

**CREATING MULTI-STAKEHOLDER VALUE BY LEVERAGING
HIGH PERFORMANCE WORK PRACTICES: AN INTELLECTUAL
CAPITAL PERSPECTIVE**

By

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CERTIFICATE OF ORIGINAL AUTHORSHIP

I, **Junaid Rehman**, declare that this thesis is submitted in fulfillment of the requirements for the award of Doctor of Philosophy (Information Systems) in the School of Information, Systems and Modelling at the Faculty of Engineering and IT, University of Technology Sydney. This thesis is wholly my own work unless otherwise referenced or acknowledged. In addition, I certify that all information sources and literature used are indicated in the thesis. This document has not been submitted for qualifications at any other academic institution. This research is supported by the Australian Government Research Training Program.

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DEDICATION

I dedicate this doctoral project to my parents & wife.

KEY TERMS AND THEIR DEFINITIONS

Term	Acronym	Definition
Confirmatory Factor Analysis	CFA	An analysis method that verifies the factorial structure of observed variables and ascertains whether the link between these variables and their corresponding latent constructs is existent or otherwise (Hair et al., 2006).
Comparative Fit Index	CFI	Gives an indication of incremental fit that considers whether all the latent variables are uncorrelated by comparing the covariance matrix samples with null-model (Hooper et al., 2008).
Competitive Advantage		Maintaining a long-term benefit over the competitors based on the unique resources and capabilities.
Customer Value Creation	CVC	A process wherein value outcomes are derived for the clients and customers such as customer/client satisfaction, improved service quality, value for money etc.
Exploratory Factor Analysis	EFA	A data-analysis technique employed to evaluate main dimensions using various latent constructs representing set of measures/items (Williams et al., 2010).
Employee Value Creation	EVC	A process wherein value outcomes are derived for the employees such as engagement, better prospects for promotion and developed professional skillset.
Employee Training and Development	ETD	Organizational initiative that encourages learning and inculcates work-related competencies with an aim to improve employee performance.
Employee Knowledge Sharing	EKS	The degree of employee willingness to participate in knowledge sharing activities.
Employee Empowerment	EE	Perception of the degree to which leaders empower their employees by delegating and sharing their authority and decision power to enhance performance and work satisfaction.
Explicit knowledge		An easy-to-communicate and tangible type of knowledge (Nonaka and Takeuchi, 1995).
Firm Financial Performance		Includes firm-performance measures such as: profits growth, shareholder return on investment, increased firm market

		value.
Firm Non-Financial/ Operational Performance		Includes firm intangible performance measures such as reduced operational cost, efficient processes, increased productivity, organizational change and firm market competitiveness.
Human Capital	HC	Denotes employee collective knowledge, expertise, experience and innovativeness to perform tasks at hand (Bontis, 2002; Roos et al., 1998).
High Performance Work Practices	HPWPs	Contemporary practices/approaches to workforce management such as self-managed work teams, quality circles, performance-oriented pay, workplace flexibility, continuous training & learning, collaborative communication, information sharing etc. that maximize knowledge, abilities, flexibility and commitment of the employee (Picón et al., 2014; Bohlander and Snell, 2004; Appelbaum et al., 2000).
Intellectual Capital	IC	Indicates an enterprise's knowledge, competencies and external relations that form the basis of its competitive success in the industry (Kianto et al., 2014; Bontis, 2002).
Knowledge-based View	KBV	Claims knowledge to be strategically-critical firm resource that serves as the basis of sustainable advantage (Grant, 1995; 1996).
Interpersonal Trust	IT	Achieving a mutual faith on the behaviour, actions and intentions by the individuals.
Knowledge Management	KM	A process that involves efficiently identifying, creating, applying, storing & sharing knowledge with an aim to accomplish organizational goals (Nonaka, 1991).
Knowledge Sharing	KS	A phenomenon characterized by transfer of knowledge (both tacit & explicit) among the individuals to create new knowledge and improve perspectives and processes (Nonaka and Takeuchi, 1995; Nonaka, 1991).
Organisational Culture	OC	Incorporates corporate norm and shared values, behaviors and work practices followed by the members of an organisation.
Open and	OCC	Free exchange of thoughts & ideas through employee

Collaborative Communication		collaboration and interaction.
Organization Value Creation	OVC	A process wherein value outcomes mainly encompassing firm financial and non-financial performance are derived for the organization. Please refer to terms 'Firm Financial-Performance' and 'Firm Non-Financial-Performance' in this glossary.
Performance Based Reward	PBR	A system of incentive that motivates employees to enhance performance and achieve effectiveness.
Professional Service Firms	PSFs	A professional body whose principal asset is its professionalized workforce that deliver solutions to the complex industry problems by providing intangible services as outputs (Greenwood et al., 2005).
Resource-based View	RBV	A viewpoint that theoretically suggests that an organization's capabilities & resources that are inimitable and unique form the basis of its competitive advantage Barney (1991).
Relational Capital	RC	It encompasses knowledge and resources deep-rooted in the employees' relations with the external stakeholders' network (Bontis, 2002; Roos et al., 1998).
Root Mean Square Error of Approximation	RMSEA	Gives a credible indication of model-fit based on detection of model misspecification (Byrne, 2016).
Self-Managed Work Teams	SMWT	Individual groups within an organization equipped with all the job-related competencies & skills and delegated with an authority to direct themselves, assign roles, manage problems and make decisions (Zárraga-Oberty, 2011).
Shared Leadership	SL	A form of leadership behaviour involving collective sharing of responsibility in a manner that staff leads each other in teams.
Social Capital Theory	SCT	Propounds that Social capital builds an environment that paves way towards the increase in or the creation of (new) IC that subsequently results in some organizational advantage i.e. organization value creation (Nahapiet and Ghoshal, 1998).

Structural Equation Modelling	SEM	A 2 nd generation multi-variate statistical analyses technique, the SEM is used for effectively measuring and testing the reliability of linkage between structural model variables (Hair et al., 2014).
SHRM		Strategic Human Resource Management
SPSS		Statistical Package for Social Sciences
Structural Capital	SC	Specifies organizational knowledge institutionalized as records, processes & procedures (Youndt et al., 2004).
Supplier & Partner Value Creation	SPVC	A process wherein value outcomes are derived for suppliers and partners i.e. opportunities for long-term relationships with suppliers and strategic collaboration and alliance with partners.
Chi-square	χ^2	Statistically tests a null hypothesis and compares the relationship between two categorical variables.
Tacit Knowledge		Hard-to-capture and intangible type of knowledge (Nonaka and Takeuchi, 1995).
Teamwork Quality	TWQ	Quality of interaction among team members and how well their collaboration/interaction is towards achievement of set goals.
UTS		University of Technology, Sydney

DOCTORAL RESEARCH PUBLICATIONS TO DATE

Following is an up-to-date account of the research papers published or under review.

Refereed A-ranked Conference and WoS Journal Papers

- Rehman, J., Hawryszkiewicz, I., Sohaib, O. and Namisango, F. (2021) 'How Professional Service Firms Derive Triple Value Bottom-line: An IC Perspective, *Journal of Intellectual Capital*. [Under Review].
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- Rehman, J., Hawryszkiewicz, I., Sohaib, O. and Namisango, F. (2021) 'Deriving Intellectual Capital Bottom-line in Professional Service Firms - A High Performance Work Practices Perspective, *International Journal of Knowledge Management*, 17(2), pp. 104-129.
- Rehman, J., Hawryszkiewicz, I., Sohaib, O. and Namisango, F. (2020) 'Intellectual Capital Creates Value for the Organization: What About Other Stakeholders?', in *International Conference on Knowledge Management (ICKM) 2020, Durham, United States*.
- Rehman, J., Hawryszkiewicz, I., Sohaib, O. and Namisango, F. (2020) 'Building a Knowledge-Based Competitive Advantage in Service Firms - Role of High Performance Work Systems', in *European Conference on Knowledge Management (ECKM), 2020, Coventry, United Kingdom*.
- Rehman, J., Hawryszkiewicz, I., Sohaib, O. and Soomro, A. (2020) 'Developing Intellectual Capital in Professional Service Firms Using High Performance Work Practices As Toolkit', in *Hawaii International Conference on System Sciences (HICSS) 2020, Hawaii, USA*.
- Rehman, J., Hawryszkiewicz, I., Sohaib, O. and Namisango, F. (2019), 'Rethinking Intellectual Capital in Professional Service Firms: A Triple Bottom-line Perspective on Value creation', in *Australasian Conference on Information System (ACIS) 2019, Perth Australia*.
- Qahl, M., Hawryszkiewicz, I., Binsawad, M. and Rehman, J. (2019) 'Factors Affecting the Saudi Arabian Higher Education Creative Environment', *Australasian Conference on Information System (ACIS) 2019, Perth Australia*.
- Rehman, J., Hawryszkiewicz, I. and Sohaib, O. 2018, 'Leveraging High Performance Knowledge Sharing Culture (HPKSC): A firm Performance and Innovation Capability Perspective', in *Pacific Asia Conference on Information System (PACIS) 2018, Yokohama, Japan*.

ABSTRACT

The global trends necessitating organizational transformation and competitiveness have challenged the effectiveness of traditional HRM practices which alone are incapable of achieving the value-creation goals of the contemporary Professional Service Firms (PSFs). The ever-increasing acceptance of High-Performance-Work-Practices (HPWPs) and their robust influence on organization's Intellectual Capital (IC) makes it pertinent for the scholars to further evaluate and enrich this relationship particularly in a knowledge-intensive environment. This is because of the current research that indicates that PSFs being knowledge-reliant firms are faced with the challenges of how to effectively leverage HPWPs for building and enhancing their knowledge capital to achieve sustainable competitive advantage. In this context, the extant literature mostly investigates the strategic HRM practices (i.e. HPWPs) from the viewpoint of their direct effects on firm performance. However, there has been little research on how HPWPs influence some intermediary variables to consequently guide the achievement of knowledge-based competitive advantage. In particular, the qualitative and mixed-method studies are scarce. Hence, we introduced intellectual capital as an intervening variable between HPWPs and Multi-stakeholder Value Creation (MSVC) with an aim to put forward a more innovative framework of strategic HRM for the service firms.

Given the above gaps, we applied mixed-method design to collect data from the executives and staff at 30 Australian Professional Service Firms (PSFs). The quantitative data involving online surveys helped in empirically evaluating and testing the association between HPWPs & IC and subsequently the role of IC in deriving value for multi-stakeholders in PSFs (HPWPs→IC→MSVC). The surveys also assisted in measuring the thoughts and opinions of the employees. Besides, the qualitative data involving face2face interviews enabled managers and executives to share their personal experience and perception on the implementation of strategic HRM practices (HPWPs) in a knowledge-based environment.

In view of the research data analysis, the quantitative data initially involved descriptive data analysis that enabled preliminary data screening and ensured suitability for multivariate analyses at an advanced level which involved measurement scale analyses, followed by EFA, CFA and SEM in a consecutive order. Subsequently, the qualitative data were analyzed via 'Thematic Analysis' technique that yielded emerging themes, which were compared with the results of the quantitative findings with an aim to qualitatively validate the research model and draw additional insights that were not captured by the quantitative enquiry.

This research theoretically contributes by offering an empirically-validated framework that successfully evaluates HPWPs influence on firm's IC resources and how this interaction serves as a guiding mechanism for multi-stakeholder value creation in PSFs. On practical front, the results assist service firms in understanding the value phenomena from the multi-stakeholder

viewpoint. It also contributes to industry practice by building an understanding on how PSFs can optimally reap their finite IC resources to derive triple value bottom-line using these resources. In short, the investigation of how HPWPs influence IC dynamics in PSFs to achieve knowledge-based competitive advantage is at the core of this research.

Keywords:

High Performance Work Practices, Strategic HRM, Intellectual Capital, Intellectual Assets, Strategic Knowledge Management, Multi-stakeholder Value-Creation, Triple Value Bottom-line, Professional Service Firms, Sustainable Competitive Advantage.

TABLE OF CONTENTS

Thesis Title Page.....	.i
Certificate of Original Authorship.....	ii
Acknowledgement.....	.iii
Dedication.....	iv
Key Terms and Their Definitions.....	v
Doctoral Research Publications To Date	ix
Abstract.....	x
Table of Contents.....	xii
List of Figures	xviii
List of Tables.....	xx

CHAPTER-1 INTRODUCTION

1.1. Background.....	1
1.2. Problem Statement.....	3
1.3. Research Question.....	4
1.4. Research Aims & Objectives.....	5
1.5. Research Scope.....	5
1.6. Significance and Contribution of Research.....	6
1.7. Thesis Structure.....	7
1.8. Research Action Plan.....	9

CHAPTER-2 LITERATURE REVIEW

2.1 Introduction.....	10
2.2. Professional Service Firms.....	11
2.2.1. Defining 'Professionals' and 'Professional Service Firms'.....	11
2.2.2. Characteristics of PSFs.....	12
2.2.3. Organizational Structure and Governance.....	13
2.2.4. Staff Categories.....	14
2.2.5. Management Mechanisms.....	14

2.3. High Performance Work Practices(HPWPs).....	15
2.3.1. High Performance Work Practices Vs. Traditional HRM Practices.....	17
2.3.2. AMO Model/Framework – Bundle Perspective in HPWPs.....	18
2.3.2.1. Ability-Enhancing HPWPs.....	19
2.3.2.2. Motivation-Enhancing HPWPs.....	19
2.3.2.3. Opportunity-Enhancing HPWPs.....	19
2.3.3. Organization-Level and Employee-Level HPWPs.....	20
2.3.4. HPWPs and Organizational Culture.....	21
2.3.5. HPWPs and Organizational Performance.....	21
2.3.6. HPWPs and Resource Based View (RBV)	22
2.3.7. HPWPs in PSFs.....	23
2.4. Intellectual Capital.....	24
2.4.1. Intellectual Capital Dimensions.....	25
2.4.1.1. Human Capital.....	26
2.4.1.2. Structural Capital.....	26
2.4.1.3. Relational Capital.....	27
2.4.2. Intellectual Capital and Firm Performance.....	29
2.4.3. Social Capital Theory – How IC Leads to Value Creation.....	29
2.4.4. Intellectual Capital and Resource Based View (RBV).....	30
2.4.5. Intellectual Capital and Knowledge Based View (KBV).....	31
2.4.6. Intellectual Capital in PSFs.....	32
2.5. Value Creation.....	33
2.5.1. Understanding ‘Value’ and ‘Value-Creation’ Concepts.....	33
2.5.2. Value Creation – An Organizational Context.....	34
2.5.3. Tangible and Intangible Aspects in Value Creation.....	35
2.5.4. Rethinking Value Creation from Multi-stakeholder Perspective.....	37
2.6. HPWPs and Intellectual Capital.....	39
2.6.1. HPWPs and Human Capital.....	39
2.6.2. HPWPs and Structural Capital.....	41
2.6.3. HPWPs and Relational Capital.....	42
2.7. Intellectual Capital and Value Creation.....	43
2.7.1. Towards Multi-stakeholder Value Creation Using IC.....	46
2.7.2. RBV, Intellectual Capital and Multi-stakeholder Value Creation.....	47
2.8. Gaps in the Literature.....	48
2.8.1. Research Gaps Snapshot	49
2.9. Summary.....	53

CHAPTER-3 RESEARCH MODEL AND HYPOTHESES

3.1. Introduction.....	54
3.2. Research Problem Theoretical Context.....	54
3.3. Research Model.....	55
3.4. Hypotheses Development.....	56

3.4.1. HPWPs and Intellectual Capital.....	56
3.4.1.1. Ability-Enhancing HPWPs and IC.....	57
3.4.1.2. Motivation-enhancing HPWPs and IC.....	60
3.4.1.3. Opportunity-Enhancing HPWPs and IC.....	64
3.4.2. Intellectual Capital and Multi-stakeholder Value Creation (MSVC).....	68
3.4.2.1. Human Capital and Multi-stakeholder Value Creation.....	69
3.4.2.2. Structural Capital and Multi-stakeholder Value Creation.....	70
3.4.2.3. Relational Capital and Multi-stakeholder Value Creation.....	71
3.5. Alignment Between Research Question, Model Constructs and Hypotheses.....	73
3.6. Summary.....	75

CHAPTER-4 RESEARCH DATA AND METHODOLOGY

4.1. Introduction to Research Methodology.....	78
4.2. Research Paradigm.....	79
4.2.1. Classification of the Paradigms.....	79
4.2.2. Quantitative and Qualitative Paradigms.....	82
4.2.3. Paradigms Recommended For Mixed-methods Research.....	83
4.2.4. Alignment Between Paradigms, Methods and Tools.....	84
4.2.5. Paradigm Chosen for this Research and Justification.....	85
4.3. Mixed Methods As Research Design.....	86
4.3.1. Rationale Behind Use of Mixed Methods.....	88
4.3.2. Chosen Quantitative and Qualitative Research Methods.....	88
4.3.2.1. Quantitative Research Method (Survey).....	89
4.3.2.2. Qualitative Research Method (Interview).....	89
4.4. Methodology Phase-I: Quantitative Data Collection.....	90
4.4.1. Survey Administration.....	90
4.4.2. Firm Identification Criteria.....	91
4.4.3. Development of Survey Questionnaire.....	91
4.4.4. Research Measures (Survey Items).....	92
4.4.5. Pilot Testing.....	94
4.4.6. Sample Size.....	94
4.4.7. Sampling Method/Strategy.....	95
4.4.8. Sample Population.....	96
4.4.8.1. Professional Service Firms – A Contextual Overview.....	96
4.4.9. Firm Size Criteria.....	97
4.5. Quantitative Data Analysis.....	97
4.5.1. Descriptive Data Analysis.....	97
4.5.2. Measurement Scale Analysis.....	98
4.5.3. Structural Equation Modelling (SEM) Analysis.....	98
4.6. Methodology Phase-II: Qualitative Data Collection.....	99
4.6.1. Interview Administration.....	99
4.6.2. Interview Guide (Questions).....	99
4.6.3. Sample Size.....	101

4.6.4. Sample Population (Interview Respondents).....	101
4.6.5. Interview Data Transcription and Management.....	101
4.7. Qualitative Data Analysis.....	101
4.7.1. Data Analysis Approach.....	102
4.8. Consideration of Ethics and Risks.....	103
4.8.1. Ethical Considerations.....	103
4.8.2. Risk Considerations.....	103
4.9. Summary.....	104

CHAPTER-5 DESCRIPTIVE DATA ANALYSES

5.1. Introduction.....	105
5.2. Survey Questionnaire and Respondents Profiles.....	105
5.2.1. Survey Questionnaire.....	105
5.2.2. Respondents Profiles.....	105
5.3. Preliminary Findings.....	110
5.3.1. Frequencies for Measurable Variables.....	110
5.3.1.1. Ability-Enhancing HPWPs.....	110
5.3.1.2. Motivation-Enhancing HPWPs.....	111
5.3.1.3. Opportunity-Enhancing HPWPs.....	113
5.3.1.4. Intellectual Capital.....	115
5.3.1.5. Multi-stakeholder Value Creation.....	117
5.3.2. Assessment of Mean, Standard Errors of Mean and Standard Deviation.....	119
5.3.2.1. Means, S.E. and SD for HPWPs.....	119
5.3.2.2. Mean, S.E. and SD for Intellectual Capital.....	123
5.3.2.3. Mean, S.E. and SD for Multi-stakeholder Value Creation.....	124
5.4. Summary.....	125

CHAPTER-6 MEASUREMENT SCALE ANALYSES AND STRUCTURAL EQUATION MODELLING

6.1. Introduction.....	126
6.2. Scale Reliability.....	127
6.2.1 Internal Consistency.....	127
6.2.2 Item-total Correlation.....	128
6.3. Exploratory Factor Analysis (EFA).....	133
6.3.1. Data Factorability.....	133
6.3.2. Factor Extraction	134
6.3.3. Exploratory Factor Analysis Results.....	135
6.4. Assessing Common Method Variance (CMV).....	140
6.5. Assessing Normality and Outliers.....	141

6.6. Structural Equation Modelling (SEM)	143
6.3.1. Confirmatory Factor Analysis (CFA).....	143
6.6.1.1. Model Fit Assessment and Methods of Estimation	143
6.6.1.2. Assessment of Construct Validity.....	145
6.6.1.3. Measurement Model Assessment.....	145
6.7. Summary	162

CHAPTER-7

QUALITATIVE DATA ANALYSIS AND MODEL VALIDATION

7.1. Participant Profile and Demographic Information	163
7.2. High Performance Work Practices	165
7.2.1. Managers' Perspective on Ability-Enhancing HPWPs.....	166
7.2.1.1. Ability-enhancing Category: Employee Training and Development.....	167
7.2.1.2. Ability-Enhancing Category: Employee Knowledge Sharing.....	168
7.2.2. Managers' Perspective on Motivation-Enhancing HPWPs.....	171
7.2.2.1. Motivation-Enhancing Category: Employee Empowerment.....	171
7.2.2.2. Motivation-Enhancing Category: Performance Based Reward	173
7.2.2.3. Motivation-Enhancing Category: Shared Leadership	175
7.2.3. Managers' Perspective on Opportunity-Enhancing HPWPs.....	177
7.2.3.1. Opportunity-Enhancing Category: Interpersonal Trust.....	178
7.2.3.2. Opportunity-Enhancing Category: Open and Collaborative Communication.....	180
7.2.3.3. Opportunity-Enhancing Category: Teamwork Quality.....	181
7.3. Intellectual Capital in PSFs	184
7.3.1. Intellectual Capital Dimension: Human Capital.....	184
7.3.2. Intellectual Capital Dimension: Structural Capital.....	186
7.3.3. Intellectual Capital Dimension: Relational Capital.....	187
7.4. Multi-Stakeholder Value Creation in PSFs	191
7.4.1. Multi-stakeholder Value Creation Category: Employee Value Creation.....	192
7.4.2. Multi-stakeholder Value Creation Category: Organization Value Creation.....	195
7.4.3. Multi-stakeholder Value Creation Category: Customer Value Creation.....	198
7.4.3.1. Supplier-Partner Value Creation.....	201
7.5. Qualitative Confirmation/Validation of the Research Model	203
7.6. Relationship Between HPWPs and Intellectual Capital	204
7.6.1. Relationship Between Ability-Enhancing-HPWPs and IC.....	204
7.6.2. Relationship Between Motivation-Enhancing-HPWPs and IC.....	205
7.6.3. Relationship Between Opportunity-Enhancing-HPWPs and IC	207
7.7. Emerging Associations Between HPWPs and MSVC	209
7.8. Intellectual Capital and Multi-Stakeholder Value Creation	212
7.8.1. Relationship Between Human Capital and MSVC.....	213
7.8.2. Relationship between Structural Capital and MSVC.....	216
7.8.3. Relationship Between Relational Capital and MSVC.....	218
7.9. Comparative Summary of Quantitative-Qualitative Data Findings	221
7.10. Summary	222

CHAPTER-8
DISCUSSIONS, IMPLICATIONS AND CONCLUSION

8.1. Introduction.....	223
8.2. Research Overview-Revisiting Background and Problem Context	223
8.3. Discussions on Key Research Findings.....	224
8.3.1. Discussions: High Performance Work Practices and Intellectual Capital.....	225
8.3.2. Discussions: Intellectual Capital and Multi-stakeholder Value Creation	226
8.4. Research Contribution.....	228
8.4.1. Theoretical Contribution.....	228
8.4.2. Methodological Contribution.....	229
8.4.3. Practical Contribution.....	229
8.4.4. Sectoral Contribution.....	230
8.5. Research Implications.....	230
8.5.1. Theoretical Implications.....	230
8.5.2. Managerial Implications.....	231
8.6. Some Additional Recommendations Amidst COVID-19 Pandemic.	233
8.7. Limitations and Future Research Recommendations.....	234
8.8. Conclusion.....	235
References.....	237
Annexure – A: Letter of Invitation (Participant Information Sheet).....	261
Annexure – B: Informed Consent Form – Online Surveys.....	262
Annexure – C: Survey Questionnaire.....	263
Annexure – D: Informed Consent Form – Interview Respondents.....	271
Annexure – E: Interview Guide/Protocol.....	272

LIST OF FIGURES

Figure 1.1: Research Action Plan	9
Figure 2.1: Social Capital Theory	30
Figure 2.2: Value Creation Map.....	35
Figure 2.3: Balanced Scorecard.....	36
Figure 2.4: Skandia's Navigator Model.....	38
Figure 2.5: Leveraging IC at ICS.....	44
Figure 2.6: Schema for IC Indicators.....	45
Figure 3.1: Research Model.....	55
Figure 4.1: Research Action Plan.....	77
Figure 4.2: Research Methodology At a Glance.....	90
Figure 5.1: Participants' Gender.....	106
Figure 5.2: Participants' Age.....	106
Figure 5.3: Participants' Work Experience.....	107
Figure 5.4: Participants' Job Titles.....	107
Figure 5.5: Participants' Level of Education.....	108
Figure 5.6: Industry/Sectors Surveyed.....	108
Figure 5.7: Firm Size.....	109
Figure 5.8: Number of Employees in Different Firm Categories	109
Figure 5.9: Frequencies for Employee Development and Training.....	110
Figure 5.10: Frequencies for Employee Knowledge Sharing.....	111
Figure 5.11: Frequencies for Employee Empowerment.....	111
Figure 5.12: Frequencies for Performance Based Reward.....	112
Figure 5.13: Frequencies for Shared Leadership.....	113
Figure 5.14: Frequencies for Open and Collaborative Communication.....	113
Figure 5.15: Frequencies for Interpersonal Trust.....	114
Figure 5.16: Frequencies for Teamwork Quality.....	114
Figure 5.17: Frequencies for Human Capital.....	115
Figure 5.18: Frequencies for Structural Capital.....	116
Figure 5.19: Frequencies for Relational Capital.....	116
Figure 5.20: Frequencies on Employee Value Creation.....	117
Figure 5.21: Frequencies on Organization Value Creation.....	118
Figure 5.22: Frequencies on Customer Value Creation.....	118
Figure 6.1: Measurement Model for Ability-Enhancing Practices.....	146
Figure 6.2: Measurement Model for Motivation-Enhancing HPWPs.....	147
Figure 6.3: Measurement Model for Opportunity-Enhancing HPWPs.....	149
Figure 6.4: Measurement Model for Intellectual Capital.....	151
Figure 6.5: Measurement Model for Multi-stakeholder Value Creation.....	152
Figure 6.6: Structural Model for Ability-Enhancing Practices, IC and MVC.....	155
Figure 6.7: Structural Model of Motivation-Enhancing Practices, IC and MVC.....	156
Figure 6.8: Structural Model for Opportunity-Enhancing Practices, IC and MVC.....	157
Figure 6.9: Structural-Model of HPWPs, IC (Separate Dimensions) and MVC.....	159
Figure 6.10: Structural-Model of HPWPs, IC (Combined Dimensions) and MVC.....	161
Figure 7.1: Participating Firms by Size.....	163
Figure 7.2: Participating Firms by Industry/Sector.....	164
Figure 7.3: Influence of (Ability, Motivation & Opportunity)-Enhancing Practices in PSFs.....	166
Figure 7.4: Number of Codes and Mentions for Employee Training and Development	167
Figure 7.5: Number of Codes and Mentions for Employee Knowledge Sharing.....	169
Figure 7.6: Combined Word Cloud for Ability-Enhancing HPWPs in PSFs.....	170

Figure 7.7: Number of Codes and Mentions for Employee Empowerment.....	171
Figure 7.8: Number of Codes and Mentions for Performance Based Reward.....	173
Figure 7.9: Number of Codes and Mentions for Shared Leadership.....	175
Figure 7.10: Combined Word Cloud for Motivation-Enhancing HPWPs in PSFs.....	177
Figure 7.11: Number of Codes and Mentions for Interpersonal Trust.....	178
Figure 7.12: Number of Codes and Mentions for Open and Collaborative Communication .	180
Figure 7.13: Number of Codes and Mentions for Teamwork Quality	182
Figure 7.14: Combined Word Cloud for Opportunity-Enhancing HPWPs in PSFs.....	183
Figure 7.15: Influence of IC Dimensions in PSFs.....	184
Figure 7.16: Number of Codes and Mentions for Human Capital in PSFs.....	184
Figure 7.17: Word Cloud for Human Capital in PSFs.....	186
Figure 7.18: Number of Codes and Mentions for Structural Capital in PSFs.....	186
Figure 7.19: Word Cloud for Structural Capital in PSFs.....	188
Figure 7.20: Number of Codes and Mentions for Relational Capital in PSFs.....	189
Figure 7.21: Word Cloud for Relational Capital in PSFs.....	191
Figure 7.22: Average Value Creation Proportion for Multi-Stakeholders in PSFs.....	191
Figure 7.23: Number of Codes and Mentions for Employee Value Creation in PSFs... ..	192
Figure 7.24: Word Cloud for Employee Value Creation in PSFs.....	195
Figure 7.25: Number of Codes and Mentions for Organization Value Creation in PSFs... ..	196
Figure 7.26: Word Cloud for Organization Value Creation in PSFs.....	198
Figure 7.27: Number of Codes and Mentions for Customer Value Creation in PSFs.....	198
Figure 7.28: Word Cloud for Customer Value Creation in PSFs	200
Figure 7.29: Number of Codes and Mentions for Supplier & Partner Value Creation in PSF.....	201
Figure 7.30: Project Map of the Relationship Between HPWPs and IC.....	203
Figure 7.31: Project Map of the Relationship Between HPWPs and MSVC.....	210
Figure 7.32: Project Map of Relationship Between IC and MSVC.....	213

LIST OF TABLES

Table 2.1: Conventional HRM Practices Vs. HPWPs	18
Table 2.2: Classification of Intellectual Capital	26
Table 2.3: Literature Gaps Snapshot	52
Table 3.1: Alignment Between Research Question, Model Constructs and Hypotheses.....	74
Table 4.1: Quantitative & Qualitative Research Characteristics	83
Table 4.2: Paradigms, Methods and Tools.....	84
Table 4.3: Purposes of Mixed-Methods Research.....	87
Table 4.4: Different Research Methods and Situations.....	89
Table 4.5: Survey Measures.....	94
Table 4.6: Interview Guide Questions.....	100
Table 5.1: Descriptive Statistics for Employee Training and Development.....	119
Table 5.2: Descriptive Statistics for Employee Knowledge Sharing.....	120
Table 5.3: Descriptive Statistics for Employee Empowerment.....	120
Table 5.4: Descriptive Statistics for Performance Based Reward.....	121
Table 5.5: Descriptive Statistics for Shared Leadership.....	121
Table 5.6: Descriptive Statistics for Open & Collaborative Communication.....	122
Table 5.7: Descriptive Statistics for Interpersonal Trust.....	122
Table 5.8: Descriptive Statistics for Teamwork Quality.....	122
Table 5.9: Descriptive Statistics for Human Capital.....	123
Table 5.10: Descriptive Statistics for Structural Capital.....	123
Table 5.11: Descriptive Statistics for Relational Capital.....	124
Table 5.12: Descriptive Statistics for Employee Value Creation.....	124
Table 5.13: Descriptive Statistics for Organisation Value Creation.....	125
Table 5.14: Descriptive Statistics for Customer Value Creation.....	125
Table 6.1: Internal Consistency of Measurement Scales.....	127
Table 6.2: Item-Total Correlation for Ability-Enhancing Practices.....	128
Table 6.3: Item-Total Correlation for Motivation-Enhancing Practices.....	129
Table 6.4: Item-Total Correlation for Opportunity-Enhancing Practices.....	130
Table 6.5: Item-Total Correlation for Intellectual Capital.....	131
Table 6.6: Item-Total Correlation for Multi-Stakeholder Value Creation.....	132
Table 6.7: Data factorability Using KMO and Bartlett's Measure of Sphericity.....	134
Table 6.8: Communalities and Factor Loadings for Ability-Enhancing HPWPs.....	136
Table 6.9: Communalities and Factor Loadings for Motivation-Enhancing HPWPs.....	136
Table 6.10: Communalities and Factor Loadings for Opportunity-Enhancing HPWPs.....	137
Table 6.11: Communalities and Factor Loadings for Intellectual Capital.....	138
Table 6.12: Communalities and Factor Loadings for Multi-Stakeholder Value Creation.....	139
Table 6.13: Harman's Single-Factor Test for Assessing Common Method Bias.....	140
Table 6.14: Assessment of Normality Before Deleting Outliers.....	142
Table 6.15: Assessment of Normality Using K-S and S-W Tests.....	142
Table 6.16: Measurement Estimates for Ability-Enhancing Practices.....	146
Table 6.17: Measurement Estimates for Motivation-Enhancing HPWPs.....	148
Table 6.18: Measurement Estimates for Opportunity-Enhancing Practices.....	149
Table 6.19: Measurement Estimates for Intellectual Capital.....	151
Table 6.20: Measurement Estimates for Multi-stakeholder Value Creation.....	153
Table 6.21: Hypotheses Testing (With Separate IC Dimensions).....	159
Table 6.22: Hypotheses Testing (With Combined IC Dimensions).....	161
Table 7.1: Interview Participant Profile and Demographic Information.....	165
Table 7.2: Interview Questions and Coding Categories for Ability-enhancing HPWPs.....	166

Table 7.3: Interview Questions and Coding Categories for Motivation-enhancing HPWPs. ...	171
Table 7.4: Interview Questions and Coding Categories for Opportunity enhancing HPWP..	178
Table 7.5: Relationship Between Ability-enhancing HPWPs and IC.....	204
Table 7.6: Relationship Between Motivation-enhancing HPWPs and IC.....	206
Table 7.7: Relationship Between Opportunity-enhancing HPWPs and IC.....	208
Table 7.8: Relationship Between HPWPs and MSVC.....	211
Table 7.9: Relationship between Human Capital and MSVC.....	215
Table 7.10: Relationship Between Structural Capital and MSVC.....	217
Table 7.11: Relationship between Relational Capital and MSVC.....	220
Table 7.12: Summary of Quan-Qual Results on Relationship Between HPWPs, IC and MSVC..	221

CHAPTER-1

INTRODUCTION

This introductory chapter offers a descriptive account of the research background and problem context that lead to research problem statement and formulation of main research question and ultimately the identification of corresponding aims & objectives for addressing the research problem. The key research objective was to investigate the effects of strategic HRM practices i.e. High-Performance-Work-Practices (HPWPs) on the intellectual-capital growth and how it creates value for employees, organization and customers as key stakeholders in Professional Service Firms (PSFs). Followed by the aims & objectives, the research scope, significance and contribution are presented. In the end, the research plan is pictorially shown along with the summary on the structure of thesis.

1.1. Background

Knowledge being a driver of corporate growth has maintained its status as an indispensable organizational reality during the past decades. The contemporary business organizations strive for continuous transformation by capitalizing on innovative technologies and making use of their intellectual assets such as employee knowledge, skills and core capabilities rather than simply relying on physical assets like production facilities, machinery or plant (Stevens, 2012; Vidaver-Cohen, 2007). To this end, organization's skilled workforce forms the basis of a robust knowledge capital (Chen and Wang, 2013; Amiri et al., 2010). However, the global trends necessitating organizational transformation and competitiveness have challenged the effectiveness of traditional HRM practices which alone appeared to be incapable of addressing the value-creation goals of the contemporary service firms. Moreover, given the tremendous growth of the global services sector over the last two decades, human knowledge has taken precedence over physical factors of production in the current knowledge age (Shin and Konrad, 2017; Fu et al., 2015; Stevens, 2012).

As a result, the desire to maximize value in today's competitive market is being increasingly linked to application of HPWPs that ensure effective utilization of organization's intellectual resources for meeting the competitive pressures and the change requiring continuous transformation & innovation. Consequently, a number of organizations, particularly the ones operating in the manufacturing sector were

among the first to adopt HPWPs (O'Driscoll, 1998; Appelbaum, 2000). These renewed management practices characterized by the empowerment concepts such as encouraging interactions, promoting open exchange of ideas, enabling employees to work in self-directed teams etc. lead to improved profits, thereby justifying the additional expense made in the human resource development (Posthuma, 2013; Datta et al., 2005; O'Driscoll, 1998). Given the effectiveness of HPWPs that yielded significant performance and profit gains, a number of non-manufacturing organizations also adopted these practices (Fu et al., 2015; Georgiadis and Pitelis, 2012; McClean and Collins, 2011; Chang and Chen, 2011; Teo et al., 2008).

Accordingly, in today's fast-paced corporate environment, organizations must continue to build new knowledge and utilize existent knowledge capabilities in order to optimize value creation. However, the value created by the virtue of organizational innovative capabilities is characterized by a process that involves recognition, grooming and utilization of Intellectual Capital (IC) resources (Jennex, 2020; Vidaver-Cohen, 2007). An organization, via training, capacity building, upskilling and promoting knowledge-sharing culture among its staff, achieves a transformation of its human capital assets into core competencies. These competencies serve as critical success factors for the organization, enabling the value addition and achievement of the sustained competitive advantage.

All organizations are equipped with tangible and intangible resources. Needless to say, intellectual capital is an intangible resource, however, its role is phenomenal in creating wealth for the organization (Bchini, 2015; Cuganesan, 2005; Prahalad and Hamel, 1990). Usually, the value created by the intangible assets of a firm is not always reflected in their financial statements. In this regard, the value delivered by a firm's human capital demonstrates greater impacts than the value created by its tangible assets like plant, equipment and machinery (Chen and Lin, 2004). Therefore, a firm's financial and tangible factors are no longer the key drivers of value-addition and growth, but are considered as the mere commodities (Corsaro, 2019; Lev, 2001). This is because of the changing focus of the modern service firms towards intangible assets like human knowledge and intellectual capabilities which are being viewed as the sustainable value-creating factors.

Therefore, the organizations need to focus more on overlooked intangible assets so as to gain enhanced understanding of their business performance dynamics (Hillstrom, 2016; Perla, 2003; Starovic and Marr, 2003). In view of this, it is critical for the PSFs to understand in particular the new drivers of IC for dealing with the volatility of their business. This firstly requires acknowledging the central role of IC as a value-deriving mechanism for the organizations, followed by the recognition that the

implementation of empowerment and creative practices (i.e. HPWPs) is central to the growth of IC in present-day competitive environment.

Nevertheless, this research by no means represents a 'final say' on the underlying research problem. In fact, it is an important step towards enriching research literature and making a meaningful knowledge contribution to the current managerial practices in PSFs. As a whole, the investigation of how HPWPs influence IC dynamics to derive multi-stakeholder value is at the core of this research.

1.2. Problem Statement

These days, business firms hire staff for their skills instead of physical strength as they continually encounter the challenges like cutting costs and enhancing service quality (Özçelik et al., 2016; Teo et al., 2015). Particularly, these competitive pressures have shifted the focus of service firms from routine work environment to knowledge-based work environment (Fu et al., 2015; Teo et al., 2008; Løwendahl, 2000). As PSFs compete based on their staff's skills and competencies, they always endeavour to implement novel HR management approaches for boosting their staff knowledge.

In this regard, the research on HPWPs has gained increased momentum over the past two decades (Silva et al., 2019; Posthuma et al., 2013; Godard, 2004; Datta et al., 2005). A critical review of HPWPs literature highlights significant developments in determining how HPWPs contribute to organizational performance (Guthrie et al., 2009; Bartlett, 2001; Robert et al., 2000; Huselid, 1995; Arthur, 1994). However, insufficient research has been done governing HPWPs implementation in PSFs (Fu et al., 2017; 2015; Teo et al., 2015), hence highlighting a need to examine how these work practices can be leveraged to build intellectual capabilities to consequently achieve knowledge-based competitive advantage (Jerez-Gómez et al., 2017; Fareed et al., 2016).

Besides, when it comes to research on intellectual capital, prior researchers have mostly emphasized on measuring and determining tangible aspects of value and rarely investigates the black-box of intangible value it creates (Dumay, 2014). To this end, it is by now established that the effective intellectual capital management is greatly linked to its organizational structure, innovation goals and performance enhancement measures (Özçelik et al., 2016; Dumay, 2014). Organizations, in their quest to achieve corporate gains, need to be capable of transforming their core knowledge capabilities into value-creating products & services, thereby dynamically renewing these capabilities (Rehman et al., 2020c). This requires continuous

acquisition, creation, application and sharing of the knowledge resources (Jennex, 2020; Darroch, 2005). Besides, a critical challenge in this direction is to extract maximum value out of these knowledge resources which can be attained if they are inspired and guided by the performance and creativity enhancing practices i.e. HPWPs. This ever-increasing acceptance of HPWPs and their potential impact on the organization intellectual capabilities indicates that it is critical for the scholars to further evaluate and enrich this relationship. Therefore, it is crucial for the knowledge-intensive firms such as PSFs to explore ways to leverage and reap optimal benefits from their IC resources which necessitates greater role of HPWPs to inculcate creative thinking and knowledge exchange culture (Kianto et al., 2017; Teo et al., 2015)

As a whole, from the research problem perspective, this research critically reviews the Organizational Behavior, Strategic HRM and IC literature and identifies that there is a gap governing HPWPs implementation in the knowledge-based context i.e. PSFs. This was particularly highlighted by some recent scholars such as: Fu et al. (2017), Jerez-Gómez et al. (2017), Shin and Konrad (2017), Kianto et al. (2017), Özçelik et al. (2016), Fareed et al. (2016), Fu et al. (2015), Teo et al. (2015), McClean and Collins (2011), Teo et al. (2008), etc. who recommended further investigating these relationships which eventually formed the basis of this research.

1.3. Research Question

In view of the gaps in the literature governing HPWPs application and effectiveness in the intellectual capital context and the gaps governing Multi-stakeholder Value Creation (MSVC) in the service firms, following research questions were considered worth-investigating in the given context.

RQ) How Do High Performance Work Practices support the growth and development of Intellectual Capital for multi-stakeholder value creation in the Professional Service Firms?

a) How Do (Ability, Motivation & Opportunity)-enhancing bundles of High Performance Work Practices influence Intellectual Capital development in the Professional Service Firms?

b) How does Intellectual Capital create value in Professional Service Firms when viewed from organization multi-stakeholder perspective?

1.4. Research Aims & Objectives

Having identified the knowledge gaps, this research was conducted with following aims & objectives in mind:

- To identify High Performance Work Practices (HPWPs) from broad Strategic HRM literature.
- To examine HPWPs influence on Intellectual Capital in Professional Service Firms (PSFs).
- To propose multi-stakeholders perspective in the notion of value creation.
- To evaluate how intellectual capital derives triple value bottom line for multi-stakeholder in PSFs.
- Broadly speaking, to determine the link between HPWPs, IC and Value Creation.
- As a whole, to investigate and empirically-test the effects of HPWPs on IC and consequently the effects of IC in creating value for multi-stakeholders in PSFs.

1.5. Research Scope

This mixed-method research scope was limited to Professional Service Firms (PSFs). PSFs are known to be equipped with highly professional and skilled staff that utilizes their knowledge in delivering services to the clients. Some common examples of PSFs include legal, accounting, engineering services, IT and management consulting firms (Greenwood et al., 2005). The rationale behind choosing PSFs as target sector is the knowledge-intensive nature of these firms which necessitates their staff reliance on the knowledge, skills and capabilities (Løwendahl, 2000). Hence, the PSFs offered an essentially relevant context for examining HPWPs effects in deriving knowledge-based competitive advantage. Keeping in view its scope, following aspects were covered in the research:

- The research evaluated the relationship between HPWPs, IC and value creation that involved first examining HPWPs effect on IC and subsequently the IC effect in creating value for multi-stakeholders (employees, organization and customers).
- While the target sector for this research was PSFs, the participants for survey included employees in all categories such as staff, supervisors, managers and senior executives, whereas the participants for face-face interviews involved managers and senior executives in PSFs.
- Given its scope being Australian PSF, the findings may not represent a complete picture of HPWPs implementation in PSFs across all the cultures. Therefore, the findings might be more applicable to the western cultures or the cultures that are similar to Australian culture.

1.6. Significance and Contribution of Research

Although considerable research has been done on HPWPs as critical towards enhancing organizational performance, efficiency and effectiveness through employee development, empowerment and motivation, however, insignificant empirical research has been done to investigate how HPWPs, by building and stimulating the intellectual capital, guide Multi-stakeholder Value Creation (MSVC) in PSFs. The key motivation for leveraging IC assets was to not only maximize the value benefits it was primarily able to derive for the organization, but also to evaluate its potential in creating value for other key organizational stakeholders. Accordingly, the research significance lies in how effectively it assists and augments the abilities of HR and KM managers in the service firms in terms of recognizing IC potential as a value-driving asset and how individual IC elements could be leveraged to achieve maximized value. The research contribution is multifold.

- The HPWPs perspective of IC would serve as a critical lens towards understanding the influence of HPWPs on organization intellectual assets, which was insufficiently investigated in the earlier research.
- This research presents an empirically-tested research framework that evaluates the effect of AMO practices on each dimensions of IC and consequently the effect of IC dimensions towards deriving value outcomes for multi-stakeholder in service firms. This adds a unique perspective to the literature and opens new vistas for future empirical studies.
- From the viewpoint of the research framework proposing that HPWPs could guide the IC-enabled multi-stakeholder value creation, this represents a novel aspect of their relationship compared to the conventionally discussed IC and value creation perspective in the strategic HRM and IC literature.
- The present research explores value creation from multi-stakeholder perspective by examining how various IC dimensions create tangible & intangible value outcomes for multi-stakeholders. The proposed multi-stakeholder viewpoint would add new organizational perspective and fill the gap in strategic HRM and IC literature as the said relationship has not been investigated by the prior researchers.
- On practical front, the empirically-validated AMO bundles of practices serve as an optimum combination of IC building HPWPs that would assist Professional Service Firms (PSFs) in effectively achieving triple value bottom-line for multi-stakeholders.
- The practical findings would also assist managers in more meaningfully utilising HPWPs for deriving sustainable knowledge-based value advantage in PSFs.

1.7. Thesis Structure

This doctoral research is based on eight chapters. Following paragraphs present a succinct account of each chapter.

Chapter-1 acquaints the readers with research background and problem context that leads to emergence of the research problem and consequently formulation of the research question and relevant aims & objectives to address the research problem. After that, research significance is outlined, followed by the identification of its scope and research plan and finally a summary outlining how thesis chapters are structured.

Chapter-2 presents comprehensive review of strategic HRM and IC literature, focusing on strategic HRM and KM processes, assets and activities that lead to competitive value advantage in PSFs. The literature review covers relevant theories and frameworks such as: AMO framework, RBV, KBV and Social Capital Theory, aimed at supporting the key research question, justify research objectives and substantiate the proposed research model. The chapter also discusses key literature and concepts on PSFs being the target sector for this research. The broad review, discussion and synthesis of the literature eventually leads to the identification of literature gaps, thereby forming a basis for proposing the research model, applying the appropriate research methodology, collecting & analyzing the data and presenting the research results and contributions.

Chapter-3 builds theoretical foundation of the proposed research model/framework. Considering the gaps in the strategic HRM and IC literature and by utilizing supporting theories such as AMO Framework, KBV, RBV and SCT, a relationship between HPWPs and Multi-stakeholder Value Creation (MSVC) in the IC context of PSFs is established in the research model. Subsequently, a number of hypotheses are built to examine the causal relationships among various research model constructs. These research hypotheses also helped evaluate the relationship between HPWPs, IC and MSVC in general.

Chapter-4 involves a comprehensive account of the methodology employed for this research, involving discussions on various research methods, paradigms and tools and the justification behind their use in this mixed-method enquiry. In the next step, quantitative & qualitative data-collection processes, management approaches and strategies employed for analysing both types of data are discussed. Finally, the chapter deliberates on data storage and risk management and considers research ethical aspects.

Chapter-5 highlights in detail on descriptive analyses of the quantitative data gathered via a survey questionnaire. This involved analysis of the participants' profiles and demographic information along with the identification of descriptive statistics, involving frequencies, means, standard-deviations, standard-errors etc. of the measurement items that were used while designing the survey questionnaire. The descriptive data analysis enabled preliminary screening of the data and ensured its suitability for advanced multivariate level of analyses in the next stage.

Chapter-6 presents quantitative data analysis at an advanced level. The first step involves measurement scale analysis to ensure reliability of the measurement items, followed by Exploratory Factorial Analysis to identify latent factors and structures in the research model. Subsequently, the Confirmatory Factor Analysis (CFA) that involved measurement model assessment was conducted as one of two-step Structural Equation Modelling (SEM) analyses process. The CFA results demonstrated adequate model fit and acceptable level of convergent and discriminant validities and hence confirmed the reliability and applicability of measurement model. The analysis subsequently led to structural model assessment which was the last step in SEM analyses and involved assessing the relationships between the model constructs through hypotheses testing.

Chapter-7 involves additional qualitative validation of the research model that was empirically tested in chapter-6. The qualitative data collected via 12 face-to-face interviews were analyzed using a technique called 'Thematic Analysis'. The interview responses on the key factors of research model such as HPWPS, IC and MSVC and their constructs were analyzed and subsequently compared with their corresponding hypotheses developed for the research model. In the end, it was evident that the qualitative results not only successfully confirmed the adequate reliability of research model, but also complemented the quantitative findings.

Chapter-8, which is also the final chapter, sums-up the key outcomes of this research, thereby offering the theoretical, methodological, sectoral and practical contributions of this study and presenting research implications for HRM and KM scholars and managers working in the service firms. Finally, the chapter highlights limitations and suggests future research recommendations leading to final conclusion. In the end, a comprehensive reference list is provided followed by the study protocols and data-collection instruments employed for executing this research.

1.8. Research Action Plan

This segment gives a pictorial summary of the series of research steps along with the details of the corresponding research activities undertaken and subsequently the outputs achieved as part of the execution of these steps.

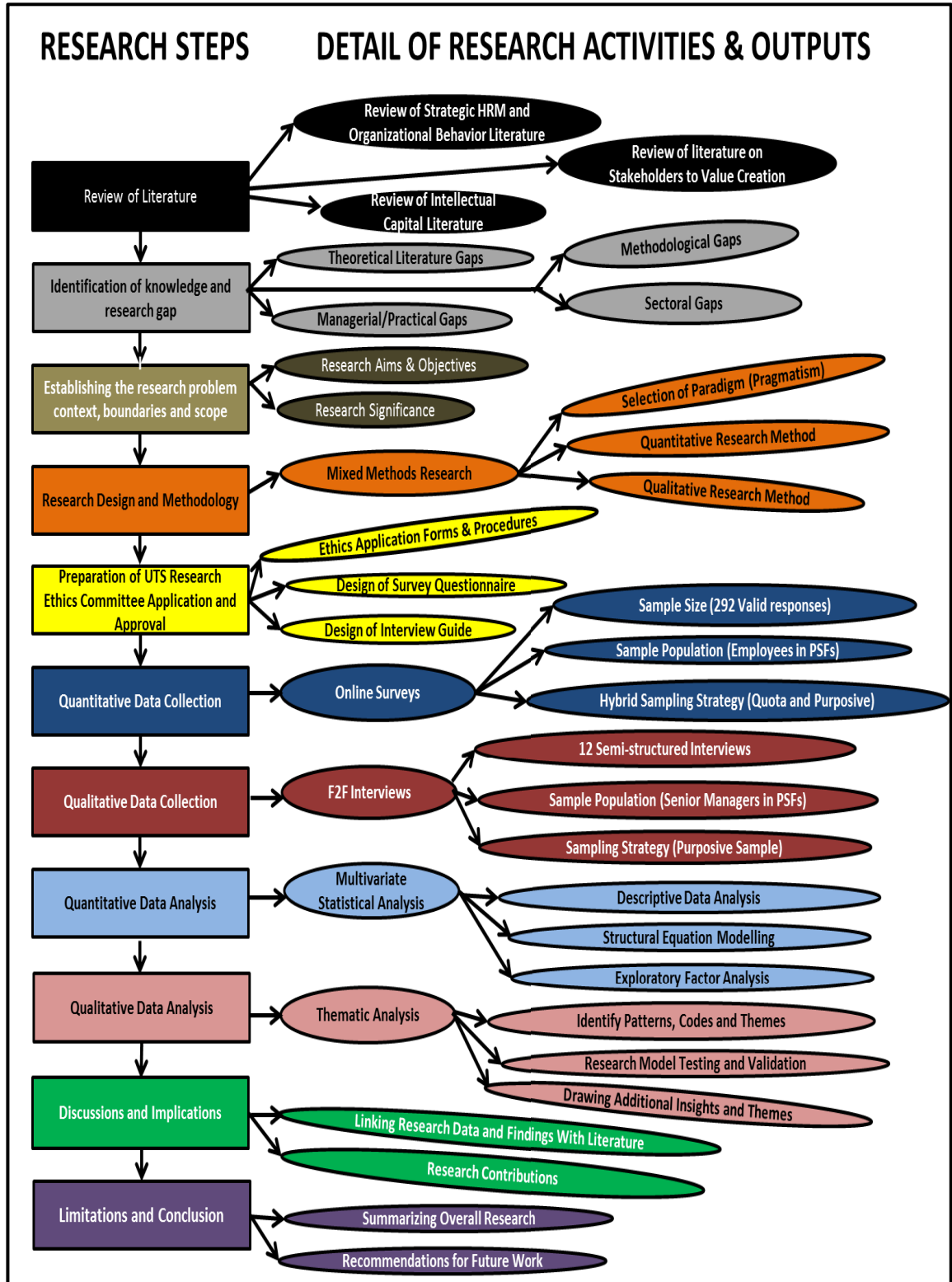


Figure 1.1: Research Action Plan

CHAPTER-2

LITERATURE REVIEW

2.1. Introduction

The introductory chapter outlined a comprehensive account of the research problem context, aims & objectives, scope, significance and gaps, thereby suggesting the overall research plan. This chapter reviews the literature to identify strategic HRM practices that promote development of intellectual capital to derive competitive advantage in the service firms. While, this chapter undergoes detailed review of literature along with discussions on research theoretical background, the literature review related to various research model constructs is done in Chapter-3.

The literature search process was undertaken using the robust UTS library database. The research-related keywords and concepts used for identifying the key literature included: Professional Service Firms/Consulting Firms/Knowledge-Based Service Firms, Strategic HRM Practices/High Performance Work Practices/Systems, Intellectual Capital/Intellectual Assets/Intellectual Resources, Human/Structural/Relational Capital Assets, Firm Performance, Employee/Organization/Customer Value-Creation, Sustainable Competitive Advantage etc.

In addition, the supporting theories and frameworks like AMO, RBV, KBV and SCT were reviewed and incorporated to establish a linkage between the key concepts. The obtained results were filtered out to only peer-reviewed papers, theses and research-based books. Besides, the research reports published by international agencies, government-issued reports and reliable industry studies were also considered in various aspects of this research. The in-depth review of literature helped identify knowledge gaps, thereby leading to the formulation of emergent research question and proposed model to address the research problem.

2.2. Professional Service Firms (PSFs)

The contribution of PSFs has proudly been seen as remarkable towards the growth of modern knowledge economies as they employ a larger segment of global workforce (Malhotra and Morris, 2009; DeLong and Nanda, 2002). PSFs have drawn considerable focus of strategic KM researchers owing to their increasingly crucial role (Empson, 2007; DeLong and Nanda, 2003). The knowledge competencies, skills and expertise of staff are considered key strategic assets in PSFs (Von Nordenflycht, 2010), hence the competitiveness of PSFs such as: legal, marketing, accounting, design, engineering and management consulting firms is predominantly reliant on how efficiently these staff knowledge capabilities are utilized (Hitt et al., 2006; Løwendahl, 2000).

2.2.1. Defining 'Professionals' and 'Professional Service Firms'

Before further evaluating the notion of PSFs, it is imperative to first understand the term 'professional' being pertinent in the given context. Sharma (1997) termed professional as an individual who apply specialized skills and techniques acquired through formal experience and training, possess service-orientated thinking, exercise autonomy and professional ethics while being associated with a service firm. Empson (2007) defined professionals in somewhat stricter terms as 'somebody having a privilege to acquire membership of a professional body by fulfilling all the examination, training and accreditation related codal formalities. However, this definition characterizes a small segment of the PSFs, notably law, architecture, accounting, engineering etc. being the accredited professions (Fu, 2010).

On the other hand, when it comes to defining the term 'PSF', it was either not formally defined or defined only in indirect terms by mentioning its various categories i.e. audit, IT, law firms etc. (Von Nordenflycht, 2010). According to Fu (2010), a PSF basically represents group of trained professionals or experts from a particular field who have access to the resources and agreed to work together constitute a PSF. In the opinion of Greenwood et al. (2005), PSF is a professional body whose principal asset is its professionalized workforce that deliver solutions to the complex industry problems by providing intangible services as outputs. In the words of Hitt et al. (2006), PSFs refer to knowledge-intensive firms that necessitate higher knowledge and skills in their employees to provide efficient customer service.

Needless to say, PSFs are considered knowledge-intensive or knowledge-based, nevertheless, these are unlike other routinized firms as they deliver knowledge-based customized client solutions. This is to say, the input processes and output services delivered by them are always tailored or customized to meet individual client

requirements (Fu, 2010; Morris, 2001). In this regard, for instance pharmaceuticals are characterized as knowledge-intensive but these can't be considered as PSFs as they unvaryingly deliver same products or services to their clients as opposed to the PSFs that offer customized client services. In view of the above definitions of 'Professional' and 'Professional Service Firm' and the factors differentiating PSFs from other types of knowledge-oriented firms collectively highlight their distinctiveness, making it evident that these rely on highly-skilled and specialized workforce to deliver client services. Stated differently, organizational workforce is viewed as the most critical asset in PSFs (Fu, 2010).

2.2.2. Characteristics of PSFs

Keeping in view the above definitions, PSFs demonstrate a clear-cut difference from the conventional administrative or manufacturing firms owing to their knowledge-intensive nature of work, organizational processes, governance structure and employee management mechanisms (Greenwood et al., 2005; Morris, 2001; Løwendahl, 2000). The only input to PSFs is the expert knowledge of the skilled staff with output as customized client services (Von Nordenflycht, 2007; Hitt et al., 2001). PSFs differ from the other firms in the following aspects in particular (Fu, 2010; Stumpf et al., 2002; Maister, 1993).

- **Systematic Work** – The nature of work is systematic for which efficient procedures and solutions are in place. Hence the tasks can also be delegated to less-experienced individuals in some cases.
- **Brain Intellect** – Due to unique and complex nature of end solutions delivered to the client, the successful completion of tasks not only necessitates professional expertise but also the intellectual creativity of the individuals.
- **Grey Hair** – In PSFs, the work activities are mostly project/program oriented involving experienced professionals with cross-functional expertise to work in collaboration with each other, aimed at efficiently and smoothly delivering external client services of complex nature.

Greenwood et al. (2005) identified two distinctive features that affect the organisational decisions making and work activities performed by the PSFs. The first one is the information asymmetry between a PSF and its client that eventually increases the client's dependence on the firm. The second one is the PSF's reliance on the skilled staff because of high mobility of firm's human capital assets that may not be easily retained. These unique contingencies in PSFs distinguish them from the manufacturing organizations (Fu, 2010). From the viewpoint of professional staff in PSF, Stumpf et al. (2002) noted that PSFs provided their staff with opportunities to gain

advanced qualifications and certifications relating to their field of expertise. This is because working in PSFs requires individuals to be equipped with technical skills and expertise in addition to problem-solving and analytical skills. In this regard, Williams and Nersessian (2007) determined three specific staff characteristics in PSFs:

- **Entry Barriers** – There are professional prerequisites that must be fulfilled before commencing specialized work in a specific type of PSF. For example, each of the accounting, finance, law, engineering and IT firms would require formal qualification besides the relevant accreditations, trainings or experience.
- **High Level of Controls** – The staff inductions are controlled through initial qualifications and industry accreditations. The on-going staff performance and conduct are measured through relevant codes of ethics and professional practice as the binding documents.
- **Application of Specialized Knowledge** – This highlights professionals' ability to utilise expert knowledge and acquired skills in a personalized manner to address complex client problems.

Løwendahl (2000), while observing the characteristics of PSFs, highlighted that more than 50% of the workforce is comprised of the professional staff. These professionals practice high-level of altruism and demonstrate professional commitment to create new knowledge coupled with an ability to make sensible decisions and solve complex client problems. Besides, Empson (2007) identified following distinctive characteristics of PSFs to further elucidate in this regard:

- **Professional Identity** – Staff members in PSFs recognize themselves as professionals and work together as part of shared commitment. This professional behaviour is guided by ethical obligations and continuous emphasis on delivering exceptional services to the clients.
- **Knowledge Base** – While there is a little dependence on use of physical resources, the PSFs primarily rely on the knowledge capabilities of their professional staff that mainly include technical skills, experience and creativity. Therefore, management of staff knowledge is extremely important in PSFs.
- **Work Autonomy** – Professionals are encouraged to exercise high level of autonomy as part of working in a corporate environment.

2.2.3. Organizational Structure and Governance

Traditionally, an important characteristic of organisational structure in PSFs was to share ownership by a group of individuals called partners. However, this structural arrangement couldn't sufficiently meet the dynamic growth needs of modern service firms that underwent a transformation from traditional partnership firms to

professionally-managed firms (Pinnington and Morris, 2003). At present, the organizational structure in PSFs exhibit lesser hierarchies because of the fewer categories of skilled staff. This type of work structure enables senior executives to guide young professionals through on-job learning, mentoring and training (Fu, 2010). In terms of service charges, most of the PSFs bill based on total number of hours or days required to complete a particular client project (Fu, 2010). From the viewpoint of overall governance, leadership responsibilities are often assigned to the executives on a rotation basis (Stumpf et al., 2002). What had been seen as unique in traditional PSFs was the up-or-out system of promotion that required individuals not getting promoted to resign. However, this type of promotion system gradually became least effective particularly in the PSFs of today (Fu, 2010; Pinnington and Morris, 2003).

2.2.4. Staff Categories

Master (2004) identified following core categories of staff in PSFs (Fu, 2010):

- **Finders:** Individuals responsible for identifying business opportunities i.e. client projects and subsequent projects initiation including high-level client engagement and relationship building.
- **Minders:** Individuals responsible for managing teams working on the client projects, ensuring effective use of resources and cohesiveness between the teams and executives.
- **Grinders:** Individuals at the lowest level responsible for performing the tasks of analytical nature.

2.2.5. Management Mechanisms

According to Fu (2010), management mechanisms such as communication, coordination, teamwork and staff performance measurement are crucial to the effective functioning of PSFs. As already mentioned above, work nature in PSFs is mainly project or programme based. In order to effectively meet client needs, Partners (Senior Executives) usually create different teams comprising of suitably qualified professionals to work on complex client projects. The effectiveness of teamwork is essential to enable teams to work on diverse range of projects (Fu, 2010; Stumpf et al., 2002). Moreover, the market competitiveness, varying priorities and tight deadlines demand accelerated completion of the client projects in PSFs. These again call for creating vibrant teams that are capable enough to openly collaborate, exchange ideas and timely create client solutions (Rehman et al., 2020a). Therefore, by incorporating above management mechanisms involving communication effectiveness, adequateness of teamwork and ongoing staff

performance management, managers in PSFs would be able to appropriately utilize their human capital and smoothly accomplish client projects.

Overall, having analyzed and synthesized the work of above scholars, following is the summary underlining the key characteristics of PSFs:

- ✓ Professionally-managed firms.
- ✓ Represent lesser hierarchies as compared to other type of business firms.
- ✓ Exhibit knowledge-based nature of work.
- ✓ Rely on the expert knowledge of their professional workforce.
- ✓ Pay structure is mostly based on per-hour, per-day or number of days.
- ✓ Smooth execution of the activities necessitates shared communication and cooperation among the individuals from cross-functional backgrounds.

2.3. High Performance Work Practices (HPWPs)

The increased significance of strategic HRM can be attributed to scholarly shift from hierarchy-based management to empowerment-based HR management (Obeidat et al., 2016). To this end, strategic HRM literature has identified various HR practices that demonstrate positive effects on firm performance. Scholars have assigned several labels to conceptualize and describe HRM practices viz. High Performance Work Practices/System, Knowledge-Based-HRM System, Strategic-HRM-Practices etc. However, these are more commonly termed as High Performance Work Practices (HPWPs) (Gojny-zbierowska, 2015). HPWPs have been defined by many scholars, however, there's no unanimously-accepted or unique definition. Nevertheless, by reviewing the most common definitions, we can observe various commonalities and shared elements. Collins and Smith (2006) consider HPWPs as HR systems that nurture employee knowledge, skills and capabilities, aimed at improving firm performance. Nadler, Gerstein and Shaw (1992) define HPWPs as organisational architecture clustering the people, information, work processes and technological components in a manner that they complement their match (Rehman et al., 2020a). This arrangement is aimed at exploring opportunities, meeting requirements and addressing needs, thereby enhancing efficiency (Silva et al., 2019; Posthuma et al., 2013; Lawler, 1992).

According to Appelbaum et al. (2000), HPWPs are contemporary workforce management practices, such as: self-managed work teams, quality circles, performance-oriented pay, workplace flexibility, continuous training & learning, collaborative communication, information sharing etc. In the opinion of Picón et al.

(2014) and Bohlander and Snell (2004), HPWPs refer to strategic HR functions, processes and practices that maximize employee skills, abilities, flexibility and commitment of the employee. This viewpoint highlights that HPWPs represent a highly efficient system involving series of unrelated work components whose tactful implementation enables the achievement of organisational goals as the impact of implementing individual practice would be insignificant as opposed to their collective implementation (Posthuma et al., 2013; Huselid and Becker, 1997).

The fundamental aspect of HPWPs is to instil a work culture within an organisation where employees feel empowered, motivated and dedicated (Tomer, 2001; Becker and Huselid, 1998). Organizations that adopt employee-oriented approach view work activities as simple, standardized and specialized, hence managers should incentivize employees to keep them motivated (Jyoti and Rani, 2019; Combs et al., 2006; Lawler, 1992). Organisations implementing HPWPs engage their employees in problem-solving and continuous process improvement to achieve organizational growth. In a HPWPs-enabled environment, teams are encouraged to work without directions and supervisions because of the clearly-defined work goals and organizational objectives (Picón et al., 2014).

SHRM scholars underscore the importance of three critical elements that are operationalized within HPWPs for fostering organizational performance. These involve a) employee Knowledge, Skills & Ability (KSA) development; b) employee empowerment to act; and c) employee motivation to act (Combs et al., 2006; Bohlander and Snell, 2004; Becker and Huselid, 1998). Employees in a HPWP work environment utilize their talent to the fullest. This not only enables the achievement of organisational goals but at the same time, it fosters sense of employee engagement and fulfilment, inducing in them a feeling that their contribution has an impact and is meaningful (Bohlander and Snell, 2004; Podsakoff et al., 2003; Tomer, 2001). On the other hands, the critics of these practices maintain that HPWPs are purposed at enhancing staff productivity by forcing them to work harder under increased control and pushing them for productivity (Shin and Konrad, 2017; Godard, 2004). Overall, it can be argued that effective implementation of HPWPs leads to improved employee outcomes and organizational performance (Combs et al., 2006).

An organization can be considered production-focused or problem/knowledge-focused. The production-focused organization believes in mobilising people and resources with an aim to maximize efficiency. The knowledge-focused organization is the one applying or creating knowledge for solving complex problems (Stevens, 2012; O'Driscoll, 1998; Zand, 1981). While knowledge is being considered a key player of organizational effectiveness in such organizations, it must be allowed to

freely evolve in order to improve organizational ability to make decisions (O'Driscoll, 1998). This is because knowledge-based organizations are rich in innovative ideas on new products & services that aid in improving managerial effectiveness. Hence, hoarding or misusing organizational knowledge would be detrimental to its growth (Robertson et al., 2003; Peters, 1987).

Moreover, the ever-increasing external market competitiveness coupled with internal challenges of meaningfully utilising organizational workforce has inevitably compelled corporate managers to adopt empowered approaches to HR management (Stumpf et al., 2002; Ackoff, 1990; Zand, 1981). This, however, necessitate managers to preserve and promote organizational values like fairness, mutual support and equitable growth opportunities for all if they ought to fully capitalize on the creativity and intellect of their people and spearhead the process of organizational transformation (Rehman et al., 2020b). As a result, the competitive urge to achieve strategic objectives no longer relies on utilization of physical material and labour resources in the current knowledge economy. Rather organizations must emphasize on improving the productivity of their knowledge workers and consequent purposeful utilization of this expert knowledge in deriving optimal performance (Silva et al., 2019; Morris and Snell, 2008; O'Driscoll, 1998; Drucker, 1993).

2.3.1. High Performance Work Practices Vs. Traditional HRM Practices

Contemporary knowledge-based organisations rely on the skills of their knowledge workers who utilise primitive technologies to meet competitive market needs (Morris and Snell, 2008; Stumpf et al., 2002; Peters, 1987). The authority structure in such organizations hinges upon mutual relationship instead of hierarchical commands and structures (O'Driscoll, 1998; Ackoff, 1990). These organizations ensure their competitive survival by delegating authority and responsibility to lower level of employees. This not only helps managers create synergies but also maintain charisma by the virtue of empowered relationships. Additionally, it promotes interpersonal interaction among the employees, enabling them to voluntarily share innovative ideas and information without exercising managerial authority (Rehman et al., 2018; Harley et al., 2007).

In contrast, such approaches are typically discouraged in the traditional hierarchical organizations as the top individuals resist such structural change, seeing it as an attack on their status and authority (Malhotra and Morris, 2009; Harley et al., 2007). As a result, the need to transform to a flatter and transparent organizational structure is hindered by the people in top positions who remain unwilling to relinquish their

power and status in conventional bureaucratic organizations (Rehman et al., 2018; Stumpf et al., 2002; Drucker, 1993). To this end, Nadler and Gerstein (1992) compare the characteristics of traditional HRM practices applied by hierarchical organizations and High Performance Work Practices applied by the contemporary organizations (O'Driscoll, 1998).

S #	Conventional HRM Practices	High Performance Work Practices
i.	Internally-driven design	Customer and environmentally-focused design.
ii.	Highly-controlled units	Autonomous and empowered units
iii.	Ambiguous requirements	Clear goals and directions
iv.	Inspection of errors	Variance control at source
v.	Dominance of technical systems	Socio-technical integration
vi.	Limited flow of information	Accessible free flow of information
vii.	Narrow jobs	Enriched and shared jobs
viii.	Controlled and restrictive HR practices	Empowered HR practices
ix.	Controlled organizational structure and management practices	Empowered organizational structure and management practices
x.	Static design dependent on senior management	Capacity to reconfigure

Table 2.1: Conventional HRM Practices Vs HPWPs (Nadler and Gerstein, 1992)

2.3.2. AMO Model/Framework – Bundle Perspective in HPWPs

While it can be assumed that the individually-applied HPWPs may support organizational performance to some extent, however a number of researchers suggest HPWPs application in mutually-supportive bundle as opposed to their application as individual work practice (Obeidat et al., 2016; Jiang et al., 2012a). The bundle perspective is far more effective in deriving favourable employee outcomes viz. employee flexibility, retention and productivity (Fu et al., 2017). This is because a bundle configuration to HPWPs implementation demonstrates greater influence on organizational performance outcomes owing to their synergistic and mutually-reinforcing effects (Wright and Kehoe, 2008; Appelbaum et al., 2000; MacDuffie, 1995). Nevertheless, there arises a question as to which of these practices should be combined to constitute a complete system of HPWPs. In this regard, the notable

AMO Model/framework pioneered by Appelbaum et al. (2000) has received wider acceptance and offers solid grounds for conceptualizing and categorizing HPWPs. The AMO model described below suggests that a blend of Ability, Motivation & Opportunity-enhancing bundles form a holistic system of HPWPs:

2.3.2.1. Ability-enhancing HPWPs – [A]

These refer to HRM practices that enhance staff ability to perform better (Katou and Budhwar, 2010). In fact, these practices highlight the investment made by the organization in employee knowledge & skills development (Wright and Kehoe, 2008). Examples include: formal staffing, comprehensive recruitment & selection, skill upgradation, training and learning (Obeidat et al., 2016; Appelbaum et al., 2000).

2.3.2.2. Motivation-enhancing HPWPs – [M]

These denote the practices that motivate staff to deliver result-oriented performance and achieve desired goals (Meadows and Pike, 2010). To this end, the research highlights that when individuals sense that they are adequately rewarded and fairly treated, they endeavour to perform to the fullest of their abilities. Common examples are: rewards & recognitions, performance appraisal, job security, promotion etc. (Obeidat et al., 2016; Appelbaum et al., 2000).

2.3.2.3. Opportunity-enhancing HPWPs – [O]

This category includes the practices that provide employees a supportive work environment and opportunities to express themselves and feel inclusive (Katou and Budhwar, 2010). Some examples in this category are: employee autonomy, job design, work flexibility, formal complaint procedures, staff attitude surveys, quality circles, teamwork, extensive communications, information sharing etc. (Paauwe, 2009; Appelbaum et al., 2000).

Wright and Kehoe (2008) claim that categorizing HPWPs and then taking into account their influence on range of outcomes enables to measure the impact of each category on achieving specific performance outcome (Obeidat et al., 2016). In addition, many other scholars have tested HPWPs according to AMO categories and confirmed the varying effect of each dimension on organizational performance indicators (Jiang et al., 2012a). In line with AMO framework, employees' ability to improve the effort-performance link is enhanced by their motivation to add value. Employee empowerment brings new avenues of growth and improvement by motivating them to act on innovative ideas. Such a sense of autonomy fosters employee effort-performance link by minimizing barriers to creative thinking (Appelbaum et al., 2000). Moreover, reward system motivates employees to apply their discretionary efforts, enabling them to identify and address ineffectiveness by

encouraging the performance-reward linkage (Jyoti and Rani, 2019; Fu, 2010; Lawler, 1986). Needless to say, AMO model has drawn consensus in most of the studies researches, Boxall and Macky (2009), however, argue that these AMO dimensions may individually or collectively support the achievement of different goals, implying that not necessarily all of AMO bundles but any of these could be applied based on the organizational competing needs.

It is now evident that the AMO model has been widely used by the researchers as a commonly-accepted framework for categorising HPWPs (Paauwe, 2009; Luna-Arocas and Camps, 2008). For this research, the framework is particularly relevant from two viewpoints. First, it enables the researchers to understand the unique effects of AMO bundles in achieving varying IC growth outcomes and subsequently the multi-stakeholder value outcomes. Second, it guides in general on the strategic significance of HPWPs when implemented in PSFs as knowledge-intensive firms.

2.3.3. Organization-Level and Employee-Level HPWPs

The literature review from last two decades indicates that prior researchers such as Fu et al. (2017), Shin and Konrad (2017), Jerez-Gómez et al. (2017), Gojny-Zbierowska (2015), Posthuma et al. (2013), Jiang et al. (2012a; 2012b), Scott (2008), Combs et al. (2006), Godard (2004), Bohlander and Snell (2004), Bartlett (2001), Tomer (2001), Wright et al. (2001), Appelbaum et al. (2000), Kalleberg and Moody (1994), Huselid (1995), Arthur (1994), Lawler (1992) and many others have mostly adopted a macro-level (organisational-level) approach to HPWPs implementation by evaluating their impact on organizational-level outcomes.

However, very few studies such as Riaz (2016), Wu et al. (2011), Liao et al. (2009) and Wright and Boswell (2002) have considered a micro-level (employee-level) position to examine employee experience of HPWPs. The reason behind preferring macro-level over micro-level approach to HPWPs was that these practices were predominately assumed to be invariably uniform across various individuals, groups and job roles in an organization. Nevertheless, this viewpoint was challenged by the researchers like Riaz (2016), Wu et al. (2011) and Harley et al. (2007), arguing that individual employee-experienced HPWPs within an organization vary from the others (Wright and Boswell, 2002).

This accounts to mainly two reasons. First, employees work in different groups in different organizations which uniformly adopt various HPWPs with different work groups. Second, group members may have diverse experience of HPWPs at workplace, they might be treated in a different way even within the same group (Harley et al., 2007). Accordingly, scholars advocate that HPWPs personally

experienced by the employees have more impact than the organizational-adopted HPWPs and could have significant implications for employees in terms of their performance and work-related outcomes (Wright and Boswell, 2002). In view of the above, this research has considered both employee-experienced and organizational-level HPWPs.

2.3.4. HPWPs and Organizational Culture

Traditional HRM practices focus on short-term exchange association between employer and employees, however, HPWPs improve organization capabilities by sensibly investing in its human resources (Datta et al., 2005). Hence, the organizations with proactive and advanced HPWPs strategies are able to best utilize their human resource (Collins and Smith, 2006). The literature also advocates that HPWPs support the creation of a work culture that inspires employee commitment to learning, encouraging them to collaborate and create new knowledge (Arthur, 1994).

Moreover, HPWPs promote collaborative communications and exchange of knowledge among the employees, resulting in an increased sense of empowerment and inclusiveness towards the organization, leading to creative work behaviour (Datta et al., 2005; Nahapiet and Ghoshal, 1998). When such a learning culture flourishes, employees feel naturally motivated so they strive hard towards the achievement of organizational goals. As a whole, HPWPs support HR integration with the organizational strategy and vision, enabling a systems perspective.

2.3.5. HPWPs and Organizational Performance

Needless to say, organizations apply HPWPs to build their employee knowledge, skills and competencies and motivate them through training, empowerment and incentive. Previous empirical research has attributed each HPWP component to performance outcomes. For example, empowerment drives positive organizational and employee benefits such as: employee positive attitudes and organization innovation (Tesluk et al., 1999). Also, investing in employee training and learning positively affects employee productivity (Delaney and Huselid, 1996; Kalleberg and Moody, 1994). Besides, performance-based pay promotes employee motivation and encourages workplace efficiency, resulting in superior performance outcomes (Silva et al., 2019; Way, 2002; Kalleberg and Moody, 1994).

In the context of turbulent organizational environment, systems perspective emphasizes that complex organizational systems are effective towards managing its internal complexities. Organizations that are equipped with complex systems and

structures often outperform their competitors because of their structural complexity and robust change management strategy, enabling them to respond to uncertainties, thereby maintaining efficiency at the workplace (Scott, 2008; Boisot and Child, 1999). This viewpoint that organizational complexities enhance its performance is also supported by the researchers like Walters and Bhuian (2004) and Ashmos et al. (2000).

HPWPs represent a complex system and their integrated impact is lot more significant than the individual work practice (Subramony, 2009; Walters and Bhuian, 2004). HPWPs enable organizations to react to the competitive changes through motivation and commitment of their staff that is adequately equipped with required skillset and proactive enough to respond to the problems & opportunities emerging as a result of organizational changes (Shin and Konrad, 2017; Jiang et al., 2012b). Based on broad scholarly agreement, it can be argued that HPWPs enhance overall firm performance and effectiveness.

2.3.6. HPWPs and Resource Based View (RBV)

HPWPs enhance employee productivity by introducing empowerment and reward mechanism (Wright et al., 2001; Lawler, 1986). The empirical work suggesting that HPWPs application leads to improved performance has primarily relied on RBV perspective (Jiang et al., 2012a). The RBV offers theoretical perspective for evaluating the effects of HPWPs on firm success (Guthrie et al., 2009). It suggests a shifting focus from external environmental factors to internal firm resources when it comes to strategic HRM (Fu, 2010). According to the RBV, organizational human resource plays phenomenal role in deriving long-term competitiveness for the firm. However, this competitive advantage would only be sustainable as long as these resource capabilities are exceptional, unparalleled and unmatched (Barney, 1991).

This perspective views HPWPs as a realistic investment on the employees that eventually translates into a robust human capital base (Özçelika et al., 2016; Wright et al., 2001). Along the lines of RBV, capitalizing on employee knowledge and skills supports efficient work processes because of the improved employee competencies and creative thinking abilities (Wright et al., 1994). Hence, organizational human resource is considered crucial for sustained competitiveness (Jennex, 2020; Özçelika et al., 2016).

2.3.7. HPWPs in PSFs

HPWPs on their own don't result in firm performance effectiveness but their competitiveness is derived from the contribution of people who are hired, trained and nurtured through these practices (Messersmith and Guthrie, 2010; Takeuchi et al., 2007). Needless to say, HPWPs represent diverse HR management approaches intended at enhancing performance, nevertheless, different organizational circumstances necessitate applying different set of practices to help build organizational capabilities (Collins and Smith, 2006).

Accordingly, PSFs were chosen as intended sector as the skills and capabilities of human resource serve as the key value-creating driver in these firms (Stumpf et al., 2002). Given the dearth of HPWPs implementation in PSFs (Fu et al., 2017), one of the key concerns is to foster the creation and exchange, and making use of new knowledge for solving complex client problems (Greenwood et al., 2005). This calls for continuous performance management of the staff through application of HPWPs such as training & capacity building, performance rewards, workplace flexibility, information sharing etc. with an aim to assist these firms in cutting costs and boosting performance (Jyoti and Rani 2019; Fu, 2010).

Employees in PSFs, owing to their skills and expertise, are considered revenue generating sources (Stumpf et al., 2002). In this regard, role of senior executives/consultants (commonly known as partners) has been extremely important when it comes to creating new business opportunities and maintaining existing client relationships (Hitt et al., 2006). When client services are delivered, these partners serve in their capacity as senior executives and actively contribute to the key business activities. They are also responsible for making company decisions of strategic nature due to their professional expertise (Empson, 2007). Given their specialized knowledge and relevant industry experience, these executives play their role in continually monitoring and improving staff competencies by taking range of performance management initiatives. Yet another reason their presence is indispensable for PSFs is that they possess substantial knowledge about the client market and the fact that their professional industry network can be utilized in creating new business opportunities (Fu, 2010).

Hence, by applying HPWPs in PSFs, the relationship between senior executives and staff can be further strengthened through improved communication and teamwork. As a whole, the choice of services sector as target sector offers a suitable context for examining the effectiveness of strategic HRM practices (HPWPs) owing to the phenomenal role of skilful workforce being the most critical asset in these firms.

2.4. Intellectual Capital

In 1969, the economist John Galbraith first coined the term 'Intellectual Capital' from the viewpoint of an individual human capacity. According to him, IC accounts to using behaviour of human brain in addition to use of knowledge and intelligence (Lu et al., 2014). In early-1980s, IC was considered as intangible asset that was reportable in the financial statement mostly taking the form of intellectual property (e.g. copyrights, patents) and goodwill. In the late-1980s, it was viewed as a difference of enterprise's market value & book value (Altındağ et al., 2019). Later on Stewart (1991) popularized the IC concept as an intangible asset in the company context. According to him, all type of knowledge, experience and competencies that are existent in the company's people, processes, technological system and capabilities and customer relations represent its IC.

The IC concept has been explained by many scholars in their own idiosyncratic ways. Most of them have primarily focused on how to measure, manage and report IC as an intangible company asset (Altındağ et al., 2019). For example, Skandia business firm describes IC as combination of knowledge, experience, professional skills, technological capabilities, core competencies and customer relationships that result in competitive business advantage. Skandia was the first to issue a report on IC in 1994 besides its financial report wherein it provided additional information on measuring the knowledge assets. Stewart (1991) defines IC as combined mental energies as well as existing knowledge capabilities, information systems, structures and business reputation of an organization that help it achieve competitive edge in the market. He considers intellectual material of an organization as the sum of its employee skills, past experience, management processes, patents, technologies, customer intelligence, supplier information etc (Rehman et al., 2020b).

Furthermore, in views of Edvinsson and Sullivan (1996), IC is an intangible asset that exceeds the market value from the book value, leading to an increased organizational value and long-term advantage (Silva et al., 2019; Lu et al., 2014). Özdemir and Balkan (2010) consider IC as an intangible resource required by an organization to continue its business activities and operations. Atalay (2018) defines IC as the most valuable organizational resource, comprising of the assets which are not even visible in company's financial statement but offer an opportunity to transform these assets into value. Chang and Hsieh (2011) view IC as a competitive intangible asset that requires effort to achieve transformation of knowledge from possession to application. In the words of Erkanli and Karsu (2012), IC is an intangible asset that has a role in the company value-chain process. According to Kianto et al.

(2014), IC indicates an enterprise's knowledge, competencies and external relations that form the basis of its competitive success in the industry.

Above definitions give rise to two fundamental viewpoints on IC as a concept. The first one is by Bosworth and Rogers (2001) that eyes intellectual capital as an intangible organizational asset. The other viewpoint by Subramaniam and Youndt (2005) and Nahapiet and Ghoshal (1998) propounds IC as sum total of knowledge resources. However, the later idea draws more attention in the SHRM and IC literature. This perspective adopts firm's Knowledge Based View (KBV) suggesting IC as collective sum of firm's knowledge resources that it utilizes to sustain a competitive advantage. Hence, to make most of IC, organizations should develop collaborative network of linkage between various cross-functional teams and establish relationship network with the external stakeholders such as customer and suppliers in order to augment value creation (Lu et al., 2014).

As part of firm's business strategy, an effective IC management is vital to firm's competitive success. In this regard, a systematic approach to IC measurement and management would be increasingly critical irrespective of the size, structure and type of the firm (Altındağ et al., 2019; Zor and Cengiz, 2013). In its capacity as an intangible asset, IC provides business firms with new opportunities in terms of acquired technological capabilities that augment their staff knowledge capabilities to eventually assist these in becoming knowledge-based firms (Rehman et al., 2020c; Fidanbas, 2017).

2.4.1. Intellectual Capital Dimensions

Given that organizational knowledge resources and intellectual assets are diverse and involve different approaches to their utilization, previous researchers have endeavoured to determine IC dimensions that yielded many frameworks. Edvinsson and Malone (1997) categorise IC to be comprising of human and structural capitals with organizational and customer capital as subdivisions of structural capital. These subdivisions provide an understanding of the market structure and help in developing IC guidelines. Moreover, in line with the views of Subramaniam and Youndt (2005), IC is comprised of three dimensions: Human, Organizational and Social capitals. On the other hand, scholars like Kong (2009), Bontis (2002), Dzikowski (2000), Roos et al. (1998) and Sveiby (1997) suggest that IC constitutes Human, Structural & Relational capitals. Also, the Meritum Project (European universities consortium) recommends the same dimensions as suggested by the later scholars. Hence, this research adopts the dimensions proposed by most of the scholars and Meritum Project.

2.4.1.1. Human Capital

The knowledge, talent and expertise embedded in human resources represent an organization's human capital. Stated differently, it denotes employee collective skills, expertise and innovativeness to perform tasks at hand (Bontis, 2002; Roos et al., 1998). Barney (2002) additionally found that the attributes like training, intelligence, judgment and insight of the organizational members also constitute human capital (Stevens, 2011). The specific examples of human capital include creativity, innovative capability, knowhow, past experience, organization culture, employee flexibility, teamwork capacity, motivation, loyalty, problem-solving ability, formal training, learning capacity etc. (Bontis, 2002; IFAC, 1998; Edvinsson and Malone, 1997). In the views of Bayram (2018), it incorporates both organizational and employee related characteristics such as competencies, values, culture, learning philosophies. In the words of Gülcemal (2016), human capital is an agent of knowledge-based competitiveness and innovation for the organizations that can be further enriched through continuous learning and skills upgradation of the employees (Altındağ et al., 2019).

As the staff members acquire on-the-job skills, expertise and experience, these staff competencies ultimately get translated into tacit knowledge capabilities for the organization. Moreover, the staff competencies thus improved result in higher workplace productivity and efficiency (Stevens, 2011). While some of the employee knowledge could be generic and some may be unique to the individual employees, a human capital serves as an agent of sustained organizational advantage by enhancing its ability to respond to complex environmental changes (Bontis, 2002; Sveiby, 1997). However, the downside of human capital is that it cannot be retained by the firm because the employees take the acquired skills and competencies with them while leaving the firm (Roos et al., 1998; Stewart, 1997). Accordingly, HR managers must hire suitable candidates and continually upskill their capabilities in their pursuit to attain and maintain a competitive advantage.

2.4.1.2. Structural Capital

Also sometimes called organizational capital, structural capital represents the knowledge institutionalized by the organizations as records, procedures and processes (Youndt et al., 2004). In other words, it accounts to the knowledge resources that reside inside the organization. Examples include organizational structure, records, documents, databases, processes, procedures, hardware & software, IT infrastructure, information systems and all other resources and facilities that stimulate employee productivity and support organizational operations and business activities (Roos et al., 1998; Nahapiet and Ghoshal, 1998; Sveiby, 1997). In

other words, all resources that remain at the workplace when employees go home constitute a firm's structural capital. Structural capital involves organizational routine activities and processes that facilitate the transformation of human knowledge into organizational output (Roos et al., 1998; Stewart, 1997).

As opposed to human capital, some of structural capital resources could be legally owned by the company as they become its Intellectual Property (IP). These comprise: copyrights, trade-secrets, trademarks, patents etc. (Bontis, 2002; IFAC, 1998). When it comes to utilising IP related structural capital assets, achieving firm competitiveness is dependent on how effectively these are used in combination with primary structural capital assets. While it is possible to replicate these resources but these would be meaningless if used out of context (Morris and Snell, 2008; Youndt, 1998). This is owing to social-complexity governing the utilization of these resources. Stated other way, it requires coordinated use of people, processes, information and systems to achieve a given purpose (Lerro et al., 2014).

For example, a composition or formulae of a life-saving drug would be of little or no value to the competitor unless it comes with an expert biochemist who possesses product-specific tacit knowledge to create the product (Stevens, 2012; Youndt 1998). Hence, it goes without saying, the competing firms would only be able to substitute and derive value if they are in position to exactly mimic the resource capabilities and simultaneously acquire tacit human expertise associated with use of resource. Structural capital also helps a firm eliminate errors, avoid repetitive procedures and utilize lessons learnt by providing access to the organizational knowledge stored as: databases, project documents, records and past experiences (Youndt et al., 2004; Snell et al., 1996). Another reason behind structural capital importance is that it serves as organizational memory to collectively store individuals' know-how that eventually becomes organizational property to create bigger impacts (Stevens, 2012; Bontis, 2002; Stewart, 1997).

2.4.1.3. Relational Capital

Also sometimes referred to as customer capital, it encompasses knowledge and resources deep-rooted in the employees' network of relations with the external environment and stakeholders network such as: customers/clients, partner, supplier etc. (Bontis, 2002; IFAC, 1998; Sveiby, 1997). The relational capital represents the part of human capital and structural capital that involves a firm's relationship predominantly with the customers in addition to other stakeholders like partners, investors and suppliers (Stewart, 1997). Besides, it also involves the company perception these stakeholders have in mind. Examples include: customer satisfaction and loyalty, brand image, supplier relationships, negotiating capacity with financial

institutions, corporate social responsibility initiatives and environmental activities (Bontis, 2002; IFAC, 1998; Edvinsson and Malone, 1997).

While the human capital management only revolves around people-centred focuses with structural capital requiring organizational systems & infrastructure oriented emphasis, however the relationship capital necessitates both infrastructural and people related focuses. This dual focus to managing relational capital is due to the efforts required in managing and utilizing both knowledge types i.e. the knowledge possessed by people – the human capital, and the knowledge stored in organizational physical infrastructure & systems – the structural capital (Kong and Thomson, 2009; Reicha et al., 2003; Youndt, 1998). Relational capital gives an understanding of organization's external relationships, but it doesn't present a complete picture of the influence made by the external atmosphere (Bontis, 2002).

The external environment situations include political and economic conditions, natural/manmade crises, technological changes and other factors that can directly or indirectly affect organization's functioning. Since organizations have little or no control on these factors, nevertheless, by focusing on relational capital, they can adjust and minimize the impact of these changes (Kong and Thomson, 2009). Below table shows the IC classification done by International Federation of Accountants (IFAC).

Human capital	Relational (customer) capital
<ul style="list-style-type: none"> ● know-how ● education ● vocational qualification ● work-related knowledge ● occupational assessments ● psychometric assessments ● work-related competencies ● entrepreneurial elan, innovativeness, proactive and reactive abilities, changeability 	<ul style="list-style-type: none"> ● brands ● customers ● customer loyalty ● company names ● backlog orders ● distribution channels ● business collaborations ● licensing agreements ● favourable contracts ● franchising agreements
Organisational (structural) capital	
<p><i>Intellectual property</i></p> <ul style="list-style-type: none"> ● patents ● copyrights ● design rights ● trade secrets ● trademarks ● service marks 	<p><i>Infrastructure assets</i></p> <ul style="list-style-type: none"> ● management philosophy ● corporate culture ● management processes ● information systems ● networking systems ● financial relations

Table 2.2: Classification of Intellectual Capital (IFAC, 1998)

2.4.2. Intellectual Capital and Firm Performance

As discussed earlier, IC collectively refers to knowledge, capabilities, skills, resources, employee interaction and relationship network utilised by the firm for gaining and maintaining a competitive advantage (Chang and Chen, 2011; Roslender and Fincham, 2001; Youndt, 1998). Evaluating this in a firm's context, scholars advocate that intellectual capital promotes knowledge transfer, stimulates innovative capabilities and drives firm performance, thereby bringing a positive effect on overall functioning of the firm (Jennex, 2020; Kang and Snell, 2009; Chen et al., 2009).

Since IC is a firm's critical asset ingrained in the employees' actions, attitudes and core competencies, scholars therefore suggest that IC should be explored from an individual employee perspective rather than organisational perspective so as to gain in-depth knowledge and understanding on IC related phenomena (Georgiadis and Pitelis, 2012; Kang and Snell, 2009). Moreover, Knowledge Management (KM) scholars have stressed on the need to focus on knowledge-based value creation which is deeply-rooted in the actions, interactions and building employee relationship network (Foss, 2010; Reed et al., 2006).

2.4.3. Social Capital Theory – How IC Leads to Value Creation

The Social Capital Theory (SCT) conceptualizes IC as 'knowledge & knowing ability of social-collectivity' i.e. the intellects or professional communities of practice within an organization (Nahapiet and Ghoshal, 1998). Consistent with this theory, social capital builds an environment that paves way towards the increase in or the creation of (new) IC that subsequently results in some organizational advantage (organization value creation) and further enhancement of social capital (Reicha and Kaarst-Brown, 2003). The theory further underscores that an organization's social capital supports its IC development by means of two mechanisms i.e. combination & exchange. Combination refers to a process of incrementally or radically combining knowledge while exchange process denotes to knowledge transfer (explicit or tacit) using teamwork and collaboration.

The theory additionally argues that there are four prerequisites that must be fulfilled so as to enable the combination or exchange of knowledge. These are opportunity, motivation, capability and expectation for value-creation. To this end, various measurements of social capital i.e. structural, cognitive and relational play their role in this knowledge transformation. For example, shared language, network ties, collective narratives, identification and trust facilitate knowledge exchange and

combination in somewhat different ways, however, all of these have a contribution towards the growth of IC (Reicha and Kaarst-Brown, 2003).

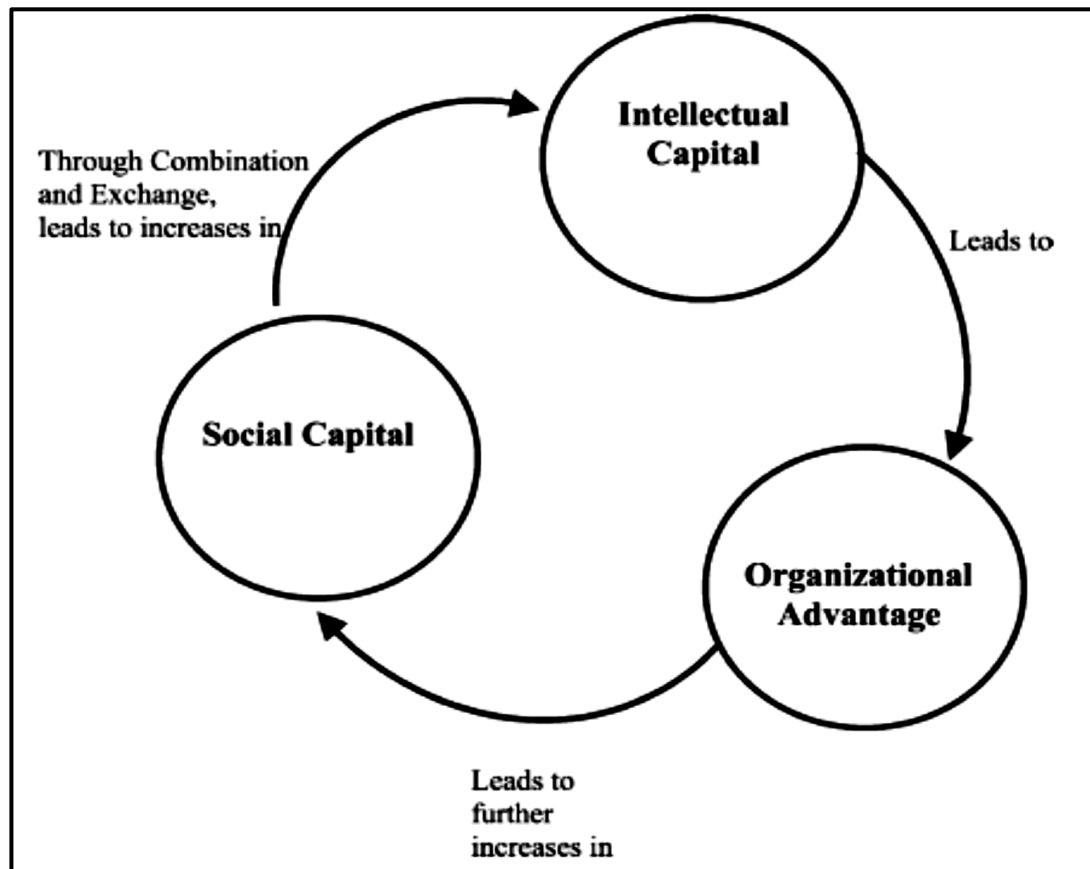


Figure 2.1: Social Capital Theory (Nahapiet and Ghoshal, 1998)

2.4.4. Intellectual Capital and Resource-Based View (RBV)

A firm's RBV pinpoints towards internal capabilities and resources of the firm that help derive profits and create value (Grant, 1996; Barney, 1991; Wernerfelt, 1984; Penrose, 1980). Propounded by Barney (1991), this view suggests that a firm's intellectual capabilities, information systems & knowledge resources form a basis of sustained competitive advantage (Silva et al., 2019). These internal resources and knowledge capabilities may include human, physical, social, financial and organizational capitals (Barney and Wright, 1998) that drive long-term value for a firm. However, to sustain this competitiveness, these capabilities and resources must be exceptional, invaluable and irreplaceable (Wright et al., 2001; Barney, 1991).

Yet another notable aspect of this view is that it highlights the competitive advantages that different firms have over one another owing to the heterogeneous nature of their internal resource capabilities and efficiencies. This variation among the firms within the same industry continues to exist owing to the inimitability of the resources possessed by the competing firms (Seth and Thomas, 1994).

The RBV provides firms with a possibility to align their employee skills and work practices with the firm structural resources and capabilities, ensuring that the firm capabilities are utilized by the employees to the fullest of their abilities, resulting in a sustained innovation and long-term value creation (Wright et al., 2001; Barney, 1991). While RBV links profitability of an organization with its competitive market positioning, nevertheless, being a conceptual framework, it exhibits some limitations in a way that it only provides a theoretical perspective on how to utilize firm resources to achieve value creation (Rehman et al., 2019; Stevens, 2011; Peppard and Rylander, 2001). Nevertheless, in this research, the RBV perspective even at the theoretical level aids in understanding the organizational IC dynamics for deriving knowledge-based advantage in PSFs.

2.4.5. Intellectual Capital and Knowledge-Based View (KBV)

Derived from RBV of firm, KBV takes into account various aspects of knowledge integration, offering a unique viewpoint of making use of knowledge as prime mover of gaining a sustained advantage (Stevens, 2011; Barney and Wright, 1998). According to KBV (Grant, 1995; 1996), knowledge is ascribed as an extremely significant and strategically-crucial firm resource. This is because knowledge based capabilities and resources are socially complex and hard to imitate. These heterogeneous firm knowledge capabilities are ingrained in the employee's mind and also preserved as organizational policies, routine procedures and processes, corporate culture, information systems etc (Grant, 1996), serving as a basis for superior performance and sustainable competitiveness (Nonaka and Takeuchi, 1995; Kogut and Zander, 1992).

The RBV interprets knowledge as generic and not as a specific firm characteristic, so it doesn't differentiate between various knowledge based capabilities. On the other hand, there is a broad consensus that KBV substantiates and enhances the RBV of the firm by considering organizations as the heterogeneous systems that are loaded with knowledge (Curado, 2006; Sveiby, 2001; Hoskisson et al., 1999; Roos et al., 1998; Grant, 1997). KBV argues on determining the knowledge significance as an intangible resource and critical driver of long-term effectiveness (Bontis, 2002; Roos et al., 1998; Grant, 1996). In this respect, the role of information systems and capabilities is critical toward the KBV of a firm in a way that information systems can be employed to promote creation and exchange of inter-&-intra-organization knowledge (Jennex, 2020; Curado, 2006; Alavi and Leidner, 2001).

The KBV assumes knowledge as an important asset. In this regard, Alavi (2000) suggests that an effective KM approach aimed at creating, sharing and applying

organizational knowledge would assist in timely and smoothly utilizing the key information and knowledge for improving the process and operational efficiencies. However, KBV does have some limitations that lie in knowledge application as an internally usable and controllable resource like other physical assets. Resultantly, more emphasis was on developing information systems to store and transfer knowledge between the organization and its people (Fu, 2010; Curado, 2006). The increased efforts put in the development of ICT systems limited the culture of knowledge utilization and its significance as a value-creating driver (Stevens, 2011). Nevertheless, the ever-increasing focus on strategic management of 'knowledge' is guided by its ability to derive economic benefits. Resultantly, organizations capable of effectively organizing and mobilizing their knowledge capabilities and assets in diverse ways are better positioned to maximize value for their clients as opposed to their competitors (Rehman et al., 2020c).

2.4.6. Intellectual Capital in PSFs

Employees owing to their professional knowledge and expertise are considered an indispensable asset in PSFs (Fu et al., 2017). From the IC perspective, employee tacit skills and competencies acquired through training not only boost PSF's knowledge base but these are also utilised in solving complex client problems and further improving client relationships (Hitt et al., 2006; Løwendahl, 2000). The extant literature considers human, structural & relational IC dimensions as the key assets. Each of these represents unique aspect of organizational knowledge and has following application in PSFs (Fu et al., 2015).

- **Human Capital in PSFs** – Professional employees are considered as the most critical asset in PSFs. These professionals acquire explicit knowledge through formal training and education, whereas for developing tacit skills, they undergo routine on-job learning. These staff competencies are utilized in delivering customized client services (Fu, 2010; Hitt et al., 2001).
- **Structural Capital in PSFs** – Professional employees play a phenomenal role in developing organisational databases, information systems and routines to promote exchange of knowledge and ideas in PSFs (Fu, 2010; Hitt et al., 2001).
- **Relational Capital in PSFs** – Professional employees in PSFs establish and maintain working relationship with clients and external partners to assist their firms in creating new business opportunities (Fu, 2010; Hitt et al., 2001).

2.5. Value Creation

2.5.1. Understanding 'Value' and 'Value-Creation' Concepts

The term 'value' conveys different meanings and uses based on its specific context. In general, the value processes encompass actions and activities that produce beneficial outcomes for the stakeholders involved (Weske, 2012; Miller, 2016). Traditionally speaking, the value concept mostly emphasized on the economic aspects of value – taking the form of physical assets and tangible resources as factors of production and profit making (Corsaro, 2019; O'Cass and Ngo, 2011). In the classical economic theory, the value concept was mostly characterized by 'exchange value' & 'use value' (Aminoff, 2016; Jensen, 2005). However, the 'exchange value' context was predominately at the heart of classical notion of value in socioeconomics field. This classical economic value concept established during the industrial era has been evolving thereby prompting scholars to rethink the 'value' concept (Corsaro, 2019; Miller, 2016; Baskerville and Dulipovici, 2006). Consequently, during the last two decades, the 'use value' context has been gaining increased prominence in the organizational behaviour and strategic knowledge management literature (Rehman et al., 2019; Aminoff, 2016).

When it comes to the notion of 'value-creation', it has been defined by many scholars in their own unique way. Most of the scholars view it as a multi-stage process that encompasses different users of value whose needs must be taken into account at different points in time being the important stakeholders in the process (Weske, 2012; Bowman and Ambrosini, 2000). In the views of Nunamaker et al. (2001), the 'value-creation' process can be accredited to something that individuals consider critical, desirable or purposeful. According to BusinessDictionary.com (2020), 'value creation' is characterized by the actions performed that enhance worth of company's products & services or even the company itself.

When viewed in the broader context, value creation is increasingly being acknowledged as a primary firm objective than strictly a mere financial performance indicator. This is because many firms tend to put emphasis on cost-cutting measures to reap short-term benefits rather than investing in long-term competitiveness and growth. Owing to this, scholars recommend considering value-creation as a key organizational priority for all the staff members in various aspects of firm decisions (Hillstrom, 2016; Madden, 2004). Given the above scholarly viewpoints governing the value-creation concept, it is important to evaluate its sources, drivers and stakeholders within the organization that help understand this concept (Corsaro, 2019; Hillstrom, 2016).

2.5.2. Value Creation – An Organizational Context

The organizational context of value-creation is extremely critical in understanding the nexus between the organizational resources such as intellectual capital and the stakeholders to value creation process. This necessitates an understanding as to why value creation is vital and whether investing on staff, structures and systems would help them continually innovate and stay on top of the market competitiveness or otherwise (Corsaro, 2019; Study.com, 2018; Brito, 2014). These days, organizations strive to enhance value as it helps them financially sustain and maintain competitive market positioning (Rehman et al., 2019). Moreover, in view of the ever-increasing role of knowledge as a basis for organizational transformation, there has been a shift in the value-creation focus from production-based factors to knowledge-based drivers (Rehman et al. 2020c). This renewed perspective necessitates increased utilization of intangible organizational assets like tacit knowledge, innovative capabilities, intellectual property brand equity, relationship network etc. (Corsaro, 2019; Hillstrom, 2016; Teece, 2003). As a result, it is vital for the organizations to judiciously allocate and exploit intangible resources in order to maximize value.

Nowadays, clients & customers overwhelmingly expect value for money by getting cost-effective products & services, making it increasingly important for the companies to emphasize on creating enhanced value for clients & customers in addition to the company (Rehman et al., 2019). To understand this relationship, we review the relevant work of prior scholars who explored how organizational assets create value. For instance, Barney (1995) claims that a firm utilizes its knowledge capabilities and resources to reduce threats and exploit opportunities, thereby creating value. Whereas Snell et al. (1996) offered a slightly different perspective by accrediting value as the ratio of benefit received to the cost incurred. This makes it clear that organizational capabilities and resources can only add value if they help lower overall cost in order to offer enhanced benefit to the customers. Hence when both parties reap monetary gain, value is said to be created (Brandenburger and Stuart, 1996). On the other hand, Brito (2014) views value creation as a long-term benefit that not only takes into account the profit gains but also sustained advantage that enables a firm to outperform its competitors in the key areas of firm performance such as profit growth, improved performance, higher efficiency, customer satisfaction etc. Along the same lines, Youndt (1998) also views reduced costs, increased profits and operational effectiveness as sustainable value benefits that result in a long term competitive advantage.

Moreover, determining what value can be created and using what type of knowledge assets would help managers prioritize and realign organizational intellectual assets and capabilities on the profitable activities and value-creating

opportunities to achieve sustainable growth (Silva et al., 2019; Kaplan and Norton, 2003). For example, if customers/clients value higher quality and timeliness attributes, the means, resources & capabilities that ensure timely delivery of superior quality products & services would be greatly valuable to that organization. On the other hand, if clients/customers value high-performance and innovation then the corresponding skills, resources and systems that facilitate development of innovative products & services would take on high value. Therefore, consistent positioning and alignment of actions, assets & capabilities with the customer's value perception is at the heart of effective strategy execution (Hillstrom, 2016; Kaplan and Norton, 2003).

In the regard, following value creation map as conceptualized by Roos (1997) and modified by Starovic and Marr (2003) helps determine and visualize the key knowledge assets & capabilities and how their interplay aids in understanding the needs of the stakeholders. It highlights value-creation process in the organisations by taking into account various knowledge assets and their relationships. The arrows of varying thickness show the strategic significance of their respective knowledge assets and to what extent these are able to translate into value. These knowledge assets vary from organization to organization based on their unique needs and competing priorities of the stakeholders (Starovic and Marr, 2003).

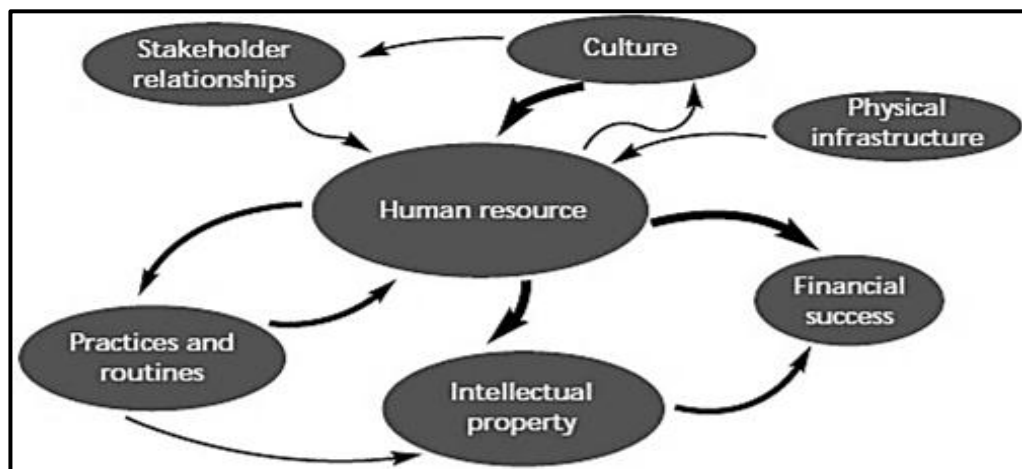


Figure 2.2: Value Creation Map (Starovic and Marr, 2003)

2.5.3. Tangible and Intangible Aspects in Value Creation

Value creation as a concept is considered a fundamental goal of any business firm. When viewed in a financial (tangible) context, value is said to be achieved if a firm earns revenue (capital return) that is in excess of the expenses (capital cost) and results in a profit (Hillstrom, 2016; Amit, 2003). Therefore, by concentrating on creating customer value, a firm can enhance sale of products or services, which in turn generates value for its shareholders via increased profits, dividends, stock prices etc and also for the firm itself in the form of increased sales, higher customer base, market value etc, ensuring the firm sustainability (Corsaro, 2019; Madden, 2004).

Nevertheless, some proponents of value creation argue to take into account additional aspects in value creation to be considered separate from conventional financial measures. According to Value-Based-Management (2017), conventional methods of determining firm performance are not adequate in present-day economy as stock prices are not merely dependent on firm assets and earnings but also on the intangible value-creating drivers such as people, ideas, brands and innovation that have significant representation in determining the stock prices of today's companies (Corsaro, 2019; Perla, 2003). While the intangible factors driving value vary from industry to industry, these mainly include technological competencies, innovation capabilities, intellectual property, strategic alliances, R&D focus, employee-customer relationship, brand value etc.

The Balanced Scorecard approach propounded by Kaplan and Norton (2001) offers a linking framework between tangible & intangible assets and guides on how value can be created through a meaningful combination of intangible and tangible assets (Silva et al., 2019; Nazari, 2010). The Balanced Scorecard serves as an effective tool in a manner that it allows organizations to continually monitor and track financial & non-financial performance in line with organizational competitive strategy and vision. Kaplan and Norton (2001) present following four perspectives that act as the indicators of organizational performance.

- **Financial Perspective** – Involves conventional accounting measures e.g. profit, growth, risk etc.
- **Customer Perspective** – Encompasses organizational relationship with the clients and customers and related aspects such as: brand image, market share, customer/client satisfaction etc.
- **Internal (Process) Perspective** – Focuses on effective utilization and continuous improvement of organizational systems & processes with an aim to maximise value.
- **Learning and Growth Perspective** – Centred on setting competing goals and priorities to support organizational transformation, sustainable growth & innovation.

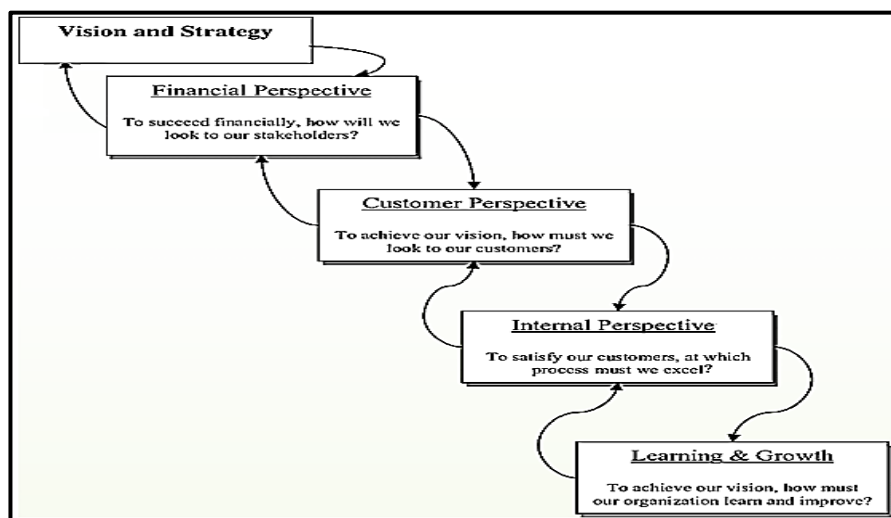


Figure 2.3: Balanced Scorecard (Kaplan and Norton, 2001)

A balanced score card approach is particularly useful because of two reasons. First, it assists in creating a linkage between performance measures and organizational strategy, thereby offering a comprehensive mechanism for effective strategy execution (Nazari, 2010; Kaplan and Norton, 2003). Second, by taking into account various technological factors and market trends, it helps organizations realign their competitive resources and strategies toward the attainment of sustainable value-creation goals (Hillstrom, 2016).

2.5.4. Rethinking Value Creation from Multi-stakeholder Perspective

The impact of collective value created by an organization is far more than the value created by the individual organizational members. There is an increased acceptance that organizations employ a blend of intangible resources to achieve value for diverse stakeholder groups (Corsaro, 2019; Nunamaker et al., 2001). Organizational success is determined by the way staff member expertise and skills are utilized in providing solutions to the complex problems (Quinn, 1992). This underscores the importance of intellectual resources such as: knowledge and intellectual capabilities that are transformed into value and profits (Stewart, 1997).

Generally an organization's IC, collectively consisting of individual's knowledge, routine processes, knowledge repositories and employee interactions, can be utilized to achieve strategic ends (Miller, 2016; Stewart, 1997). Besides, the IC resources are also considered to be cumulative sum of what is known by the members of an organization that creates sustainable value (Qureshi et al., 2006; Zack, 1999). Although, value can be derived by leveraging organization's intellectual capital, however, it requires enhancing access to intellectual resources and linking organizational knowledge and expertise with its strategic objectives (Jennex, 2020; Nunamaker et al., 2001; Zack, 1999). Accordingly, organizations consider their IC resources as strategic assets which could be efficiently managed and utilized to result in a sustainable advantage.

The optimal utilization of intellectual resources enables an organization to reduce costs, develop new products, improve production processes, enhance quality, improve customer relations and effectively respond to abrupt market changes. In addition, organisational performance effectiveness and growth necessitates knowledge integration and sharing which is highly distributed (Miller, 2016; Zack, 1999; Stewart, 1997). Distributed knowledge poses great challenge as it is often personalized, isolated and lies within the individuals, groups and communities of an organisation (Qureshi et al., 2006; Mark, 2002; Zack, 1999). Tallon et al. (2000) argue that an organization's value chain system involves series of critical business activities

such as: design, production/assembling, distribution, marketing and after-sales support can influence its value creation capability. The effective execution of these activities require mutual cooperation, improved coordination, collaboration and knowledge exchange between the individuals and organization functional units, thereby harnessing maximum value from diverse intellectual activities and resources (Qureshi et al., 2006; Mark, 2002; Tallon et al., 2000).

In this regard, Skandia's navigator model might additionally assist in comprehending the process of value creation (Edvinsson and Malone, 1997). The model as shown below highlights five key areas of Skandia's business focuses i.e. Financial, Process, Customer, Renewal & Development and Human Focus. The most critical among these is the human focus that serves as a prime mover of value creation in the entire navigator model. Metaphorically speaking, the business model could be viewed as a 'house' comprising of soul (human-focus), roof (financial-focus), walls (process-& customer-focus) and the platform (renewal and development focus) that serves as sustainable business bottom line (Starovic and Marr, 2003).

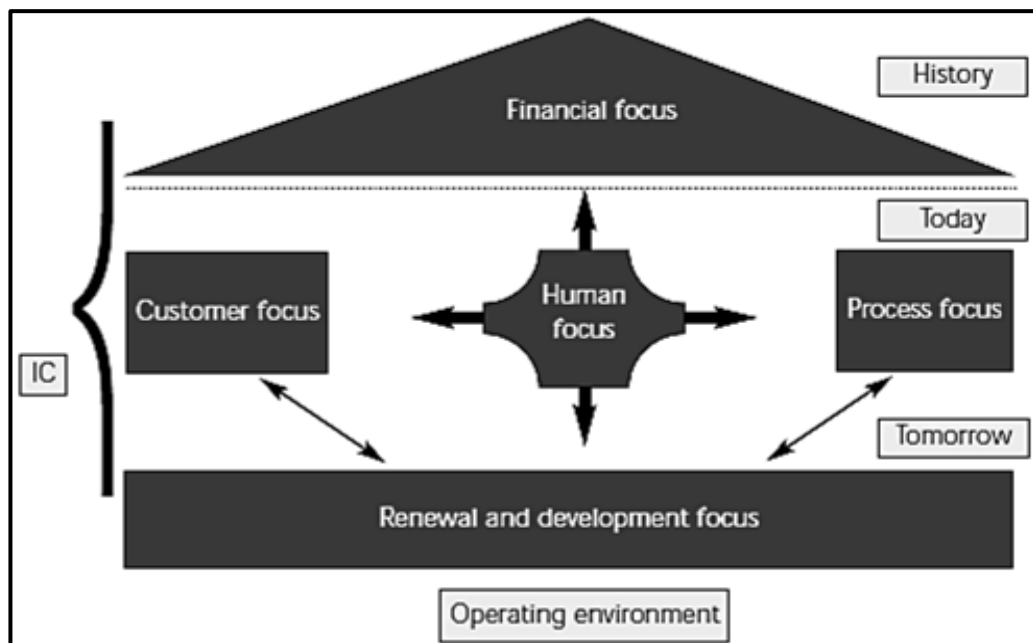


Figure 2.4: Skandia's Navigator Model (Edvinsson and Malone, 1997)

As a whole, an organization's potential to transform IC to value creation is guided by the efforts towards making knowledge resources more and more accessible to its members and to what extent they collaborate and resolve complex issues (Nunamaker et al., 2001). This is because many organizations experience knowledge hoarding which hinders knowledge-sharing efforts (Qureshi and Keen, 2005; Hibbard and Carrillo, 1998). Therefore, the potential to maximize value from IC is guided by as to what extent an organization fosters knowledge sharing and collaborative work culture (Rehman et al., 2019).

2.6. HPWPs and Intellectual Capital

Organizational culture, economic conditions and the industry it operates in serve as the guiding forces for building HRM strategies of the firms (Buck et al., 2003). The effect of external environment on IC and how it influences the organization is an issue that still needs more attention. Research suggests that HPWPs influence firm performance by enhancing its intellectual capital (Coder et al., 2017). HPWPs play a pivotal role in transforming human resource into firm's IC resource, eventually becoming firm's knowledge capital (Fareed et al., 2016; Chang and Chen, 2011).

Organizational work processes and learning activities support the development of firm-specific human capital skills. To this end, structural capital resources such as organizational systems, processes and routines further augment its human capital, resulting in an enhanced firm-specific capabilities and hence reduced threat of imitability by the competitor (Roos et al., 2004). This implies that the role of human capital in delivering sustainable advantage can be greatly attributed to structural and relational IC components (Marr and Spender, 2004; Kong, 2009). Therefore, the relationship between HPWPs and IC can be meaningfully understood by evaluating IC elements in more detail.

2.6.1. HPWPs and Human Capital

HPWPs have been recognized as vital towards the growth of human capital. In particular, some scholars argue that practices like comprehensive staffing, selective hiring, training & upskilling, rewards etc. support the growth of organization's human capital (Fu, 2010; Hatch and Dyer, 2004). For example, a firm can hire employees with right skills through its standard 'recruitment & selection' practice and hence enhance its stock of human capital (Collins and Smith, 2006; Wright et al., 1995). Similarly, 'comprehensive staffing' practice would ensure distinguishing between the appropriate and inappropriate candidates, thereby augmenting the quality of firm's human capital. Likewise, 'extensive training & upskilling' practice would develop employee knowledge and skills critical for innovation, resulting in an appropriately-skilled human capital (Collins and Smith, 2006; Snell and Dean, 1992). Moreover, 'rewards & recognition' practice would motivate employees to put their optimal efforts in the acquisition and development of the work-related skills. Hence, by applying these HPWPs, it helps in developing organization's human capital (Fareed et al., 2016; Chang and Chen, 2011). According to Wright et al. (2001), HPWPs enhance firm competitiveness by expanding pool of high-quality human capital resources which competitor firms find difficult to acquire in short time. Further in this

regard, Guest (1997) claim that by enhancing the human capital skills, HPWPs boost firm financial performance.

When it comes to PSFs, human capital indicates expertise and talent imbedded in its professional workforce that enables it to deliver exceptional client services (Hitt et al., 2006). In fact human capital serves as a core asset in PSFs. Highly developed and capable human capital resources means PSFs are skills-ready to undertake diverse client projects (Morris and Snell, 2008). This human capital robustness also aids PSFs in maintaining positive image by giving a signal of their readiness to the clients in terms of offering efficient services. As a result, clients give preference to the firms having more developed human capital skills as it is obvious that highly skilful people are likely to deliver better solutions (Fu, 2010). These days, PSFs develop their human capital by preferring graduates from top-notch institutes as such individuals are equipped with better learning capabilities, thereby contributing more to the growth of service firms (Fu, 2010; Hitt et al., 2006). Moreover, PSFs by providing new hires extensive trainings and enabling a learning culture as part of their strategic HR development strategy, it would help build staff interpersonal skills and foster professional growth opportunities (Rehman et al., 2020b). This approach also helps PSFs attract the best and brightest individuals (Fu et al., 2017).

It is not always possible to attract individuals from market that are attuned to the norms of new workplace, hence the organizations continually refine their stock of human capital through on-job training & development, thereby equipping the new recruits with firm-exclusive skills that are hard to replicate by the competing firms (Fareed et al., 2016; Youndt et al., 2004). However, enabling staff to quickly learn work-related tacit skills at new place of work requires activities and opportunities that keep them motivated. In this regard, it is not reasonable to expect staff to deliver same performance when hired by another firm (Kong and Thomson, 2009; Grant, 1996). This is because human capital could be unique owing to its imperfect geographic mobility and therefore it can't be easily transacted from one employer to another. Even if a highly skilled individual is hired by the other firm, it would be hard to hire entire pool or team of skilled individuals (Wright et al., 2004; Youndt, 1998; Grant, 1996). This aspect highlights the collective significance of organizational human capital as an individual staff member can't work in isolation. Accordingly, PSFs should implement strategic HRM practices if they ought to attract, retain and utilise best professionals.

2.6.2. HPWPs and Structural Capital

In addition to human capital, the HPWPs' role in boosting a firm's structural capital has also been phenomenal. The structural capital that involves organizational information-systems, databases, processes, patents etc. is codified and developed from individual knowledge and collective teamwork processes (Youndt and Snell, 2004). In fact, the structural capital is an outcome of individual knowledge that is combined and integrated as organisational knowledge that eventually becomes its intellectual property, enabling the attainment of competitive advantage (Kang and Snell, 2009; IFAC, 1998; Grant, 1995). Scholars advocate that HPWPs promote structural capital development by enabling a mutual learning culture among the employees. To this end, Wright et al. (2001) argue that HPWPs assist organization in building the core competencies of their employees by encouraging a culture of knowledge exchange and collaboration.

As compared to human and relational capital, the link between HPWPs and structural capital is a bit unclear. Thus, the structural capital development needs more attention in HPWPs context as it offers a remarkably important role particularly when it comes to boosting operational efficiency of the firm (Jennex, 2020; Lerro et al., 2014; Youndt, 1998). In this regard, some HPWPs like comprehensive staffing, training and performance management may support growth of structural capital (Kang and Snell, 2009). For example, hiring suitable candidates who possess right set of attitude and demonstrate fitness to new company culture. Besides, while training new hires, firms should not only inculcate specialized knowledge, but also the shared mission and values (Fu, 2010).

In PSFs, owing to knowledge-based nature of activities, the work structures, processes and systems are highly systematic (Fu, 2010; Robertson et al., 2003). In PSFs, organisational processes and practices constituted by the staff working in teams form the basis of their routine work activities (Georgiadis and Pitelis, 2012; Morris, 2001). PSFs of large size develop their own storage systems and databases that are often termed as knowledge centres where they maintain stock of data and knowledge created by the individuals (Youndt et al., 2004). Staff members are encouraged to access the databases to get key insights from the previous project records in a manner to utilize and make most of the previously created organizational knowledge (Suddaby and Greenwood, 2005). PSFs mostly have flat work structure that facilitates smooth exchange of knowledge at all levels. In this regard, structural capital acts as an enabler in a way that it eases the production, application, storage and dissemination of new knowledge. This ability to rapidly

integrate new knowledge helps PSFs shape better client image, leading to increased client base (Morris and Snell, 2008).

In view of the above, it becomes primary responsibility of HRM departments to equally focus on building structural capital by putting in place the knowledge storage systems and encouraging employees to contribute to organizational stock of knowledge. These storage systems could capture knowledge and insights relating to organization culture, assets and processes. For instance, knowledge pertaining to organization culture may encompass metaphors, storytelling and discussions, while the organizational knowledge stored as assets may include databases, records and data storage systems to preserve routinely created knowledge. Lastly, the knowledge embedded as organizational processes may take the form of procedures, policies & practices (Youndt et al., 2004).

2.6.3. HPWPs and Relational Capital

Relational capital is an organizational resource that is ingrained in its relationship with the external stakeholders and their perception about the firm (La Rocca et al., 2008; Bontis, 2002). The supportive role of HPWPs in fostering relational capital is evident from prior research (Qureshi et al., 2006). In this regard, some scholars have highlighted the collective impact of HPWPs on the relational capital (Evans and Davis, 2005). For instance, Bowen and Ostroff (2004) propound that HPWPs shape collective organisational culture through shared norms, behaviours and perceptions. Schiuma et al. (2007) also expound that HPWPs foster relational capabilities that maximize value by improving stakeholder perception about the organisation. Gittell et al. (2010) argue that HPWPs help achieve performance outcomes by promoting relational capital i.e. by encouraging interpersonal coordination between the staff members. Likewise, Collins and Clark (2003) elucidate that HPWPs stimulate the growth of relational capital that consequently results in improved organizational performance, efficiency and flexibility.

From the viewpoint of PSFs, relational capital accounts to the knowledge inherent in the staff-client relationship and client perception about the firm as the service provider (Fu et al., 2010; Teo et al., 2008). In this regard, HPWPs such as: staff training, reward system, teamwork, communications and knowledge-sharing promote firm competitiveness by enabling and maintaining socially-complex relationships (Chang and Chen, 2011; Fu et al., 2010). For instance, the 'teamwork' and 'communication' practices would enable employees to maintain working relationship and strong mutual ties with the external network of stakeholders that may include customers and suppliers. In the similar vein, 'staff training', 'knowledge sharing and interaction'

would improve employee capabilities, build new opportunities for collaboration and enlarge the organization's professional network, enabling it to live up to expectations of the external stakeholders, consequently leading to the strengthened relational capital (Coder et al., 2017; Greenwood et al., 2005; Cohen and Levinthal, 1990).

In particular, HPWPs role in promoting relational capital in PSFs would be important in two ways. First, HPWPs enabled work culture would help attract and retain new clients. Second, since the service quality can't be measured before the services are actually delivered to the client because of intangible nature of inputs and outputs (von Nordenflycht, 2010; Greenwood et al., 2005), assuming all other aspects as equal, clients mostly prefer the service providers who have maintained long-term relationships with them (Rehman et al., 2020b; Fu, 2010). This HPWPs guided client relations provide yet another competitive edge to PSFs. Therefore, HPWPs can potentially guide the strategic development of relational capital in PSFs.

Considering the HPWPs significance in transforming organization human resource into intellectual resource, it would be worthwhile for the PSFs to invest in HPWPs if they intent to develop a robust IC.

2.7. Intellectual Capital and Value Creation

A widely-researched aspect, how IC creates value, this relationship dates back to over a decade. Although, various studies have examined the linkage between IC and value-creation with most of these indicating a positive association, however, the empirical findings have been mixed (Bchini, 2015; Phatak, 2003). This is due to elusive (intangible) nature of IC. More importantly, the complexities behind truly leveraging IC to create value have been quite challenging for most of the firms (Green, 2007). The underlying reason is that transforming pool of IC resources into value-creating activities is a process that requires strategic planning and thinking (Chatzkel, 2002). In this respect, Goran Roos, the CEO of ICS Ltd. is credited with suggesting a useful mechanism which is a blend of classical strategic theory and RBV of the firm. The figure below helps understand value-creation process at ICS, thereby guiding on optimal utilization of IC to maximize value creation potential (Chatzkel, 2002).

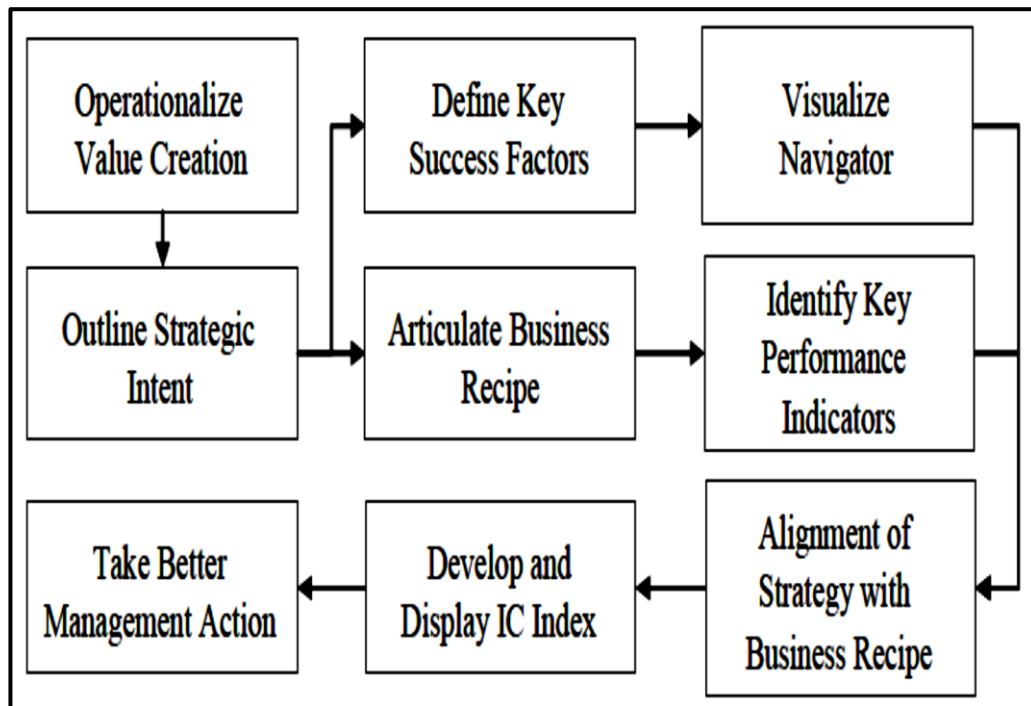


Figure 2.5: Leveraging IC at ICS (Chatzkel, 2002)

Although, the significance of IC as critical to achieving firm value creation is clearly highlighted in prior research, nevertheless, its evaluation and assessment continues to be an elusive and complex process (Chen and Wang, 2013; Hermans and Kauranen, 2005). Besides, it is also evident that merely having a pool of IC resources is not sufficient to achieving firm performance and value addition. Consequently, the firms must be capable of recognizing the unique value-creation prospects and of various IC dimensions and accordingly craft a strategy to meaningfully achieve these value opportunities (Rehman et al., 2019; Tseng and Goo, 2005; Phatak, 2003).

According to Meritum Project (2002), IC attributes are unique and vary from one company to another. Nevertheless, it suggests some guidelines that help observe and manage firm's IC performance and to what extent it is able to achieve value creation goals (Cuganesan, 2005). This involves assessing the performance of company's intangible assets. At present, while there are no uniformly-agreed standard set of indicators that could be included in the company's IC report for monitoring its performance, however, Meritum Project suggests following guidelines to assist in this regard:

- The activities and resources of the company should be considered separate.
- These indicators must incorporate each of three IC elements. In case of any missing element, specific reason should be stated.
- A blend of both financial & non-financial indicators should be incorporated. However, the guidelines strongly encourage the utilization of financial indicators

as it would be more convenient to link and compare financial indicators of IC with the financial indicators of the company value creation.

- These set of IC indicators should portray a visualization of how company actions are translated into value-creation process.
- At any time, all IC indicators should be verifiable even when no audit is required.
- The mechanism adopted in identifying, utilising and presenting these indicators should be mentioned in the report.

Keeping in view the above guidelines, following schema was suggested by the Meritum Project. By pictorially exhibiting the above phenomena, it enables companies to portray their unique resources and activities and how these ultimately help achieve value creation.

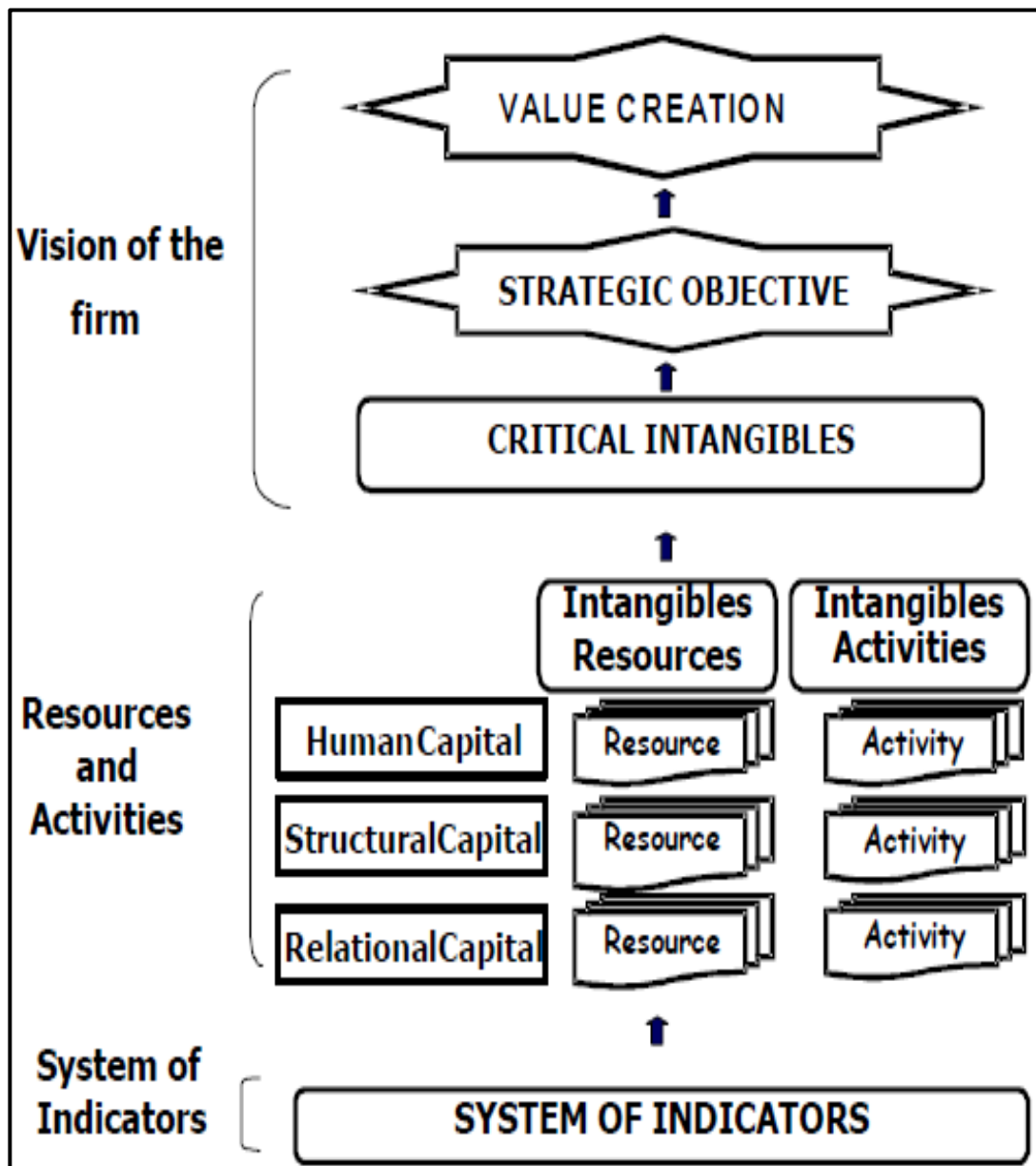


Figure 2.6: Schema for IC Indicators (Meritum Project, 2002)

2.7.1. Towards Multi-stakeholder Value Creation Using IC

There is a broad literature that suggests that IC guides value creation for the organization. To this end, Cuganesan (2005) argues that the extent to which value could be derived using IC is based on how effectively each of its dimensions is deployed and utilized in an organizational setting. Besides, the viewpoint regarding maximum value that could be potentially derived by IC has received insufficient empirical considerations and therefore needs further investigations (Miller, 2016; Phatak, 2003). The IC offers an organisation with competitive gains by aiming on organizational philosophy of boosting the knowledge base, thereby enabling it to respond to external market changes (Qureshi et al., 2006; Senge, 1990). The same standpoint is also endorsed by the information-processing theory (Galbraith, 1973), claiming that IC aids in deriving organizational effectiveness by augmenting its ability to efficiently process information by utilizing in-house information-processing capabilities and technologies and relational strengths (Youndt and Snell, 2004). In other words, this is because of collective IC capabilities that include highly skilled staff and organizational systems & tools whose meaningful combination augment organizational service quality capabilities, thereby promoting working relationship among the staff members, managers and customers (Qureshi et al., 2006; Youndt, 1998).

It's obvious that the investment made in the human capital development leads to more skilled and capable workforce that consequently develops organization's structural capital (Kong, 2009; Youndt and Snell, 2004; Knight, 1999). These developed human and structural capitals facilitate the creation of relational capital by promoting external relationships and enhancing delivery of services to the clients and customers, thereby contributing to the organizational growth (Silva et al., 2019; Miller, 2016; Schiuma et al., 2007). Besides, the relational capital additionally supports an organisation in recognizing external knowledge dynamics, enabling it to manage client needs and expectations (Bhatti et al., 2014; Kong and Thomson, 2009; Youndt, 1998).

In view of the above scholarly arguments and discussions, it can be argued that all three IC elements, when combined and optimally utilized to the fullest, can potentially act as value-maximizing agents for multi-stakeholders in PSFs (Rehman et al., 2019). Thus, PSFs must fully emphasize on each of three IC components instead of just focusing on human capital. Accordingly, this research particularly evaluates employees, organization and customer along with supplier and partner as stakeholders to value creation as follow:

- **Employee Value Creation:** This includes employee value outcomes such as employee engagement, high morale, better prospects for promotion, career growth and developed professional skillset & industry network.
- **Organization Value Creation:** This includes tangible and intangible firm performance outcomes/measures:
 - Firm Financial-Performance: Via profit growth, increased firm market value and shareholder return on investment.
 - Firm Non-Financial/Operational-Performance: Via efficient processes, reduced operational cost, increased productivity, organizational change and firm market competitiveness.
- **Customer Value Creation:** This includes customer satisfaction, improved service quality, value for money, service ease and efficiency and improved customer/client relationship.
- **Supplier and Partner Value Creation:** This includes opportunities for long-term relationships with suppliers and strategic alliance & collaboration with partners.

2.7.2. RBV, Intellectual Capital and Multi-stakeholder Value Creation

A key question underlying RBV is to understand what assets and capabilities potentially support competitive advantage for the firms over their rivals (Youndt and Snell, 2004). In this regard, Barney (1991) claims that a firm, owing to its valuable and exclusive resources, becomes capable of attaining a sustainable advantage (Silva et al., 2019). However, the scholars like Amit and Schoemaker (1993) and Grant (1997) concentrate on resources that are uncommon, inimitable and long-lasting. These perspectives when viewed together suggest that a firm's market competitiveness can be attributed to its valuable assets and resources that are not possessed or difficult to replicate by the competing firms. More concisely, competitive success of a firm is rooted in the resources of unique and valuable nature (Youndt and Snell, 2004; Ulrich and Lake, 1991).

A firm attains unique capabilities due to range of competitive factors like past unique circumstances, social complexity, tacitness etc. (Hitt et al., 2001; Youndt, 1998). A firm attribute like 'past unique circumstances' refers to its once acquired capabilities in the past that are extremely hard to imitate, for instance, innovation led by the evolution of semiconductors (Grant, 1997; Barney, 1991b). In the same manner, a firm's 'tacitness' capability highlights firm-exclusive resources such as individual know-how, work-related competencies and other hard to communicate skills (Youndt, 1998; Nonaka, 1991; Polanyi, 1962). Similarly, a firm's 'social complexity'

capability denotes its social relations, connections and interactions of complex nature that are implicit in its people, organizational systems and knowledge networks and hence difficult to understand by the competitor firms (Jennex, 2020; Youndt and Snell, 2004; Barney, 1991a).

2.8. Gaps in the Literature

Summarizing and synthesizing the overall literature discussions on HPWPs, IC and multi-stakeholder value creation in PSFs context, following gaps become evident.

- Most of the studies have been done on investigating the influence of HPWPs on improving firm performance or building innovation capabilities. However, insufficient research has been done on evaluating the individual contribution of each AMO bundles of HPWPs (Obeidat et al., 2016). To this end, the proposed research model focuses on addressing these gaps by empirically evaluating the effect of all three HPWPs dimensions.
- Another literature gap is to overlook the notion of 'value creation' as a critical organizational dimension in the HPWPs context. This leads to an underpinning enquiry as to how HPWPs create value using organizational intellectual assets. This is to say, how HPWPs nurture intellectual capital to derive value for multi-stakeholders. The notion of 'value-creation' when viewed in general, most of the researchers emphasize on the significance of value-creation concept as the basis for achieving corporate gains. Nevertheless, there is still lack of empirically validated framework or even a value-driving mechanism underlying this concept that could be applied by the researchers and practitioners as essentially useful approach. The value concept that was traditionally put forward is now gaining revitalization and leading to new value concept (Aminoff et al., 2016; Miller, 2016). This is deriving a compelling need to revitalize and rethink the classical value-creation concepts from the viewpoint of multiple stakeholders. Consequently, this research explores multi-stakeholder perspective to value-creation by considering employees, organization and customer including supplier & partner in PSFs as key beneficiaries to value creation process.
- Another gap is from the viewpoint of theoretical research model. There is no prior study that simultaneously presents a clearer picture of link between HPWPs, IC and Multi-stakeholder Value-Creation (i.e. HPWPs→Intellectual.Capital→Multi-stakeholder.Value.Creation) in a single research framework. While, there are studies conducted by previous scholars who evaluated the association between two constructs i.e. between HPWPs and IC e.g. Aino et al. (2017), Coder et al.

(2017), Fareed et al. (2016), Wang and Chen (2013), Chen and Wang (2010) and the scholars who evaluated the link between IC and Value Creation such as: Jordão and Novas (2017); Bchini (2015); Corte and Gaudio (2014); Shakina and Barajas (2013); Stevens (2012); Chang and Hsieh (2011); Nazari (2010); Liao et al. (2009); Green (2007); Curado (2006) etc. In this research, the relationship between all three variables has been simultaneously examined and empirically-tested in a single framework.

- There is yet another gap from the viewpoint of research methods applied. Majority of the recent HPWPs researchers such as: Fu et al. (2017), Jerez-Gómez et al. (2017), Shin and Konrad (2017), Coder et al. (2017), Fareed et al. (2016), Gojny-Zbierowska (2015), Chen and Wang (2013), Jiang et al. (2012a; 2012b), Wu et al. (2011), Martynov and Zhao (2010) etc. have adopted quantitative approaches except a few researchers like Özçelika et al. (2016), Tregaskis et al. (2013), Chow (2005) that adopted a qualitative or mixed-method approach. In view of the methodological gaps and considering the recommendations of mixed method researchers like Venkatesh et al. (2013) and Creswell and Clark (2007), this research utilizes a blend of methods to methodologically enrich the literature.
- The literature also highlights a dearth of prior research governing application of HPWPs in PSFs sector. Except a few studies such as Fu et al. (2017; 2015; 2013), Teo et al. (2014), McClean and Collins (2011), most of the past researchers such as: Özçelika et al. (2016), Oliveira and Silva (2015), Wang and Chen (2013), Chen and Wang (2010), Datta et al. (2005), Richard et al. (2004), Gant et al. (2002) etc. evaluated the HPWPs effectiveness in routine manufacturing and business firms. Thus, the nexus between systematic implementation of HPWPs in knowledge-intensive sector like PSFs is not fully established and therefore needs more empirical evidence. Accordingly, this research chooses PSFs as the target sector.

Overall, aligning the gaps underlying HPWPs, IC and value-creation, the proposed research investigates and uncovers the black-box of relationships between HPWPs, IC and value-creation i.e. how AMO HPWPs stimulate IC to guide multi-stakeholder value-creation in Professional Service Firms.

2.8.1. Research Gaps Snapshot

The table 2.3 below gives an overall snapshot of the literature gaps that formed the basis of this study.

<div style="text-align: center;"> Keyword Supporting Literature/Studies </div>	High Performance Work Practices/ High Performance Work Systems/ Knowledge Based HRM/ Strategic HRM Practices	Knowledge Assets/ Knowledge Resources/ Intellectual Capital (Human, Structural and Relational Capital)	Multi-stakeholder Value Creation		
			Employee Value Creation	Organization Value Creation	Customer Value Creation
Wu et al. (2011)	✓			✓	
Wang et al. (2014)		✓		✓	✓
Massingham et al. (2015)		✓	✓	✓	
Fu et al. (2017); Hsu et al. (2017); Shin and Konrad (2017); Soo et al. (2017); Özçelika et al. (2016); Fareed et al. (2016); Obeidat and Bray (2016); Riaz (2016); Lin and Liu (2016); Jiang and Liub (2015); Ramdani et al. (2014); Ma Prieto and Pérez-Santana (2014); Hoch (2014); Wang et al. (2014); Kroon et al. (2013); Kim and Sung-Choon (2013); Tregaskis et al. (2013); Jiang et al. (2012a; 2012b); Tsai and Cheng (2012); Wu et al. (2011); Wang et al. (2011); Boselie (2010); Messersmith and Guthrie (2010); Martynov and Zhao (2010); Cheng-Hua et al., (2009); Guthrie et al. (2009); Hellriegel and Slocum (2009);	✓			✓	

Takeuchi et al. (2009); Liao et al. (2009); Birdi et al. (2008); Teo et al. (2008); Al-Alawi et al. (2007); Lin (2007); Combs et al. (2006); Chow (2005); Taylor (2005); Hatch and Dyer (2004); Roos (2004); Buck (2003); Lepak and Snell (2002); Tarricone and Lucca (2002); Wright and Boswell (2002); Bartlett (2001).					
Jordão and Novas (2017); Curado (2006)		✓			
Jeon (2015).		✓			✓
Hamid (2017); Fu et al. (2017); Aino et al. (2017); Jerez-Gómez et al. (2017); Coder et al. (2017); Kianto et al. (2017); Fareed et al (2016); Özçelika et al. (2016); Teo et al. (2014); Wang and Chen (2013); Fu et al. (2013); Teo et al. (2011); Fu (2010); Chen and Wang (2010); Richard et al. (2004).	✓	✓			
Ogbonnayaa and Valizade (2016); Kehoe and Wright (2013).	✓		✓		
Grace et al. (2017); Razmerita et al. (2016); Debra and Lacono (2015); Hsu (2008).			✓		
Shin and Konrad (2017); Massingham et al. (2015); Ngo et al. (2014); O'Cass and Ngo (2011); Wang et al. (2011), Kroon et al. (2013), Martynov and Zhao (2010); Cheng et al. (2009).				✓	
Aminoff et al. (2016); Hillstrom (2016); Miller (2016); O'Cass and Ngo (2011).					✓

Fu et al. (2017); Fu (2010); Youndt et al. (2004); Youndt (1998).	✓	✓		✓	
Castaneda and Toulson (2013).		✓	✓		
Altındağ et al. (2019); Atalay (2018); Fidanbas (2017); Kianto et al. (2017); Bchini (2015); Massingham et al. (2015); Bhatti and Zaheer (2014); Brito and Brito (2014); Corte and Gaudio (2014); Lu et al. (2014); Lerro et al. (2014); Kianto et al. (2014); Shakina and Barajas (2013); Zor and Cengiz (2013); Erkanli and Karsu (2012); Stevens (2012); Chang and Hsieh (2011); Wang et al. (2011); Nazari (2010); Diez et al. (2010); Özdemir and Balkan (2010); Kong and Thomson (2009); Chang (2007); Schiuma et al. (2007); Green (2007); Qureshi et al. (2006); Cabrita and Vaz (2006); Qureshi and Keen (2005); Marr and Spender (2004); Perez et al. (2003); Bontis (2002); IFAC (1998); Sveiby (1997); Stewart (1997); Edvinsson and Malone (1997).		✓		✓	
Aminoff et al. (2016); Hillstrom (2016); Miller (2016); O'Cass and Ngo (2011)				✓	✓
Fu et al. (2015); Gojny-Zbierowska (2015); Prince et al. (2011).	✓				
Present Research Covers All of These Factors/Themes	✓	✓	✓	✓	✓

Table 2.3: Literature Gaps Snapshot

2.9. Summary

A comprehensive review of Strategic HRM, Organizational Behaviour and IC literature specifically focusing on HPWPs, IC and Value-Creation in the context of PSFs was done in view of the supporting theories and framework such as AMO, RBV, KBV and SCT being relevant to this research. In doing so, the objective was to discuss the existing literature and evaluate key research aspects which eventually led to literature gaps and paved way to the identification of research problem that was narrowed down to formulate main research question which was investigated as part of this research study.

CHAPTER-3

RESEARCH MODEL AND HYPOTHESES

3.1. Introduction

In continuation of comprehensive literature review done in the last chapter, this chapter deliberates on the theoretical foundation of the research model that is proposed to address the identified knowledge gaps and underlying research problem. This chapter is structured in a manner that the section 3.2 highlights on theoretical context of the model development. The section 3.3 discusses in detail about the theoretical research model, describing the identified key constructs and their justification to operationalize in the model along with the discussion on their potential relationship in the wake of the supporting theories and literature. The section-3.4 discusses the research hypotheses that were developed based on theoretical discussions and reasoning. The section 3.5 pictorially presents an alignment between research model constructs, research question, hypotheses and related literature. In the end, a quick chapter summary is included in the section 3.6.

3.2. Research Problem Theoretical Context

As discussed in the previous chapter, a comprehensive review of Organizational Behavior, Strategic HRM and Intellectual Capital literature in the wake of supporting theories such as: AMO Framework (Appelbaum et al., 2000), RBV (Barney, 1991), KBV (Grant, 1996) and SCT (Nahapiet and Ghoshal, 1998) was conducted to identify knowledge and research gaps within the framework of PSFs. As the literature review was further narrowed-down, the research gap governing the relationship between the key factors i.e. HPWPs, IC and MSVC became more evident, which eventually guided the research model development. The proposed research model in general evaluates how HPWPs influence the intellectual capital to derive multi-stakeholder value bottom-line in the service firms. In particular, it examines the indirect effects of HPWPs on multi-stakeholder value creation with IC as an intermediate variable. These relationships are empirically supported and validated in Chapter 06. Following were the key areas of focus:

- ✓ High Performance Work Practices (Applied within AMO Bundles)
- ✓ Intellectual Capital (i.e. Organizational Knowledge Assets and Resources)
- ✓ Professional Service Firms (i.e. Knowledge-intensive firms)
- ✓ Multi-stakeholder Value Creation (focusing on Employee, Organization, Customer including suppliers & partners).

3.3. Research Model

In general, research literature identifies a range of HPWPs that have been evolving from time to time. In view of the effectiveness and unique nature of each practice, their applications and effectiveness varies between different cultures (Posthuma et al., 2013). The firms typically implement unique set of these practices keeping in view their organizational culture and the KPIs they intend to drive such as business system success, firm performance and effectiveness, firm innovation capabilities etc. consistent with their competitive strategy (Rehman et al., 2020a; Corsaro, 2019).

In view of the above, a set of HPWPs having a significant potential to build the IC in service firms were identified as part of robust literature review. Of the overall identified set of practices, we operationalized eight practices within three AMO bundles in Chapter 6. The reason for adopting a bundling approach to HPWPs implementation was owing to their increased effectiveness in bundles as compared to their application as an individual practice (Youndt and Snell, 2004). Some of the identified practices i.e. Employee Empowerment, Employee Knowledge Sharing, Training and Development, Performance-Based Rewards are commonly-applied practices, whereas as other practices such as Teamwork Quality, Shared Leadership, Interpersonal Trust are comparatively new and hence require considerable empirical confirmation.

Needless to say, HPWP implementation on employees is primarily the HR department initiative as part of its organizational strategy, nevertheless, some practices are more employee-dependent and their effective implementation is subject to employee voluntary behaviour (Wu et al., 2011). This aspect was therefore taken into consideration while operationalizing the identified set of HPWPs, for example, Interpersonal Trust, Employee Knowledge Sharing in this case.

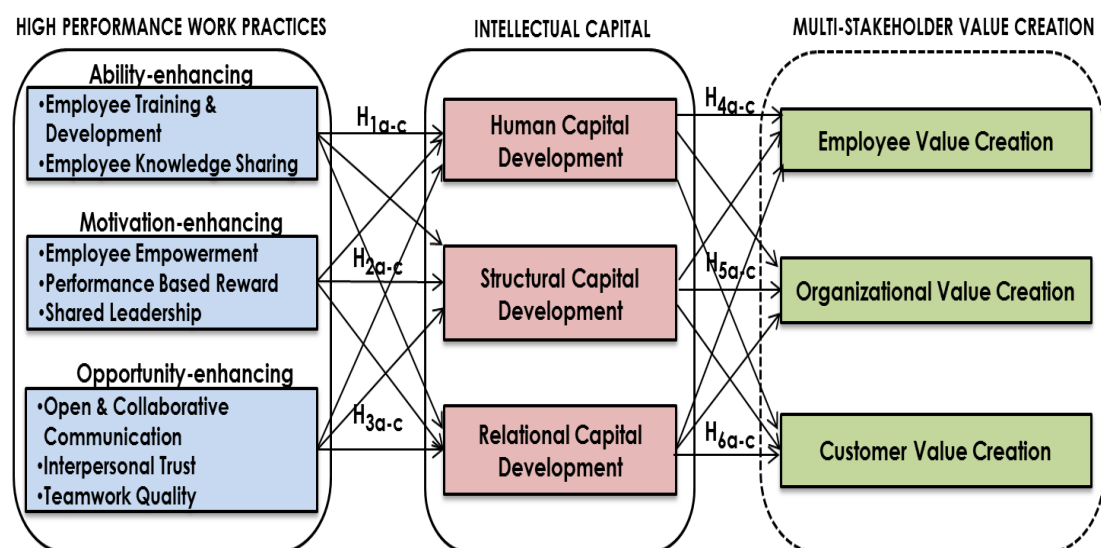


Figure 3.1: Research Model

While an extensive literature review assisted in building the research theoretical basis, it was equally crucial to empirically validate the research model. Therefore, in the next section, we theoretically deliberate on the relationships between various model constructs followed by their corresponding research hypotheses to test the model.

3.4. Hypotheses Development

This research was primarily aimed at examining the effectiveness of (Ability, Motivation & Opportunity)-enhancing HPWPs on IC growth to consequently derive multi-stakeholder value in PSFs. In view of broad literature review, the research model as proposed in the above figure highlights a potential relationship between three key factors (HPWPs, IC and MSVC). To confirm the possibility of their relationship, a broad review of literature in conjunction with the supporting theories was conducted with an aim to establish theoretical and scholarly evidence, which subsequently resulted in the formulation of hypothesis statements to answer the key research question. All the constructs lying under key factors of the model are discussed herewith followed by their hypotheses statements.

3.4.1. HPWPs and Intellectual Capital

HRM practitioners implement a range of management approaches and practices viz. recruitment & selection, job design, compensations, information sharing, training & development, leadership etc. that enhance organizational learning and boost intellectual assets (Posthuma et al., 2013; Snell et al., 1996). However, the question arises – how these HRM activities and practices support organizational culture, processes and knowledge capabilities? A range of approaches exist towards creation and institutionalization of the knowledge. For instance, creation of a shared mindset and learning culture would require informal communication structure, whereas the organization of structural assets such as records, processes and systems requires formal management approaches (Ulrich and Lake, 1991; Youndt, 1998).

These approaches give rise to the concept of tacit & explicit knowledge. Tacit knowledge being informal by nature is difficult to formalize and hence challenging to communicate. On the other hand, explicit knowledge by virtue of its formal nature is able to be communicated easily and systematically (Nonaka, 1991; Polanyi, 1962). Therefore, HR managers must implement a diverse set of HPWPs in order to effectively institutionalize tacit & explicit knowledge. Organizations in general and HRM departments in particular can institutionalize tacit knowledge through socialization and enculturation efforts to aid transfer of tacit knowledge from

individuals to team level and organizational level (Lönnqvist, 2017; Youndt and Snell, 2004; Nonaka and Takeuchi, 1995). Now to institutionalize the explicit knowledge, organizations need to support transfer of explicit knowledge from individuals by simply facilitating and formalizing documentation efforts, aimed at specifically codifying the knowledge (Youndt, 1998).

Accordingly, HR managers should take into account all IC components while devising HRM strategies. In the next section, we discuss three bundles/configurations of HPWPs and how they nurture the growth of IC in the service firms.

3.4.1.1. Ability-Enhancing HPWPs and IC

Ability-enhancing HPWPs include set of practices like formal recruitment & selection, training & development etc. These set of practices mainly focus on imparting training to build firm-specific employee skills and abilities required to undertake tasks effectively (Ma Prieto and Pérez-Santana, 2014; Youndt and Snell, 2004). Ability-enhancing practices facilitate organization's human capital development by building the knowledge competencies of their staff or by hiring skilled and capable individuals from the market. HPWPs, therefore, play a major role in each of these human capital development strategies (Obeidat et al., 2016; Williamson, 1981). Needless to say, employee training and continuous upskilling are critical towards the development of intellectual capital (in particular the human capital), nevertheless, Becker and Gerhart (1996) argue that organizations only execute training programs that develop firm-specific skills of the employees which may not be transferred to other organizations. Scholars such as Doeringer and Piore (1971) and Williamson (1981) suggest that organizations should focus on culture of internal promotions so as to capitalize on the investments made in trainings. In support of this argument, Koch and McGrath (1996) claim that any organization investing in trainings but not frequently entertaining internal promotions would reasonably fail in capitalizing on its investment.

Performance appraisal processes are yet another set of HR activities that support intellectual capital development in the organizations. Conventionally, employee performance appraisal was meant to focus only on routine management functions such as job assignments, pay raises and promotions (Obeidat et al., 2016). However, scholars have realized the true potential of the appraisal process towards building organizational knowledge (Latham and Wexley, 1981). HRM scholars argue that a system of employee appraisal comprising of training needs assessment, tolerance of mistakes and feedback mechanism when become an integral part of the appraisal process, it supports in building the human capital (Youndt and Snell, 2004; Snell and Dean, 1992).

Moreover, other ability/skill development activities such as fair grievance procedures and information sharing instil a culture of learning and sharing within the employees, allowing them to be well-informed of the company key processes, information and decisions and at the same time enable them to stay connected with the external stakeholders, thereby enhancing organization relationship network (Rehman et al., 2020b; Fu et al., 2017; Stewart, 1997). In addition, these activities also encourage employees to create, store and apply new knowledge and hence contribute to the development of organization structural assets, resources and capabilities. This perhaps could be owing to the ease of access to in-house information systems and the organizational culture and processes that support smooth flow of knowledge among the employees (Youndt, 1998; Becker and Gerhart, 1996; McGill and Slocum, 1994).

Accordingly, as part of our research model, we identified and operationalized Employee Training & Development and Employee Knowledge Sharing as the most relevant ability-enhancing practices from the literature having a significant potential to build the IC in service firms.

3.4.1.1.1. Employee Training and Development

Employee trainings are deliberate management efforts intended at inculcating a desired set of employee behaviors, attitudes and motivations (Bartlett, 2001; Huselid, 1995). It is basically an investment made in the development of employees by an organization as part of its moral obligation (Jiang and Liub, 2015). Most of the employees perceive training & learning opportunities as their institutional right and employment benefit (Fey et al., 2000). In general, training is also considered as a reward given to the hardworking and loyal employees and a sign of promotional possibilities by the employer (Wang et al., 2011; Taylor, 2005). Employee training & development enables them to gain firm-specific skills and competencies (Jiang and Liub, 2015). Employee trainings aimed at building work-related knowledge and skills enable them in smoothly adjusting to the place of work (Bartlett, 2001). In this regard, the research highlights that training & professional development of employees result in increased job satisfaction, higher commitment and positive workplace attitude, eventually leading to employee integration into the organizational culture (Silva et al., 2019; Jiang and Liub, 2015; Cable and Parsons, 2001).

In support of this, Dysvik and Kuvaas (2008) highlight that staff trainings and capacity building initiatives promote positive outcomes such as employee retention, motivation and productive work behaviour, which consequently lead to improved firm performance and effectiveness (Taylor, 2005; Becker and Gerhart, 1996). Dysvik and Kuvaas (2008) also consider training & development programs as the social

exchange contracts that promote employer-employee relationships by building a sense of long-term commitment. The employee commitment, as a result, encourages them to deliver to the best of their capacities. Besides, from the employees' viewpoint, training provisions are viewed as sign of recognition and appreciation of employee contribution to the organization (Ramdani et al., 2014).

A variety of researchers such as: Wang et al. (2011), Taylor (2005), Bartlett (2001), Fey et al. (2000), Huselid (1995) etc. consider employee training & development as an integral part of strategic HR management and argue training provision as a reasonable justification to enhance employee performance and productivity at the workplace (Jyoti and Rani, 2019; Ramdani et al., 2014; Srivastava et al., 2013). Strategically speaking, investment made in the employee training & development boosts employee knowledge competencies which consequently aids in building a robust knowledge base to derive a competitive advantage (Silva et al., 2019; Jiang and Liub, 2015; Pfeffer, 1994; Huselid, 1995; Miller and Monge, 1986). In view of the challenges governing achieving a knowledge-based competitive advantage, a more relevant line of action would be to evaluate the impact of trainings in the development of competent workforce (Rehman et al., 2020a).

3.4.1.1.2. Employee Knowledge Sharing

It is characterized as a phenomenon involving exchange of knowledge & experience and making accessible these learnings to all the employees (Jiang and Liub, 2015; Lin, 2007). As a process, knowledge sharing offers employees with an opportunity to undergo mutual learning, cooperation and exchange, thereby creating new knowledge and boosting organizational capability to innovate (Jennex, 2020; Van den Hooff et al., 2012). Furthermore, according to Nonaka (1991), Knowledge sharing represents a phenomenon involving exchange of tacit & explicit knowledge aimed at creating new knowledge. Residing in the mind of people, the tacit knowledge encompasses personal know-how, skills and experience. Whereas, the explicit knowledge is the one stored in the form of organizational databases, policies, records and manuals that are available for routine use by the members of an organization and hence involves less effort to communicate as opposed to the tacit knowledge (Razmerita et al., 2016).

As an organizational practice, employee knowledge sharing is viewed as an essential element of social interactions, involving a set of behaviours that encourage mutual exchange and relations (Lönnqvist, 2017; Razmerita et al., 2016). Over the period of time as this knowledge exchange and interaction increase between the employees, their knowledge gets transformed into routines, procedures and practices that are eventually stored in the organizational manuals and databases

(Lin, 2007; Nonaka, 1991). Some of such interactions and knowledge exchanges, when formalised and institutionalized, turn out to become organizational knowledge and intellectual property. For instance, introducing a policy to document 'lessons learnt' after the successful completion of a project, would help develop organization's structural capital. Similarly, having a policy to constantly update information & knowledge databases would also support the building of its structural capital (Youndt, 1998; Garvin, 1993).

In the same manner, encouraging employees to redesign workflow processes and activities would help institutionalise the individualized employee knowledge as a standard procedure stored in the organizational knowledge database (Lönnqvist, 2017; Hsu, 2008; Youndt, 1998). Lastly, from an external knowledge creation perspective, incorporating mechanisms to formally document customer feedback, complaints and suggestions etc., would build organization's relational capital (Stewart, 1997; Quinn et al., 1996). This being said, the institutionalization of knowledge by the organization, however, necessitates a formal strategic HR management approach (Kehoe and Wright, 2013; Newell et al., 2009; Schein, 1992). Hence, we may hypothesize for Ability-enhancing HPWPs as follow:

H_{1a}: Ability-enhancing HPWPs have significant positive effects on human-capital in the PSFs.

H_{1b}: Ability-enhancing HPWPs have significant positive effects on structural-capital in the PSFs.

H_{1c}: Ability-enhancing HPWPs have significant positive effects on relational-capital in the PSFs.

3.4.1.2. Motivation-enhancing HPWPs and IC

The motivation-enhancing practices refer to the investment made on set of HRM activities that inspire and encourage a can-do work attitude among the employees (Rehman et al., 2020b). An organization with a demotivated staff can't sustain a competitive advantage on long-term basis. However, a configuration of employee performance management practices such as empowerment, reward system, participation in decision making, flatter organizational structure, reduced status distinction, workplace flexibility etc. could be helpful in instilling employee motivation, enabling the organization to set its direction (Obeidat et al., 2016; Kehoe and Wright, 2013). A common impediment to employee motivation is the status distinction in the organizations that usually takes the forms like executive dining, reserved car parking, executive rooms etc., all of these express a sense of inequality among the organizational members (Dysvik and Kuvaas, 2008; Youndt 1998; Pfeffer, 1994). These inequalities emerge from organizational culture in general and communication barrier and hierarchical structure in particular as well as social class difference that promote 'us' vs. 'them' mindset. Hence, companies must eliminate status distinctions between its people in order to promote egalitarianism culture and

resultantly enable mutual collaboration and intellectual knowledge development (Rehman et al., 2018; Oliveira and Silva, 2015; Dumaine, 1994). In the same manner, reduced job classification fosters creation of more egalitarian workplaces, enabling employees to share responsibility and work in harmony. Similarly, reduced pay difference in organizations minimize interpersonal politics and conflicts thereby supporting mutual cooperation and collective building of organizational knowledge capabilities (Kehoe and Wright, 2013; Lazear, 1989).

Stock ownership is yet another practice that is instrumental in attracting and retaining the brightest human resource (Stewart, 1997; Pfeffer, 1994). Capable individuals would only choose to stay with the organizations that value their employees by making them part of stock ownership programs. Stock ownership initiatives have been increasingly popular, particularly, in the knowledge intensive firms. Many of these go public not with an intention to gain capital but to share ownership with their employees, being their most critical assets (Youndt, 1998; Stewart, 1997). Why would the most talented minds line-up to join companies like Microsoft, Parsons, HP, Google, Godaddy, Walt Disney etc. if they don't get stock ownership program to earn big returns. Another way to achieve increased employee involvement, participation and ownership is through empowerment and giving employees an authority to make decisions which would result in motivation to contribute to organizational knowledge creation (Lönnqvist, 2017; Youndt, 1998). Lastly, the reward systems which not only motivates employees to add to the organizational stock of knowledge but also enables organizations to retain skilled human resource and hence maintain its intellectual capital. Consequently, the companies must reward skilled and knowledgeable employees if they ought to expand their human capital (Obeidat et al., 2016; McGill and Slocum, 1994).

Drawing insights from the above literature suggesting a potential nexus between Motivation-enhancing HPWPs and intellectual capital, we operationalized three HPWPs i.e. Employee Empowerment, Shared Leadership and Performance-Based Reward being the most appropriate bundle in the given context. These are described below:

3.4.1.2.1. Employee Empowerment

Empowerment refers to giving employees a set of working conditions such as autonomy, flexibility, support, access to information & resources and the opportunities for self-determination that enable them to effectively accomplish the assigned roles (Budijanto, 2013; Kanter, 1993). While job satisfaction is primarily amongst the key outcomes of employee empowerment, some of the other anticipated outcomes are reduced absenteeism, employee motivation, retention

and wellbeing. Employees psychologically ascribe empowerment to the environment they get at the workplace that may involve the amount of autonomy they have and their perception about their contribution towards the achievement of organizational goals (Tourangeau et al., 2010; Oliveira and Silva, 2015).

Empowerment motivates employees to exercise flexibility and stimulates productive work behavior with minimal supervision, hence augmenting the firm performance (Birdi et al., 2008). Organizations adopting empowerment practices, such as giving employees workplace flexibility and involving them in the decision making, are able to augment their skills & capabilities, enabling them to perform better than the organizations that follow a highly-centralized decision-making system (Oliveira and Silva, 2015; Collings et al., 2010). This is because decentralized decision-making system supports creation of flatter and less rigid hierarchies that are characterized by wider managerial span of control, involving delegation of power and decision-making responsibilities at a lower level. Not only this creates a smooth information flow but also frequent sharing of ideas and opinions among the members of an organization (Budijanto, 2013; Malone, 1997).

Organisations can't achieve their goals of competitiveness unless they take efforts in attracting and retaining the skilled workforce and continually encourage them to improve their performance through empowerment and flexibility. This would help HR practitioners build a system that supports empowered learning and inclusiveness of the employees, enabling them to contribute to the organisational goals of effectiveness (Budijanto, 2013; Hellriegel and Slocum, 2009). As a whole, employee empowerment serves as a basis for attracting and retaining the skilled human resource thereby boosting the organizational pool of human capital (Wang et al., 2011; Miller and Monge, 1986).

3.4.1.2.2. Performance Based Reward

An organizational reward system denotes a system of compensation to achieve desired employee outcomes and behaviors. Employee reward takes the form of intrinsic & extrinsic rewards. Individuals are intrinsically rewarded in terms of autonomy, flexibility and empowerment to self-express themselves at workplace, whereas, the extrinsic reward involves monetary benefits, financial gains, bonuses, promotions etc (Lee and Ahn, 2007; Alavi and Leidner, 2001). Generally speaking, organizations having well-designed compensation schemes based on employee performance are in a better position to achieve organizational outcomes as opposed to those having no reward schemes in place (Silva et al., 2019; Jiang and Liub, 2015; Becker and Gerhart, 1996).

Performance based compensation facilitates an organization to attract and retain highly-skilled staff. The company reward mechanism must commensurate with employee performance and contribution (Snell and Dean, 1992). In support of this viewpoint, Pfeffer (1994) argues companies should pay higher wages than their competitors if they ought to retain their trained staff. In the same manner, the rewards such as gain-sharing and bonuses based on the collective team-based performance motivate employees to openly interact and exchange knowledge (Lawler, 1992). In performance oriented cultures, the research highlights a strong link between employee rewards and organizational success outcomes such as knowledge innovation, performance effectiveness etc (Ramdani et al., 2014).

When appropriately implemented, the reward system has also proved to boost employee motivation to contribute to organizational knowledge pool (Peltokorpi, 2011; Huselid, 1995). Therefore, rewarding high-performing employees not only inspires employees to apply their optimal efforts but also promotes a culture of knowledge sharing (Jyoti and Rani, 2019; Davenport and Prusak, 2000). Performance based compensation provisions offer enormous potential to induce either cooperative or competitive behaviour among the individuals and teams and help align individual or team goals with the organizational goals which then translates into organizational success (Jennex, 2020; Jiang and Liub, 2015; Srivastava et al., 2013).

3.4.1.2.3. Shared Leadership

As opposed to vertical leadership, a shared or distributed leadership is characterized by the processes where team members mutually influence and lead each other with an aim to accomplish common goals (Day et al., 2004). Characterized by shared responsibility and collaborative decision-making, the shared leadership represents a situation wherein team individuals exercise a leadership behavior and shared authority (Hoch, 2014). Moreover, the rapidly-changing business landscape has reshaped the way contemporary firms engage in their business activities, making the adoption of shared leadership practices indispensable for developing in-house knowledge and learning culture (Rehman et al., 2018; Hsu et al., 2017).

Although both vertical and shared leadership approaches are simultaneously applied in teams activities and processes, however, the research indicates that the shared leadership results in a notably higher team performance as compared to the one achieved by the vertical leadership approach (Pearce and Sims, 2002). Hence, the shared-leadership practices and their impact on team effectiveness have drawn significant interest from both researchers and practitioners (Carson et al., 2007). Particularly, from the viewpoint of knowledge-intensive firms, shared leadership approach is more effective as compared to the vertical leadership when managing

complex team processes and achieving team effectiveness (Wang et al., 2014). Moreover, the knowledge-intensive nature of service firms necessitates staff members to be in possession of diverse knowledge and skillset as sometimes it's challenging for the team leaders to lead the roles requiring range of complex and cross-functional skills. Thus the shared leadership style serves as a promising strategy towards maintaining the quality of decisions and achieving optimal solutions (Wang et al., 2014; Carson et al., 2007).

Needless to say, the shared leadership approach supports team innovation through mutual cooperation, cohesion and knowledge sharing (Hsu et al., 2017), however, when it comes to managing conflicts, solving problems and building trust among the team members, the shared leadership has proved to surpass the vertical leadership approach (Hoch, 2014).

Thus, the following hypotheses can be anticipated for Motivation-enhancing HPWPs:

H2a: Motivation-enhancing HPWPs have significant positive effects on human-capital in the PSFs.

H2b: Motivation-enhancing HPWPs have significant positive effects on structural-capital in the PSFs.

H2c: Motivation-enhancing HPWPs have significant positive effects on relational-capital in the PSFs.

3.4.1.3. Opportunity-Enhancing HPWPs and IC

The opportunity-enhancing practices refer to the HRM activities offering staff with the opportunities to build confidence and professionally grow as they get autonomy to execute assigned tasks (Kehoe and Wright, 2013). A set of HPWPs that could help achieve this configuration may include flexible work environment, trusting culture, collaborative communication, teamwork and opportunities to grow (Obeidat et al., 2016). However, building such an organizational culture requires a collaborative work environment where information and knowledge could be shared freely (Bontis, 2000; Nonaka, 1991). In support of this viewpoint, scholars like Quinn et al. (1996) and Pfeffer (1992) while considering knowledge as a key asset suggest that effective information & knowledge exchange practices must be facilitated via a shared work environment (Youndt, 1998). Such an environment can be thought of as the one characterized by a culture of openness created through trusting relationship wherein organizational members freely exchange knowledge and encourage feedback from the customers and suppliers (Jyoti and Rani, 2019; Obeidat et al., 2016; Youndt, 1998). At the core of enabling an open and trusting culture is breaking the interpersonal and structural barriers among the organizational members by creating more egalitarian workplaces, fair treatment and equitable growth prospects (McGill and Slocum, 1994; Pfeffer, 1994).

Organizations having communicational and structural barriers eliminated tend to promote interpersonal trust and their people become more and more open to

sharing knowledge and information (Nonaka, 1991). One way to minimize horizontal barriers is through horizontal connections such as collaborative teams, data sharing through information systems, building liaison networks etc (Kong and Thomson, 2009; Youndt, 1998). All of these initiatives offer employees a shared platform to establish trust and openness of the relationship, encouraging them to exchange individual ideas and perspectives (Nonaka and Takeuchi, 1995). The egalitarianism as a concept is instrumental towards eliminating vertical barriers through classless organizations that discourage power distance among the employees (Kong and Thomson, 2009; Youndt and Snell, 2004).

In support of enhancing organizational capabilities to create, transfer and apply knowledge, organizations need to redesign work structures, job functions and boundaries and these workplace arrangements be supported through network intimacy and permeability (Youndt, 1998). One way of bringing network intimacy and permeability could be through forming cross-functional teams and networks especially for solving common employee-customer problems (Youndt and Snell, 2004; McGill and Slocum, 1994). To further enhance the effectiveness of teams and networks, organizations should emphasize on recruiting employees having strong interpersonal skills (Kong and Thomson, 2009), provide trainings and encourage teamwork through improved communication and coordination (Fu et al., 2017; Subramaniam and Youndt, 2005; Edwards, 1990) and integrate customer feedback into employee performance evaluation (Shin and Konrad, 2017; Obeidat et al., 2016; Bowen and Lawler, 1992).

Needless to say, the tacit knowledge is hard to articulate (Nonaka, 1991), therefore organizations always look for innovative ways of gathering, storing and fully utilizing such knowledge resources (Armstrong, 1992). Hence, if the organizations ought to effectively institutionalize on their tacit knowledge assets, a high level of interpersonal trust in conjunction with shared learning platforms and collaborative exchange systems must exist to promote tacit learning enabled through mutual interactions and sharing of stories, gossips, routines and experiences, aimed at augmenting organizational stock of intellectual capital resources (Rehman et al., 2020a; Youndt, 1998).

When organizations offer socialization platforms and support informal discussions in the lunch rooms where employees enjoy lunch and play games together, these practices encourage employees to share common bonds in the form of stories and metaphors, enabling communication of the knowledge that was otherwise incommunicable (Youndt, 1998; Schein, 1992). The knowledge once communicated in the form of stories and experiences, it becomes part of organizational culture and

routine practices for extensive use (Nonaka and Takeuchi, 1995). Likewise, experts' know-how can be institutionalized as organizational stockpile of knowledge through coaching and mentoring activities. This ongoing interaction between the experts and employees results in the knowledge being adopted as routine organizational processes and activities (Nonaka, 1991). No matter, it's a formal interaction in the form of structured learning program or an informal one, employee interactions are indispensable towards turning individual property into organizational property (Youndt, 1998).

Accordingly, we identified Open & Collaborative Communications, Teamwork Quality and Interpersonal Trust as the most relevant HPWPs to operationalize within the opportunity-enhancing category. These are discussed below:

3.4.1.3.1. Open & Collaborative Communication

Open & collaborative communication serves as a vital source of interaction and exchange, allowing employees to articulate their feelings, satisfy their needs, gain access to key information, influence decision-making process and build opportunities to make a difference (Tourish and Hargie, 2009). Collaborative communication practices support immediate sharing of new information including the exchange of opinions and innovative ideas by the employees (Jiang and Liub, 2015). Organizations with formal communication hierarchies and structures foster a culture of high power distance that hampers free flow of communication. On the other hand, a flat communication and reporting structure augments organizational capacity to rapidly create, share and apply new knowledge owing to the reduced communication barriers and minimal power distance (Youndt, 1998). Moreover, an open approach to communications also enables an organization to timely share key insights relating to the changes in organizational policies and performance goals, ensuring that the employees are fully cognizant of the strategic priorities and have access to the new information (Lawler, 1992; Pfeffer, 1998).

An organization should work like a social community where employees are tied to each other through common norms, shared values and collective visions. This would help eliminate opportunistic feelings and conflicting behaviour, thereby motivating them to share resources and create new opportunities for each other (Nahapiet and Ghoshal, 1998). An organisation is essentially a system for supporting human interactions. Often the key aspect governing organizational success is to determine how collaborative the exchange of information among the employees is (Tourish and Hargie, 2009). So, it is impossible to achieve organizational effectiveness and knowledge based innovations without focusing on building an open communication culture. Hence, an organisation in its quest to gain a competitive advantage must

redesign its communication strategies in a manner that these are able to effectively address the communications needs of its employees (Tourish and Hargie, 2004).

3.4.1.3.2. Interpersonal Trust

One of the key aspects of organisational culture, interpersonal trust, manifests an individual's faith or belief on the actions and intentions of other individuals (Al-othman, 2014). In other words, it highlights the level of faith between the employees in terms of expression of their feelings, perceptions, information, knowledge and experience, and maintaining trustworthy relationships with each other (Migdadi, 2005). Interpersonal trust serves as a key factor that represents employees' willingness to take risk and engage in knowledge-sharing behaviour with other individuals. It basically determines the extent to which individuals are willing to exchange ideas and express opinions with each other in an organisation (Johnson and Cullen, 2002).

Generally speaking, mutual trust and credibility are the preconditions for the effective development of the employee knowledge. Interpersonal trust facilitates generation of new ideas through effective coordination and smooth communications, enabling the achievement of sustainable knowledge development strategy (Migdadi, 2005). When individuals establish the feelings of trust among each other, they tend to freely interact and share their concerns without taking into account the fact that they could be exploited by the other individual (Al-othman, 2014). Interpersonal trust is an essential ingredient of the social exchange process that promotes knowledge sharing among the coworkers and ultimately guides the success of an organisation (Jennex, 2020; Tsai and Cheng, 2012).

Furthermore, higher feelings of trust encourage employees to freely express their information and knowledge which promotes employee relationships and exchange of novel ideas and eventually supports the development of organizational knowledge (Al-Alawi et al., 2007; Migdadi, 2005; Nahapiet and Ghoshal, 1998). This implies that increased level of trust induces individual's willingness to collaborate and cooperate for the collective achievement of organizational objectives (Al-Alawi et al., 2007). While the interpersonal trust may help achieve a number of organizational outcomes, the organizational culture built on trust-based relationships would be instrumental in creating a robust knowledge base.

3.4.1.3.3. Teamwork Quality

Typically, teamwork includes cooperative and supportive behaviour amongst the interdependent employees to collectively achieve set goals. The effectiveness of the teamwork improves employee motivation to workplace which leads to increased job satisfaction (Wang et al., 2011). However, in order to truly capture team members' overall cooperation and level of effectiveness in teams, Hoegl and

Gemuenden (2001) introduced the concept of Teamwork Quality (TWQ) by incorporating six qualitative aspects governing the interactions between the team members viz. communications, coordination, mutual support, balance-of-member contribution, effort and cohesion. Besides, Kozlowski and Ilgen (2006) consider communications, interpersonal interactions, cooperation, coordination, cohesiveness, mutual support, adaptability, problem-solving ability and team-based learning as the key attributes of the teamwork quality. These aspects enable the measurement of the quality of both social and task-oriented interactions among the team members. Moreover, these aspects also help measure the effectiveness of team's internal processes.

One of the key attributes of the teamwork quality is the continued development of the knowledge, skills & competencies of the team members through interdependent interactions and experience-sharing (Wang et al., 2011). In other word, the dynamic characteristics of the teamwork quality is that it augments team's performance and effectiveness through mobilization of individual members' knowledge, efforts and resources (Rehman et al., 2020b). This implies that the success of teamwork quality processes necessitates a sense of synergy and mutual cohesiveness among the organizational members who must be agile enough to become accustomed to the workplace culture as the achievement of organizational goals requires team members' social interdependence and collaborative efforts rather than their personalised views and competing interests (Tarricone and Lucca, 2002). In this regard, collective team efforts guided by the shared learning behaviours are crucial towards the productivity and capacity enhancement of the team members (Malone, 2004). Such a quality-focused teamwork would be instrumental in improving the shared cognitive thinking enabled through active participation, fair contribution and open exchange of communication between the team members, leading to collective wisdom and productive teamwork behaviour (Rehman et al., 2018).

The above arguments overall lead to suggesting following hypotheses:

H_{3a}: Opportunity-enhancing HPWPs have significant positive effects on human-capital in the PSFs.

H_{3b}: Opportunity-enhancing HPWPs have significant positive effects on structural-capital in the PSFs.

H_{3c}: Opportunity-enhancing HPWPs have significant positive effects on relational-capital in the PSFs.

3.4.2. Intellectual Capital and Multi-stakeholder Value Creation (MSVC)

The IC resources collectively assist organizational members in augmenting work performance and making informed decisions which ultimately lead to improved competitive standing in the market (Hsu, 2008). To dig deeper into this phenomena, we now theoretically evaluate the potential of each intellectual capital dimension

(human, structural and relational) towards driving value outcomes for key organizational stakeholders i.e. employees, organization and customers including suppliers and partners. The theoretical discussion would subsequently form the basis of proposing relevant hypotheses to empirically test these relationships.

3.4.2.1. Human Capital and Multi-stakeholder Value Creation

Primarily the notion of human capital emphasizes on creating human knowledge and building new competencies with an aim to achieve organizational performance effectiveness (Nahapiet and Ghoshal, 1998). Human capital, when viewed from the organizational competence perspective, the key ideology is to derive value outcomes for the organization. Consistent with this line of thinking is the Resource Based View that emphasizes on significance of firm's valuable and inimitable competencies that form the basis of long-term competitive edge. In this regard, human capital of an organization constitutes multitude of distinctive and rare resources that aid in maintaining and sustaining a competitive advantage (Barney, 1991a).

An organization's human capital is indispensable because the employees possessing diverse knowledge and skillset contribute to range of value-creating activities that are aided by well-planned managerial strategies (Rehman et al., 2020c; Youndt and Snell, 2004). This gives an understanding that building robust pool of human capital is difficult for the organization mainly because of the two reasons. First, there is an asymmetry of the skills in the job market. Secondly, maintaining appropriate human resource skills heterogeneity across the organization is yet another challenging task (Hsu, 2008; Youndt, 1998). This in-built social complexity governing human capital development process makes it unique and non-substitutable resource to drive positive value outcomes for various organizational stakeholders in a rapidly-changing business landscape (Corsaro, 2019; Hsu, 2008).

Organizational human resource serves as the basis for gaining market competitiveness for contemporary business firms, making organizational performance more prone to varying human knowledge, capabilities and behaviors than their physical efforts (Silva et al., 2019; Fu, 2010). It is obvious that individuals who are smart and adequately skilled demonstrate the ability to enhance value through improved service delivery focus and decreased costs, leading to higher customer benefits in a variety of ways (Shin and Konrad, 2017). This is because the role of organization's human capital has been phenomenal in driving process and service innovations by reducing costly inputs, eliminating redundant activities and improving the utilization of in-house structural systems and capabilities.

Moreover, increased pool of human capital also supports judicious planning and improved problem solving which consequently lead to customer benefits via increased service quality and efficiency at minimal costs (Rehman et al., 2019). To this end, Total Quality Management (TQM) scholars like Deming (1986) and Crosby (1979) maintain that the expert human resource lays the foundation of overall service quality philosophy by focusing on quality-conscious processes and activities, resulting in increased service reliability and customer satisfaction. In the same manner, humans as opposed to the machines exhibit flexible customer service attitude by realigning their service offerings in line with the varying expectations of their clients and customers (Rehman et al., 2020c; Subramaniam and Youndt, 2005; Youndt, 1998). Overall, a creative and motivated workforce is instrumental towards continually improving service innovation and delivering remarkable customer value. In view of such an increasing potential toward value-creation for employees, organization and customers/clients in PSFs, we may hypothesize that:

H_{4a}: Human-capital creates value for employees in the PSFs

H_{4b}: Human-capital creates value for organization in the PSFs

H_{4c}: Human-capital creates value for customers including supplier & partner in the PSFs.

3.4.2.2. Structural Capital and Multi-stakeholder Value Creation

Structural capital that also represents organizational memory plays a phenomenal role in cutting organizational cost and improves operational efficiencies primarily due to three factors. First, by institutionalizing organizational knowledge, experience and lessons learnt that help learn from failures and avoid repetition of the past mistakes Dixon (1992). Second, structural capital being preserved as institutionalized knowledge can be utilized in its entirety to meet cutting-edge business needs or to achieve a transformation (Snell et al., 1996; Garvin, 1993). Lastly, structural capital entrenched in organizational records, processes, routines and information systems can directly help extract key information and knowledge to ease their processing and sense-making (Subramaniam and Youndt, 2005; Galbraith, 1977).

The above three factors (such as avoiding repetition of mistakes; increased information & knowledge use; and improved information & knowledge processing and sense-making) not only enable an organization to reduce costs and enhance operational effectiveness but also assist in extending benefits to other stakeholders such customers/clients and external partners (Hsu, 2008). For instance, elimination of the mistakes aids in speedy delivery of services to the clients. In the same way, employees who directly interact with the clients can smoothly access organizational knowledge base to quickly address client issues. Moreover, maintaining key customer information in the organizational memory such as its information systems

and databases enables to keep a track of customer needs, preferences and expectations, leading to customer value creation in terms of increased benefit and satisfaction (Shin and Konrad, 2017; Youndt and Snell, 2004; Dixon, 1992).

Like the human capital, structural capital is also context specific. For example, organizational activities, actions and routines represent its unique corporate culture that is exclusive to that organization, making it hard for the competitor to imitate or recreate (Subramaniam and Youndt, 2005; Barney, 1991). Therefore, structural capital helps an organization enhance its product and service offerings by enabling employee flexibility and giving them ease of access to key organizational knowledge, thereby allowing them to understand what customer needs are and how these can be fulfilled. Overall, in view of the increased structural capital prospects for deriving value outcomes for employees, organization and customers/clients including suppliers & partners in PSFs, it can be hypothesized that:

H_{5a}: Structural-capital creates value for employees in the PSFs.

H_{5b}: Structural-capital creates value for organization in the PSFs.

H_{5c}: Structural-capital creates value for customers including supplier & partner in the PSFs.

3.4.2.3. Relational Capital and Multi-stakeholder Value Creation

Along the same lines as human & structural capitals, role of relational capital is also instrumental in driving value outcomes for key organizational stakeholders via better interaction between the employees and relationships that the member of an organization maintain with customers, partners and suppliers, leading to improved problem solving, better service quality and process innovations (Deming, 1986; Youndt et al., 2004). Moreover, relational capital facilitates cost reductions by augmenting organizational ability to process information. Thus, building lateral relations between the cross functional work teams facilitates free flow of communication and knowledge transfer between various organizational units. In addition, the knowledge transfer activities enabled by the virtue of organizational relational capital support the integration of diverse employee skills and in-house technologies, enabling maximum utilization of organizational relational knowledge base for deriving value advantage for the range of stakeholders (Silva et al., 2019; Shin and Konrad, 2017; Prahalad and Hamel, 1990; Stewart, 1997).

When it comes to the benefits to be derived in particular, the relational capital might be more effective to deliver customer benefits in terms of better identification of idiosyncratic needs of the customers and hence achieving customer satisfaction by developing working solutions towards meeting those needs (Hamel and Prahalad, 1994). Besides, the better existence of the relational capital helps an organization come closer to its customers. While it is extremely hard for an organization to quickly

acquire relational capital from the market, the collaborative work activities and information exchange culture between the staff members, customers, partners and suppliers built over a period of time indeed highlight unique relational capabilities of an organization, making its relational capital highly inimitable (Kehoe and Wright, 2013; Youndt, 1998). For instance, a competitor would likely have tough time understanding and imitating the factors underlying successful organisation-customer relations or organisation-partner strategic alliance as these relational capital strengths were built after long-term and socially complex interactions with its external stakeholders. Given that much of relational capital potential for delivering multi-stakeholder value outcomes, we may hypothesize that:

H_{6a}: Relational-capital creates value for employees in the PSFs.

H_{6b}: Relational-capital creates value for organization in the PSFs.

H_{6c}: Relational-capital creates value for customers including supplier & partner in the PSFs.

3.5. Alignment Between Research Question, Model Constructs and Hypotheses

The table below gives an alignment of the research question with its corresponding hypotheses, supporting literature and theories. Besides, a quick description of factors and constructs/variables used in research model is also given.

Model Constructs and Brief Description	Relevant Literature/Studies	Research Questions	Corresponding Proposed Hypotheses	Theories Supporting Relationship			
HPWPS AND INTELLECTUAL CAPITAL							
Ability-enhancing Practices							
Employee Training & Development: Organizational initiative that encourages learning and inculcates work-related competencies with an aim to improve employee performance.	Hsu et al. (2017); Peake and Spiller (2017), Kianto et al. (2017); Soo et al. (2017); Fu et al. (2017); Özçelikaet al. (2016); Hsu et al. (2017); Obeidat et al., (2016); Fareed et al (2016); Razmerita et al. (2016); Jiang and Liub (2015); Wang et al. (2014); Hoch (2014); Ma Prieto and Pérez-Santana (2014); Ramdani et al. (2014); Kehoe and Wright (2013); Fu et al. (2013); Budijanto (2013); Tsai and Cheng (2012); Van den Hooff and Simonovski (2012); Wang et al. (2011); Wu et al. (2011); Messersmith and Guthrie (2010); Hellriegel and Slocum (2009); Birdi et al. (2008); Dysvik and Kuvaas (2008); Al-Alawi et al. (2007); Carson et al. (2007); Bartlett (2001); Cable and Parsons (2001); Day et al. (2004); Fey et al. (2000); Hatch and Dyer (2004); Hoegl and Gemuenden (2001); Johnson and Cullen (2002); Kehoe and Wright (2013); Kozlowski and Ilgen (2006); Lee and Ahn (2007); Lin (2007); Migdadi (2005); Newell et al. (2009); Pearce and Sims (2002); Robert et al. (2000); Roos (2004); Tarricone and Lucca (2002); Taylor (2005); Tourangeau et al. (2010); Teo et al. (2008); Buck (2003); Teo et al (2005); Tourish and Hargie (2004); Tourish and Hargie (2009); Guthrie et al. (2009); Takeuchi et al. (2009); Liao et al. (2009); Wasti (2003); Youndt and Snell (2004); Pearce and Sims (2002); Lepak and Snell (2002); Wright and Boswell (2002);	RQ) How Do High Performance Work Practices support the growth and development of Intellectual Capital for multi-stakeholder value creation in the Professional Service Firms? a) How Do (Ability, Motivation and Opportunity)-enhancing bundles of HPWPs influence intellectual capital development in the PSFs?	H1a: Ability-enhancing HPWPs have significant positive effects on human capital in the PSFs.	RBV AMO Framework			
Employee Knowledge Sharing: The degree of employee willingness to participate in knowledge sharing activities.			H1b: Ability-enhancing HPWPs have significant positive effects on structural capital in the PSFs.				
Motivation-enhancing Practices							
Employee Empowerment: Perception of the degree to which leaders empower their employees by delegating and sharing their authority and decision power to enhance performance and work satisfaction.			H1c: Ability-enhancing HPWPs have significant positive effects on relational capital in the PSFs.				
Performance Based Reward: A system of incentive that motivates employees to enhance performance and achieve effectiveness.			H2a: Motivation-enhancing HPWPs have significant positive effects on human capital in the PSFs.				
Shared Leadership: A leadership style that collectively shares leadership responsibility in a manner that employees within teams and organizations lead each other. The idea emerges when vertical leadership is enhanced between the teams.			H2b: Motivation-enhancing HPWPs have significant positive effects on structural capital in PSFs.				
Opportunity-enhancing Practices							
Interpersonal Trust: Achieving a mutual faith on the behaviour, actions and intentions by the individuals.			H2c: Motivation-enhancing HPWPs have significant positive effects on relational capital in PSFs.				
Open & Collaborative Communication: Free exchange of ideas and information through employee collaboration and			H3a: Opportunity-enhancing HPWPs have significant positive effects on human capital in the PSFs.				

interaction.	Hoegl and Gemuenden (2001); Youndt (1998)		H3b: Opportunity-enhancing HPWPs have significant positive effects on structural capital in the PSFs. H3c: Opportunity-enhancing HPWPs have significant positive effects on relational capital in the PSFs.		
Teamwork Quality: Quality of interaction among team members and how well their collaboration/interaction is towards achievement of set goals.					
INTELLECTUAL CAPITAL AND MULTI-STAKEHOLDER VALUE CREATION					
Intellectual Capital					
Human Capital: Employee collective knowledge, expertise, experience and innovativeness to perform tasks at hand.	Kianto et al. (2017); Fu et al. (2017) Bchini (2015); Massingham et al. (2015); Kianto (2014); Brito and Brito (2014); Shakina and Barajas (2013); Wang et al. (2011); Kong and Thomson (2009); Marr and Spender (2004); Migdadi (2005); Newell et al. (2009); Subramaniam and Youndt (2005); Bontis (2002); IFAC (1998); Sveiby (1997); Stewart (1997); Edvinsson and Malone (1997); Perez et al. (2003); Schiuma et al. (2007); Youndt and Snell (2004); Youndt (1998).		H4a: Human-capital creates value for employees in the PSFs. H4b: Human-capital creates value for organization in the PSFs. H4c: Human-capital creates value for customers including supplier & partner in the PSFs.	RBV KBV Social Capital Theory	
Structural Capital: Knowledge resources that reside inside the organization such as databases, info systems, management processes.			H5a: Structural-capital creates value for employees in the PSFs.		
Relational Capital: Knowledge and resources deep-rooted in the employees' network of relations with the external environment and stakeholders.			H5b: Structural-capital creates value for organization in PSFs. H5c: Structural-capital creates value for customers including supplier & partner in the PSFs.		
Multi-stakeholder Value Creation					
Employee Value Creation: This involves employee outcomes such as employee engagement, increased motivation and satisfaction, promotion and career growth, improved knowledge and skillset.	Grace et al. (2017); Aminoff et al. (2016); Ogbonnayaa and Valizade (2016); Massingham et al. (2015); Oliveira and Silva (2015); Debra and Lacono (2015); Castaneda and Toulson (2013); Razmerita et al. (2016); Hsu (2008)	b) How does Intellectual Capital create value in PSFs when viewed from organization multi-stakeholder perspective?	H6a: Relational-capital creates value for employees in PSFs. H6b: Relational-capital creates value for organization in the PSFs.		
Organization Value creation: This includes financial and non-financial performance outcomes such as sales & profit growth, increased shareholder Rol, increased firm market value, increased productivity, improved firm performance and competitive advantage etc.	Shin and Konrad (2017); Massingham et al. (2015); Ngo et al. (2014); Kroon et al. (2013); Wang et al. (2011); O'Cass and Ngo (2011); Martynov and Zhao (2010); Cheng-Hua et al. (2009)		H6c: Relational-capital creates value for customer including supplier & partner in the PSFs.		
Customer Value creation: This covers benefits offered to the customers, suppliers and partners such as improved service quality, greater value for money, better customer relationship, opportunities for collaborations, strategic alliances etc.	Aminoff et al. (2016); Hillstrom (2016); Miller (2016); Jeon (2015); O'Cass and Ngo (2011)				

Table 3.1: Alignment Between Research Question, Model Constructs and Hypotheses

3.6. Summary

This chapter was primarily aimed at building theoretical grounds for the proposed research model. On the basis of review of Strategic HRM, Organizational Behavior and IC literature and by utilizing supporting theories such as AMO Framework, RBV, KBV and SCT, a relationship between HPWPs, IC and Multi-stakeholder Value Creation was successfully established in the research model within the framework of PSFs. These relationships were subsequently tested using a set of hypotheses developed in chapter 6.

CHAPTER-4

RESEARCH DATA AND METHODOLOGY

This chapter offers a comprehensive account of research methodologies employed to address the research problem by investigating the underlying research question.

RQ) How Do HPWPs support the growth and development of Intellectual Capital for multi-stakeholder value creation in the Professional Service Firms?

a) How Do (Ability, Motivation & Opportunity)-enhancing bundles of High Performance Work Practices influence Intellectual Capital development in the PSFs?

b) How does Intellectual Capital create value in Professional Service Firms when viewed from organization multi-stakeholder perspective?

As a first step, a generic account of the proposed methodology is explained followed by an in-depth discussion on the research methods and data collection & analyses approaches employed. The chapter initially gives an overview of the research methodology adopted. After that it elaborates on general concepts and understanding of various research paradigms and the justification behind the *Pragmatism Paradigm* as chosen for this research. Followed by the paradigms is the discussion on mixed methods and their application in the given research context and subsequently the justification on use of quantitative (surveys) and qualitative (interviews) research methods as methodological choices within the framework of mixed methods.

The rest of the chapter deliberates on the quantitative and qualitative methods adopted for this research, initially covering details on design of survey questionnaire, research measures, pilot testing, sample population, sampling strategy, sample size and survey administration. This ends-up in the quantitative data analysis approaches that involved Descriptive Data Analyses, Measurement Scale Analyses and SEM analyses. In the subsequent section, qualitative research methodology is discussed that gives a considerable account of the Interviews as the chosen research method and narrates on the process of interview administration, development of interview guide, sample size, interview respondents, data transcription and management, followed by the illustration on the qualitative data analysis approach used.

Lastly, the considerations on ethics and risks governing this research are discussed which culminates in the summary of the chapter. Given below is the research action plan covering the main research steps undertaken along with the details of the activities involved and the output(s) of each research step.

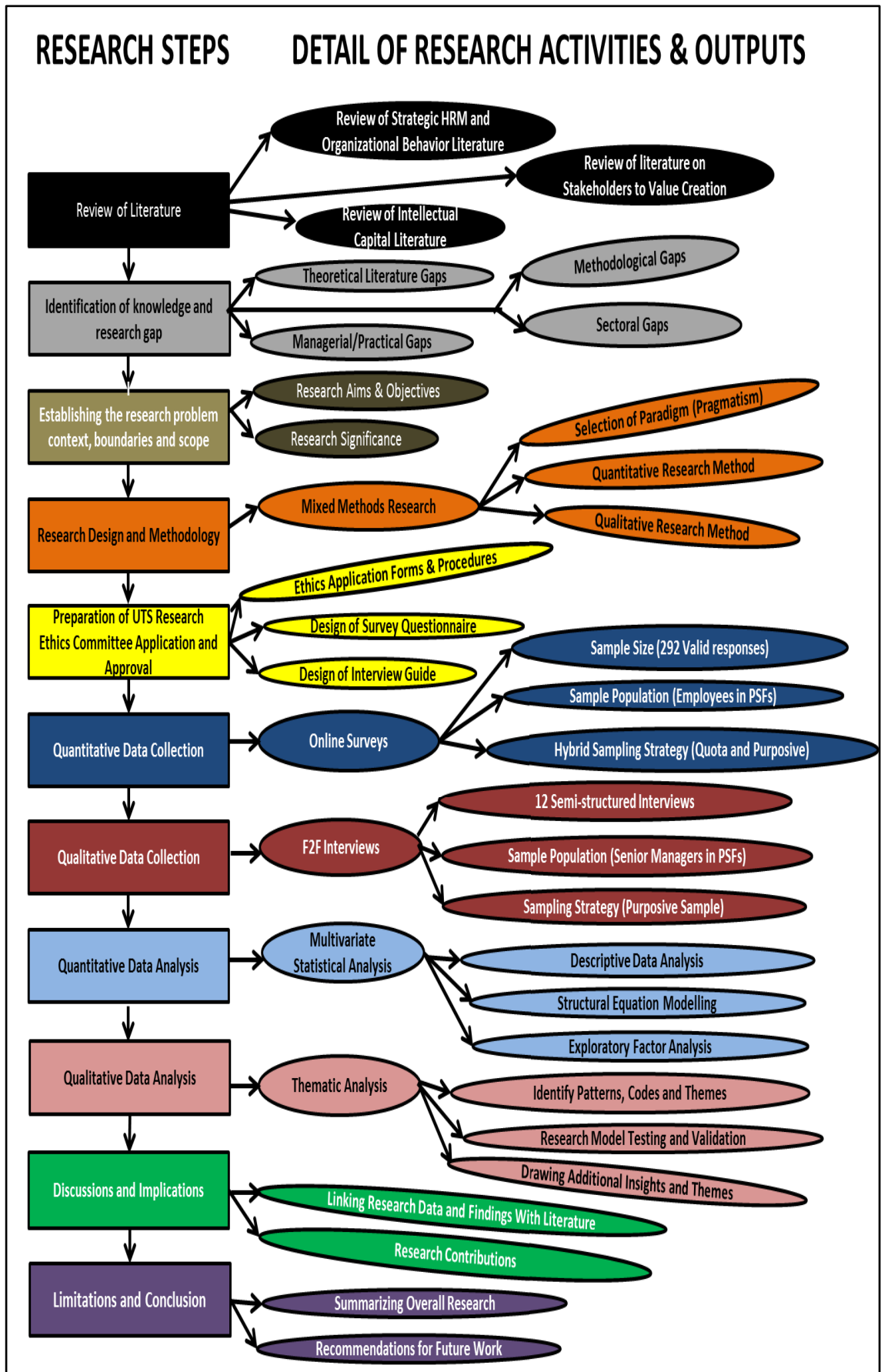


Figure 4.1: Research Action Plan

4.1. Introduction to Research Methodology

This study is primarily intended at evaluating the relationships between HPWPs and IC in a manner to derive value for multiple organizational stakeholders. Keeping in view the methodology adopted, the research process initially commenced with review of literature as secondary source of data. A broad-based literature review enabled to understand the key aspects of the relationship these factors and subsequently research problems, gaps and limitations were identified which resulted in emergent central research question. Accordingly, to examine and investigate the research question, an blend of quantitative & qualitative methodologies was employed. This methodological approach comes under the domain of pragmatism paradigm as the paradigm best justifies the application of mixed-method research. Secondly, pragmatism believes in the dominance of the underlying research question, emphasizing mainly on what and how of the research question (Creswell, 2003). Since this research relied more on investigating the central research question, the chosen paradigm was considered a better choice.

The quantitative & qualitative methods were separately applied in two phases. Phase-I involved a survey questionnaire that was administered online. The outcome of phase-I enabled researcher to collect and analyze quantitative data and subsequently helped researcher in more meaningfully exploring the research problem under investigation by understanding the behavior and trends of the chosen population. In phase-II, the qualitative data were gathered via face2face interviews with senior managers and executives in the professional service firms responsible for range of HR functions viz. employee empowerment, training & development, performance rewards etc. Some executives in other categories such as: Operations, Quality Assurance, Finance, Marketing Strategy and Project Management were also interviewed with an aim to capture managerial viewpoint on diverse set of functions (Teo et al., 2008) and to accordingly draw more meaningful insights for various organizational stakeholders i.e. Employee, Organization and Customer in this case. This was done with an aim to get insights and perspectives of the managers from diverse functional areas who worked in different capacities. This also served the purpose of more purposefully and meaningfully capturing the voice of these executives.

The quantitative data gathered as part of survey questionnaire were analysed in SPSS 22.0 and AMOS software tools, whereas the qualitative data collected via interviews were first transcribed, cleaned, categorized and finally analyzed in qualitative software tool called Nvivo. The data triangulation approach employed in this research covering online surveys and face2face interviews assisted in achieving

consistency and completeness of the research thereby resulting in a richer understanding of phenomena under investigation.

4.2. Research Paradigm

This section elaborates on various paradigms and justifies the one adopted for this research. Kuhn (1970) was the one who first popularized the idea of paradigms in scientific research fields. According to him, research paradigms combine beliefs, philosophies and viewpoints and serve as guiding principles to understand and investigate the problems. Research paradigms represent a set of philosophies that define world view, individuals' position and their relationships (Guba and Lincoln, 1994). It is an arrangement of the logically connected thoughts, assumptions and propositions that form a basis of and give purpose to a research enquiry (Bogdan and Biklen, 1998). Cohen and Manion (1994) define paradigm as a philosophically motivated desire to undertake a research. According to Mac Naughton et al. (2001), a paradigm encompasses three components such as an understanding on the nature of knowledge, methodological approach and a basis for validity.

Paradigms are crucial to a scientific inquiry as the interpretation of events, activities or processes require at least some implicitly interwoven methodological or theoretical assumptions to promote rational selection, assessment and criticism (Kuhn 1970). These provide a background and assumptions to guide researchers (Healy and Perry, 2000). In view of Mertens (2005), the philosophical orientation of the researchers guides all the research-related decisions including their methodological choice. Regarding the classification of the paradigms, there are differing claims on their exact number. Also, there are different terms used to represent the same paradigm in some studies. This has resulted in some confusion for new researchers. Overall, the most common paradigms used in the research are discussed below.

4.2.1. Classification of the Paradigms

Research paradigms, when viewed from epistemological, ontological and methodological assumptions, have been categorized as Positivism, Post-positivism, Constructivism/Interpretivism, Critical Theory, Participatory, Transformative and Pragmatism (Lynham and Guba, 2011). Epistemology represents a relationship between a researcher, researchable aspects and the methods involved. Ontology deals with forms & nature of reality. Methodology speaks of ways that can be followed to determine something intended to be known or achieved (Guba and

Lincoln, 1994). These assumptions guide the suitability of selected paradigm for the research problem under investigation and work as a standard for ascertaining the research quality (Healy and Perry, 2000). An overview of these is given below.

- **Positivism:** The paradigm, concentrates on the realities achievable through application of suitable methodologies. It enables independent research enquiry in a way that there is no influence of the researcher on the problem being investigated. The paradigm deals with quantitative data collection techniques like surveys and experiments and their analyses in a manner to test theories & hypotheses (Guba and Lincoln, 1994). Positivism paradigm supports causal relationships through independent empirical research and validation (Neuman, 2006).
- **Postpositivism:** Also termed as realism, the Postpositivism paradigm suggests that human knowledge is dictated by human assumptions instead of relying on the philosophy of positivism (Guba and Lincoln, 2000). The paradigm is backed on the assumptions that reality exists but is understood incompletely owing to the limited intellectual ability of the humans. Assertions on the reality are subject to critical inquiry that supports to understand the nature of reality (Lincoln, Lynham and Guba, 2011). A researcher has no influence on the research process but is able to apply quantitative &/or qualitative research methods, however, qualitative method takes precedence over its quantitative counterpart (Mackenzie and Knipe, 2006).
- **Interpretivism/Constructivism:** The paradigm was originated from the German interpretive philosophy called Hermeneutics. The interpretivism/constructivism research paradigm offers an understanding on human experience, proposing the reality to be socially-constructed (Mertens, 2005). It claims that reality is attained by the virtue of an individual's perception, hence a varying number of subjective realities occur over a certain period of time (Guba and Lincoln, 1994). Interpretivist/Constructivist researchers recognize that their investigation of an issue or situation is subject to the background, experience and opinion of the participants (Creswell, 2003). The paradigm further propounds that the researchers passionately work on their areas of research focus, however, the criterion for establishing true realities is subject to consensus built by the community. Because of its reliance on the subject realities, it utilizes qualitative methodologies that mainly involve dialogue and consensus (Lincoln et al., 2011).
- **Participatory:** This type of paradigm is based on the view that a conceptual understanding is always drawn from an experiential perspective (Heron and Reason, 1997). The participatory paradigm perceives individuals as a collective entity instead of their separate status who demonstrate and engage in a

collaborative behaviour to identify problems and apply relevant methods of enquiry in order to come up with new findings as part of their problem investigation (Lincoln, Lynham and Guba, 2011; Heron and Reason, 1997).

- **Critical-Theory:** The paradigm critically examines the social world issues and encourages individuals to resolve those issues (Guba and Lincoln, 2000). Ontologically speaking, critical theory has roots in historical realism that challenges the norms of reality that were established on social, cultural, political, economic, gender and ethnic grounds. By enabling researchers to understand and critique the realities of the society, it aids researchers in solving social problems such as conflict theory, materialism, feminism, radicalism etc. to name a few (Neuman, 2006). It mostly utilizes focus groups as qualitative method to gain insights and perceptions of the informants. A paradigmatic enquiry conducted along the lines of critical theory is mainly grounded on identifying social realities that are evolving and supports human empowerment and value-based activism (Guba and Lincoln, 2000).
- **Transformative:** The need to introduce transformative paradigm was felt partially because of the fact that existing research paradigms insufficiently addressed the philosophical needs and assumptions of the research. Another reason behind the advent of this paradigm was backed by the realization that much of the psychological and sociological theories that guided dominant paradigms were derived from the viewpoints of males after studying them as subject case (Mertens, 2005). Besides, the advocates of the transformative paradigm were of the opinion that the interpretivist/constructivist paradigmatic approach was not able to sufficiently represent the problems of the vulnerable masses and address social justice system as a whole (Creswell, 2003).

The transformative researchers maintain that the nature of research inquiry should be linked to action politics, comprising of a political agenda that is grounded on social reforms to bring a positive change on institutions and individuals (Creswell, 2003). Methodologically speaking, the transformative researchers may employ quantitative & qualitative data-collection and analyses methods in more or less the similar manner as in interpretivist/constructivist paradigm, however, a mixed methodology offers transformative researchers comprehensive insights of the social world, enabling the researcher to view from diverse position, stance and perspective (Somekh and Lewin, 2005).

- **Pragmatism:** This type of paradigm is characterized by the belief that if a theoretical concept can be applied satisfactorily then it is true and there is a practical reason for accepting it (Johnson and Christensen, 2012; Creswell, 2003). It emphasizes more on what & how of research question(s) to suitably fit the

purpose (Tashakkori and Teddlie, 2008). Hence, by relying on the dominance of research question(s), the pragmatism paradigm enables researchers to ponder over the practical implications as key elements of truth and reality (Creswell, 2003). Researchers, when subject to use of pragmatist assumptions, endeavor to understand and make sense of the interactions, actions and experience of the individuals which enable researchers to observe the trends and patterns critical to understanding individual behaviors (Tashakkori and Teddlie, 2008). Hence unlike most of the other paradigms, pragmatism doesn't necessarily follow the assumptions built on epistemological or ontological grounds but on the practical aspects of the problem realities (Johnson and Onwuegbuzie, 2004). Advocates of pragmatism consider it as a highly suitable paradigm for rationalizing use of mixed-method enquiries (Creswell, 2003). In short, a pragmatism paradigm offers a philosophical and practically applicable mode of research.

4.2.2. Quantitative and Qualitative Paradigms

The paradigms discussed above also highlight the application of quantitative & qualitative data-collection approaches in a specific context and how results could be generalized after analyzing respective data. Nevertheless, the terminologies such as 'quantitative' and 'qualitative' when viewed in their entirety and underlying theoretical framework also denote their corresponding paradigms that serve the underpinning motivation of a researcher (Mackenzie and Knipe, 2006).

A quantitative researcher aims to discover common patterns and configurations embedded within individual thoughts and behaviors followed by their broad generalization (Johnson and Christensen, 2012). A quantitative-type researcher conducts research assuming the strongly controlled conditions and driven by the use of confirmatory methods that are centered on testing a theory or hypothesis. A researcher of this type is different from the researchers relying on qualitative reflections (Downes, 2014).

In contrast, a qualitative researcher believes on exploratory method to build perceptions and understandings about a specific individuals, groups or communities. The method is based on the notion of discovery and nature of reality (Johnson and Onwuegbuzie, 2004). A researcher, when subject to qualitative enquiry, is not typically concerned about the generalizations and is assumed to be associated with the research (Johnson and Christensen, 2012; Creswell, 2003). A summary highlighting the key characteristics of quantitative & qualitative research is given in the table 4.1.

Characteristic	Quantitative research	Qualitative research
Assumption	Social facts have an objective reality independent of the knower	Reality is socially constructed and arises out of social action
Purpose	Generalisability	Contextualisation
Research problem	Who (how many)? What (how much)?	How? Why?
Literature review	Explanatory – what are the relationship between the variables that have been previously identified and measure? Hypotheses are developed	Exploratory – what are the variables involved? Constructs are messy Research questions are developed
Paradigm	Positivism Postpositivism	Postpositivism Critical theory Constructivism Participatory
Methodology	Hypothetico-deductive Focus on description and explanation for example, survey or experiment	Inductive/interpretive Focus on understanding and interpretation for example, case study, action research, focus group, interviewing, observation
Researcher role	Objective and remote	Up close and personal
Data collection	Reduction/aggregation of data to numbers	Capture lived experience of informants
Nature of data	Variables	Words, images, categories
Data analysis	Falsification of null hypothesis with statistical tests	Identify recurring themes and patterns in the search for meaning

Table 4.1: Quantitative & Qualitative Research Characteristics (Johnson and Christensen (2012); Lincoln et al. (2011)).

4.2.3. Paradigms Recommended For Mixed-methods Research

When it comes to undergoing mixed-method studies in the fields like information systems, KM and other related fields etc., the choice of suitable paradigm should not be an impediment (Venkatesh et al., 2013; Mertens, 2005). In view of determining a reasonable and theoretically rigorous solution to a research problem and building a theoretical framework, researchers should bring their paradigmatic considerations along the lines of mixed methods (Somekh and Lewin, 2005). For mixed method researchers, Venkatesh et al. (2013) recommended to choose from three paradigmatic choices to substantiate the epistemological foundation of their research. These are i) critical theory/realism, ii) pragmatism and iii) transformative. None of these mixed-method paradigms have any dominance over the other and hence can be used in the mixed-methods context (Somekh and Lewin, 2005).

While this being a mixed-method research primarily, the focus could have been philosophically aligned on critical theory or transformative paradigms (Mertens, 2005), the present research was however conducted along the lines of pragmatism

as the researcher believed that the chosen paradigm was not only able to provide underlying philosophical framework but it also offered a suitable context to investigate the research problem at hand.

4.2.4. Alignment Between Paradigms, Methods and Tools

Researchers applying positivism or postpositivism paradigms predominantly, though not always, focus on quantitative data-collection and analyses methods. On the contrary, interpretivism/constructivism paradigm mostly considers qualitative data-collection & analysis approaches of (Mertens, 2005; Cohen and Manion, 1994). In case of transformative paradigm, it enables the utilization of both quantitative & qualitative research methods (Mackenzie and Knipe, 2006). Likewise, a pragmatism paradigm offers an opportunity to utilize different data collection methods along with diverse assumptions and worldviews within the framework of mixed-methods research (Creswell 2003; Wiersma, 2000). Table 4.2 given below gives an alignment between different paradigms with their corresponding research methods and tools.

Paradigm	Methods (primarily)	Data collection tools (examples)
Positivist/ Postpositivist	Quantitative. "Although qualitative methods can be used within this paradigm, quantitative methods tend to be predominant . . ." (Mertens, 2005, p. 12)	Experiments Quasi-experiments Tests Scales
Interpretivist/ Constructivist	Qualitative methods predominate although quantitative methods may also be utilised.	Interviews Observations Document reviews Visual data analysis
Transformative	Qualitative methods with quantitative and mixed methods. <i>Contextual and historical factors described, especially as they relate to oppression</i> (Mertens, 2005, p. 9)	Diverse range of tools - particular need to avoid discrimination. Eg: sexism, racism, and homophobia.
Pragmatic	Qualitative and/or quantitative methods may be employed. Methods are matched to the specific questions and purpose of the research.	May include tools from both positivist and interpretivist paradigms. Eg Interviews, observations and testing and experiments.

Table 4.2: Paradigms, Methods and Tools (Mackenzie and Knipe, 2006)

4.2.5. Paradigm Chosen for this Research and Justification

Having reviewed different paradigms along with their characteristics and attributes, preference was given to their contextual relevance, compatibility to support mixed methods and the ability to solve given research problem.

- The positivism and postpositivism paradigms were considered unsuitable because these mostly focused on existence of realities and highlighting limited human ability in understanding the realities. Another reason was that this research was not intended to build or measure any theory.
- The critical-theory paradigm was rejected on the premise that our key aim was to test the effectiveness of HPWPs in professional service firms rather than understanding a change process or critiquing realities of the society.
- The interpretivism/constructivism paradigm was not suitable as it was mainly aimed at constructing social realities based on human emotions and thought process, whereas our aim was to operationalize HPWPs in the context of organizational knowledge capabilities to derive value.
- The reason behind rejecting participatory paradigm was the same as for the constructivism paradigm. Moreover, the notion of research agenda being determined by the participants was not suitable for this research (Lincoln, Lynham and Guba, 2011).
- The transformative paradigm, though it supported this research from methodological viewpoint, was not able to capture and address the research problem as it emphasized more on achieving social change and reforms to solve problems of the society.
- The Pragmatism paradigm was thus adopted being appropriate here because of the two reasons. First, as this study was meant to examine HPWPs effectiveness on the growth IC in service firms and how these HPWPs nurture firm intellectual capabilities to derive multi-stakeholder value. Hence choosing this paradigm enabled broader and more meaningful inquiry of the underlying problem as the concepts, processes and applications of HPWPs in intellectual capital context are complex and varied that involve understanding employee behavior (such as employee communications, interpersonal trust, knowledge exchange, collaborative actions etc.) at the workplace. Secondly, the pragmatism paradigm recommends to simultaneously utilize mixed methods in a single research and hence methodologically supports this research which employs a blend of quantitative & qualitative approaches in a fashion that the quantitative findings are further complemented by qualitative data findings which helps in adequately examining the research problem and enhancing the research reliability (Mackenzie and Knipe, 2006). As a whole, keeping in view the research problem,

chosen data-collection methods and analysis approaches, pragmatism was considered the best paradigmatic choice to effectively serve the given research purpose.

4.3. Mixed Methods As Research Design

By virtue of its nature, a mixed-methods approach combines quantitative & qualitative approaches (Venkatesh et al., 2013). That's to say, it considers multiple worldviews in the same research inquiry (Tashakkori and Teddlie, 2008). Mixed-methods research applies quantitative & qualitative methods either in an independently simultaneous or sequential manner (i.e. results of one method enlighten other) to determine and recognize a research issue (Venkatesh et al., 2013). This blended approach has been promoted by the scholars owing to an increasingly complex and interdisciplinary research environment these days.

Moreover, the advocates of mixed-method research acknowledge the significance of having multiple worldviews in an effort to accurately understand a research phenomenon. Hence, by adopting a methodological mix, researchers become able to substantiate the results of one mode of inquiry with the other (Johnson and Onwuegbuzie, 2004). For instance, a researcher could use quantitative data-collection method (i.e. Surveys) or qualitative method (i.e. Interviews) to gather data on the implementation of new information system. In the same manner, a researcher may utilize another quantitative data-collection method i.e. *Lab Experiment* and qualitative data-collection approach i.e. *Focus Groups* to enquire and investigate the same phenomenon (Venkatesh et al., 2013). Furthermore, as suggested by Venkatesh et al. (2013), Tashakkori and Teddlie (2008) and Creswell and Clark (2007), the four important mixed-method research designs are:

- **Triangulation** – Utilize both quantitative & qualitative data to gain understanding of a common research enquiry.
- **Embedded** – Includes either use of quantitative or qualitative data to examine research problems within the domain of main quantitative or qualitative research.
- **Explanatory** – Characterized by the application of qualitative data to enhance the understanding of quantitative results.
- **Exploratory** – Deals with quantitative data-collection so as to verify and further evaluate qualitative relationships and results.

Besides the above, some other scholars have proposed various typologies of mixed-method designs concerning the sequential progression of data collected and

analyzed. However, irrespective of the design strategy utilized, the fundamental aspect of the mixed-methods design is to either sequentially or concurrently combine multiple methods in a single research enquiry i.e. data-collection, analysis and presentation (Creswell and Clark, 2007). Adapted from Venkatesh et al. (2013), Creswell (2003), Tashakkori and Teddlie (2008) and Greene et al. (1989), the following table highlights various purposes of mixed-method studies.

Purposes	Description	Prior IS Research	
		Examples**	Illustration
Complementarity	Mixed methods are used in order to gain complementary views about the same phenomena or relationships.	Soffer and Hader (2007)	A qualitative study was used to gain additional insights on the findings from a quantitative study.
Completeness	Mixed methods designs are used to make sure a complete picture of a phenomenon is obtained.	Piccoli and Ives (2003) Hackney et al. (2007)	The qualitative data and results provided rich explanations of the findings from the quantitative data and analysis.
Developmental	Questions for one strand emerge from the inferences of a previous one (sequential mixed methods), or one strand provides hypotheses to be tested in the next one.	Becerra-Fernandez and Sabherwal (2001) Ho et al. (2003) Grimsley and Meehan (2007)	A qualitative study was used to develop constructs and hypotheses and a quantitative study was conducted to test the hypotheses.
Expansion	Mixed methods are used in order to explain or expand upon the understanding obtained in a previous strand of a study.	Ang and Slaughter (2001) Koh et al. (2004) Keil et al. (2007)	The findings from one study (e.g., quantitative) were expanded or elaborated by examining the findings from a different study (e.g., qualitative).
Corroboration/ Confirmation	Mixed methods are used in order to assess the credibility of inferences obtained from one approach (strand).	Bhattacharjee and Premkumar (2004)	A qualitative study was conducted to confirm the findings from a quantitative study.
Compensation	Mixed methods enable to compensate for the weaknesses of one approach by using the other.	Dennis and Garfield (2003)	The qualitative analysis compensated for the small sample size in the quantitative study.
Diversity	Mixed methods are used with the hope of obtaining divergent views of the same phenomenon.	Chang (2006)	Qualitative and quantitative studies were conducted to compare perceptions of a phenomenon of interest by two different types of participants.

Table 4.3: Purpose of Mixed-Method Research (Venkatesh et al., 2013; Creswell, 2003; Tashakkori and Teddlie, 2008; Greene et al., 1989)

4.3.1. Rationale Behind Use of Mixed Methods

While a mixed-method approach offers additional insights and diverse perspectives on the research problem under investigation, the use of triangulation technique within a mixed-method research for evaluating the same research problem helps achieve data accuracy and overall research reliability (Dang, 2015; Lincoln et al. 2011). There are four different ways triangulation technique can be applied i.e. as Data, Researcher, Theory and Methodological triangulations (Denzin, 2010; Thurmond, 2001). This research being mixed methods, the use of Methodological triangulation was considered appropriate to overcome the limitations of survey method that was additionally complemented through the strength of interview method. Moreover, the technique assisted in comparing the quantitative & qualitative data findings, thereby enabling the researcher to cross-validate the results and establish the validity (Dang, 2015; Sale et al. 2002; Mays and Pope, 2000).

Consistent with the above scholarly discussions and recommendations, this research applied mixed methods so as to quantitatively test and qualitatively confirm the research hypotheses, thereby addressing the underpinning research question. A quantitative method was employed as a primary methodology with a view to draw insights from a considerable sample of population and to derive statistical inference. This not only enabled the researcher to measure participants' difference of opinion but also aided in determining the thematic significance of the key constructs and their validation from the literature which was additionally complemented through a quantitative measurement by means of descriptive data analysis.

Additionally, the qualitative enquiry offered enriched information on the phenomenon under evaluation. The qualitative data collection was also suitable to comprehensively capture the tacit dimensions of HPWPs, IC and multi-stakeholder value creation within the PSFs as the prior studies were mainly positivist quantitative, leading to methodological limitations and gaps in the literature. The chosen methodological choice served two purposes (i.e. Complementarity and Corroboration/Confirmation) and was in accordance with the recommendations by Venkatesh et al. (2013), Creswell (2003), Tashakkori and Teddlie (2008) and Greene et al. (1989) (Table 4.3). The next section presents details of the methods adopted.

4.3.2. Chosen Quantitative and Qualitative Research Methods

As a standard, research methods mainly fall under 12 categories as a minimum. These include surveys, experiments, history, historical comparative, archival analysis, case study, focus groups, in-depth interviews, panels, observations, cohorts including the secondary data. A researcher adopts a suitable method or a blend of methods

based on nature of research questions, contextual suitability and relevance in a manner to best serve the overall research objectives (Mackenzie and Knipe, 2006; Creswell, 2003). Below table, adapted from Yin (2009), indicates different research methods and situations.

Method	Form of research question	Requires control of behavioural events?	Focuses on contemporary events?
Experiment	how, why	yes	yes
Survey	who, what, where, how many, how much	no	yes (usually)
Archival analysis	who, what, where, how many, how much	no	yes/no
History	how, why	no	no
Historical-comparative	how, why	no	no
Case study	how, why	no	yes (usually)
In-depth interview	how, why, who, what	no	yes/no
Focus group	how, why, who, what	no	yes/no
Panel	how, why, what	no	yes (longitudinal)
Cohort	how, why, what	no	yes (longitudinal)
Observation	how, who, what, when	no	yes
Secondary data	how, why, who, what	no	no

Table 4.4: Research Methods and Situations (Yin, 2009)

4.3.2.1. Quantitative Research Method (Survey)

Executed in two phases, the Phase-I employed online Surveys to collect quantitative data. Self-administered online survey questionnaire was disseminated to gather responses from employees of the Professional Service Firms (PSFs). A semi-structured questionnaire reduces biases in scope, allowing generation of complete responses (Creswell, 2003). Given the widespread use of online survey softwares and tools, survey administration and data collection were done using the online software tool Qualtrics because of the fast, cheap and timely availability of responses. Besides, online administered surveys allowed participants to independently and conveniently complete the surveys from any location. The use of survey questionnaire enabled hypotheses testing and development of structural model of the links between HPWPs, IC and value creation within the PSFs framework. To elucidate the relationship involving employee interactions, knowledge exchange and teamwork, survey was considered the most appropriate method to investigate above phenomena (Creswell, 2003).

4.3.2.2. Qualitative Research Method (Interview)

The phase-II incorporated face-face interviews with the executives such as Directors, Senior Managers and Project Leaders working in the PSFs with an aim to support and corroborate the quantitative findings. The qualitative enquiry offered additional enlightenment and validation on the IC perspective of HPWPs to improve value-

creation mechanism in PSFs. The analysis of interview responses also confirmed that the interviewees were subjected to right set of enquiry that was aligned with research methodological objectives.

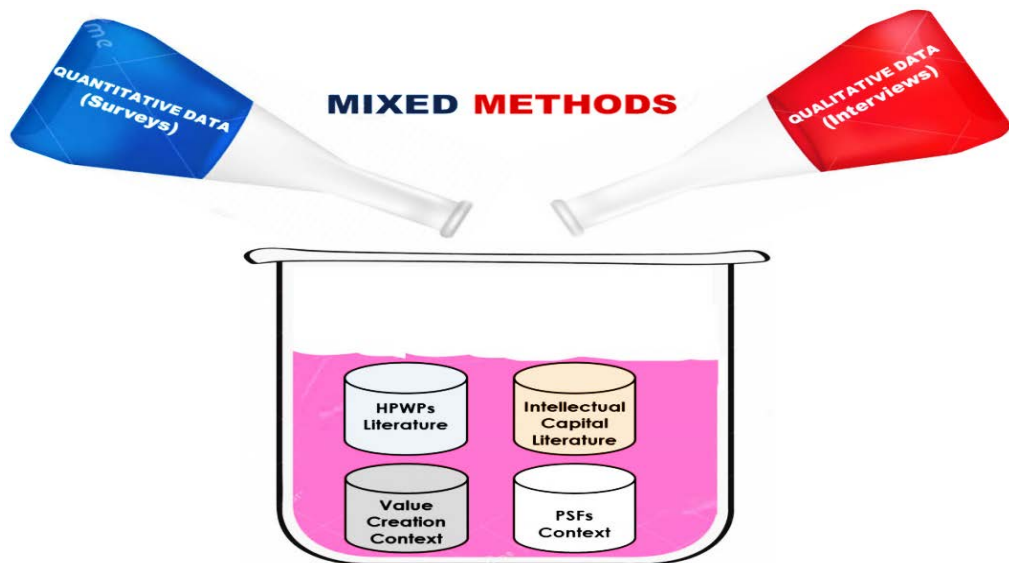


Figure 4.2: Research Methodology at a Glance

4.4. Methodology Phase-I: Quantitative Data Collection

As discussed earlier, the quantitative data were collected in phase-I via an online survey questionnaire. The process on survey administration is discussed below:

4.4.1. Survey Administration

As a very first step, a considerable number of Australian Professional Service Firms (PSFs) were identified from the database of IBISWorld Australia. IBISWorld is the largest industry-based research organization in Australia, providing Australian firms market trends and insights on more than 2,000 companies across 700 industries. A total of 30 firms were finally shortlisted from the pool of firms that consented to take part in the research. The criteria for identification of suitable firms are discussed in this section.

In the next step, the HRM (or equivalent) departments within the identified PSFs were requested on email to entertain 20 or more survey responses from the employees involved in the varying level of roles and responsibilities in both managerial and non-managerial categories. The HRM departments were also requested to nominate one or more Senior Managers/Executives for face-face interviews. The email contained quick details of the research and details of the cooperation required from the participating firms. The quantitative data collection process via online survey questionnaire was administered through Qualtrics software tool. Participants interested to take the online survey anonymously followed the link which was made

available to them through their respective HRM/Equivalent departments and in some cases through the focal persons nominated for the purpose.

The survey began with online Letter of Invitation (Participant Information Sheet) that mentioned information about the research, researcher and supervisory panel (Annexure-A). The information sheet was followed by online Informed Consent from the participants (Annexure-B). The participants who consented to fill the survey were directed to online survey Questionnaire (Annexure-C). The survey link remained open from Nov 2018 to March 2019. Two follow-up reminders were also sent to ensure adequate responses and achieve a robust sample size. Here is the overall summary of quantitative data collected.

- ✓ Total Number of PSF Finally Invited: 30
- ✓ Number of Invites Requested Per Firm: 20
- ✓ Total number of Responses Expected: 600 (30 x 20)
- ✓ Total Responses Finally Received: 316 (Response Rate = 52.6%)
- ✓ Number of Incomplete/Inconsistent/Invalid Responses: 24
- ✓ Number of Valid Responses Used in Quantitative Analysis: 292

4.4.2. Firm Identification Criteria

Various key factors such as firm size, industry type, and multicultural aspects were considered while identifying suitable firms. Diversity of the firms was also ensured with an aim to achieve adequate representation from a broad spectrum of service firms. Moreover, given the unique nature of HPWPs implementation and to ensure that the chosen firms actually implemented these practices, we only extended invitations to the firms having at least 20 or more employees. This was done keeping in view the findings of prior research in HPWPs that showed that firms employing more staff were likely to have formal departments/units responsible for executing HRM functions (Obeidat et al., 2016; Guthrie, 2001).

4.4.3. Development of Survey Questionnaire

The development of online survey questionnaire involved comprehensive literature review on HPWPs, IC and Value Creation. The survey questionnaire/instrument constituted three sections and enquired employees in the context of their organization. The first section included information for participants, giving a brief account of researcher and supervisory panel including the research objectives and ethical aspects followed by the informed consent of the participants to collect data. The second section involved research-related questions, covering various questions on key factors and constructs and an option to offer an open-ended response. The

final section gathered participants' demographic and firm-specific information. Further details on these are discussed in the subsequent section.

4.4.4. Research Measures (Survey Items)

Literature suggests that researchers should adapt previously-validated instruments wherever possible instead of developing new measures so as to enhance credibility and reliability of the measures (Alattas, 2016; Al-Othman, 2014). Hence, this study utilized previously-validated research measures from a number of relevant studies after necessary modification. This ensured that the adapted measures adequately represented particular construct or factor and helped achieved content validity. Moreover, the researcher went one step further by requesting three relevant subject experts to review the survey instrument from the viewpoint of its ability to appropriately measure different constructs or suggest necessary improvements. While developing the first draft of survey instrument, researcher included additional items for each construct. The experts who agreed to review the instrument were requested to choose specific number of items against each construct that were more representative of that particular construct.

The expert suggestions and feedback received were discussed with supervisory panel for final comments/advice and survey instrument was accordingly revised. Subsequently, the survey instrument was finalized after five iterations. To measure specific item, a five-point based likert scale as conventionally recommended was used along with its values coded from strongly-disagree=1 up to strongly-agree=5. The specific detail of all theoretical constructs is discussed as follow.

HPWPs constructs were measured using 32 items. These covered a total of eight HPWPs with each practice representing one construct and measured through four items. The measures for HPWPs were adapted from different studies after necessary changes. The items for 'Employee Empowerment' were adapted from Guthrie et al. (2009), Youndt et al. (2004) and Lepak and Snell (2002). The scales for measuring 'Performance Based Reward' were adapted from Takeuchi, Chen and Lepak (2009) and Kehoe and Wright (2013). The scales for the construct 'Employee Knowledge Sharing' were taken from Kianto et al. (2017). The measures for 'Employee Training & Development' were taken from Messersmith and Guthrie (2010). The items for 'Open and Collaborative Communication' were drawn from Soo et al. (2017) and for 'Interpersonal Trust' from Singh (2004). Likewise, the scales for the construct 'Teamwork Quality' were drawn from a study by Hoegl and Gemuenden (2001), and for the construct 'Shared leadership' from Hsu et al. (2017) and Hoch (2014). However, the constructs such as 'Shared Leadership' and 'Teamwork Quality' being

relatively new, the measures adapted were deductively improved after extensive review of literature relating to these constructs.

Intellectual Capital was measured using nine items. Its human, structural and relational dimensions were separately represented by three items. The items for these dimensions were collectively adapted from Kianto et al. (2017), Fu et al. (2017) and Subramaniam and Youndt (2005) after minor changes.

Multi-stakeholder Value Creation comprising of three sub constructs was measured via twelve items adapted from different studies. Each of the value creation constructs was measured through four items. The items for 'Employee Value Creation' were acquired from Kehoe and Wright (2013) and Grace et al. (2017). The scales for 'Organization Value Creation' were drawn from Ngo et al. (2014) and Wang et al. (2014), whereas measures for 'Customer Value Creation' were adapted from Kehoe and Wright (2013) and O'Cass and Ngo (2011). All 12 items adapted within the dependent variable 'multi-stakeholder value creation' were deductively refined and improved after review of relevant literature with an aim to appropriately measure the intended outcome. The table 4.1 shown below summarizes all the research items/measures within a particular construct and studies adapted from.

Factors/Constructs	Number of Item	Adapted/Developed from the Studies
High Performance Work Practices		
Employee Training & Development	4	Messersmith and Guthrie (2010)
Employee Knowledge Sharing	4	Kianto et al. (2017)
Employee Empowerment	4	Guthrie et al. (2009) Youndt et al. (2004) Lepak and Snell (2002)
Performance Based Reward	4	Takeuchi, Chen and Lepak (2009) Kehoe and Wright (2013)
Shared Leadership	4	Hsu et al. (2017) Hoch (2014)
Open and Collaborative Communication	4	Soo et al. (2017)
Teamwork Quality	4	Hoegl and Gemuenden (2001)
Interpersonal Trust	4	Singh (2004)
Intellectual Capital		
Human-Capital	3	Kianto et al. (2017)

Structural-Capital	3	Fu et al. (2017)
Relational-Capital	3	Subramaniam and Youndt (2005)
Multi-stakeholder Value Creation		
Employee Value Creation	4	Kehoe and Wright (2013) Grace et al. (2017)
Organization Value Creation	4	Wang et al. (2014) Ngo et al. (2014)
Customer Value Creation	4	Kehoe and Wright (2013) O'Cass and Ngo (2011)
Research-Related Measures	53	-
Demographic Data Measures	09	-
Total Survey Items/Measures	62	-

Table 4.5: Survey Measures

4.4.5. Pilot Testing

Generally a pilot testing is considered a critical for ensuring smooth data collection process as it enables researchers to avoid pitfalls and enhance research validity (Granello and Wheaton, 2004). Given the chances of errors, inaccuracies and misinterpretations in the data-collection instrument, the questionnaire survey was initially pilot-tested to determine level of difficulty and achieve right interpretation of the questions asked. In view of pilot testing, the online questionnaire survey was emailed to ten volunteers, comprising of doctorate students, administrative staff and teaching faculty. The pilot test triggered some changes in survey questionnaire in terms of clarity and simplicity of the language in a manner to be understood by the lay people. The survey was administered online using Qualtrics software tool and the suggestions relating to design layout, format and presentation were also incorporated.

4.4.6. Sample Size

Estimating appropriate sample size is critical towards ensuring the credibility and validity of a research (Wolverton, 2009). Various SEM scholars and statisticians have recommended a thumb rule for approximating sample size for the studies involving use of SEM. As stated by Hair et al. (2006), when it comes to statistical analysis within Structure Equation Modelling (SEM), five factors potentially affecting the sample size include estimation techniques used, multivariate data distribution, complexity of the research model, magnitude of missing data and average variance of error in reflective constructs of the model. As a thumb rule and also in view of the

suggestions by Hair et al. (2014), SEM analyses usually take into account a sample size in the range of 200-400 for a study involving 10-15 indicators. Since this research was comprised of 14 indicators which suggested 280 responses as a satisfactory and reliable sample size. Hence for this research, a sample size comprising of 292 responses was believed to be reliable and sufficient.

4.4.7. Sampling Method/Strategy

Sampling method refers to choosing a part of a large population so as to be examined to come up with findings that could be attributed to that population group (Johnson and Christensen, 2012). A sample must be an approximated reflection of the chosen population it is supposed to represent (Neuman, 2006). According to Downes (2014), a typical sampling process involves some or all of the activities that include choosing a representative population, sampling units, sample frame, design of sample, size of sample, sampling plan in addition to the actual sample.

There are many sampling techniques that fall under two main categories viz. Probability/Random sampling and Non-probability/Non-random sampling. The Probability/Random sampling includes: Simple-random-sampling, Clustered-sampling, Systematic-sampling and Stratified-sampling. A Non-Probability sampling method covers: Convenience-sampling, Judgement/Purposive-sampling, Quota-sampling and Snowball-sampling (Johnson and Christensen, 2012; Neuman, 2006). In probability sampling method, a whole sampling frame of all eligible participants is selected, allowing all the participants to equally chosen as a sample and enabling researcher to generalize research findings (Ben-Shlomo et al., 2013). This however comes at an expense of being more time-consuming and costlier than the non-probability method of sampling (Johnson and Christensen, 2012; Tashakkori and Teddlie, 1998).

Whereas, in non-probability-sampling method, the whole sample frame is not taken into account, resulting in less or no chance of being selected for some participants and consequently making it difficult for the researcher to accurately determine sampling error. This can also end up in a high risk of non-representative samples and hence the results that can't be generalized (Ben-Shlomo et al., 2013). However, the upside of this method is that it is comparatively more convenient and cheaper than the former method. It's also suitable for exploratory studies and hypotheses development (Downes, 2014).

In view of the discussion on the above techniques, a hybrid sampling strategy that involved a combination of two non-probability type sampling techniques (i.e. quota

and purposive sampling) was considered appropriate and hence adopted for this research. The hybrid strategy not only assisted in effective survey administration process in PSFs but also helped in drawing samples that were truly representative of the targeted population.

4.4.8. Sample Population

The study samples were drawn from 30 selected Australian Professional Service Firms (PSFs). There are many reasons behind choosing PSFs as target sector. First, recent researches by the scholars like Fu et al. (2017; 2015; 2013) and McClean and Collins (2011) suggest a paucity of research on HPWPs in service firms' context. Second, PSFs as the sample population was deemed appropriate because of their extensive reliance on the use of knowledge-based capabilities and intellectual resources. Third, PSFs being knowledge-intensive firms are subject to highly capable and skilled workforce and hence were considered suitable for this research (Fu et al., 2017; 2015; Greenwood et al., 2005). To further understand the rationale behind choosing PSFs as sample population, a brief overview of these firms is discussed below.

4.4.8.1. Professional Service Firms – A Contextual Overview

Professional service firms (PSFs) refer to knowledge-intensive firms that necessitate higher knowledge and skills in their employees to provide efficient services to their clients and customers (Hitt et al., 2006; Løwendahl, 2000). The contribution of PSFs has been extremely important in the knowledge economies. The key strategic assets in PSFs are the expert knowledge, skills and competencies of their employees (Von Nordenflycht, 2010; Greenwood, 2005). The competitiveness of the PSFs such as: legal, audit, accounting, engineering and management consulting firms etc. is predominantly reliant on how efficiently the employees utilize their knowledge capabilities and resources (Hitt et al., 2006).

HPWPs on their own don't result in a competitive advantage for the firms but the competitiveness is derived from the contribution of the people who are hired, trained and nurtured through these practices (Messersmith and Guthrie, 2010; Anand et al., 2007). IC assets of a firm including human, structural & relational capitals in particular are critical for PSFs as the delivery of customized client solutions in a professional manner necessitates efficient exploitation of the intellectual knowledge resources (Von Nordenflycht, 2010; Takeuchi et al., 2007). To this end, the quality and uniqueness of the intellectual resources and how effectively they are utilized forms the basis for PSFs market success. Since PSFs compete based on the intellectual capabilities of their workforce, hence these offer a right context to examine the link between HPWPs and IC and how it leads to multi-stakeholder value creation.

4.4.9. Firm Size Criteria

Generally, there are a number of standards and criteria available for determining firm size and not all of these are appropriate in ascertaining size of different types of firms, thus making firm size measurement less clear. We therefore utilized a combination of criteria suggested by professional research and government organizations of international repute such as: Australian Bureau of Statistics (ABS) and Organization for Economic Co-operation and Development (OECD) and the criteria suggested by Open University, England. These organizations mostly categorize firms as small (or small and medium), medium and large. However, we divided chosen Professional Service Firms into five firm size categories and hence above criteria were utilized in conjunction. Accordingly, we categorized PSFs having: 10-49 employees as Small; 50-99 employees as Small- Medium; 100-249 employees as Medium-Large; 250 or more employees as Large.

4.5. Quantitative Data Analysis

The SPSS-22 software tool was utilized in the quantitative data analyses. The use of SPSS allowed systematic recording, organisation and coding of quantitative data, which were then analyzed by means of recommended multiple statistical methods to test various hypotheses and empirically validate the research model (Venkatesh et al., 2013). The quantitative analysis of data served three objectives i.e. measuring and sensing data dispersion and central tendency; estimating data sufficiency by determining its validity & reliability and lastly the testing of developed research hypotheses (Sekaran, 2003). The data were analysed in AMOS, a useful statistical software tool for SEM analyses. The quantitative data analyses were sequentially performed in following three steps.

4.5.1. Descriptive Data Analysis

The first stage covered descriptive data analyses using SPSS tool. The analysis covered profiles and demographics of the participants. In the next step, data screening was performed by determining normality, mean, standard deviation, variance etc. aimed at examining data dispersion and central tendency. Moreover, descriptive data analysis also helped to ensure whether the collected data were able to be used for multivariate data analysis in the next stage (Hair et al., 2006). The further details of these analyses are included in Chapter-5.

4.5.2. Measurement Scale Analysis

The Measurement Scale Analyses were conducted to determine the meaning and assess the model construct validity. To estimate validity and reliability, a factor analysis along with the assessment of cronbach's alpha was conducted to demonstrate items' consistency measured through Likert scale. In the next step, statistical analysis techniques were applied for hypothesis testing which mainly included correlation and factor analyses. The correlation analysis estimated degree of relevance of each item or construct with its scale (Hair et al., 2006). The factorial analyses involving Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA) were conducted to validate the measurement scales and confirm the results. The EFA assisted in identifying suitable variables and explaining them to achieve common objectives. The CFA helped in confirming the hypothesized relationship and provided basis for additional assessment and research model improvement (Hair et al., 2014).

4.5.3. Structural Equation Modelling (SEM) Analysis

After validating the measurement model, latent variables were arranged in a way that these demonstrated a logical relationship and corresponding hypotheses which were tested in the structural model. Rather than relying on 1st generation statistical analysis techniques like Analysis of Variance (ANOVA), Regression Analysis (RA) etc., a 2nd generation technique based on multivariate analysis such as SEM was utilized to address the constraints of the former techniques. The application of SEM analysis complemented the process of factor analysis by integrating it with path analysis with an aim to achieve reliability of the measurement model and subsequently the structural model (Garson, 2006).

This path analysis involved determining the significance of path coefficients to test various hypotheses. Besides, to achieve required t-value to carry-out significance test, Hair et al. (2014) recommended that a researcher must utilize large subsamples (e.g. 5000) out of the original samples to enable identification of the standard error. Also the cases should represent the same number as observations in the actual sample. Accordingly, t-value was calculated through the bootstrapping technique with 5000 subsamples to determine the path significance. Further details of the above analyses and results are discussed in chapter-6.

4.6. Methodology Phase-II: Qualitative Data Collection

The qualitative data were gathered via face-face interviews. The interviews were administered as follow:

4.6.1. Interview Administration

In view of increasing the validity and reliability, the phase-II of the research involved face-face semi-structured interviews as an additional evidence. The in-depth face-face interviews enabled significant exploratory inquiry of the research problem and enabled researcher to identify additional insights and themes that couldn't have been generated by merely collecting quantitative data.

As mentioned earlier, the HR departments of the participating firms were contacted via email wherein the researcher provided all research related information and necessary documents and requested the firms to nominate 1-2 Managers for face to face interview. A contact was made with the nominated respondents in different firms for scheduling interview at a mutually available date and venue. During the day of interview, all interviews were audio-recorded using the smart phone for accurately transcribing the responses and avoiding issues that might have possibly occurred. Before commencing the interviews, participant information sheet that highlighted details of the projects and interview process was provided to the participants (Annexure-A) along with a glossary of technical terms. Subsequently, informed consent for conducting interviews was obtained from all the respondents (Annexure-D). Researcher assured respondents of maintaining their privacy and anonymously using data only for research purposes and that the respondents were free to skip any question(s) or opt-out anytime during the interview process.

4.6.2. Interview Guide (Questions)

The interview guide (Annexure-E) was developed after review of same literature as referred for the quantitative surveys and highlighted the exploratory version (open-ended equivalent) of the survey questionnaire. This enabled the researcher to qualitatively evaluate the key research question using a supplementary research method. The developed interview guide incorporated a total of 22 semi-structured open-ended questions aimed at comprehensively capturing the opinion of respondents on various aspects of HPWPs, IC and Multi-stakeholder Value Creation. The detail on literature reviewed and number of interview questions developed for each construct in the interview guide are given in the table 4.3 below.

Measures	Number of Open-ended Questions	Studies/Literature Reviewed
High Performance Work Practices		
Employee Training & Development	1	Messersmith and Guthrie (2010)
Employee Knowledge Sharing	2	Kianto et al. (2017)
Employee Empowerment	1	Lepak and Snell (2002) Guthrie et al. (2009)
Performance Based Reward	1	Takeuchi, Chen and Lepak (2009) Kehoe and Wright (2013)
Shared Leadership	1	Hsu et al. (2017) Hoch (2014)
Open & Collaborative Communication	2	Soo et al. (2017)
Interpersonal Trust	1	Singh (2004)
Teamwork Quality	2	Hoegl and Gemuenden (2001)
Intellectual Capital		
Human-Capital	1	Fu et al. (2017) Kianto et al. (2017) Subramaniam and Youndt (2005)
Structural-Capital	2	
Relational-Capital	2	
Multi-stakeholder Value Creation		
Employee Value Creation	1	Kehoe and Wright (2013) Grace, King and Iacono (2017)
Organization Value Creation	2	Wang et al. (2014) Ngo et al. (2014)
Customer Value Creation	2	O'Cass and Ngo (2011) Kehoe and Wright (2013)
Research-related Questions	21	-
Additional Comment Questions	1	
Total	22	

Table 4.6: Interview Guide Questions

4.6.3. Sample Size

From the viewpoint of determining the sample size for qualitative enquiries such as interviews, most of the mixed-method researches particularly involving surveys and interviews have conducted between 6-15 interviews. Following this trend, overall 12 interviews were conducted. This sample size is consistent with a number of recently conducted mixed-method studies in the similar field such as Attar (2018), Alattas (2016), Al-Othman (2014) etc. that involved 8-12 interviews.

4.6.4. Sample Population (Interview Respondents)

The purpose of semi-structured interviews was to gain additional insights on the research problem under investigation. Interview participants were recruited through the HR department of the chosen service firms and 16 nominations were overall received from these firms. All the nominees were contacted via email and phone to confirm their availability for the face-face interview. A total of 12 respondents were finalized for participation in the interview. All the participants came from a diverse service industry background and held managerial responsibilities at executive level in their firms. Given the pragmatic nature of research enquiry and this being a mixed method research, 12 interviews represented sufficiently acceptable number (Venkatesh et al., 2013; Neuman, 2006).

4.6.5. Interview Data Transcription and Management

To ensure anonymity of the interview responses, all the participants and their respective organizations were assigned with a unique identifier codes. A printout of the consent form containing demographic & personal information was also provided to the participants. Besides, a prior approval of participants was obtained for audio-recording the interviews. A professional transcription service was hired to transcribe recorded interviews. A copy of transcription was also offered to the interviewees with an aim to ascertain accuracy of the collected responses. The transcripts were then imported in the Nvivo for coding and visualization.

4.7. Qualitative Data Analysis

As discussed earlier, the qualitative data analyses were primarily aimed at corroborating the research model and additionally drawing new insights and themes. In this regard, a significant level of consistency achieved between qualitative & quantitative data findings successfully demonstrated the relevance and suitability of the research model in the PSFs context. The qualitative data were

analysed in NVivo-12, a robust qualitative text analysis tool. Further discussions on the analysis are detailed below.

4.7.1. Data Analysis Approach

A qualitative data analysis was performed with an aim to fulfill mixed method research objectives. The analysis involved organization, evaluation and categorization of the collected data. In the first step of analysis, the data recorded through interviews were transcribed. In the subsequent step, the cleaned data transcripts were loaded into NVivo tool for visualization. In the last step, the data were analysed using 'Thematic Analysis' technique with an aim to develop emergent themes (Bazeley and Jackson, 2013; Ferlie et al., 2005). To seek assistance in this regard, the coding process suggested by Klose and Seifert (2017), Gallicano (2013) and Strauss and Corbin (1998) was systematically followed. The process involved 'Open, Axial & Selective' as three stages of coding. While this process is most commonly employed in the grounded theory approach, its application was also found to be mostly relevant in our data analyses. A brief detail of each step is given below:

- *Open-coding*: The first step mainly involved evaluation, comparison, conceptualization, labeling and categorization of data. In other words, raw data were thoroughly evaluated to achieve coherence and search for patterns in order to develop initially-emerging categories (Gallicano, 2013; Strauss and Corbin, 1998).
- *Axial-coding*: In the second step, initially-identified categories were further evaluated to identify subcategories. The subcategories were then examined to establish a relationship between these and how these were connected with the open-code categories (Klose and Seifert, 2017; Strauss and Corbin, 1998).
- *Selective-coding*: The final step involved choosing the core categories that primarily represented the main codes/themes. A further refinement was also made to eliminate overlapping categories and the ones that were weakly connected to the core categories (Klose and Seifert, 2017). Overall, the purpose was to selectively-code the subcategories that were related to the core categories with which the whole process of analysis was based on (Gallicano, 2013; Strauss and Corbin, 1998). Further details of the qualitative data analyses are in Chapter 7.

4.8. Consideration of Ethics and Risks

4.8.1. Ethical Considerations

For any research study involving data collection, the essence of research ethics lies in responsibly conducting all the research activities. Since this study employed mixed methods involving communications and interactions with humans, therefore, it necessitated relevant ethics committee approval. Although, the proposed research was assumed to have low or negligible risk, yet a formal authorization was obtained from UTS Human Research Ethics Committee (HREC) before initiating data-collection process. This enabled researcher to:

- ✓ Understand and develop awareness on ethical norms and obligations governing research involving human participants;
- ✓ Avoid unethical practices and unproductive research endeavours that endanger the timely completion of this research project;
- ✓ Act responsibly and professionally during the entire period of data collection;
- ✓ Maintain research integrity throughout the course of research project.

Accordingly, the ethics application was prepared in line with the standard guidelines and sample templates provided. A written consent was obtained from the participating firms. All research respondents were apprised on key details of the research and advised to contact ethics office in case of any additional information required by them. The research data collected was kept under extreme confidentiality and was only accessible by the researcher, supervisors and UTS HREC for their reference.

4.8.2. Risk Considerations

In an effort to successfully complete the PhD project, the researcher utilized all the available resources to help reduce and avoid potential risks such as:

- Lack of time and resource availability (software tools, library resources, workbench, quiet space, meeting rooms etc).
- Insufficient or non-availability of data and information from the participants or target firms.
- Inadequate financial support (funding required for data transcription services, thesis editing & proof reading, thesis binding & printing, conference funding etc).
- Lack of cooperation and support from UTS HREC, IT support, GRS, SML, FEIT, Library, supervisory panel, target firms etc.
- Privacy, security and confidentiality of the research data and information.
- Threats to the researcher (physical fitness, mental fitness, emotional wellbeing).
- Safety of the researcher (physical safety, emotional safety).

4.9. Summary

This chapter reviews methodological literature and deliberates in detail on the work done by the previous scholars so as to justify and substantiate the methodological choice adopted for this research. The chapter gives in-depth account of the chosen quantitative and qualitative research design. At the beginning, the activities of phase-I were explained which involved quantitative data collection using a survey instrument. After that, details of the adapted research measures along with data analyses techniques (viz. descriptive and SEM analyses) were mentioned.

In the phase-II, activities relating to qualitative data collection via interviews along with the development of interview guide and data management process were explained. This was followed by the discussion on the use of suitable qualitative analysis technique with an aim to perform exploratory analysis, thereby validating additionally the quantitative results. Overall, a justified and valid research methodology assisted researcher in collecting right set of quantitative and qualitative data that paved the way towards achieving comprehensiveness of the data analysis and empirically-validated research findings. Analyses on both data types and overall findings have been made available in the subsequent chapters.

CHAPTER-5

DESCRIPTIVE DATA ANALYSES

5.1. Introduction

This chapter gives a comprehensive picture of the descriptive data analyses. While we present respondent profiles, frequencies, means, std-deviations and std-errors of the measurement items that constituted survey questionnaire, the advanced level of data analyses are done in Chapter-6.

5.2 Survey Questionnaire and Respondents Profiles

5.2.1 Survey Questionnaire

A survey questionnaire was used as the suitable tool to gather responses on HPWPs, Intellectual Capital and Multi-stakeholder Value Creation (MSVC) in Professional Service Firms (PSFs). For this purpose, we invited 30 chosen Australian PSFs from a number of firms consenting to take part in the research. The online survey questionnaire link was emailed to the HR department in these firms with a request to forward to 20 or more employees in order to get an overall participation of $20 \times 30 = 600$. The survey was made available online from Nov 2018 to March 2019. After a few follow-up reminders to HR departments, we manage to gather 316 responses, which represented 52.6% response rate. After eliminating inconsistent and incomplete responses, we finally obtained 292 valid cases which were processed for analysis.

5.2.2 Respondents Profiles

We analysed respondents' profiles to ensure that the samples sufficiently represented target population. Respondents' profiles were based on following data categories.

- Employee's gender, age group, work experience, job title and education level.
- Type of industry/sector a particular PSF operated.
- Firm size
- Number of people working in the firm

Results indicated a vast majority was comprised of males (60%), whereas 36% were females and 3% preferred not to disclose their gender (Figure 5.1).

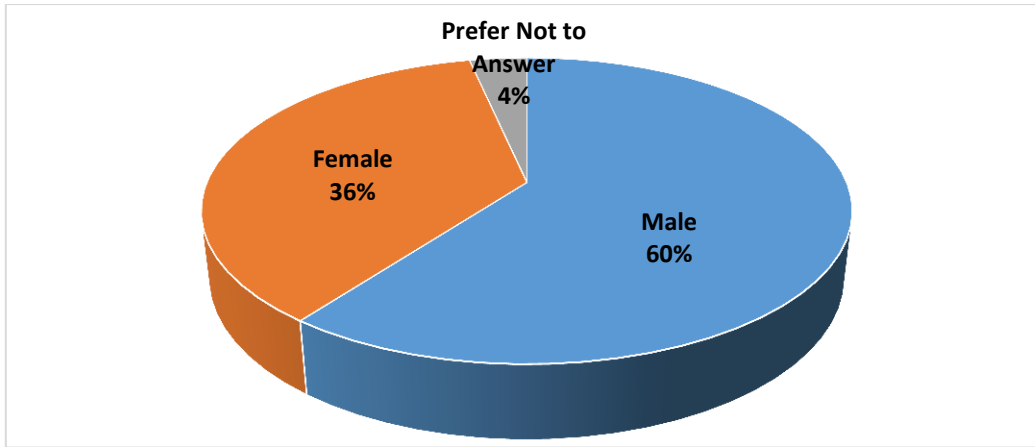


Figure 5.1: Participants' Gender

Participants were grouped into four categories such as: 18-25; 26-35; 36-45 and above 45 year. Most of the participants (46.2%) categorized themselves within 26-35 year age range. The second highest number of participants belonged to 36-45 years age category (25.3%), while 18-25 years and Above 45 year age group categories represented 14% and 15% of the participants respectively.

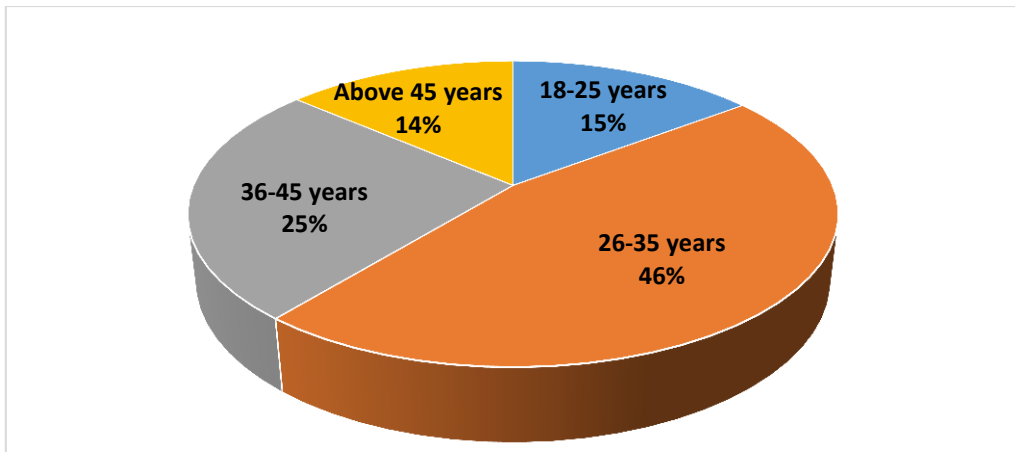


Figure 5.2: Participants' Age

In view of work experience of the participants, a considerable number of participants (26%) possessed 1 to 3 years of professional work experience. Second highest number was seen in 7-10 years of category (21%). Other three had experience of 4-6 years (19%), 11-15 years (16%) and Over 15 years (18%). This overall represented a diverse level of work experience of participants with the service firms.

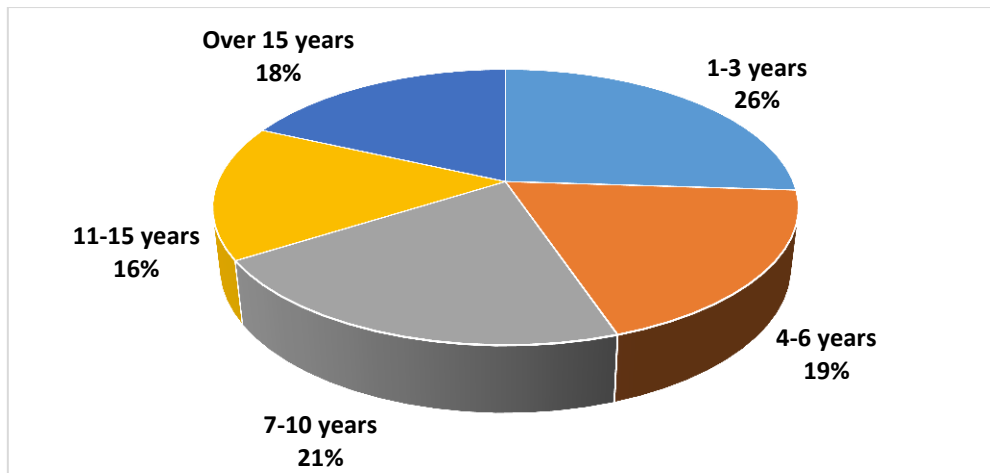


Figure 5.3: Participants' Work Experience

Regarding the job profile of the participants, more than half (52%) worked in operational level positions such as accountant, programmer, researcher, designer, medical doctor, engineer and similar but were not involved in managerial responsibilities at any level. In case of those holding formal managerial level responsibilities, 13% worked as Supervisors, 11% as Project Managers, 5% worked as Human Resource Manager and 10% served in their capacity as Senior Managers.

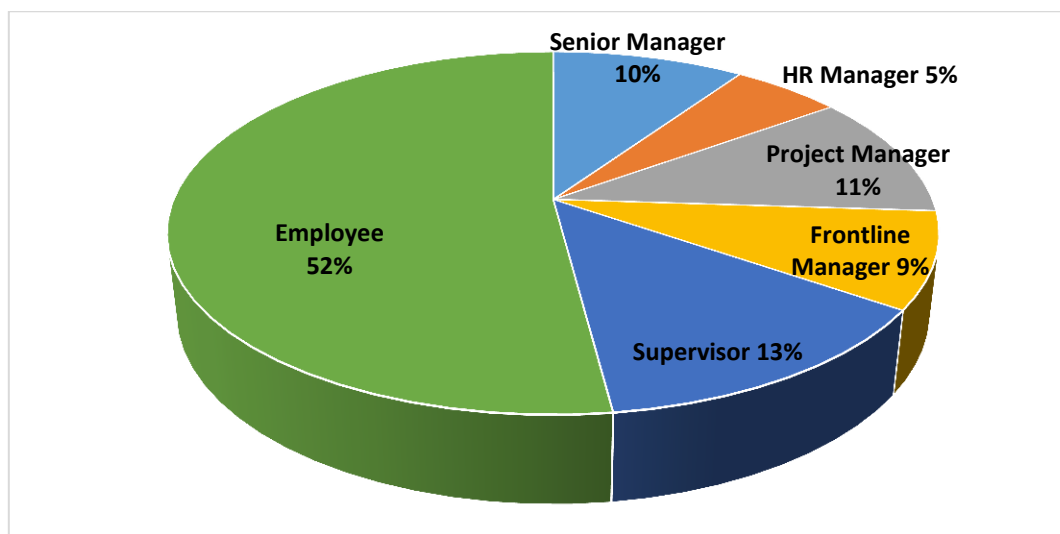


Figure 5.4: Participants' Job Titles

As shown in Figure 5.5 that gives an account of participants' qualification, a good majority of participants held master degree (48%), many others possessed a bachelor degree (31%) a PhD degree (10%). While a small number of participants demonstrated Postgraduate Diploma, Diploma and other qualifications.

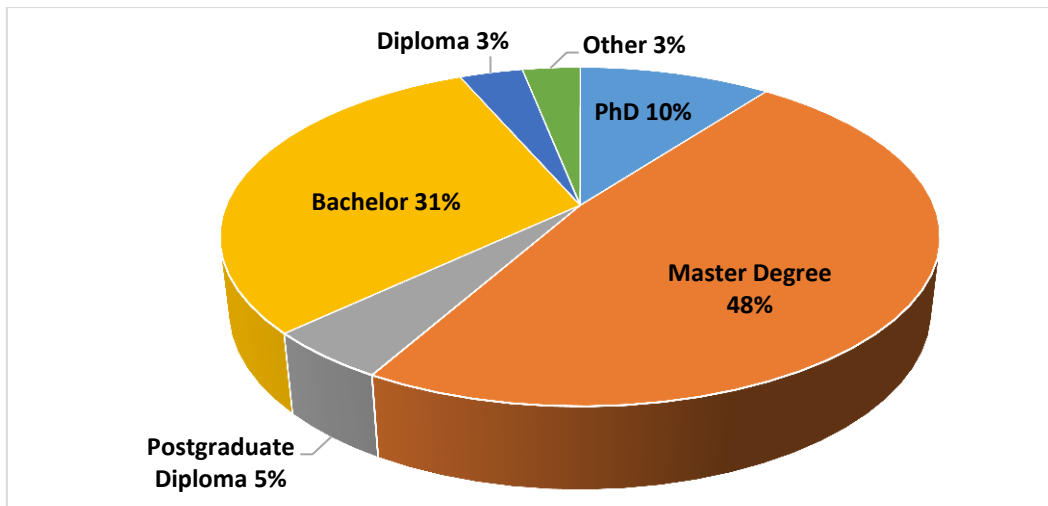


Figure 5.5: Participants' Level of Education

Considering a diverse service sector in Australia, we divided surveyed firms into 17 categories to cover broad variety of PSFs operating across services sector (See Figure 5.6). The highest firm participation (25%) was witnessed from engineering services firms with 73 participants. This was because engineering sector covered a range of technical, design, project management and other consultancy services offered across multiple engineering fields such as telecommunications, electrical, civil etc. The second largest group of participants (17.1%) were those working in Education & Training services with 50 participants. The third largest number (11.6%) came from IT Consulting Services that counted 34 participants. Hospitality & Tourism and Transport & Logistics sector/industry were the least in terms of their representations in our survey with 3 and 4 participants respectively. Further details on the representation from different sectors are mentioned in figure 5.6 below.

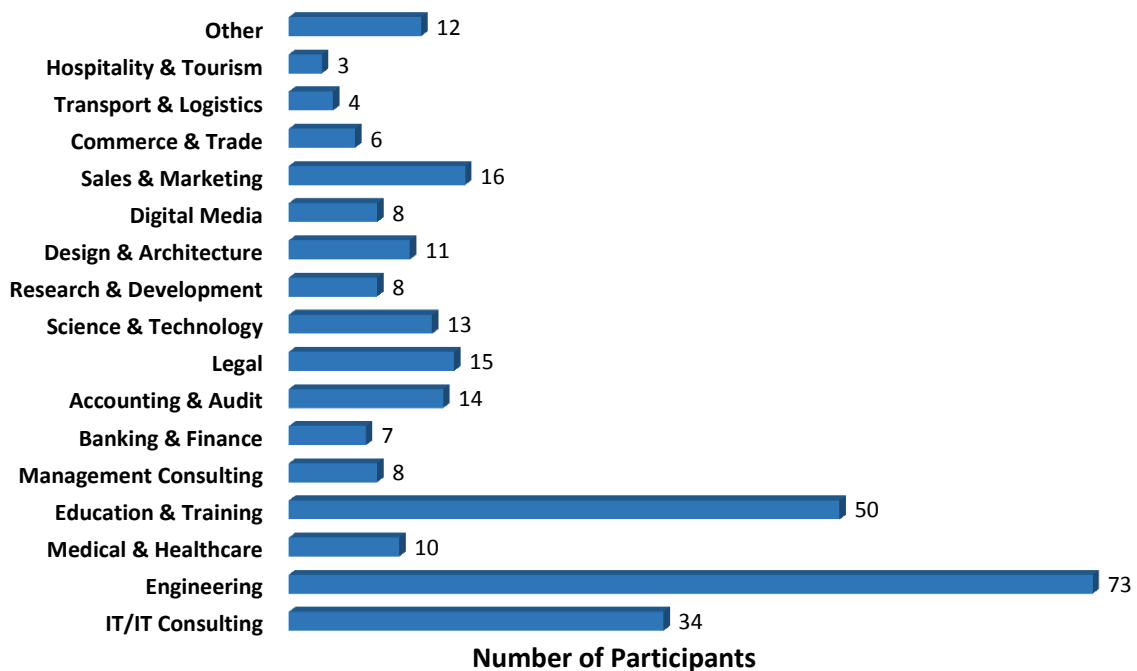


Figure 5.6: Industry/Sectors Surveyed

In terms of firm size, the survey participants were drawn from a diverse spectrum of small, small-medium, medium-large and large firms. Of the total firms, large firms accounted for a considerable number (46%). A reasonably good representation was made by medium-large firms (25%) as well as small-medium firms (22%). Small-size firms were the least to represent in the survey (7%). This was purposely done ensure that the chosen firm actually implemented High Performance Work Practices. This is because of costly nature of implementation HPWPs, so these not always applied by the small firms, hence most of the firms identified were medium and large firms.

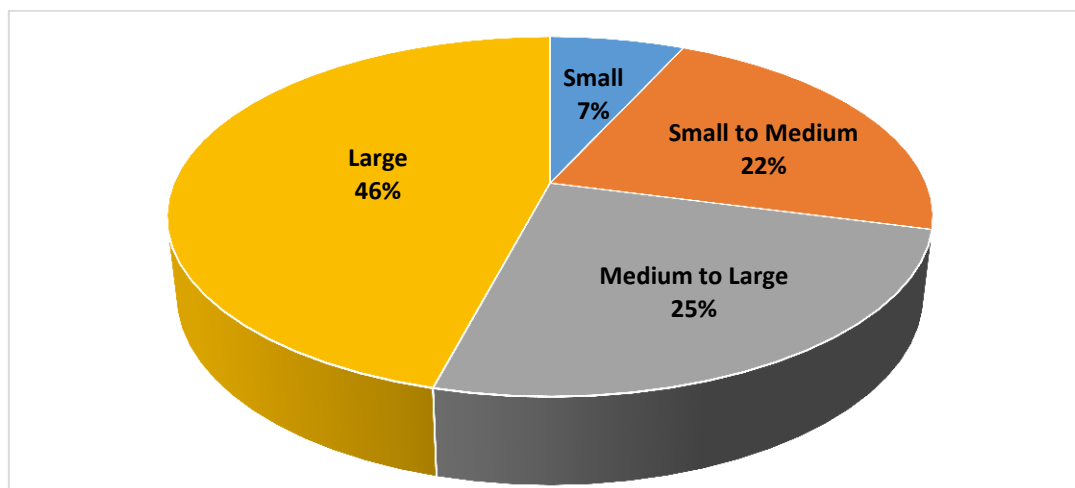


Figure 5.7: Firm Size

To get a clearer picture of the firm size, we additionally requested participants to specify the number of employees. The results show that more than one third of the participating firms had a population of over 1000 employees (36.3%). Second majority of the firms highlighting good number of population was within 501–1000 employee category (20.2%). Other firm categories such as 201–500 employees 101–200 employees and 25–100 employees drew a share of (13.7%), (8.2%) and (21.6%) respectively.

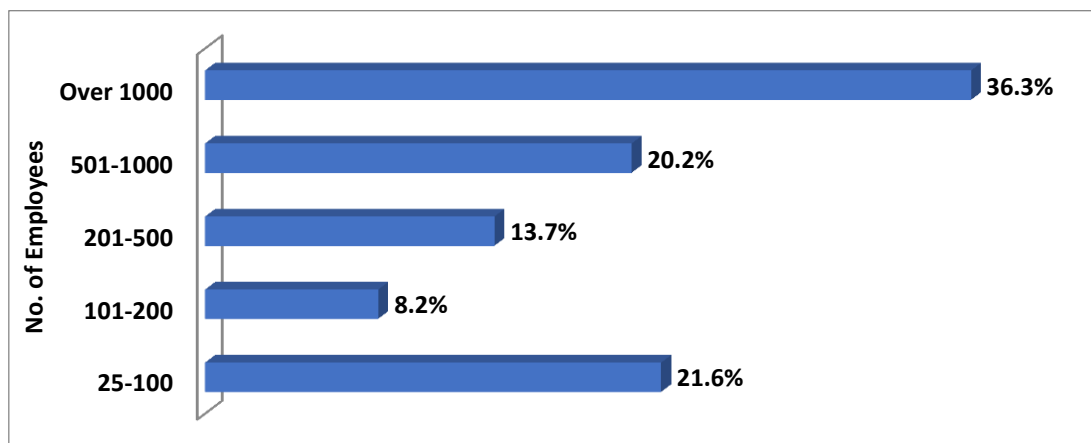


Figure 5.8: Number of Employees in Different Firm Categories

While we presented a detailed account of the study participants above, the subsequent section gives a descriptive analysis of the data in terms of variability (standard deviation assessment) and central tendency (mean value assessment).

5.3. Preliminary Findings

5.3.1. Frequencies for Measurable Variables

This section analyses the frequencies of the items measurable under each construct. We considered the percentage of responses for each of the five items on the Likert scale.

5.3.1.1. Ability-Enhancing HPWPs

Figure 5.9 to 5.10 present percentage responses for the items measuring Ability-Enhancing practices, covering Employee Training and Development (ETD) and Employee Knowledge-Sharing (EKS).

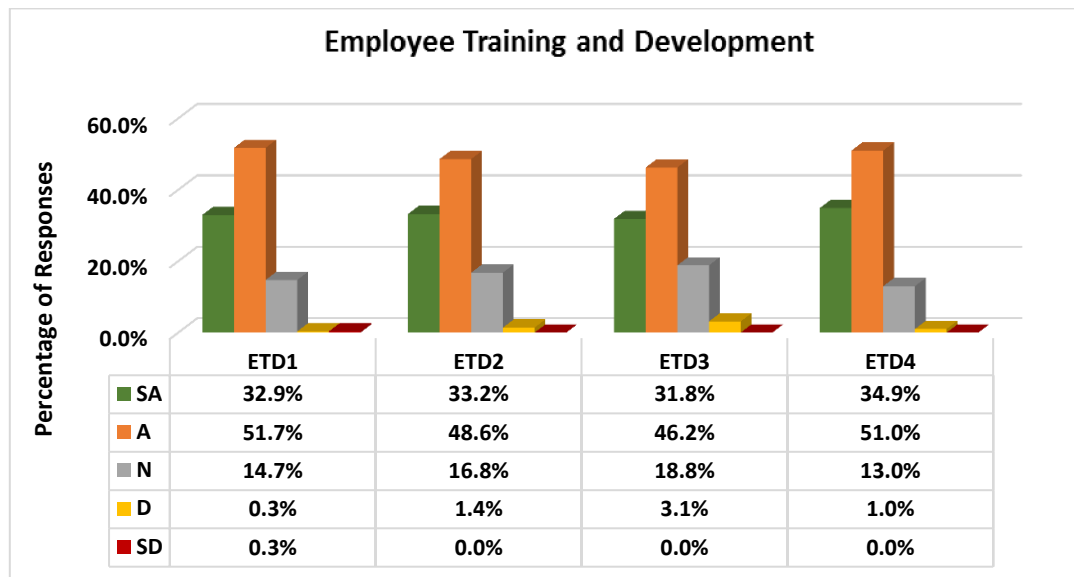


Figure 5.9: Frequencies for Employee Development and Training

Above figure indicates that the majority of participants agree to all four items measuring Employee Training and Development. Participants mainly agreed to item ETD1 (51.7%) which stated that 'our firm offers various kinds of trainings and professional development programs to the employees' and the item ETD4 (51.0%) that asked 'our firm offers training and learning opportunities to both new and existing employees'. Moreover, the participants also strongly agreed to the items ETD4 (34.9%).

For Employee Knowledge Sharing as in Figure 5.10, in case of 'strongly agree' scale response, the highest response was seen in EKS2 (32.2%) than other items. Many agreed to the item EKS1 (56.5%) and EKS2 (53.1%). It can be said that there is a greater level of agreement of the participants on EKS1 (employees at their firm share knowledge and learn from the

experiences of each other), and EKS2 (employees at their firms frequently help their colleagues through exchange of knowledge and expertise). The item where a comparatively lesser agreement of the participants was observed was 'employees at their firms participate in knowledge-sharing and mutual learning activities such as: meetings, discussions, trainings etc'.

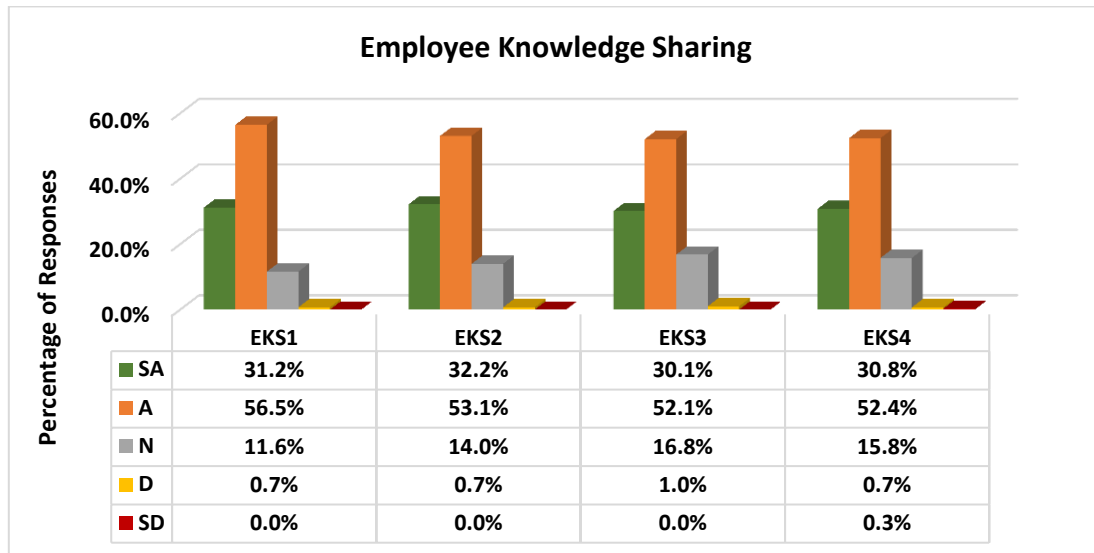


Figure 5.10: Frequencies for Employee Knowledge Sharing

5.3.1.2. Motivation-Enhancing HPWPs

Figure 5.11 to 5.13 present percentage responses for the items measuring Motivation-Enhancing practices. These included Employee Empowerment (EE), Performance Based Reward (PBR) and Shared Leadership (SL).

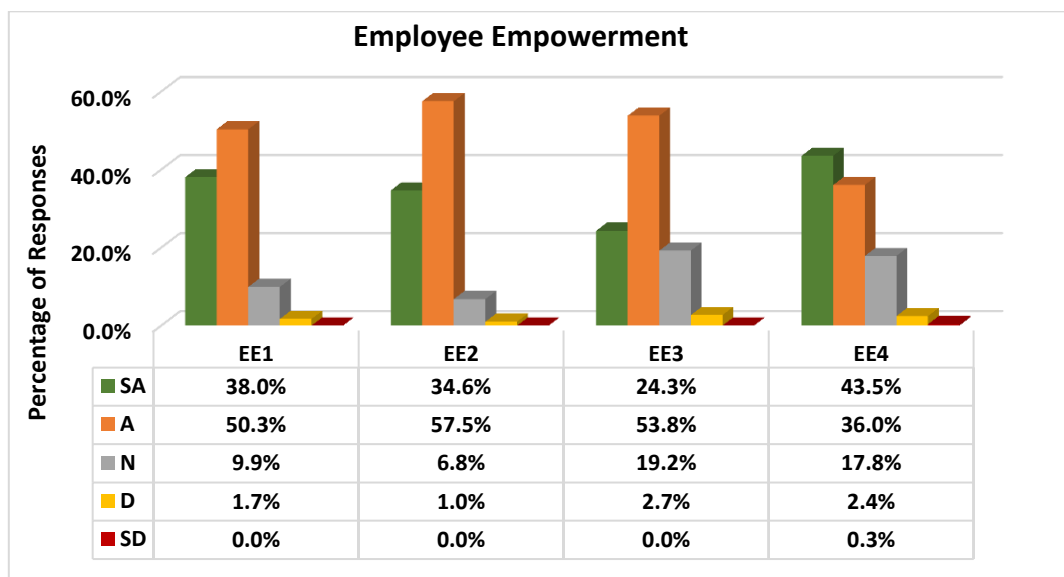


Figure 5.11: Frequencies for Employee Empowerment

In Figure 5.11, we observed that a good majority of participants (57.5%) agreed to EE2 (employees at our firm are empowered to work in self-managed-teams to effectively perform job duties). In case of EE4 (employees at our firm are allowed flexibility at the workplace such as work from home or other locations), 43.5% of the participants strongly agreed to it, which is the highest among other items in the same response scale. About 36% agreed to EE4 statement, which represents the lowest among all other response scales.

For the construct Performance Based Reward, it is obvious from the Figure 5.12, participants seemed to agree more to PBR4 (employees at our firm are recognized for their productive work behaviour which may include helping team members, solving problems, improving work processes etc.) i.e. 54.5% and agree less to the statement in PBR2 (46.2%) which states “employees at our firm receive compensation package based on their performance such as extra allowance, bonus, commission or other financial benefits etc”.

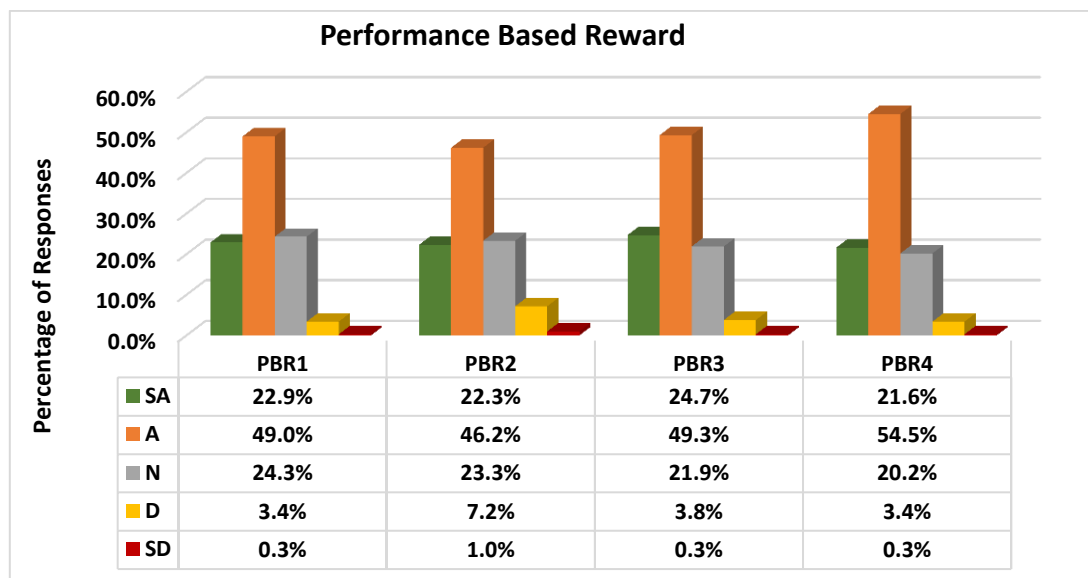


Figure 5.12: Frequencies for Performance Based Reward

Figure 5.13 indicates that majority of participants agreed to all four items measuring shared leadership. Participants mainly agreed to item SL1 (54.5%), which states that “Leadership at our firm shares a common purpose and collective responsibility with the employees”. Then participants who strongly agree to all items followed. Among those who strongly agreed to these items, a good number (32.5%) strongly agreed to item SL2 (i.e. leadership encourages employees to share ideas and suggestion for improvement).

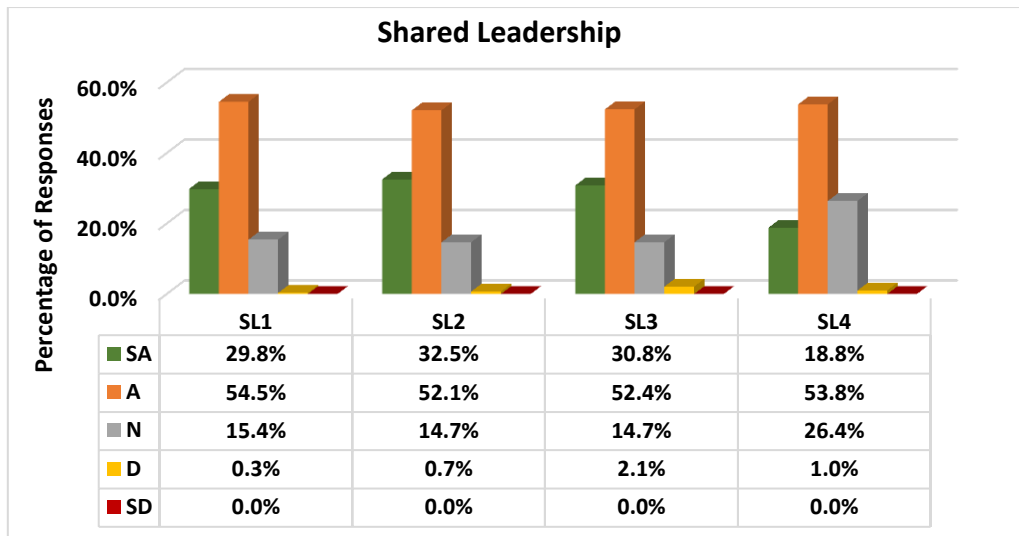


Figure 5.13: Frequencies for Shared Leadership

5.3.1.3. Opportunity-Enhancing HPWPs

Figure 5.14 to 5.16 present percentage responses for the items measuring Opportunity-Enhancing practices. These covered Open and Collaborative Communication (OC), Teamwork Quality (TWQ) and Interpersonal Trust (IT).

As shown in the figure below, majority of the participants agreed to all four items measuring Open and Collaborative Communication. Participants mainly agreed to item OC2 (54.1%), which states that “employees at our firm frequently collaborate to support the work activities of each other”. Then participants who strongly agree to all items followed. Among those who strongly agree to these items, majority strongly agree to item OC1 (39.7%), which stated that “employees at our firm are encouraged to freely communicate & interact with each others to collectively achieve set goals”.

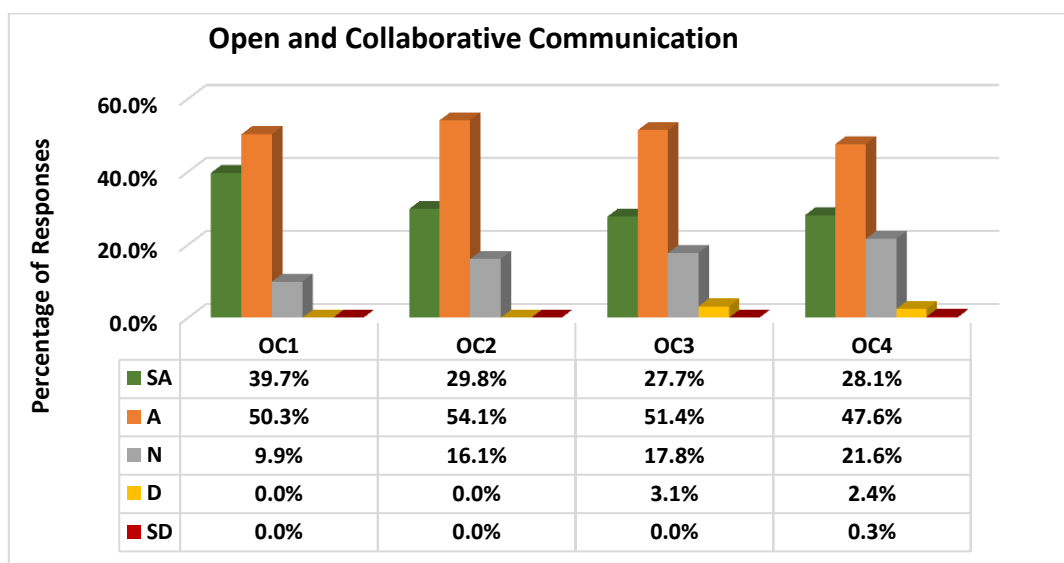


Figure 5.14: Frequencies for Open and Collaborative Communication

Figure 5.15 indicates that majority of participants agreed to all four items measuring interpersonal trust. Participants mainly agreed to item IT2 (59.2%), which stated that “at our firm employees demonstrate mutual trust on the intentions of each other”. Then participants who strongly agreed to all items followed. Among responses on strongly agree, majority strongly agree to item IT4 (28.1%), which stated that “at our firm employees extend confidence in the abilities of each other when it comes to performing routine tasks”.

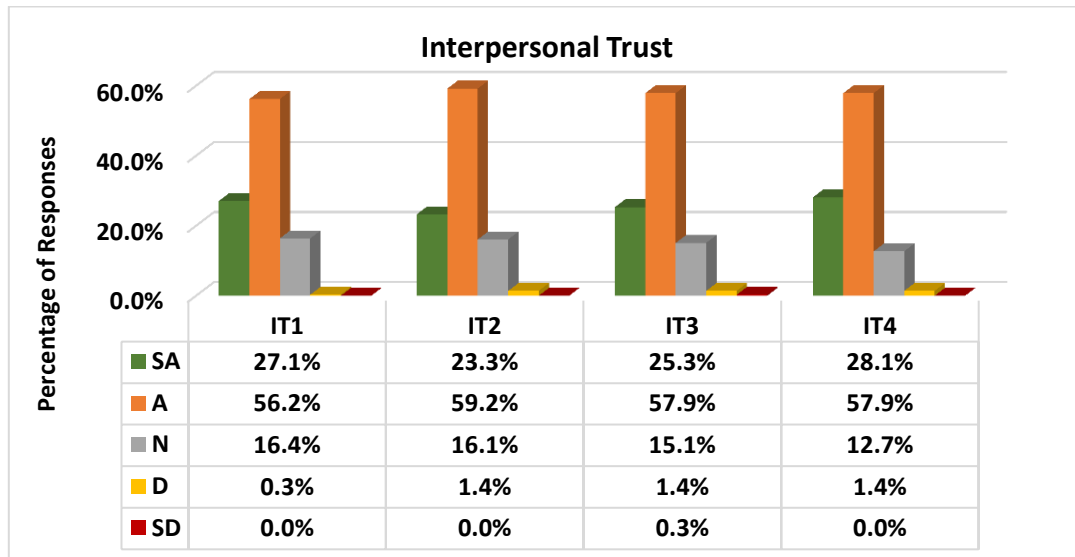


Figure 5.15: Frequencies for Interpersonal Trust

Lastly, the Teamwork Quality (TWQ) as in the below figure indicates that majority of participants agreed to all four items measuring this construct. Participants strongly agreed to the item TWQ1 (46.6%), which stated that “employees at our firm frequently communicate and coordinate in teams through emails, phone calls, meetings, conversations etc”. Furthermore, the participants also agreed to the items TWQ3 (60.3%) and TWQ2 (58.2%) and TWQ4 (51%).

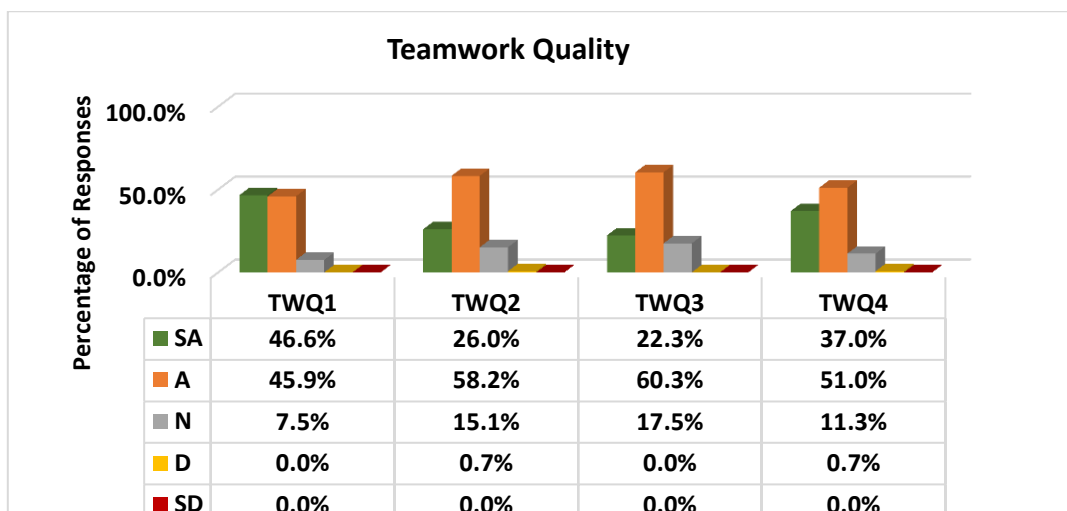


Figure 5.16: Frequencies for Teamwork Quality

5.3.1.4 Intellectual Capital (IC)

We measured IC using its three dimensions i.e. Human, Structural & Relational Capitals. Figure 5.17 to 5.19 present descriptive data on IC dimensions in PSFs. With regard to Human Capital, results in the figure 5.17 indicate that participants mostly agreed to the statement in HC2 (57.5%), which stated that “employees at our firm possess relevant qualification and experience in their particular job functions”, followed by statement HC1 (56.2%), that stated “Employees at our firm possess required knowledge and skills for successfully performing their job duties”.

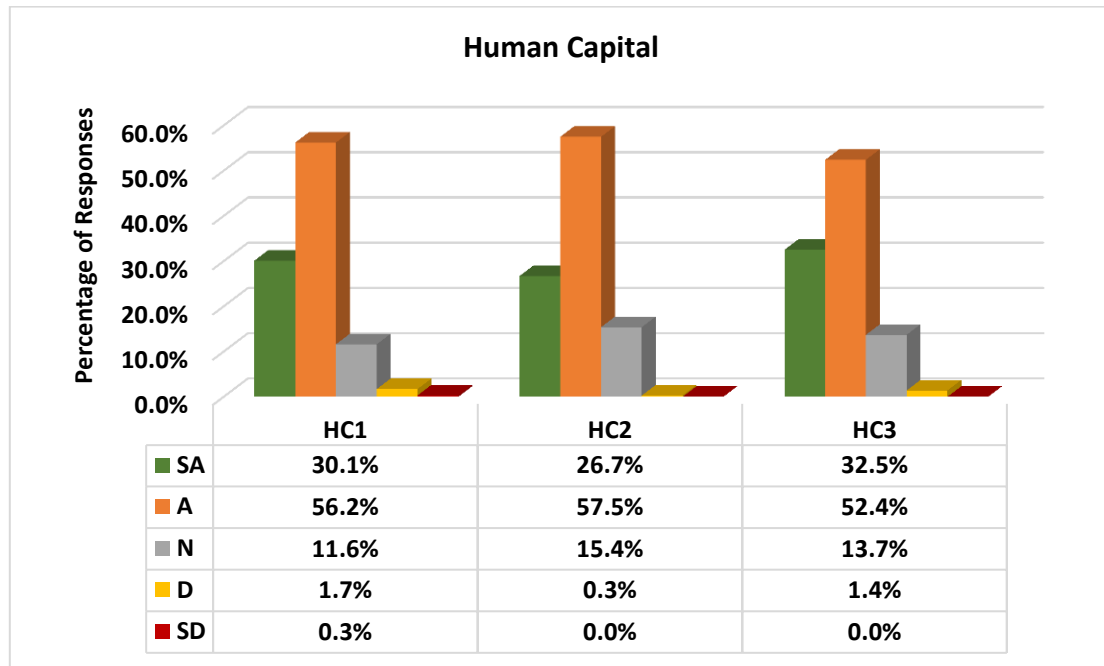


Figure 5.17: Frequencies for Human Capital

Results in figure 5.18 indicate wide variation in the responses on structural capital. Large percentages (41.1%) and (49%) of participants strongly agree as well as agree, respectively to item SC1 i.e. “most of our firm's data/information/knowledge is stored in the form of electronic records, databases, policy documents, manuals, reports etc”. In case of SC2 which stated that “Our firm's information systems and IT capabilities efficiently support business processes and activities”, most of the participants (47.6%) agreed to this item.

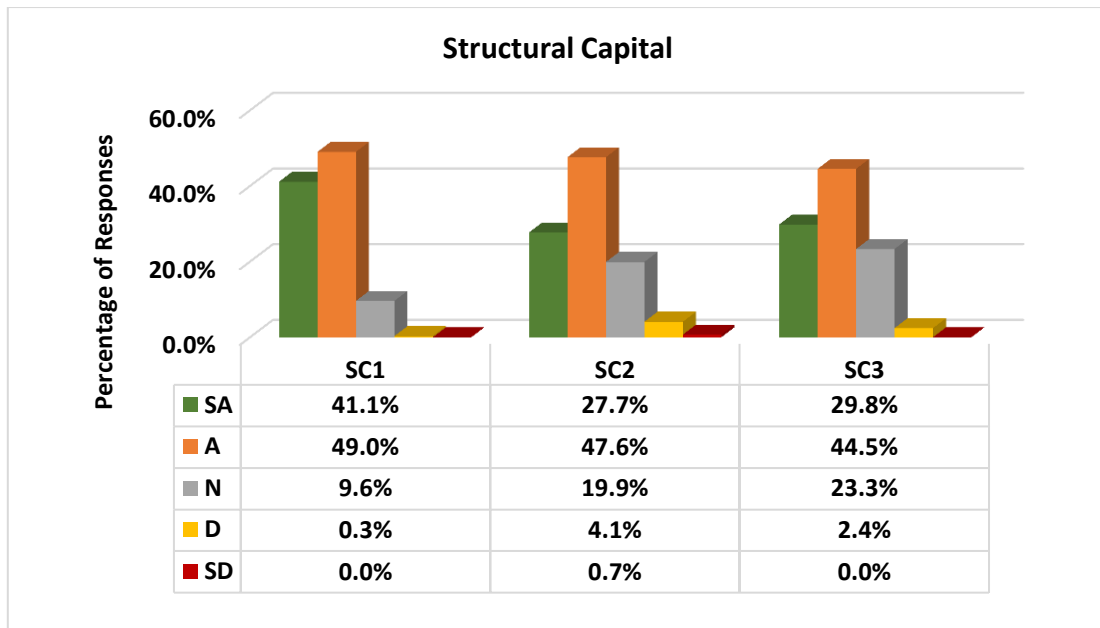


Figure 5.18: Frequencies for Structural Capital

If we look at the results on Relational Capital in figure 5.19, a great percentage of participants i.e. 60.3% agreed to the item RC2 which stated that “our firm maintains goodwill, loyalty and better brand image of the clients/customers/end users”. A substantial percentage of participants agreed to items RC3 (50%) and RC2 (47.9%). Participants strongly agree to item RC1 (38.4%) that “our firm maintains working relationships with its external stakeholder such as: customer, client, end-user, supplier & partner”.

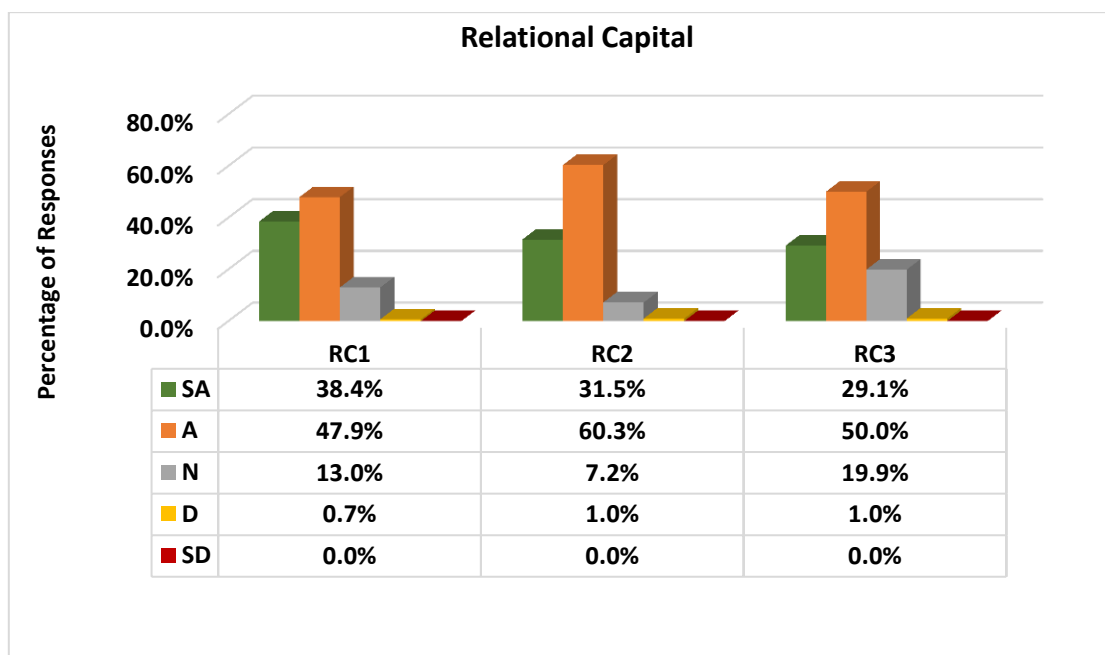


Figure 5.19: Frequencies for Relational Capital

5.3.1.5 Multi-stakeholder Value Creation

In this study, we operationalized Multi-stakeholder Value Creation using three constructs – Employee Value Creation, Organization Value Creation and Customer Value Creation. Figure 5.20 to 5.22 present the frequencies for responses on Multi-stakeholder Value Creation. According to Figure 5.20, participants generally agreed to all the items measuring Employee Value Creation. Participants agreed more to the items EVC1 (59.9%), followed by EVC3 and EVC4 (49.7%). Item EVC1 stated that “employees at our firm feel motivated and engaged to the work they perform”. Regarding responses on strongly agree, majority of the participants strongly agreed to the item EVC4 (30.1%), which states that “employees at our firm develop their professional skillset and industry network”.

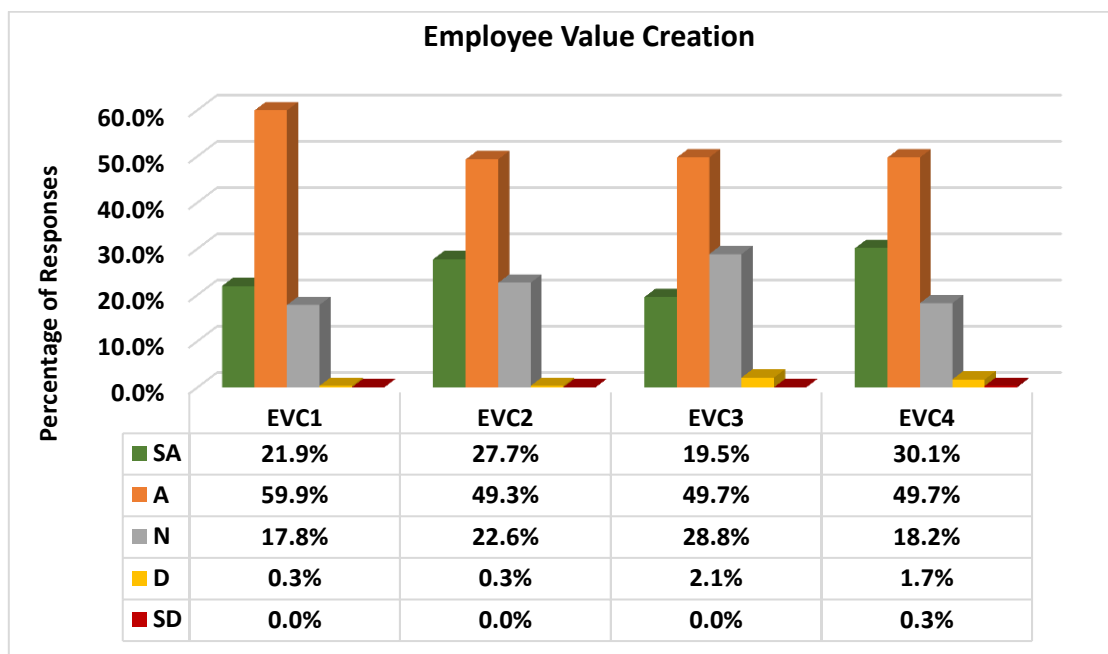


Figure 5.20: Frequencies on Employee Value Creation

When it comes to results on Organization Value Creation, majority of the participants largely agreed to item OVC1 (55.1%) which stated that “our firm performs well in terms of sales growth, profitability and shareholder Return on Investment (ROI)”. Many participants also agreed to item OVC2 (53.8%) stating, “Our firm performs well in terms of costs efficiency and productivity. Regarding the responses for strongly agree, OVC4 (i.e. our firm maintains industry competitiveness because of its Intellectual Property (IP) such as trademarks, copyrights, creative designs, innovative processes, management capabilities etc) with 28.1% response took the lead.

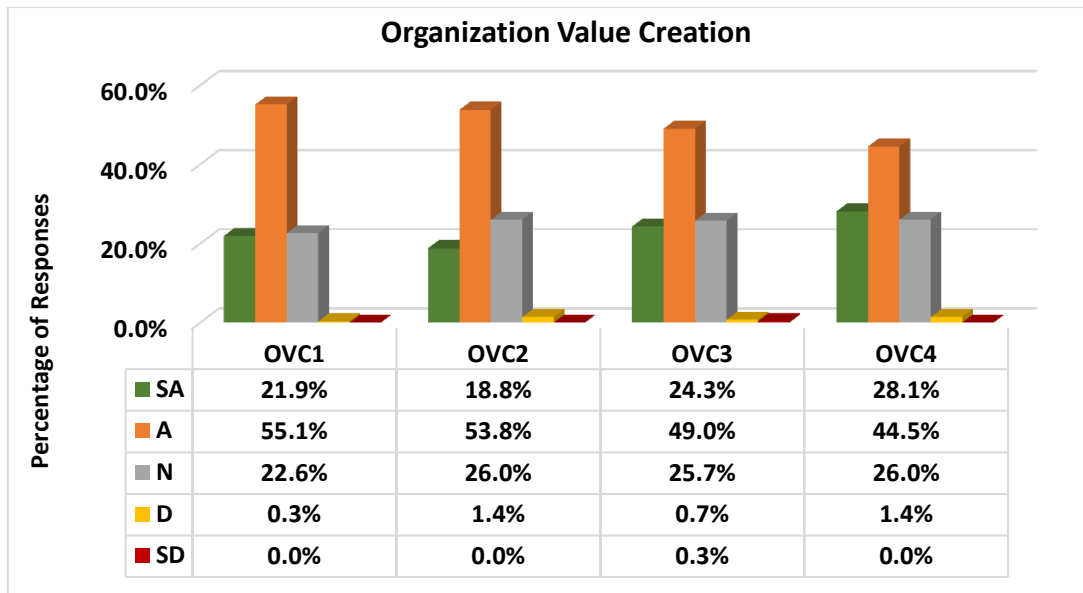


Figure 5.21: Frequencies on Organization Value Creation

For Customer Value Creation, it can be seen that more than 50% of the participants overall agreed to all four items (CVC1 through CVC4). This is more as compared to Employee and Organization Value Creation. The highest percentage was observed in item CVC3 (54.5%) which stated that “Our firm continually improves service quality and efficiency based on customer/client/end-user feedback”, followed by CVC1 (53.4%), CVC2 (52.1%) and CVC4 (51%).

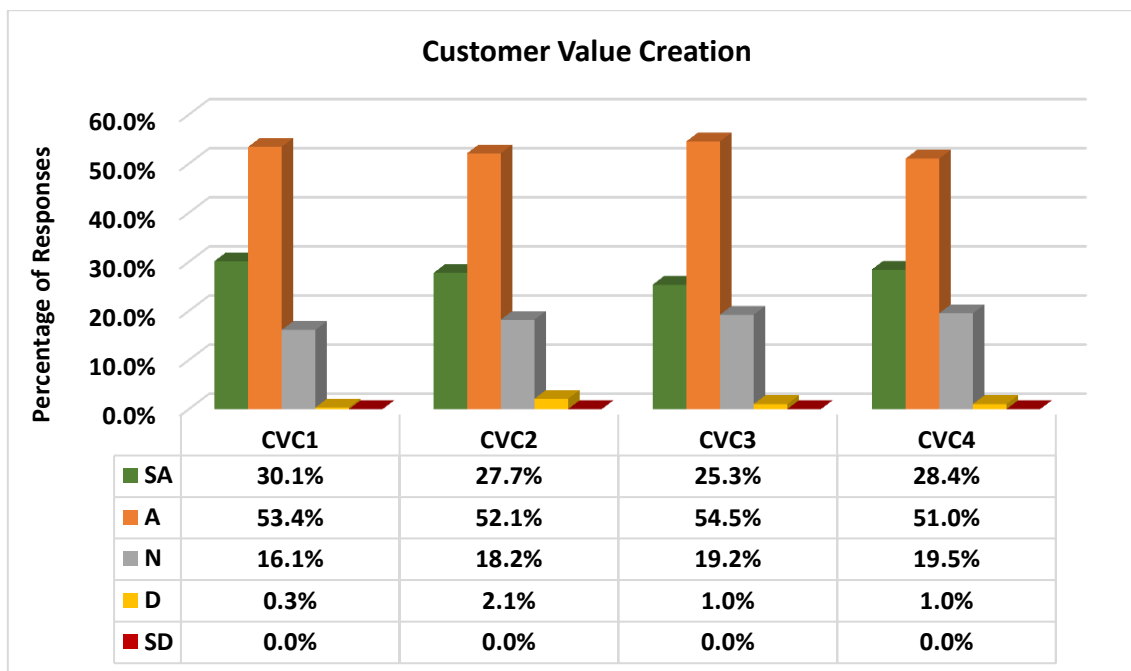


Figure 5.22: Frequencies on Customer Value Creation

5.3.2 Assessment of Mean, Standard Errors of Mean and Standard Deviation

As a researcher, it was necessary to be informed of and appropriately apply adequate statistical measures to express variability (dispersion) within the sample using Standard Deviation (SD) and measure uncertainty in the Mean estimate using Standard Error of Mean (SE). Specifically, SE measures uncertainty in mean estimates while SD shows data dispersion from Mean (Barde and Barde, 2012). It was however preferable to measure SE for determining confidence interval, which informs the precision of the population estimate. To measure SD and SE, we first assessed the Mean values for all the study variables. Statistical Mean represents the average value of the data or responses. We calculated Mean to describe the centre of data distribution in our sample. As a measure of central tendency (location), the mean values indicated in tables ranging 5.1 to 5.14 depicted the average of the responses for each study variable. To gather responses for the measurable items, we applied Likert scale wherein, 5=Strongly-Agree; 4=Agree; 3=Neutral; 2=Disagree; and 1=Strongly-Disagree.

5.3.2.1. Means, S.E. and SD for HPWPs

The descriptive statistics for Ability-Enhancing HPWPs are shown from the tables 5.1 to 5.2. The tables 5.3 to 5.5 highlight descriptive statistics for Motivating-Enhancing HPWPs. Besides, the tables 5.6 to 5.8 give descriptive statistics for Opportunity-Enhancing HPWPs.

5.3.2.1.1. Ability-Enhancing HPWPs

We used two latent variables to measure the effect of Ability-Enhancing HPWPs – i.e. Employee Training and Development (ETD), and Employee Knowledge Sharing (EKS). Table 5.1 presents the four items measuring Employee Training and Development. Because all mean values for the four items on this scale are above 4, we can say that respondents generally agreed to employee training and development in their firms. The highest mean value (4.20) was seen in the item ETD4 (i.e. training and learning opportunities to both new and existing employees), while the lowest mean value (4.07) was observed in case of item ETD3 (i.e. mentoring and guidance on work-related knowledge, skills and competencies). As an average, employees in Professional Service Firms perceive that training and development opportunities are provided by their firms in order to enable them to perform their duties.

	Item	Mean	Std. Error	Std. Deviation	Variance
Employee Training and Development	ETD1	4.16	0.041	0.704	0.495
	ETD2	4.14	0.043	0.733	0.538
	ETD3	4.07	0.046	0.792	0.628
	ETD4	4.20	0.041	0.695	0.483

Table 5.1: Descriptive Statistics for Employee Training and Development

We used four items to measure Employee Knowledge Sharing practice within Ability-enhancing HPWPs (See Table 5.2). Given that all mean values for the four items on this scale were above 4, we concluded that respondents commonly agreed that employees at their firms engage in knowledge sharing activities. The highest mean value (4.18) was found in item EKS1 (i.e. employees at our firm share knowledge and learn from the experiences of each other), while the lowest mean value (4.11) belonged to item EKS3 (i.e. employees at our firm participate in knowledge-sharing and mutual learning activities such as: meetings, discussions, trainings etc). The low SD values indicated that all the responses on EKS items were close to the value of 4, we thus conclude that employees largely agreed that they believe in sharing of knowledge.

	Item	Mean	Std. Error	Std. Deviation	Variance
Employee Knowledge Sharing	EKS1	4.18	0.038	0.651	0.424
	EKS2	4.17	0.040	0.681	0.463
	EKS3	4.11	0.041	0.707	0.499
	EKS4	4.13	0.042	0.714	0.510

Table 5.2: Descriptive Statistics for Employee Knowledge Sharing

5.3.2.1.2. Motivation-Enhancing HPWPs

For examining the effect of Motivation-Enhancing HPWPs, we used three latent variables i.e. Employee Empowerment (EE), Performance Based Reward (PBR) and Shared Leadership (SL). Table 5.3 presents four items that measured 'Employee Empowerment'. Respondents generally agreed to employee empowerment since all mean values for the four items are 4 and above. The maximum mean value (4.26) was claimed by the measure EE2 (i.e. employees at our firm are empowered to work in self-managed-teams to effectively perform job duties), while the lowest mean value (4.00) was seen in the item EE3 (i.e. delegated to exercise discretionary efforts without the involvement of the supervisors). Averagely speaking, employees agreed that they were empowered by their firms when it comes to perform routine duties.

	Item	Mean	Std. Error	Std. Deviation	Variance
Employee Empowerment	EE1	4.25	0.041	0.699	0.489
	EE2	4.26	0.037	0.625	0.391
	EE3	4.00	0.043	0.739	0.546
	EE4	4.20	0.049	0.838	0.703

Table 5.3: Descriptive Statistics for Employee Empowerment

With regard to the Performance Based Reward as in Table 5.4, responses fluctuated between Agree and Neutral scale rating, however, inclination was more towards Agree. Among the four items used to measure performance based reward within motivation-enhancing HPWP

bundle, the highest mean value (3.94) was witnessed in the item PBR3 (i.e. are recognized for their contribution in the form of awards and recognition programs such as letter of appreciation, acknowledgements, employee of month/year award etc). The lowest mean value (3.82) belonged to item PBR2 (i.e. Receive compensation package based on their performance such as extra allowance, bonus, commission or other financial benefits etc). We thus can conclude that the average of response on the scale is close to agree.

	Item	Mean	Std. Error	Std. Deviation	Variance
Performance Based Reward	PBR1	3.91	.047	.796	.634
	PBR2	3.82	.052	.897	.804
	PBR3	3.94	.047	.804	.646
	PBR4	3.93	.045	.764	.583

Table 5.4: Descriptive Statistics for Performance Based Reward

In case of Shared Leadership, which was measured using four items as Motivation-Enhancing practice, the mean values on this scale ranged from 3.90 to 4.16 (Figure 5.5). Respondents generally agree that the firm encouraged a culture of Shared Leadership since most of the mean values were above 4. The highest mean value (4.16) was demonstrated by the item SL2 (i.e. leadership encourages employees to share ideas and suggestion for improvement) while the item SL4 (i.e. leadership at our firm makes decisions having consensus of the employees) indicated the lowest mean value (3.90). On average, there was an agreement by the employees on application of shared leadership practices in their firms.

	Item	Mean	Std. Error	Std. Deviation	Variance
Shared Leadership	SL1	4.14	.039	.670	.449
	SL2	4.16	.040	.689	.475
	SL3	4.12	.042	.725	.525
	SL4	3.90	.041	.697	.486

Table 5.5: Descriptive Statistics for Shared Leadership

5.3.2.1.3. Opportunity-Enhancing HPWPs

To measure Opportunity-Enhancing HPWPs, we used three latent variables i.e. Open and Collaborative Communication (OC), Interpersonal Trust (IT) and Teamwork Quality (TWQ). The tables 5.6 and 5.7 give descriptive statistics for OC and IT. For OC, it can be seen that the responses revolve between 'Strongly-Agree' and 'Agree' scale, but are more inclined toward 'Agree'. Among the four items that were used to measure OC, the highest mean value (4.30) was seen in OC1 (i.e. employees at our firm are encouraged to freely communicate & interact with each others to collectively achieve set goals). The lowest mean value (4.01) was observed in the item OC4 (i.e. employees at our firm are satisfied with the level of communication and collaboration that exist between them). On average, we can conclude that open and collaborative communication among the employees is a norm in the PSFs.

	Item	Mean	Std. Error	Std. Deviation	Variance
Open & Collaborative Communication	OC1	4.30	.037	.640	.409
	OC2	4.14	.039	.665	.442
	OC3	4.04	.045	.761	.579
	OC4	4.01	.046	.791	.625

Table 5.6: Descriptive Statistics for Open & Collaborative Communication

Table 5.7 presents the four items measuring Interpersonal Trust among the employees as an indicator of Opportunity-Enhancing HPWP in PSFs. Since the mean values for all the four items on this scale were above 4, we can say that respondents generally agreed that there existed interpersonal trust culture among the team members. The highest mean value on this scale (4.13) was seen in the item IT4 (i.e. at our firm, employees extend confidence in the abilities of each other when it comes to performing routine tasks), while the lowest mean value (4.04) belonged to the item IT3 (i.e. at our firm, employees possess mutual trust on the actions of their colleagues). On average, there was considerable level of employee agreement on presence of trusting relationships among them.

Interpersonal Trust	Item	Mean	Std. Error	Std. Deviation	Variance
	IT1	4.10	.040	.677	.458
	IT2	4.04	.039	.669	.448
	IT3	4.07	.041	.698	.487
	IT4	4.13	.039	.669	.448

Table 5.7: Descriptive Statistics for Interpersonal Trust

We used four items to measure Teamwork Quality as one of the indicators of Opportunity-Enhancing HPWPs. This is given in the table 5.8. The item TWQ1 (i.e. employees at our firm frequently communicate and coordinate in teams through emails, phone calls, meetings, conversations etc.) demonstrated the highest mean value (4.39). The lowest mean value (4.05) was witnessed in the item TWQ3 (i.e. employees at our firm take efforts for resolving issues and conflicts arising within teams with consensus). Given that the mean values for all the four items on this scale were above 4, we can conclude that respondents in general agreed to be exercising teamwork and the factors that promote quality of teamwork.

Teamwork Quality	Item	Mean	Std. Error	Std. Deviation	Variance
	TWQ1	4.39	.037	.625	.390
	TWQ2	4.10	.038	.656	.431
	TWQ3	4.05	.037	.630	.396
	TWQ4	4.24	.039	.673	.453

Table 5.8: Descriptive Statistics for Teamwork Quality

5.3.2.2. Mean, S.E. and SD for Intellectual Capital

We analysed Intellectual Capital by measuring Mean, Std. Error and Std. Dev. for all three dimensions that measured IC. The descriptive statistics for IC dimensions is shown from tables 5.9 to 5.11.

5.3.2.2.1. Human Capital

We used three items to measure human capital. All mean values for items measuring human capital were above 4, this led us to conclude that respondents in general agreed that their firms were in possession of knowledgeable, skilled and experienced human resource. The item HC3 (i.e. employees at our firm possess flexible attitude towards learning new knowledge and adapting changes) claimed the highest mean value (4.16), while the lowest mean value (4.11) was seen in case of item HC1 (i.e. employees at our firm possess required knowledge and skills for successfully performing their job duties). Since all SD values were low, these indicated that responses on human capital were close to the value of 4, implying that respondents largely agreed on presence of robust human capital in their firms.

	Item	Mean	Std. Error	Std. Deviation	Variance
Human Capital	HC1	4.14	0.041	0.706	0.499
	HC2	4.11	0.038	0.652	0.425
	HC3	4.16	0.041	0.702	0.493

Table 5.9: Descriptive Statistics for Human Capital

5.3.2.2.2. Structural Capital

According to table 5.10, among the three items measuring Structural Capital, SC1 (i.e. most of our firm's data/information/knowledge is stored in the form of electronic records, databases, policy documents, manuals, reports etc.) possessed the highest mean value (4.31), while SC2 (i.e. our firm's information systems and IT capabilities efficiently support business processes and activities) had the lowest mean value (3.98). Since the responses were only few points away from the mean, this implied a small variation in the responses from the mean value.

	Item	Mean	Std. Error	Std. Deviation	Variance
Structural Capital	SC1	4.31	0.038	0.653	0.427
	SC2	3.98	0.049	0.839	0.704
	SC3	4.02	0.046	0.793	0.629

Table 5.10: Descriptive Statistics for Structural Capital

5.3.2.2.3. Relational Capital

According to table 5.11, RC1 (i.e. our firm maintains working relationships with its external stakeholder such as: customer, client, end-user, supplier & partner) possessed the highest mean value (4.24), followed by RC2 (i.e. our firm maintains goodwill, loyalty and better brand

image of the clients/customers/end users) with a mean value of 4.22. It can be said that there was more variation in responses on RC3 than RC1 and RC2. Overall, given the small standard deviation values, there was a minimal variability in the responses.

	Item	Mean	Std. Error	Std. Deviation	Variance
Relational Capital	RC1	4.24	.041	.697	.485
	RC2	4.22	.036	.616	.380
	RC3	4.07	.043	.726	.527

Table 5.11: Descriptive Statistics for Relational Capital

5.3.2.3. Mean, S.E. and SD for Multi-stakeholder Value Creation

While viewing from the lens of multi-stakeholder perspective, we operationalized value creation using three latent variables, i.e. Employee Value Creation (EVC), Organization Value Creation (OVC), and Customer Value Creation (CVC). Table 5.12 to 5.14 present the mean, std. error, std. deviation and variance of the responses on Multi-stakeholder Value Creation (MSVC).

5.3.2.3.1. Employee Value Creation

As evident from the Table 5.12, EVC4 (i.e. employees at our firm develop their professional skillset and industry network) received the highest mean value (4.08) followed by EVC2 (employees at our firm receive compensation based on their performance in the form of increased pay, allowances, or similar benefits) with a mean value of 4.04. We can say there is more variation in the responses on EVC4 and less variation in responses on EVC1. Overall, there is, however, minimal variability in the responses on Employee Value Creation given that there were small values of Standard Deviation.

	Item	Mean	Std. Error	Std. Deviation	Variance
Employee Value Creation	EVC1	4.03	0.038	0.641	0.411
	EVC2	4.04	0.042	0.719	0.517
	EVC3	3.87	0.043	0.741	0.549
	EVC4	4.08	0.045	0.761	0.578

Table 5.12: Descriptive Statistics for Employee Value Creation

5.3.2.3.2. Organization Value Creation

The table 5.13 shows the descriptives for Organization Value Creation (OVC), all items had mean values of slightly less than 4. OVC1 showed the highest mean value (3.99) followed by OVC3 with 3.96. While it perhaps can be considered as close to 'agree' on the response scale, this however, doesn't eliminate a slight possibility of respondents neither agreeing nor disagreeing to this construct (i.e. 'neutral' on the response scale). Overall, we can say there is more variation in responses on OVC4 and less variation in responses on OVC1. Also, in view of

small standard deviation values, there is minimal variability in responses on Organization Value Creation.

	Item	Mean	Std. Error	Std. Deviation	Variance
Organization Value Creation	OVC1	3.99	0.040	0.678	0.460
	OVC2	3.90	0.041	0.704	0.495
	OVC3	3.96	0.044	0.747	0.559
	OVC4	3.99	0.045	0.773	0.598

Table 5.13: Descriptive Statistics for Organization Value Creation

5.3.2.3.3. Customer Value Creation

Last but not the least, table 5.14 shows the descriptives for Customer Value Creation (CVC). All items claimed a mean value of more than 4 thus representing an average response of 'Agree' on the scale. For CVC1 (i.e. our customers/clients/end-users are happy and satisfied with our services) attained the highest mean value (4.13) indicating that majority of the respondents agreed to this item and there was minimal variation in their responses to this item. From the viewpoint of variance, it can be said that there is more variation in responses on CVC2. Overall, a minimal variability in responses was seen on Customer Value Creation given the small values of Standard Deviation.

	Item	Mean	Std. Error	Std. Deviation	Variance
Customer Value Creation	CVC1	4.13	0.040	0.691	0.478
	CVC2	4.05	0.043	0.735	0.540
	CVC3	4.04	0.041	0.697	0.486
	CVC4	4.07	0.042	0.719	0.518

Table 5.14: Descriptive Statistics for Customer Value Creation

5.4. Summary

This chapter presented the descriptive statistics & analyses of the participants' demographics and survey responses. It involved analysis of the participants' demographic information and descriptive statistics of all the measures incorporated in online survey questionnaire. The descriptive data analyses enabled preliminary screening of the data and ensured its suitability for multivariate analyses, which are offered in the next chapter.

CHAPTER-6

MEASUREMENT SCALE ANALYSES AND STRUCTURAL EQUATION MODELLING

6.1. Introduction

In the chapter-5, we conducted Descriptive Data Analysis as the preliminary step towards quantitative data analysis. This chapter presents data analyses at an advanced level. In this direction, we first estimated measurement scale reliability (Section 6.2) by evaluating alpha coefficient and item-total correlation for all the constructs that were operationalized within three key factors i.e. High Performance Work Practices (via Ability-enhancing, Motivation-Enhancing & Opportunity-Enhancing Practices), Intellectual Capital (via Human, Structural & Relational) and Multi-Stakeholder Value-Creation (via Employee Value Creation, Organisation Value Creation & Customer Value Creation).

In the next step, we conducted Exploratory Factor Analysis (Section 6.3) that examined the structure of various model constructs. This was followed by assessment of Common Method Variance (Section 6.4) and assessment of normality and outliers (6.5). The next stage of analysis involved 2-step analysis using Structural Equation Modelling (Section 6.6) wherein we first conducted Confirmatory Factor Analysis that helped determine Model Fit, Assessment of Construct Validity and Measurement Model Assessment with an aim to examine the reliability of various model constructs. Subsequently, structural model assessment was performed as the last step in the SEM analyses.

It's worth-mentioning that this chapter sequentially undergoes a series of analyses at an advanced level as part of standard steps and processes involved in the multivariate quantitative data analysis. However, if the readers may like to directly refer to the final results of research model and hypotheses tests, section 6.6.1.4.4 to 6.6.1.4.5 may be referred.

6.2. Scale Reliability

6.2.1. Internal Consistency

According to Henson (2001), Internal Consistency demonstrates to what degree a particular construct is collectively measured by the items pertaining to that construct. In this research, we assessed internal consistency by measuring Cronbach's alpha coefficient. The alpha coefficient of 0.6 is the minimally-acceptable value of measurement item or scale reliability, whereas, alpha coefficient greater than 0.9 highlights unnecessary redundancy and duplication of the contents across scale items (Hair et al., 2014). The alpha coefficient is affected by scale length, where scales with items over 20 will have acceptable but may have internal inconsistencies (Streiner, 2003). It is useful to check the corrected item-total correlation values because they indicate the degree of items' correlation with the total scores, wherein a value below 0.3 specifies that something different from the scale is being measured by the items (Pallant, 2016).

The table 6.1 below presents the internal consistency of measurement scales for 9 constructs used in this study. The results show that alpha coefficients for all HPWPs are above 0.7, suggesting good internal consistency. The alpha coefficients for IC and MVC, ranging from 0.55 to 0.74, suggest mediocre yet acceptable levels of internal consistency. We note that the alpha coefficients could be lower than 0.7 since there are few measurable items for the IC and MVC scales. Because the scale items were few, so it was necessary to examine the value of corrected item-total-correlations (Streiner, 2003). The corrected item-total-correlation for all the scales is above the threshold value (0.3), suggesting a good internal consistency.

S#	Measurement Scale	Number of Measures	Corrected Item-Total Correlation	Cronbach's Alpha
High Performance Work Practices (HPWPs)				
1	Ability-Enhancing HPWPs (AEH)	12	.737	.819
2	Motivation-Enhancing HPWPs (MEH)	12	.703	.782
3	Opportunity-Enhancing HPWPs (OEH)	8	.759	.789
Intellectual Capital (IC)				
4	Human Capital	3	.355	.591
5	Structural Capital	3	.425	.579
6	Relational Capital	3	.431	.657
Multi-Stakeholder Value Creation (MVC)				
7	Employee Value Creation (EVC)	4	.611	.604
8	Organisational Value Creation (OVC)	4	.626	.553
9	Customer Value Creation (CVC)	4	.610	.735

Table 6.1: Internal Consistency of Measurement Scales

6.2.2 Item-total Correlation

It indicates the extent of correlation that each item/measure demonstrates with the sum total of scores (Pallant, 2016). According to Gliem and Gliem (2003) and as a rule-of-thumb, this value should not be under 0.40. In case if the corrected item-total-correlation value is under 0.3, it shows that the relevant latent construct is not being measured by the item (Pallant, 2016). In this section, we have analysed item-total correlation for all the items used in the measurement scales. The results in the below tables 6.2 to 6.6 show that that there is a sufficient item-total correlation for all the constructs within HPWPs and IC as none of the constructs possessed a value of less than 0.3. However, in case of Multi-stakeholder Value Creation, the item-total-correlation is slightly less than 0.3 for one of the items in Employee Value Creation (EVC2) and Organisation Value Creation (OVC3). These items were considered for deletion in the confirmatory factor analysis.

Variable Description	Corrected Item-Total-Correlation	Cronbach's Alpha (if Item Deleted)
Employee Training and Development		
ETD1: Our firm offers various kinds of trainings and professional development programs to the employees	.463	.763
ETD2: Our firm offers continuous development opportunities to the employees	.504	.758
ETD3: Our firm offers mentoring and guidance on work-related knowledge, skills and competencies	.515	.756
ETD4: Our firm offers training and learning opportunities to both new and existing employees	.479	.761
Employee Knowledge Sharing		
EKS1: Employees at our firm share knowledge and learn from the experiences of each other	.456	.772
EKS2: Employees at our firm frequently help their colleagues through exchange of knowledge and expertise	.506	.764
EKS3: Employees at our firm participate in knowledge-sharing and mutual learning activities such as: meetings, discussions, trainings etc.	.555	.756
EKS4: Employees at our firm utilize various information and knowledge-sharing tools & technologies such as email, VPN, intranet, online knowledge databases, video-conferencing etc. to ease sharing of knowledge	.483	.768

Table 6.2: Item-Total Correlation for Ability-Enhancing Practices

Variable Description	Corrected Item-Total-Correlation	Cronbach's Alpha (if Item Deleted)
Employee Empowerment		
EE1: Employees at our firm are encouraged to take actions and participate in decision-making	.423	.766
EE2: Employees at our firm are empowered to work in self-managed-teams to effectively perform job duties	.390	.770
EE3: Employees at our firm are delegated to exercise discretionary efforts without the involvement of the supervisors	.179	.790
EE4: Employees at our firm are allowed flexibility at the workplace such as work from home or other locations	.210	.790
Performance Based Reward		
PBR1: Employees at our firm receive reward/incentive for their outstanding performance and contribution at the workplace	.471	.761
PBR2: Employees at our firm receive compensation package based on their performance such as extra allowance, bonus, commission or other financial benefits etc.	.481	.760
PBR3: Employees at our firm are recognized for their contribution in the form of awards and recognition programs such as letter of appreciation, acknowledgements, employee of month/year award etc.	.529	.755
PBR4: Employees at our firm are recognized for their productive work behavior which may include helping team members, solving problems, improving work processes etc.	.442	.764
Shared Leadership		
SL1: Leadership at our firm shares a common purpose and collective responsibility with the employees	.455	.807
SL2: Leadership encourages employees to share ideas & suggestion for improvement	.417	.810
SL3: Leadership at our firm communicates decisions to the employees	.451	.807
SL4: Leadership at our firm makes decisions having consensus of the employees	.392	.812

Table 6.3: Item-Total Correlation for Motivation-Enhancing Practices

Variable Description	Corrected Item- Total-Correlation	Cronbach's Alpha (if Item Deleted)
Open & Collaborative Communication		
OC1: Employees at our firm are encouraged to freely communicate & interact with each others to collectively achieve set goals	.497	.803
OC2: Employees at our firm frequently collaborate to support the work activities of each other	.565	.798
OC3: Employees at our firm cooperate across various organizational units to solve problems and improve processes	.495	.803
OC4: Employees at our firm are satisfied with the level of communication and collaboration that exist between them	.532	.800
Interpersonal Trust		
IT1: At our firm a considerable level of trust relationship exists between the employees	.470	.805
IT2: At our firm employees demonstrate mutual trust on the intentions of each other	.468	.806
IT3: At our firm employees possess mutual trust on the actions of their colleagues	.519	.801
IT4: At our firm employees extend confidence in the abilities of each other when it comes to performing routine tasks	.381	.813
Teamwork Quality		
TWQ1: Employees at our firm frequently communicate and coordinate in teams through emails, phone calls, meetings, conversations etc.	.487	.767
TWQ2: Employees at our firm adequately contribute in teams to the best of their knowledge and abilities	.533	.760
TWQ3: Employees at our firm take efforts for resolving issues and conflicts arising within teams with consensus	.543	.759
TWQ4: Employees at our firm work in harmony and mutually support each other in a team environment	.398	.781

Table 6.4: Item-Total Correlation for Opportunity-Enhancing Practices

Variable Description	Corrected Item-Total-Correlation	Cronbach's Alpha (if Item Deleted)
Human Capital		
HC1: Employees at our firm possess required knowledge and skills for successfully performing their job duties	.459	.396
HC2: Employees at our firm possess relevant qualification and experience in their particular job functions	.307	.617
HC3: Employees at our firm possess flexible attitude towards learning new knowledge and adapting changes	.440	.428
Structural Capital		
SC1: Most of our firm's data/information/knowledge is stored in the form of electronic records, databases, policy documents, manuals, reports etc.	.309	.585
SC2: Our firm's information systems and IT capabilities efficiently support business processes and activities	.427	.417
SC3: Our firm protects its intellectual property and organizational knowledge through copyrights/trademarks/design secrets/patents etc.	.441	.392
Relational Capital		
RC1: Our firm maintains working relationships with its external stakeholders such as: customer, client, end-user, supplier & partner.	.508	.503
RC2: Our firm maintains goodwill, loyalty and better brand image of the clients/customers/end users	.492	.536
RC3: Our firm successfully negotiates and creates new opportunities for business collaboration and partnership with suppliers and partners	.412	.641

Table 6.5: Item-Total Correlation for Intellectual Capital

Variable Description	Corrected Item- Total-Correlation	Cronbach's Alpha (if Item Deleted)
Employee Value Creation		
EVC1: Employees at our firm feel motivated and engaged to the work they perform	.336	.568
EVC2: Employees at our firm receive compensation based on their performance in the form of increased pay, allowances, or similar benefits	.287	.605
EVC3: Employees at our firm receive promotions and career growth prospects	.507	.433
EVC4: Employees at our firm develop their professional skillset and industry network	.418	.507
Organization Value Creation		
OVC1: Our firms performs well in terms of sales growth, profitability and shareholder Return on Investment (RoI)	.354	.470
OVC2: Our firm performs well in terms of cost efficiency and productivity	.431	.404
OVC3: Our firm strives for organizational transformation and change.	.231	.570
OVC4: Our firm maintains industry competitiveness because of its Intellectual Property (IP) such as trademarks, copyrights, creative designs, innovative processes, management capabilities etc.	.349	.473
Customer Value Creation		
CVC1: Our customers/clients/end-users are happy and satisfied with our services.	.531	.672
CVC2: Our firm offers cost-effective and quality services at competitive rates to the customers/clients/end-users.	.521	.678
CVC3: Our firm continually improves service quality and efficiency based on customer/client/end-user feedback.	.557	.657
CVC4: Our firm undertakes mutually beneficial agreements with the suppliers and partners.	.496	.693

Table 6.6: Item-Total Correlation for Multi-Stakeholder Value Creation

6.3. Exploratory Factor Analysis (EFA)

EFA assists in evaluating the main dimensions in a manner to develop a model or theory using various latent constructs representing a set of measures/items (Williams et al., 2010). While most of the measures for each construct were adapted from prior literature with a few derived after extensive review of literature, nevertheless, we felt need to additionally conduct EFA as these measures were being operationalized in the unique context of this research. Accordingly, EFA assessment of each model constructs was separately performed. Other key considerations while conducting EFA included: a) ensuring data suitability for factor analysis, b) determining the method of extraction, c) selecting rotation method, d) interpreting and labelling findings. According to MacCallum et al. (1999), ensuring data suitability and appropriateness for EFA, one may consider the sample size or sample to variable ratio (n/p). While a sample size of around 200 is considered fair and 300 as good (Williams et al., 2010), the sample size comprising of 292 datasets was deemed sufficient for EFA. Nonetheless, MacCallum et al. (1999) also warn that for EFA, this rule of thumb could be misleading as the sample size could be relatively small if the communalities are greater than 0.60. Hence, we additionally evaluated sample size using sample to variable ratio which appeared to be (20:1) and considered acceptable consistent with Williams et al. (2010).

6.3.1. Data Factorability

The first step towards factor analysis is to conduct data suitability assessment for the factor analysis. According to Pallant (2016), there are two concerns when determining data factorability i.e. the sample size and level of relationship strength between the items. The two measures provided by SPSS to assess data factorability are:

- a) Kaiser-Meyer-Olkin (KMO): It estimates adequateness of sampling.
- b) Bartlett's Test-of-Sphericity: As per this test, the factor analysis may be considered appropriate for assessment of the study variables if KMO is 0.6 or higher, and Bartlett's test-of-sphericity has $p < 0.05$ (Pallant, 2016).

According to Hair et al. (2014), KMO must at least exceed 0.50 for each variable otherwise the variable with values less than 0.50 should be omitted. The results in the table 6.7 below show that KMO for all the variables is either equal to or greater than 0.6. Besides, the Bartlett's test-of-sphericity, by presenting $p < 0.05$, demonstrates data suitability for the factor analysis.

	Constructs	KMO	Bartlett's Test-of-Sphericity		
			Approx. Chi-Square	df	Sig.
Ability-Enhancing HPWPs					
1	Employee Training and Development	.759	233.732	6	.000
2	Employee Knowledge Sharing	.674	191.534	6	.000
Motivation-Enhancing HPWPs					
3	Employee Empowerment	.601	59.272	6	.000
4	Performance Based Reward	.719	183.807	6	.000
5	Shared Leadership	.676	93.388	6	.000
Opportunity-Enhancing HPWPs					
6	Open & Collaborative Communication	.756	208.712	6	.000
7	Interpersonal Trust	.695	169.677	6	.000
8	Teamwork Quality	.728	161.337	6	.000
Intellectual Capital					
9	Human capital	.602	92.903	3	.000
10	Structural capital	.607	83.492	3	.000
11	Relational capital	.644	128.014	3	.000
Multi-Stakeholder Value Creation					
12	Employee Value Creation	.671	123.563	6	.000
13	Organisation Value Creation	.645	97.334	6	.000
14	Customer Value Creation	.753	231.524	6	.000

Table 6.7: Data Factorability Using KMO and Bartlett's Measures of Sphericity

6.3.2. Factor Extraction

After data factorability assessment, the next step was to determine the appropriate extraction and rotation method. We utilized factor extraction to examine whether all measurable items sufficiently represented latent variables or constructs used in this study. Researchers can extract representative items and constructs using multiple extraction methods. These include: Principal Component Analysis (PCA) and two EFA methods i.e. Principal Axis Factoring and Maximum Likelihood Method. The Maximum Likelihood Method is suitable when data are normally distributed and Principal Axis Factoring is appropriate when data violate this assumption (Costello and Osborne, 2005; Lezzoni and Pritts, 1991). The PCA method, however, is utilized to reduce data dimensionality (Jolliffe, 2002). It provides adequate combination or grouping of items for each component (Fabrigar et al., 1999). Hence, we applied PCA to extract items under each study construct and assessed the factor loadings and the communalities derived.

6.3.3. Exploratory Factor Analysis Results

In this study, we conducted Exploratory Factor Analysis for each variable to establish and determine as to what extent each measurable item's variance is explained by the retained study variables (components) through an assessment of communalities. The values less than 0.3 for communalities may possibly show lack of item fit with the others within its component variable (Pallant, 2016). We also examined factor loading for each item. As per Hair et al. (2014), an item of a component or factor will have practical significance for that component when its factor loading is 0.5 or above. Following these guidelines, we assessed the items representing each construct as indicated by the EFA results.

The results in the tables 6.8 to 6.12 below make it clear that all the measurement items demonstrate a factor loading of more than the minimally-recommended value i.e. 0.5, which implies that all the items explain at least 50% of the variance in the respective constructs. We consider these factor loadings to be significant since they are derived on the basis of a sample of 292. To this end, Hair et al. (2014) consider the factor loading value of 0.35 as sufficiently acceptable if the sample size is 250. All the items generally fit well with one another since there is no communality value of less than 0.3. However, the item OVC3 has a communality score of 0.248, which implies it may not sufficiently measure organisation value creation as other items grouped under this construct. We consider this item for elimination in the Confirmatory Factor Analysis.

Variable Description	Communalities Extraction	Component 1
Employee Training and Development (% of variance = 55.926)		
ETD1: Our firm offers various kinds of trainings and professional development programs to the employees	.543	.737
ETD2: Our firm offers continuous development opportunities to the employees	.545	.738
ETD3: Our firm offers mentoring and guidance on work-related knowledge, skills and competencies	.514	.717
ETD4: Our firm offers training and learning opportunities to both new and existing employees	.636	.797
Employee Knowledge Sharing (% of variance = 51.351)		
EKS1: Employees at our firm share knowledge and learn from the experiences of each other	.459	.677
EKS2: Employees at our firm frequently help their colleagues through exchange of knowledge and expertise	.503	.709

EKS3: Employees at our firm participate in knowledge-sharing and mutual learning activities such as: meetings, discussions and trainings.	.581	.762
EKS4: Employees at our firm utilize various information and knowledge-sharing tools & technologies such as email, VPN, intranet, online knowledge databases, video-conferencing etc. to ease sharing of knowledge	.512	.715
*Extraction Method = PCA		

Table 6.8: Communalities and Factor Loadings for Ability-Enhancing HPWPs

Variable Description	Communalities Extraction	Component 1
Employee Empowerment (% of variance = 38.915)		
EE1: Employees at our firm are encouraged to take actions and participate in decision-making	.503	.709
EE2: Employees at our firm are empowered to work in self-managed-teams to effectively perform job duties	.465	.682
EE3: Employees at our firm are delegated to exercise discretionary efforts without the involvement of the supervisors	.367	.517
EE4: Employees at our firm are allowed flexibility at the workplace such as work from home or other locations	.321	.567
Performance Based Reward (% of variance = 51.875)		
PBR1: Employees at our firm receive reward/incentive for their outstanding performance and contribution at the workplace	.562	.750
PBR2: Employees at our firm receive compensation package based on their performance such as extra allowance, bonus, commission or other financial benefits etc.	.468	.684
PBR3: Employees at our firm are recognized for their contribution in the form of awards and recognition programs such as letter of appreciation, acknowledgements, employee of month/year award etc.	.580	.762
PBR4: Employees at our firm are recognized for their productive work behavior which may include helping team members, solving problems, improving work processes etc.	.464	.681

Shared Leadership (% of variance = 43.84)		
SL1: Leadership at our firm shares a common purpose and collective responsibility with the employees	.335	.579
SL2: Leadership encourages employees to share ideas & suggestion for improvement	.464	.681
SL3: Leadership at our firm communicates decisions to the employees	.555	.745
SL4: Leadership at our firm makes decisions having consensus of the employees	.400	.632
*Extraction Method = PCA		

Table 6.9: Communalities and Factor Loadings for Motivation-Enhancing HPWPs

Variable Description	Communalities Extraction	Component 1
Open & Collaborative Communication (% of variance = 54.32)		
OC1: Employees at our firm are encouraged to freely communicate & interact with each others to collectively achieve set goals	.499	.707
OC2: Employees at our firm frequently collaborate to support the work activities of each other	.579	.761
OC3: Employees at our firm cooperate across various organizational units to solve problems and improve processes	.499	.707
OC4: Employees at our firm are satisfied with the level of communication and collaboration that exist between them	.596	.772
Interpersonal Trust (% of variance = 49.75)		
IT1: At our firm a considerable level of trust relationship exists between the employees	.387	.622
IT2: At our firm employees demonstrate mutual trust on the intentions of each other	.615	.784
IT3: At our firm employees possess mutual trust on the actions of their colleagues	.645	.803
IT4: At our firm employees extend confidence in the abilities of each other when it comes to performing routine tasks	.343	.586
Teamwork Quality (% of variance = 50.552)		
TWQ1: Employees at our firm frequently communicate and coordinate in teams through emails, phone calls, meetings, conversations etc.	.479	.692

TWQ2: Employees at our firm adequately contribute in teams to the best of their knowledge and abilities	.556	.746
TWQ3: Employees at our firm take efforts for resolving issues and conflicts arising within teams with consensus	.532	.729
TWQ4: Employees at our firm work in harmony and mutually support each other in a team environment	.456	.675
*Extraction Method = PCA		

Table 6.10: Communalities and Factor Loadings for Opportunity-Enhancing HPWPs

Variable Description	Communalities Extraction	Component 1
Human Capital (% of variance = 55.13)		
HC1: Employees at our firm possess required knowledge and skills for successfully performing their job duties	.639	.799
HC2: Employees at our firm possess relevant qualification and experience in their particular job functions	.399	.632
HC3: Employees at our firm possess flexible attitude towards learning new knowledge and adapting changes	.616	.785
Structural Capital (% of variance = 54.30)		
SC1: Most of our firm's data/information/knowledge is stored in the form of electronic records, databases, policy documents, manuals, reports etc.	.415	.644
SC2: Our firm's information systems and IT capabilities efficiently support business processes and activities	.599	.774
SC3: Our firm protects its intellectual property and organizational knowledge through copyrights/trademarks/design secrets/patents etc.	.615	.784
Relational Capital (% of variance = 59.71)		
RC1: Our firm maintains working relationships with its external stakeholders such as: customers, clients, end-users, suppliers and partners.	.652	.807
RC2: Our firm maintains goodwill, loyalty and better brand image of the clients/customers/end users	.628	.793
RC3: Our firm successfully negotiates and creates new opportunities for business collaboration and partnership with suppliers and partners	.511	.715
*Extraction Method = PCA		

Table 6.11: Communalities and Factor Loadings for Intellectual Capital

Variable Description	Communalities Extraction	Component 1
Employee Value Creation (% of variance = 46.09)		
EVC1: Employees at our firm feel motivated and engaged to the work they perform	.395	.628
EVC2: Employees at our firm receive compensation based on their performance in the form of increased pay, allowances, or similar benefits	.302	.550
EVC3: Employees at our firm receive promotions and career growth prospects	.629	.793
EVC4: Employees at our firm develop their professional skillset and industry network	.517	.719
Organizational Value Creation (% of variance = 43.40)		
OVC1: Our firms performs well in terms of sales growth, profitability and shareholder Return on Investment (RoI)	.469	.685
OVC2: Our firm performs well in terms of cost efficiency and productivity	.554	.744
OVC3: Our firm strives for organizational transformation and change	.248	.498
OVC4: Our firm maintains industry competitiveness because of its Intellectual Property (IP) such as trademarks, copyrights, creative designs, innovative processes, management capabilities etc.	.465	.682
Customer Value Creation (% of variance = 55.78)		
CVC1: Our customers/clients/end-users are happy and satisfied with our services	.566	.752
CVC2: Our firm offers cost-effective and quality services at competitive rates to the customers/clients/end-users	.550	.742
CVC3: Our firm continually improves service quality and efficiency based on customer/client/end-user feedback	.599	.774
CVC4: Our firm undertakes mutually beneficial agreements with the suppliers and partners	.516	.718
*Extraction Method = PCA		

Table 6.12: Communalities and Factor Loadings for Multi-Stakeholder Value Creation

6.4 Assessing Common Method Variance (CMV)

CMV denotes the variance accredited to measuring method as opposed to the construct being captured by the measurement item (Podsakoff et al., 2003). It may occur with self-reported surveys collected from a single participant in the same period of time (Podsakoff et al., 2012; Podsakoff and Organ, 1986). Common Method Bias affects measurement scale reliability, co-variation between the constructs and structural relationships between the variables. There are four alternative approaches to assessing common method variance i.e. traditional Multitrait-Multimethod (MTMM) procedure, MTMM using CFA, Marker-variable test and Harman's single-factor test (Malhotra et al., 2006). Like many studies, we use the Harman's single-factor test to assess CMV. To conduct this test, all the variables underwent factor analysis using both EFA and CFA. Using EFA, we entered all 53 measurable variables into a factor analysis. The basic assumption was that if CMV was significantly present, either a single factor should appear, or a general factor should explain significant co-variance within the independent variables (Podsakoff and Organ, 1986).

The table 6.13 below presents the SPSS output on Harman's single-factor test for the first 15 factors extracted. The factor analysis extracts not just 1 factor but 14 factors with Eigen values greater than 1. This implies non-existence of common method variance in our data. Hence, through CFA, we modelled all 53 observable variables as indicators of a single factor with an assumption that common method variance exists if there is a data fit in the hypothesised model (Malhotra et al., 2006). However, since $p < 0.05$, CFI=0.703, GFI=0.739, and AGFI=0.718, we found no data fit within the hypothesised model. We thus conclude that there was no common method variance in our datasets.

Total Variance Explained						
Component	Initial Eigenvalues			Extraction Sums-of-Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	12.767	24.089	24.089	12.767	24.089	24.089
2	2.343	4.420	28.509	2.343	4.420	28.509
3	1.997	3.767	32.276	1.997	3.767	32.276
4	1.640	3.095	35.371	1.640	3.095	35.371
5	1.582	2.985	38.356	1.582	2.985	38.356
6	1.494	2.819	41.175	1.494	2.819	41.175
7	1.409	2.659	43.834	1.409	2.659	43.834
8	1.333	2.515	46.350	1.333	2.515	46.350
9	1.247	2.353	48.703	1.247	2.353	48.703
10	1.229	2.318	51.021	1.229	2.318	51.021
11	1.215	2.292	53.313	1.215	2.292	53.313

12	1.138	2.146	55.460	1.138	2.146	55.460
13	1.089	2.056	57.515	1.089	2.056	57.515
14	1.027	1.937	59.452	1.027	1.937	59.452
15	.999	1.885	61.337			
Extraction Method = PCA						

Table 6.13: Harman's Single-Factor Test for Assessing Common Method Bias

6.5 Assessing Normality and Outliers

Assessing normality involves determining the extent to which data deviate from the normal distribution. It analyses the lack of symmetry (skewness) and lack of pointiness (kurtosis) in data distribution (Ghasemi and Zahediasl, 2012). There are many tests for evaluating data normality, the popular amongst those is the assessment of Z values using Shapiro-Wilk (S-W) test and Kolmogorov-Smirnov (K-S) test. The normally distributed data show zero values of skewness and kurtosis and a non-significant p-value for K-S and S-W (Ghasemi and Zahediasl, 2012). Assessing normality is important in this study because the estimation methods applied in SEM are based on normality assumptions. For example, it is assumed in the Maximum Likelihood method that data follow normal distribution, while Asymptotically Distribution Free (ADF) estimation method does not assume normal distribution.

The table 6.14 and 6.15 below presents a multivariate assessment of normality using Z-value for skewness & kurtosis and using K-S & S-W tests. The test results indicate non-normality of data since the skewness and kurtosis are not zero, and p-values for K-S and S-W tests are significant. As per Curran et al. (1996), if skewness < 2 and kurtosis < 7, the data are considered to be moderately non-normal. The Z-values for the skewness and kurtosis slightly falls within ± 3.6 , a value that is above the acceptable threshold of ± 2.58 for a normal distribution in large samples of 200 and more (Ghasemi and Zahediasl, 2012). To improve data distribution to a desired level of normality, we chose to delete outliers over transforming data because these retained the assumption of linearity (Gao et al., 2008). We conducted a multivariate analysis to identify outliers using Mahalanobis D^2 measure. Mahalanobis distances represent 'squared distance' in standard units of the observation vector from the sample means vector for all the variables (Gao et al. 2008). This performs a comparison of how each observed vector is positioned with regard to the centre of observed variables (Hair et al., 2014). We found and deleted two cases that were indicated as outliers. Our final datasets for further analyses, therefore, contained 290 cases.

Variable	Mean	5% Trimmed Mean	Skewness (SE 0.143)	Critical Ratio (Z) Skewness	Kurtosis (SE 0.284)	Critical Ratio (Z) Kurtosis
Ability-Enhancing HPWPs						
ETD	4.14	4.17	-0.430	-3.01	-0.047	-0.16
EKS	4.15	4.16	-0.370	-2.59	0.038	0.13
Motivation-Enhancing HPWPs						
EE	4.17	4.19	-0.387	-2.71	0.046	0.16
PBR	3.89	3.92	-0.386	-2.69	-0.292	-1.03
SL	4.08	4.09	-0.257	-1.79	-0.052	-0.18
Opportunity-Enhancing HPWPs						
OC	4.12	4.14	-0.463	-3.24	-0.193	-0.68
IT	4.08	4.09	-0.252	-1.76	0.002	0.01
TWQ	4.19	4.21	-0.450	-3.15	0.105	0.37
Intellectual Capital						
HCC	4.14	4.16	-0.52	-3.62	0.29	1.01
SCC	4.10	4.12	-0.44	-3.10	0.32	1.12
RCC	4.18	4.19	-0.11	-0.78	-0.58	-2.03
Multi-stakeholder Value Creation						
EVC	4.00	4.01	-0.16	-1.14	-0.30	-1.04
OVC	3.96	3.96	-0.11	-0.76	-0.56	-1.98
CVC	4.07	4.08	-0.27	-1.91	-0.38	-1.32

Table 6.14: Assessment of Normality Before Deleting Outliers

Tests of Normality						
	Kolmogorov-Smirnov^a			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	Df	Sig.
ETD	.123	292	.000	.957	292	.000
EKS	.129	292	.000	.961	292	.000
EE	.121	292	.000	.958	292	.000
PBR	.133	292	.000	.966	292	.000
SL	.128	292	.000	.966	292	.000
OC	.131	292	.000	.956	292	.000
IT	.174	292	.000	.957	292	.000
TWQ	.148	292	.000	.951	292	.000
HCC	.179	292	.000	.935	292	.000

SCC	.159	292	.000	.945	292	.000
RCC	.174	292	.000	.936	292	.000
EVC	.116	292	.000	.971	292	.000
OVC	.143	292	.000	.964	292	.000
CVC	.143	292	.000	.957	292	.000
a Lilliefors Significance Correction						

Table 6.15: Assessment of Normality Using K-S and S-W Tests

6.6. Structural Equation Modelling (SEM)

SEM, a multi-variate statistical analyses method, is used for effectively measuring and testing the reliability of the relationship between structural model variables (Hair et al., 2014). The SEM analyses primarily involved 2-step assessment process. These include the activities comprising of measurement model assessments which are then followed by the activities involving structural model assessments (Hair et al., 2006). The measurement model illustrates the relationships among the constructs and their corresponding measures, thereby determining whether these constructs are appropriately measured or not. The structural model mainly tests the relationship between various constructs through the hypothesized paths, thereby enabling the hypotheses testing (Allothman, 2016; Hair et al., 2014). As part of covariance-based SEM, we first conducted CFA to derive the measurement models for all the study variables, which was followed by the structural model assessment.

6.6.1. Confirmatory Factor Analysis (CFA)

Given that EFA provided preliminary assessment of the measurement items that represented various model constructs, nonetheless, it didn't provide a substantial account on the construct uni-dimensionality and validity which are considered key factors of measurement model assessment (Hair et al., 2006). Hence, it was equally important to conduct Confirmatory Factor Analysis (CFA). In this chapter, we have conducted CFA that serves as a key part of the SEM analyses technique. Generally speaking, CFA verifies the factorial structure of observed variables and ascertains whether the link between these variables and their corresponding latent constructs is existent or otherwise (Hair et al., 2006; Suhr, 2006). Accordingly, the sections 6.6.1.1 to 6.6.1.3 below present the details of CFA analyses and results.

6.6.1.1. Model Fit Assessment and Methods of Estimation

There are multiple methods of model estimation such as Maximum Likelihood (ML), Generalised Least Squares (GLS), Scale-free Least Squares, Unweighted Least squares and Asymptotically Distribution-Free (ADF). We applied ML estimation, which is normally theory

estimation method. In addition to the distributional assumption, ML and other estimation methods build an assumption that the sample structure tested correctly represents the structure existing in the population (Curran et al., 1996). According to Henly (1993), ML estimation is a robust approach in SEM, allowing for a standard test of model-fit and providing asymptotically-unbiased, efficient and reliable parameter estimates and standard error measurements for the large samples (Curran et al., 1996). However, when data is moderately non-normal with at least four categories of the likert scale, the researcher would improve the accuracy of model p -statistic values and parameter estimates through bootstrapping, particularly using the Bollen-Stine Bootstrap (Finney and Distefano, 2006). Since our data was moderately non-normal (skewness=2, kurtosis=7), constituted a reasonably large sample of 292 cases and measured via a five point Likert scale, we choose to apply ML with bootstrapping to estimate our measurement and structural models.

To assess model fit, we considered a number of absolute-fit and incremental-fit indices. The absolute-fit indices encompassed Chi-square p -value, relative chi-square, Root Mean Squared Error-of-Approximation (RMSEA), Goodness-of-fit Index (GFI) and the Adjusted-Goodness-of-fit Index (AGFI). Among these indices, the Chi-square statistic serves as a very popular model fit index but is severely affected by population size and data normality, leading to high levels of model rejection owing to small samples or severe deviations from the normality (Hooper et al., 2008). To overcome the limitations associated with this index, we followed Bollen-Stine test statistic and relative chi-square index. RMSEA is yet another highly recommended and trusted indicator of model fit because it is the best detector of model misspecification (Byrne, 2016). The GFI estimates the proportion of variance enumerated by the covariance in the estimated population. Whereas, the AGFI performs the adjustment in GFI by evaluating the degree-of-freedom of reduction fit in more saturated models (Hooper et al., 2008; Tabchnick and Fidell, 2007). Therefore, we concluded absolute model-fit on the basis of:

- P -value (Bollen-stine p) > 0.05 (Bollen and Stine, 1992; Finney and Distefano, 2006).
- $\chi^2/df < 3.0$ (Kline, 2016; Hair et al., 2006).
- $RMSEA < 0.08$ (Hu and Bentler, 1999; Hair et al., 2006).
- $GFI > 0.95$ and $AGFI > 0.95$ (Hooper et al., 2008).

Incremental model-fit indices include Comparative-Fit-Index (CFI). The CFI is a reviewed method of Normed-Fit-Index (NFI) that relatively demonstrates a sensitivity to sample size. The CFI considers whether all the latent variables are uncorrelated by comparing covariance matrix samples with the null-model (Hooper et al., 2008). CFI is a good indicator of incremental fit as it is sensitive to misspecification of factor loadings and therefore reduces the possibility of Type-1 error in the samples of small size (Hooper et al., 2008; Hu and Bentler, 1999; Curran et al., 1996). Thus, we concluded incremental model-fit based on the criteria:

- $CFI \geq 0.95$ (Hooper et al., 2008; Curran et al., 1996; Hu and Bentler, 1999).

6.6.1.2. Assessment of Construct Validity

To generate meaningful interpretation of relationships and effects between the latent variables, validity and reliability of the measurement variables should be assessed (Henseler et al., 2015). We previously analysed construct reliability using alpha coefficient and item-total correlation. Now we assess construct validity by determining Convergent and Discriminant validities of measurement models. Convergent Validity determines as to what level the two measures are correlated for the same construct being measured. Whereas, the Discriminant Validity determines as to what degree two measures representing different constructs are conceptually different (Kline, 2016; Hair et al., 2014). Discriminant Validity indicates operational distinctiveness of the respective construct by measuring the characteristics not captured by any other construct (Henseler et al., 2015). Therefore, based on following criteria, Convergent and Discriminant validities of all the measurement models have been assessed in the next section:

- We concluded Convergent Validity based on Hair et al. (2014) criterion, where constructs have convergent validity when standardised factor loadings are greater or equal to 0.5.
- We concluded Discriminant Validity based on Kline (2016) criterion, where correlation between constructs is less than 0.85. For a construct, it is essential to demonstrate no correlation with the other measures against which it is supposed to be different (Henseler et al., 2015).

6.6.1.3. Measurement Model Assessment

In this section, we present measurement model and measurement estimates for the constructs and measures within HPWPs, IC and MSVC. Starting with HPWPs, we present measurement models separately for AMO HPWPs. We then show measurement models for IC and MSVC.

6.6.1.3.1. Measurement Model: Ability-Enhancing-HPWPs

The figure 6.1 below presents the three-factor measurement model for the Ability-enhancing-HPWPs. The results in the table 6.1.6 show that CFA retained all four-measurement items for the construct 'Employee Training and Development' i.e. ETD1, ETD2, ETD3 and ETD4. It also retained all four measurement items for the other construct 'Employee Knowledge Sharing' i.e. EKS1, EKS2, EKS3 and EKS4. We therefore retained a 2-factor measurement model for Ability-enhancing HPWPs with item factor loadings between 0.548 and 0.725. We concluded model fit at $\chi^2/df=2.263$, CFI=0.952, GFI=0.965 and RMSEA=0.066. Hence, the model demonstrated Convergent Validity given that all factor loading values were above 0.5. The research model also achieved Discriminant Validity as the correlation between constructs was less than 0.85.

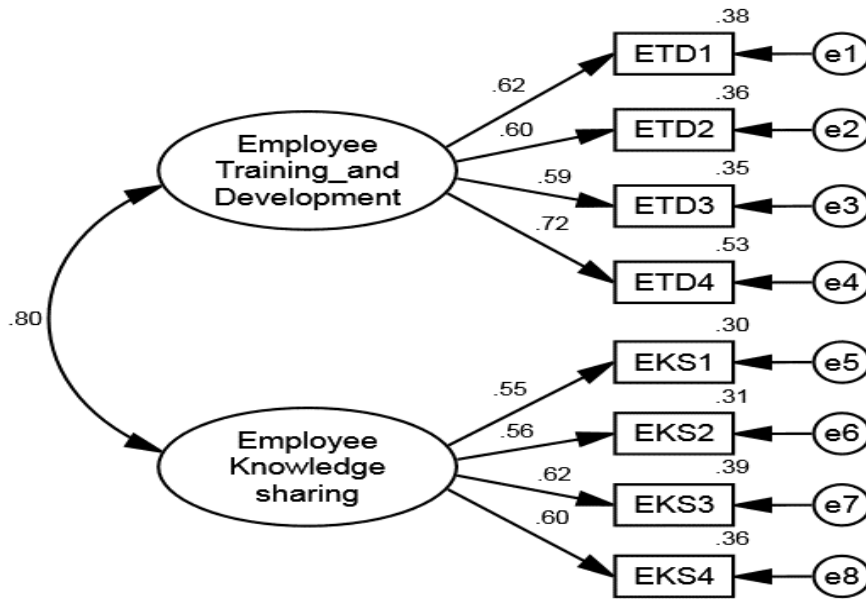


Figure 6.1: Measurement Model for Ability-Enhancing Practices

Observed Variables		Factor loading	t-value	R ²
Employee Training and Development				
ETD1	Our firm offers various kinds of trainings and professional development programs to the employees	.615	fixed par	.378
ETD2	Our firm offers continuous development opportunities to the employees	.604	7.769***	.365
ETD3	Our firm offers mentoring and guidance on work-related knowledge, skills and competencies	.588	7.624***	.346
ETD4	Our firm offers training and learning opportunities to both new and existing employees	.725	8.649***	.525
Employee Knowledge Sharing				
EKS1	Employees at our firm share knowledge and learn from the experiences of each other	.548	fixed par	.301
EKS2	Employees at our firm frequently help their colleagues through exchange of knowledge and expertise	.558	6.569***	.311
EKS3	Employees at our firm participate in knowledge-sharing and mutual learning activities such as: meetings, discussions, trainings etc.	.624	7.001***	.390
EKS4	Employees at our firm utilize various information and knowledge-sharing tools & technologies such as email, VPN, intranet, online knowledge databases, video-	.601	6.860***	.361

conferencing etc. to ease sharing of knowledge			
Model fit indices $\chi^2=43$; $df=19$; $\chi^2/df=2.263$;			
CFI=0.952; GFI=0.965; AGFI=0.934; RMSEA=0.066; $p=0.01$			
*** $p<0.001$			

Table 6.16: Measurement Estimates for Ability-Enhancing HPWPs

6.6.1.3.2. Measurement Model: Motivation-Enhancing-HPWPs

The figure 6.2 below presents the 3-factor measurement model for the Motivation-enhancing-HPWPs. The results in the table 6.17 evince that CFA retained two measurement items for the construct 'Employee Empowerment i.e. EE1 and EE2. Measurement items EE3 and EE4 were eliminated from the model with an aim to enhance model-fit, since the regression weight for these were as low as 0.25 and 0.30 respectively. However, we retained all four measurement items for the construct 'Performance Based Reward i.e. PBR1, PBR2, PBR3 and PBR4. Lastly, we also retained four measurement items for the construct 'Shared Leadership' which included SL1, SL2, SL3 and SL4. The CFA retained the measurement model for Motivation-enhancing practices. We concluded model-fit at $\chi^2/df=1.65$, CFI=0.954, GFI=0.963 and RMSEA=0.047. Hence, measurement model for motivation-enhancing practices achieved Convergent Validity since majority of factor loading for the retained variables were greater than 0.5, except factor loading for SL1 and SL2, which are not significantly less than 0.5. The model also achieved Discriminant Validity since all the correlations between constructs are below 0.85.

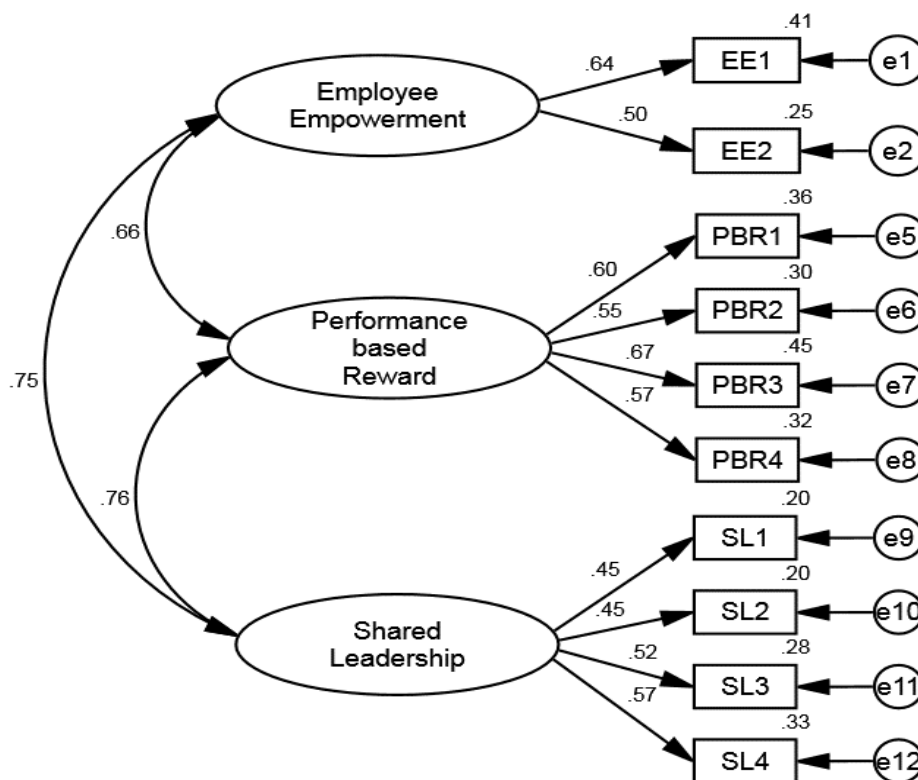


Figure 6.2: Measurement Model for Motivation-Enhancing HPWPs

Observed Variables		Factor loading	t-value	R ²
Employee Empowerment				
EE1	Employees at our firm are encouraged to take actions and participate in decision-making	.643	fixed par	.414
EE2	Employees at our firm are empowered to work in self-managed-teams to effectively perform job duties	.503	5.283***	.253
Performance Based Reward				
PBR1	Employees at our firm receive reward/incentive for their outstanding performance and contribution at the workplace	.602	fixed par	.362
PBR2	Employees at our firm receive compensation package based on their performance such as extra allowance, bonus, commission or other financial benefits etc.	.548	6.848***	.300
PBR3	Employees at our firm are recognized for their contribution in the form of awards and recognition programs such as letter of appreciation, acknowledgements, employee of month/year award etc.	.668	7.703***	.447
PBR4	Employees at our firm are recognized for their productive work behaviour which may include helping team members, solving problems, improving work processes etc.	.570	7.030***	.325
Shared Leadership				
SL1	Leadership at our firm shares a common purpose and collective responsibility with the employees	.447	fixed par	.119
SL2	Leadership encourages employees to share ideas & suggestion for improvement.	.452	4.872***	.204
SL3	Leadership at our firm communicates decisions to the employees	.525	5.262***	.275
SL4	Leadership at our firm makes decisions having consensus of the employees	.571	5.457***	.326
Model fit indices $\chi^2=52.9$; $df=32$; $\chi^2/df=1.65$;				
GFI=0.963; AGFI=0.936; CFI=0.954; RMSEA=0.047, p=0.065				
***p < 0.001				

Table 6.17: Measurement Estimates for Motivation-Enhancing HPWPs

6.6.1.3.3. Measurement Model: Opportunity-Enhancing Practices

The figure 6.3 below presents the 3-factor measurement model for the Opportunity-enhancing practices. Within this variable, we present three constructs i.e. 'Open and Collaborative Communication', 'Interpersonal Trust' and 'Teamwork Quality'. The results in the table 6.18 show that the CFA retained all four measurement variables for each construct. We concluded model-fit at $\chi^2/df=1.634$, CFI=0.957, GFI=0.956 and RMSEA=0.047. Hence, measurement model for Opportunity-enhancing practices achieved desired Convergent Validity as the factor loading values for all the measures were greater than 0.5 except for the 'Interpersonal Trust' item IT4 where the factor loading was 0.465. This value, however, was not significantly below 0.5. The model also achieved Discriminant Validity because the correlation coefficients between constructs were below 0.85.

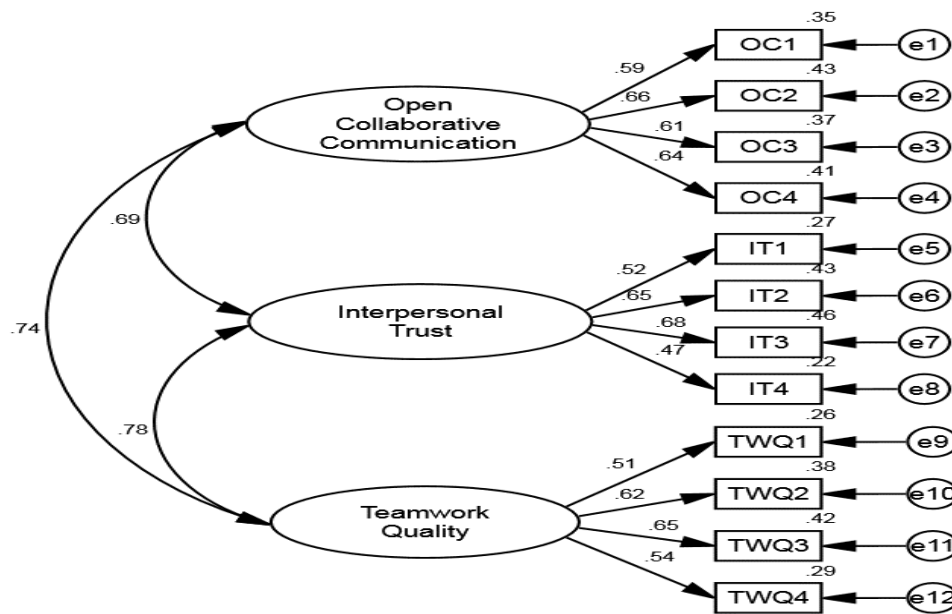


Figure 6.3: Measurement Model for Opportunity-Enhancing HPWPs

Observed Variables		Factor loading	t-value	R ²
Open and Collaborative Communication				
OC1	Employees at our firm are encouraged to freely communicate & interact with each others to collectively achieve set goals	.592	fixed par	.351
OC2	Employees at our firm frequently collaborate to support the work activities of each other	.658	7.901***	.432
OC3	Employees at our firm cooperate across various organizational units to solve problems and improve processes	.606	7.520***	.368
OC4	Employees at our firm are satisfied with the level of	.640	7.780***	.410

	communication and collaboration that exist between them			
Interpersonal Trust				
IT1	At our firm a considerable level of trust relationship exists between the employees	.522	fixed par	.273
IT2	At our firm employees demonstrate mutual trust on the intentions of each other	.654	7.037***	.427
IT3	At our firm employees possess mutual trust on the actions of their colleagues	.677	7.143***	.458
IT4	At our firm employees extend confidence in the abilities of each other when it comes to performing routine tasks	.465	5.761***	.216
Teamwork Quality				
TWQ1	Employees at our firm employees at our firm frequently communicate and coordinate in teams through emails, phone calls, meetings, conversations etc.	.510	fixed par	.260
TWQ2	Employees at our firm employees at our firm adequately contribute in teams to the best of their knowledge and abilities	.616	6.748***	.379
TWQ3	Employees at our firm employees at our firm take efforts for resolving issues and conflicts arising within teams with consensus	.652	6.932***	.425
TWQ4	Employees at our firm employees at our firm work in harmony and mutually support each other in a team environment	.537	6.258***	.289
Model fit indices $\chi^2=83.3$; $df=51$; $\chi^2/df=1.634$; CFI=0.957; GFI=0.956; AGFI=0.933; RMSEA=0.047; p=0.075				
***p < 0.001				

Table 6.18: Measurement Estimates for Opportunity-Enhancing Practices

6.6.1.3.4. Measurement Model: Intellectual Capital

In figure 6.4 below, we present the three-factor measurement model for Intellectual Capital that was comprised of human, structural & relational capitals as three dimensions. The table 6.19 below shows that the CFA retained all three measurement variables for structural capital (SC1, SC2, SC3) and relational capital (RC1, RC2, RC3). However, for human capital, it retains only two measurement items (HC1 and HC3). Hence, the measurement item HC2 was dropped from the model since its factor loading was low at 0.38. We concluded model-fit at $\chi^2/df=1.839$, CFI=0.961, GFI=0.974 and RMSEA=0.054. We additionally observed that the factor loading for item SC1 was 0.452, which was not significantly below 0.5. Overall, the

measurement model for intellectual capital achieved desired Convergent Validity as the factor loading values for all other measures were greater than 0.5. The model also achieved acceptable Discriminant Validity as the correlation coefficients between constructs were below 0.85.

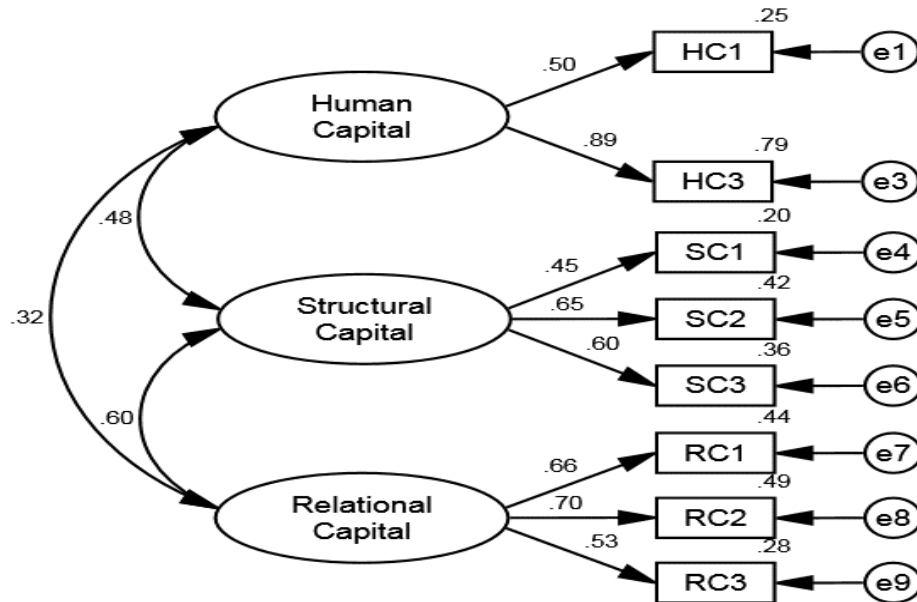


Figure 6.4: Measurement Model for Intellectual Capital

Observed Variables		Factor loading	t-value	R ²
Human Capital				
HC1	Employees at our firm possess required knowledge and skills for successfully performing their job duties	.503	fixed par	.253
HC3	Employees at our firm possess flexible attitude towards learning new knowledge and adapting changes	.886	3.785***	.786
Structural Capital				
SC1	Most of our firm's data/information/knowledge is stored in the form of electronic records, databases, policy documents, manuals, reports etc.	.452	fixed par	.205
SC2	Our firm's information systems and IT capabilities efficiently support business processes and activities	.650	5.481***	.422
SC3	Our firm protects its intellectual property and organizational knowledge through copyrights/trademarks/design secrets/patents etc.	.596	5.393***	.356
Relational Capital				
RC1	Our firm maintains working relationships with its external stakeholders such as: customers, clients, end-users,	.664	fixed par	.440

	suppliers and partners.			
RC2	Our firm maintains goodwill, loyalty and better brand image of the clients/customers/end users	.701	7.199***	.491
RC3	Our firm successfully negotiates and creates new opportunities for business collaboration and partnership with suppliers and partners	.529	6.557***	.280
Model fit indices $\chi^2=31.270$; $df=17$; $\chi^2/df=1.839$; CFI=0.961; GFI=0.974; AGFI=0.946; TLI=0.936; IFI=0.962; RMSEA=0.054				
***p < 0.001; **p<0.005				

Table 6.19: Measurement Estimates for Intellectual Capital

6.6.1.3.5. Measurement Model: Multi-stakeholder Value Creation

Figure 6.5 presents the 3-factor measurement model for Multi-stakeholder Value Creation comprising of Employee, Organisation and Customer Value Creation. The table 6.20 below shows that the CFA retained three measurement items for 'Employee Value Creation' i.e. EVC1, EVC3 and EVC4. However, the measurement item EVC2 was eliminated from the model to improve Discriminant Validity as well as generate absolute model fit given that its factor loading was slightly low at 0.46. Also for 'Organisation Value Creation, the CFA retained three measurement items i.e. OVC1, OVC2 and OVC4. The measurement item OVC3 indicated factor loading of 0.37, thus it was dropped to improve Discriminant Validity and model fit. We additionally observed that the factor loading for item OVC1 was 0.452, which was however not significantly below 0.5. We therefore concluded model-fit at $\chi^2/df=1.719$, CFI=0.962, GFI=0.963 and RMSEA=0.050. Hence, the measurement model for multi-stakeholder value creation achieved desired convergent validity as the factor loading values for all other measures were more than 0.5. The model also achieved acceptable Discriminant Validity as the correlation coefficients between the constructs were below 0.85.

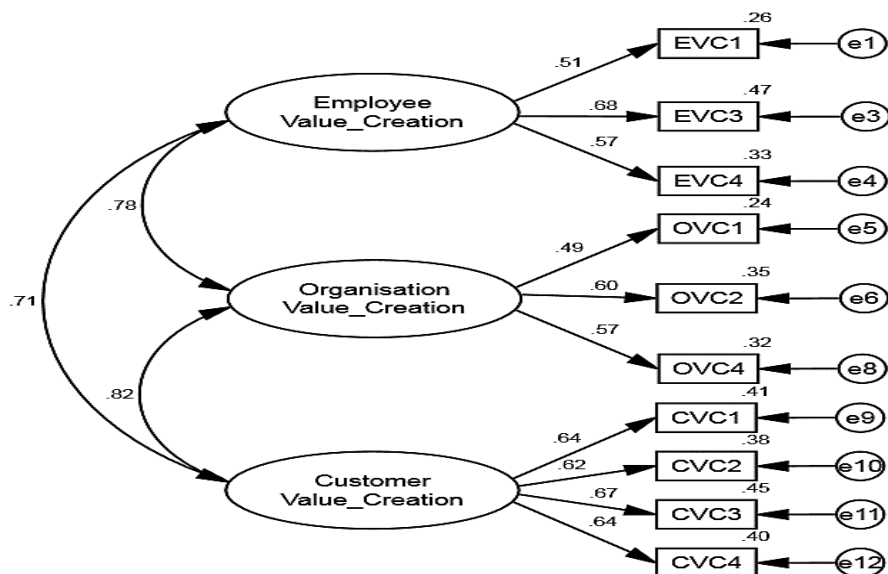


Figure 6.5: Measurement Model for Multi-stakeholder Value Creation

Observed Variables		Factor loading	t-value	R ²
Employee Value Creation				
EVC1	Employees at our firm feel motivated and engaged to the work they perform	.510	fixed par	.260
EVC3	Employees at our firm receive promotions and career growth prospects	.682	6.592***	.466
EVC4	Employees at our firm develop their professional skillset and industry network	.575	6.183***	.330
Organisation Value Creation				
OVC1	Our firms performs well in terms of sales growth, profitability and shareholder Return on Investment (RoI)	.487	fixed par	.237
OVC2	Our firm performs well in terms of cost efficiency and productivity	.595	6.216***	.354
OVC4	Our firm maintains industry competitiveness because of its Intellectual Property (IP) such as trademarks, copyrights, creative designs, innovative processes, management capabilities etc.	.569	6.086***	.324
Customer Value Creation				
CVC1	Our customers/clients/end-users are happy and satisfied with our services	.637	fixed par	.405
CVC2	Our firm offers cost-effective and quality services at competitive rates to the customers/clients/end-users	.620	8.192***	.384
CVC3	Our firm continually improves service quality and efficiency based on customer/client/end-user feedback	.671	8.648***	.450
CVC4	Our firm undertakes mutually beneficial agreements with the suppliers and partners	.636	8.344***	.404
Model fit indices $\chi^2=55$; $df=32$; $\chi^2/df=1.719$; CFI=0.962; GFI=0.963; AGFI=0.937; TLI=0.947; IFI=0.963; RMSEA=0.050				
***p < 0.001; **p<0.005				

Table 6.20: Measurement Estimates for Multi-stakeholder Value Creation

6.6.1.4. Structural Model Assessment

The structural model assessment is a key step towards the structural evaluation of research model and hypotheses testing. In this regard, the latent variables were arranged in a way that these demonstrated a logical relationship between the constructs of the model. These relationships were tested through their corresponding hypotheses in the structural model. Now, in view of the structural model assessment, we analysed the links between HPWPs, IC and Multi-stakeholder Value Creation. To this end, we first analysed the effect of individual work practice within the AMO bundles on each of the three IC dimensions separately. While the individual effect of each work practice was small, however, this allowed us to estimate the effects at the lower level. In the next step, we analysed the combined effects of all the practices within the AMO bundles on each of the IC dimensions separately. We conducted this assessment consistent with the work of scholars like Tregaskis et al. (2013), Posthuma et al. (2013) and Youndt et al. (2004) who suggested to apply HPWPs in bundles as the combined effect of HPWPs is far greater than the individual work practice. Moreover, we went one step further in the structural model assessment by additionally evaluating the effect of HPWP bundles on cumulative IC (all dimensions combined). In examining the above effects, we applied maximum likelihood estimation method with bootstrapping and used the criteria for model fit as $\chi^2/df < 3$, CFI > 0.95, GFI > 0.95 and RMSEA < 0.08. The sections 6.6.1.4.1 to 6.6.1.4.5 show these results.

6.6.1.4.1. Ability-enhancing HPWPs, IC and Multi-stakeholder Value Creation

In figure 6.6 below, we elaborate the relationship between Ability-enhancing practices (employee training & development (ETD), employee knowledge sharing (EKS)), Intellectual Capital and Multi-stakeholder Value Creation. We concluded the Model fit indices $\chi^2=663.016$, $df=292$, $\chi^2/df=2.27$, CFI=0.807, GFI=0.858, AGFI=0.824, RMSEA=0.068. The results show that the construct 'Employee Knowledge Sharing' demonstrates stronger effects on intellectual capital, particularly, on its relational ($\beta=0.70^{***}$) and structural ($\beta=0.55^{***}$) dimensions. Moreover, the construct 'Employee Training & Development' highlights stronger effect on human capital ($\beta=0.53^{***}$) as opposed to the other two dimensions. Overall, the Ability-enhancing practices explain 50% of variance in human and relational capital and 34% of variance in structural capital.

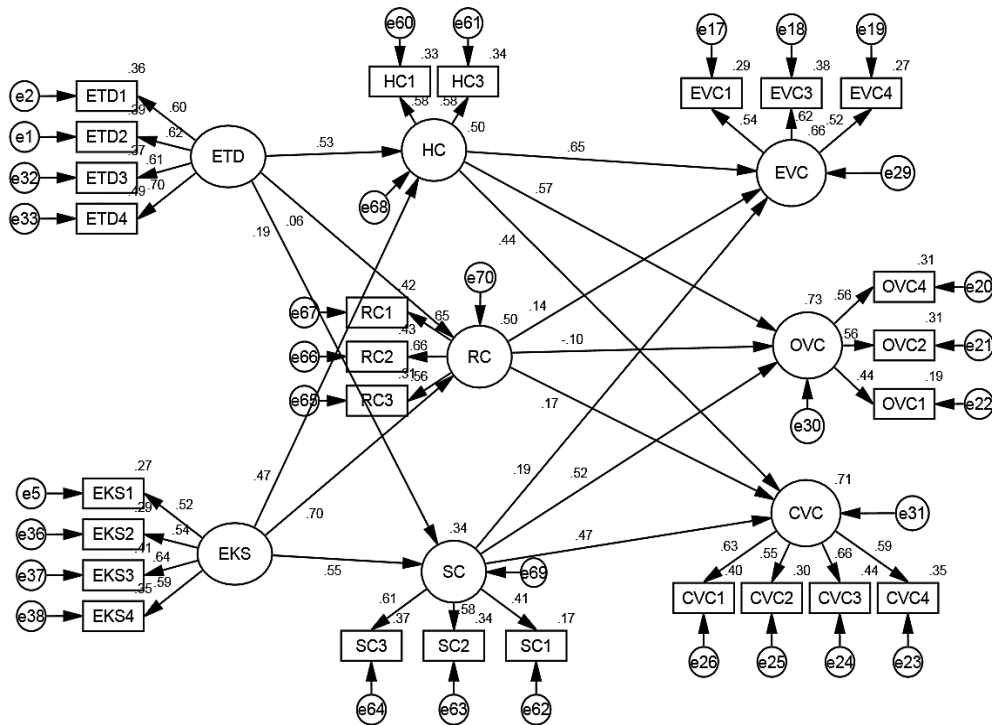


Figure 6.6: Structural-Model for Ability-Enhancing HPWPs, IC and MVC

6.6.1.4.2. Motivation-enhancing HPWPs, IC and Multi-stakeholder Value Creation

The figure 6.7 below elaborates the relationship between Motivation-enhancing practices (Employee Empowerment (EE), Shared Leadership (SL) & Performance Based Reward (PBR)), Intellectual Capital and Multi-stakeholder Value Creation. We concluded model fit indices $\chi^2=695.739$, $df=332$, $\chi^2/df=2.096$, CFI=0.808, GFI=0.854, AGFI=0.822, RMSEA=0.062. The results show that the construct Performance Based Reward has stronger effect on human capital ($\beta=0.65^{***}$) than the other two constructs within motivation-enhancing practices. The construct Shared Leadership has a stronger effect on relational capital ($\beta=0.42^{***}$) than the other two constructs of the motivation-enhancing practices. Moreover, the constructs Shared Leadership and Performance Based Reward posit the same effect on structural capital ($\beta=0.48^{***}$). When viewed as a whole, Shared Leadership has greater effect on intellectual capital, while the construct Employee Empowerment has the lowest effect on the intellectual capital. Overall, Motivation-enhancing practices explain 77%, 28% and 48% of the variance in human, relational, and structural capital respectively.

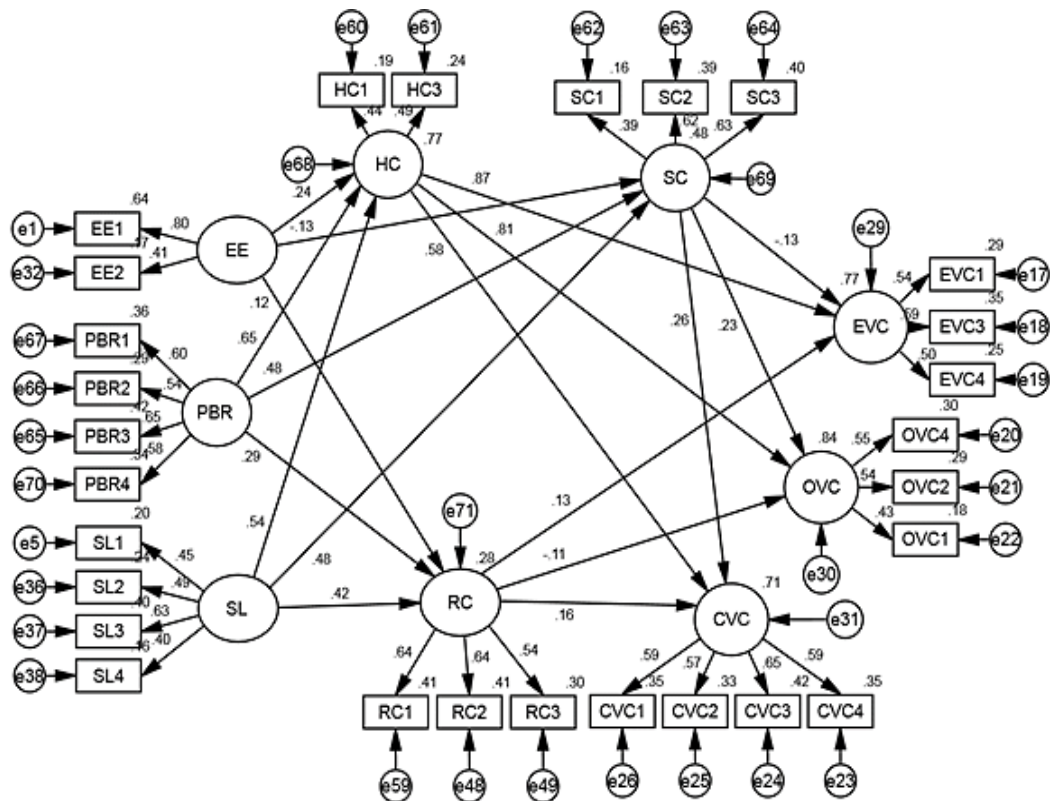


Figure 6.7: Structural Model of Motivation-Enhancing Practices, IC and MVC

6.6.1.4.3. Opportunity-enhancing HPWPs, IC and Multi-stakeholder Value Creation

In figure 6.8, we elaborate the relationship between Opportunity-enhancing practices (Open and Collaborative Communication (OC), Interpersonal Trust (IT) & Teamwork Quality (TWQ), Intellectual Capital and Multi-stakeholder Value Creation. We concluded model fit indices $\chi^2=1016.7$, $df=387$, $\chi^2/df=2.627$, $GFI=0.815$, $AGFI=0.778$, $CFI=0.736$, $RMSEA=0.075$. The results show that the construct Teamwork Quality has stronger effect on human capital ($\beta=0.65^{***}$) than the other two constructs of the Opportunity-enhancing practices. On the other hand, the construct Open and Collaborative Communication has stronger but similar effect on structural ($\beta=0.40^{***}$) and relational ($\beta=0.40^{***}$) capital dimensions as compared to Interpersonal Trust and Teamwork Quality. Overall, Teamwork Quality and Open Communication have notable effects on intellectual capital while Interpersonal Trust has the least and mainly non-significant effect on intellectual capital. Opportunity-enhancing practices explain 69%, 27% and 30% of the variance in human, relational, and structural capital respectively.

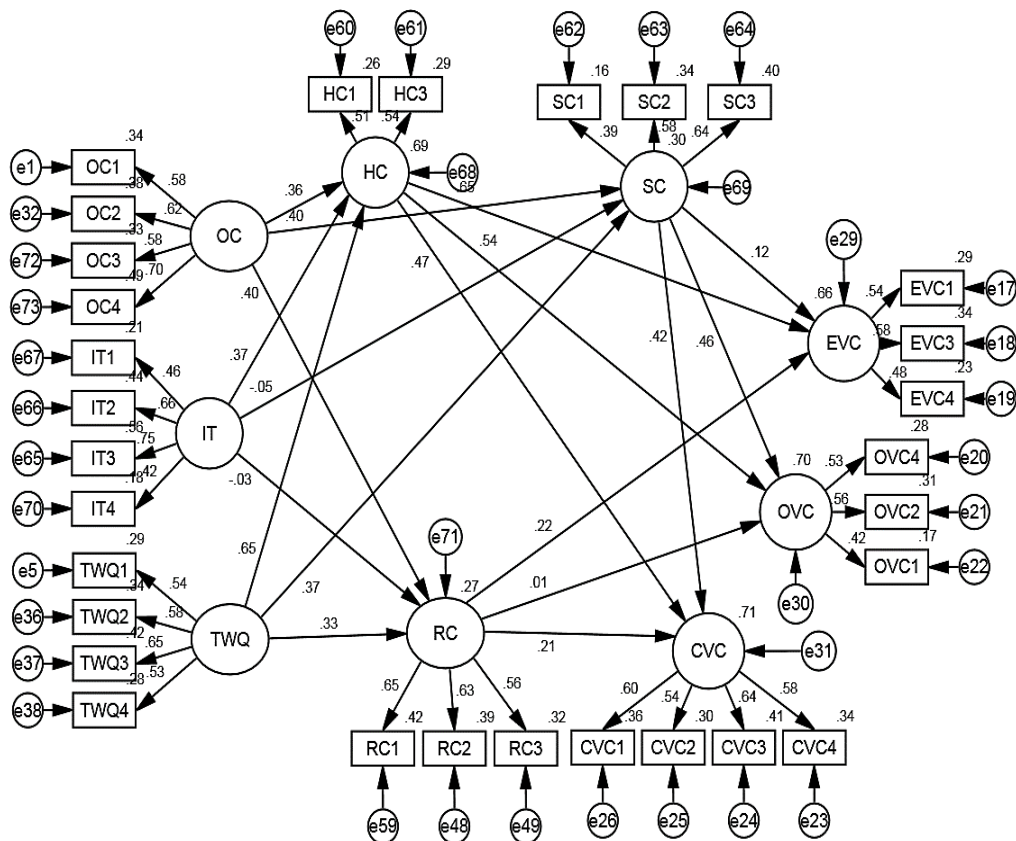


Figure 6.8: Structural Model for Opportunity-Enhancing Practices, IC and MVC

6.6.1.4.4. Structural Model of HPWPs, IC (Separate Dimensions) and Multi-stakeholder Value Creation

The structural model as in figure 6.9 below presents the effects of HPWP bundles on each of three intellectual capital dimensions separately and subsequently the effect of individual IC dimensions on each category of Multi-stakeholder Value Creation. The overall results of the structural model are discussed below:

- Ability-enhancing HPWPs (AEH) demonstrate a positive effect on structural ($\beta=0.19^{**}$) and relational ($\beta=0.39^{***}$) capital dimensions but their effect is not significant on human capital ($\beta=0.11$). This makes it evident to support the hypotheses H1b and H1c but not the hypothesis H1a. The findings highlight that AEH such as Employee Training and Development (ETD), and Employee Knowledge Sharing (EKS) positively affect the structural & relational capitals, but exhibit non-significant effects on human capital.
- For Motivation-enhancing HPWPs (MEH), we observe a positive effect of these on all IC dimensions i.e. human ($\beta=0.57^{***}$), structural ($\beta=0.46^{***}$), and relational ($\beta=0.24^{**}$) capitals. Our findings hence support the hypotheses H2a, H2b and H2c. We found that MEH i.e. Employee Empowerment (EE), Performance Based Rewards (PBR) and Shared Leadership (SL) demonstrate positive effects on human, structural and relational capital dimensions.
- For Opportunity-enhancing HPWPs (OEH) that represented the hypothesis H3, we found positive effects of OEH on human capital ($\beta=0.67^{***}$). This makes it obvious to support

hypothesis H3a. However, the effects of OEH on relational capital and structural capital are positive but not significant. We therefore didn't find substantially strong evidence to support hypotheses H3b and H3c. The results suggest that OEH such as: Open and Collaborative Communication, Interpersonal Trust and Teamwork Quality significantly promote human capital but demonstrate a little effect on structural and relational capitals.

Regarding the effects of IC dimensions on Multi-stakeholder value creation, we found that:

- Human capital significantly support employee value creation ($\beta=0.80^{***}$), organisation value creation ($\beta=0.65^{***}$) and customer value creation ($\beta=0.54^{***}$). This leads us to support the hypotheses H4a, H4b and H4c.
- Furthermore, we observed that the structural capital considerably promoted the organization value creation ($\beta=0.40^{**}$) and customer value creation ($\beta=0.36^{**}$). However, the effects of structural capital on employee value creation ($\beta=-.02$) were insignificant. This makes it evident to support the hypotheses H5b and H5c, but not H5a.
- Last but not the least, we found that relational capital significantly supported customer value creation ($\beta=0.18^{**}$). However, its effects on employee value creation ($\beta=0.16$) was marginal but positive. Besides, a negative and non-significant effect of relational capital was observed in case of organization value creation ($\beta=-.08$). These effects overall enabled us to support hypothesis H6c but we didn't find evidence to support hypotheses H6a and H6b.

Overall, the HPWPs explain 78% of the variation in human capital, 22% of the variation in structural capital and 26% of variation in relational capital. However, the variation in structural and relational capitals is non-significant. Furthermore, the IC explains 73% of variation in employee value creation, 74% of variation in organisation value creation and 66% of variation in customer value creation. The variation in organisation value creation is non-significant. These results are finally shown in figure 6.9 below followed by table 6.21 that highlights hypotheses results.

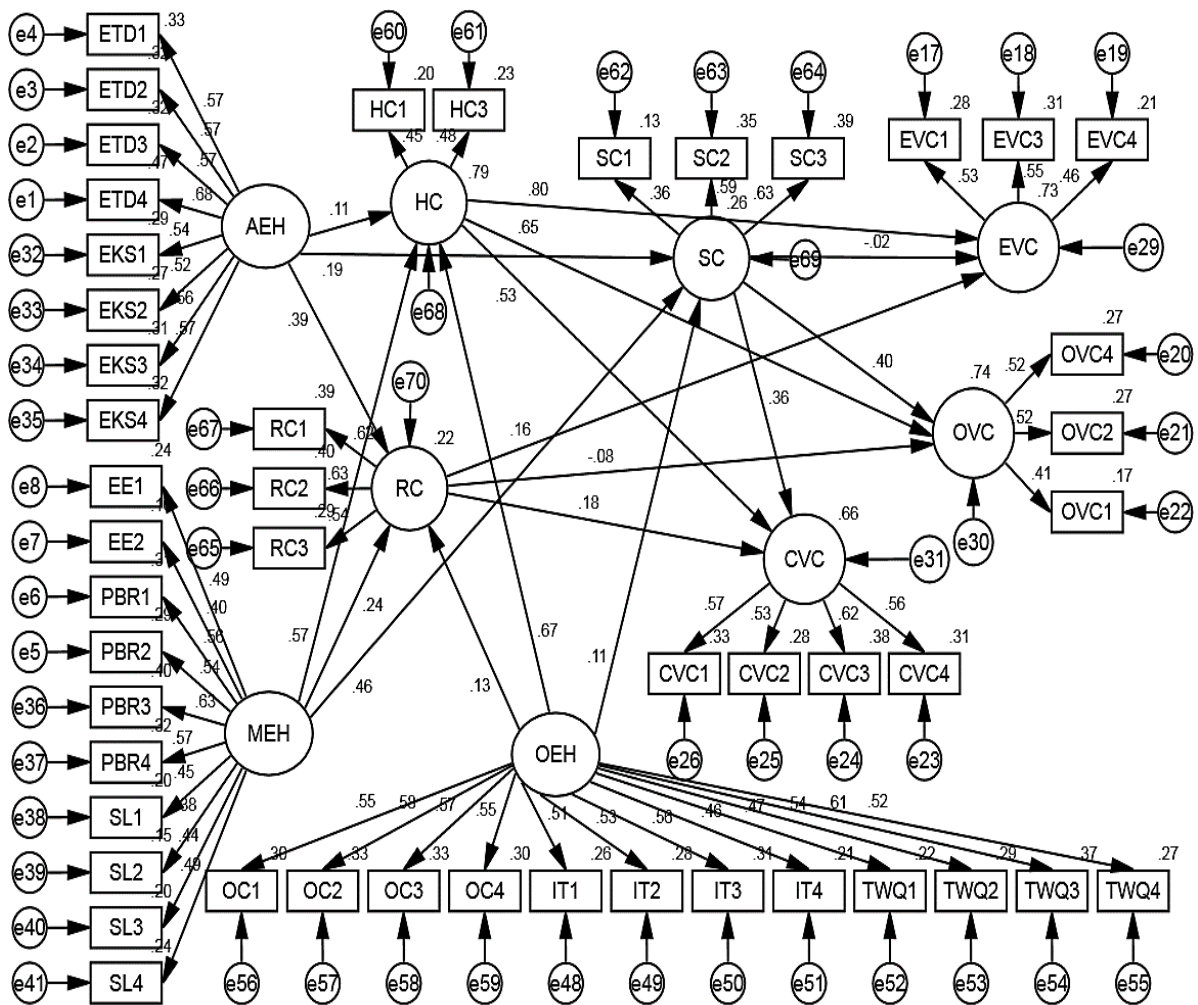


Figure 6.9: Structural Model of HPWPs, IC (Separate Dimensions) and MVC

Hypothesis	(Path Analysed)	Standardised Path Coefficients	t-value	Hypothesis Test Result
H1a	AEH → HC	0.113	1.574	Not Supported
H1b	AEH → SC	0.190	2.162**	Supported
H1c	AEH → RC	0.386	4.160***	Supported
H2a	MEH → HC	0.567	5.020***	Supported
H2b	MEH → SC	0.460	3.644***	Supported
H2c	MEH → RC	0.240	2.749**	Supported
H3a	OEH → HC	0.672	5.419***	Supported
H3b	OEH → SC	0.111	1.352	Not Supported
H3c	OEH → RC	0.128	1.639	Not Supported
H4a	HC → EVC	0.803	4.842***	Supported
H4b	HC → OVC	0.653	4.409***	Supported

H4c	HC → CVC	0.535	4.427***	Supported
H5a	SC → EVC	-0.024	-0.224	Not Supported
H5b	SC → OVC	0.400	2.879**	Supported
H5c	SC → CVC	0.357	3.035**	Supported
H6a	RC → EVC	0.164	1.637	Not Supported
H6b	RC → OVC	-0.077	-0.762	Not Supported
H6c	RC → CVC	0.183	2.125**	Supported
Model fit indices $\chi^2=2356.5$; $df =1062$; $\chi^2/df=2.219$; CFI=0.688; GFI=0.761; AGFI=0.736; RMSEA=0.065				
** significant at 0.05; *** significant at 0.01				

Table 6.21: Hypotheses Testing (With Separate IC Dimensions)

6.6.1.4.5. Structural Model of HPWPs, IC (Combined Dimensions) and Multi-stakeholder Value Creation

As already mentioned at the beginning of this chapter, we performed an additional level of the structural model assessment. The figure 6.10 below presents the effects of each HPWP bundle on intellectual capital combined as one construct and subsequently the combined effect of IC dimensions on each category of multi-stakeholder value creation.

The results below overall indicate that each of the HPWPs bundle (i.e. AEH, MEH and OEH) significantly and positively contributed to the growth of intellectual capital ($\beta=0.25$, $\beta=0.58$, and $\beta=0.54$, respectively). Furthermore, MEH bundle posits stronger effect on intellectual capital as compared to AEH and OEH bundles. Moreover, because of the cumulative effects of the three IC dimensions, the IC overall positively and significantly promoted each of the multi-stakeholder value creation indicators i.e. EVC ($\beta=0.81$), OVC ($\beta=0.81$) and CVC ($\beta=0.82$). In other words, IC has a slightly stronger effect on CVC but posits equal effects on EVC and OVC. Overall, HPWPs explain 68% of the variation in IC, while IC explains 65% of the variation in EVC and OVC and 67% of variation in CVC. As a whole, we may claim that when IC was taken as one construct/variable, the observed effects were proved to be more significant, thereby supporting all the hypotheses. These results are finally shown in figure 6.10 below followed by table 6.22 that highlights hypotheses results.

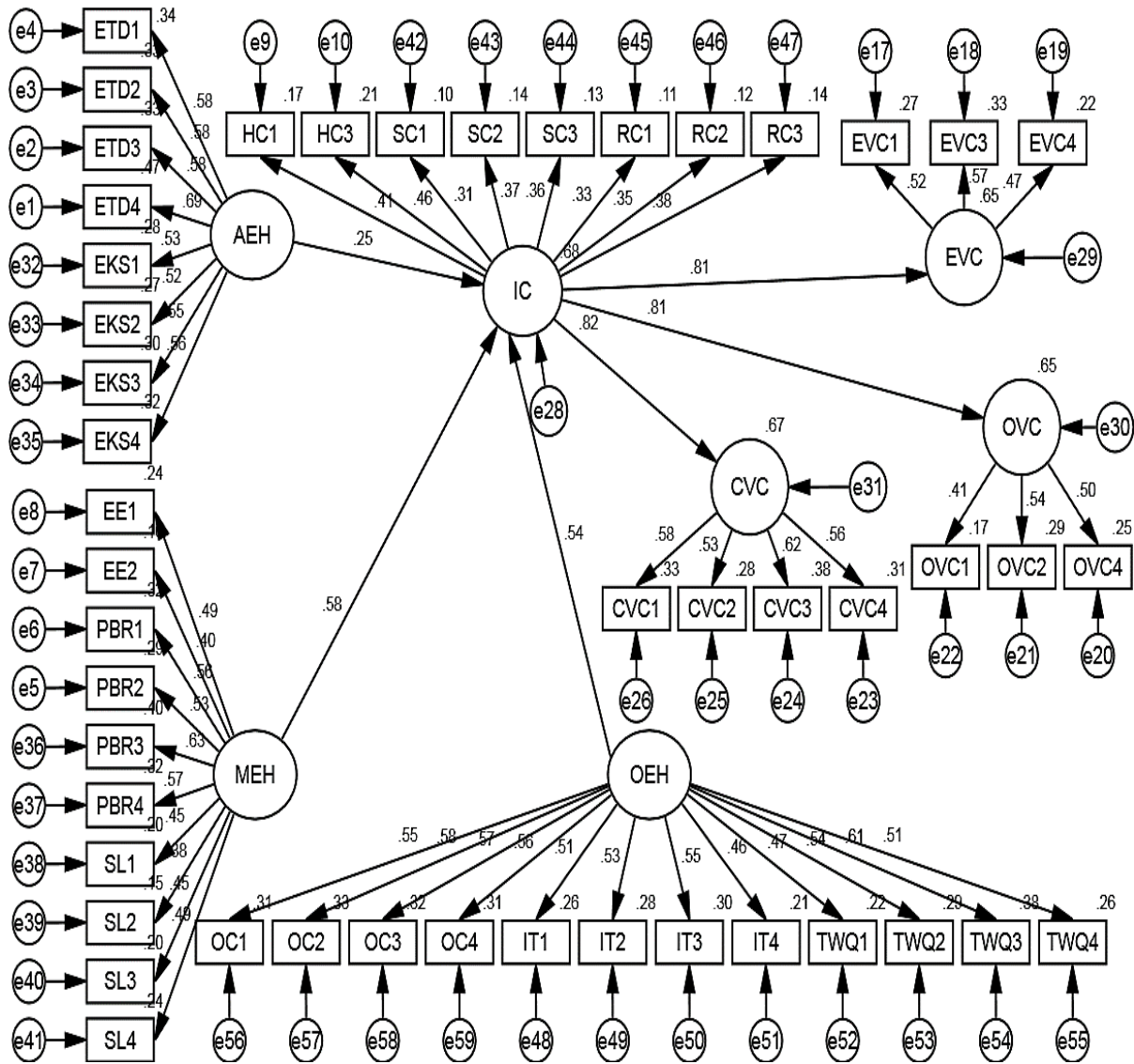


Figure 6.10: Structural Model of HPWPs, IC (Combined Dimensions) and MVC

Hypothesis (Path Analysed)	Standardised Path Coefficients	t-value	P-value	Hypothesis Test Result
AEH → IC	0.25	3.556	0.006	Supported
MEH → IC	0.58	4.905	0.009	Supported
OEH → IC	0.54	4.985	0.026	Supported
IC → EVC	0.81	4.943	0.025	Supported
IC → OVC	0.81	4.783	0.018	Supported
IC → CVC	0.82	5.251	0.010	Supported

Model fit indices $\chi^2=2356.5$; $df=1062$; $\chi^2/df=2.292$;
 CFI=0.666, GFI=0.750; AGFI=0.727; RMSEA=0.067

Table 6.22: Hypotheses Testing (With Combined IC Dimensions)

6.7. Summary

This chapter was aimed at analysing and evaluating quantitative data at an advanced level. As a first step, the analysis involved assessing the reliability of the measurement scales. By indicating acceptable values of Cronbach alpha and item-total correlations for each construct, the results revealed a substantial reliability. In the next step, EFA assessments aimed at identifying the latent factors and structures for all the model variables were carried-out. These assessments were additionally assisted by Harman's single-factor-test to observe problem of common-method variance/bias which and eventually eliminate its possibility. The factor structures confirmed via EFA were subsequently evaluated for an even more stringent CFA assessment that involved measurement model assessment. The CFA was conducted as one of two steps in SEM analyses. The CFA results demonstrated adequate model-fit and acceptable level of convergent and discriminant validities and hence confirmed the validity of measurement model. Finally, the analysis led to structural model assessment which was the last step in the SEM analyses. This step involved assessing the links between research model constructs through hypotheses testing. As a whole, a series of analyses were applied in this chapter with an aim to statistically validate the theoretically-developed research model (Chapter-3). The next Chapter-7 qualitatively validates the research model and presents additional opinions, insights and themes.

CHAPTER-7

QUALITATIVE DATA ANALYSIS AND MODEL VALIDATION

In this Chapter, we present a qualitative data analysis with an aim to corroborate the research model and determine additional themes. The findings provided herewith are derived from semi-structured interviews analysed by means of thematic analysis technique. This additional analysis was purposed at qualitatively exploring the HPWPs role in building IC to derive value for multi-stakeholders in the Professional Service Firms (PSFs). In the first step, we present interview respondents' profile and demographic information. In the next step, we carry-out qualitative analysis of the interview data which involved additional exploratory evaluation of the research model constructs and the relationship between them. Subsequently, given the research methodological objectives, we compared the findings of both qualitative & quantitative data with an aim to confirm/corroborate the model and to also draw additional insights and themes.

7.1. Participant Profile and Demographic Information

All interview participants were recruited from Australian Professional Service Firms (PSFs) that were operating in different states of the country. The figure 7.1 below shows firm's categorization as per their size. The participating firms were mainly large firm (n=8), but a few participants were recruited from medium (n=1) as well as small to medium sized firms (n=3).

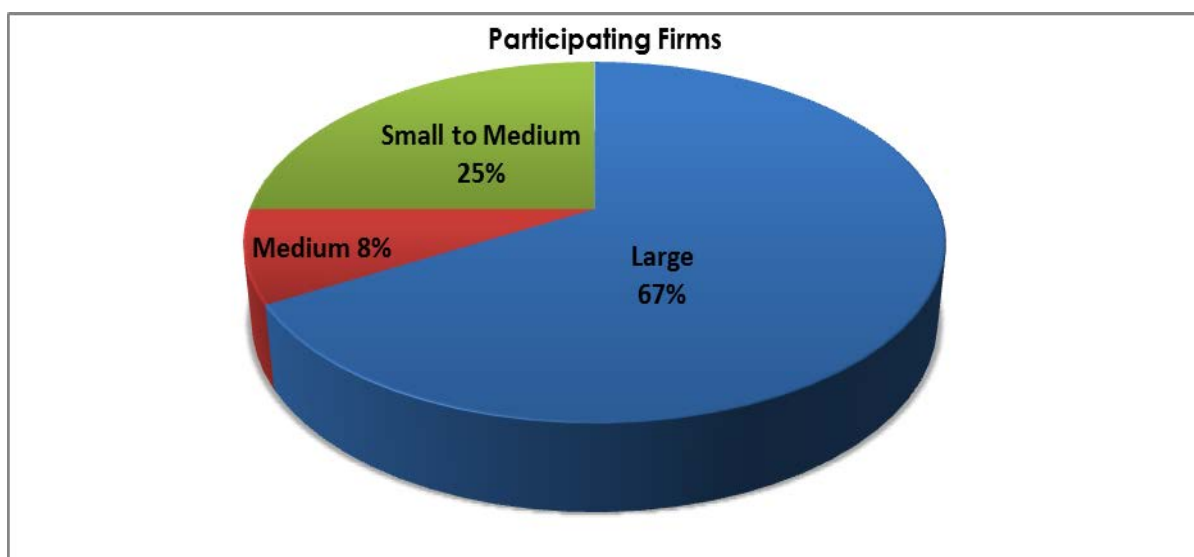


Figure 7.1: Participating Firms by Size

The participating firms operated within a variety of service sectors. According to Figure 7.2, engineering sector represented considerable number of participants, mainly covering telecommunications, civil design, energy efficiency etc. (n=4), followed by IT Consulting (n=2), Finance, Accounting & Audit (n=2) and the rest covered Transport & Logistics, Digital Media & Advertising, Management Consulting, Education & Training and Medical & healthcare service firms.

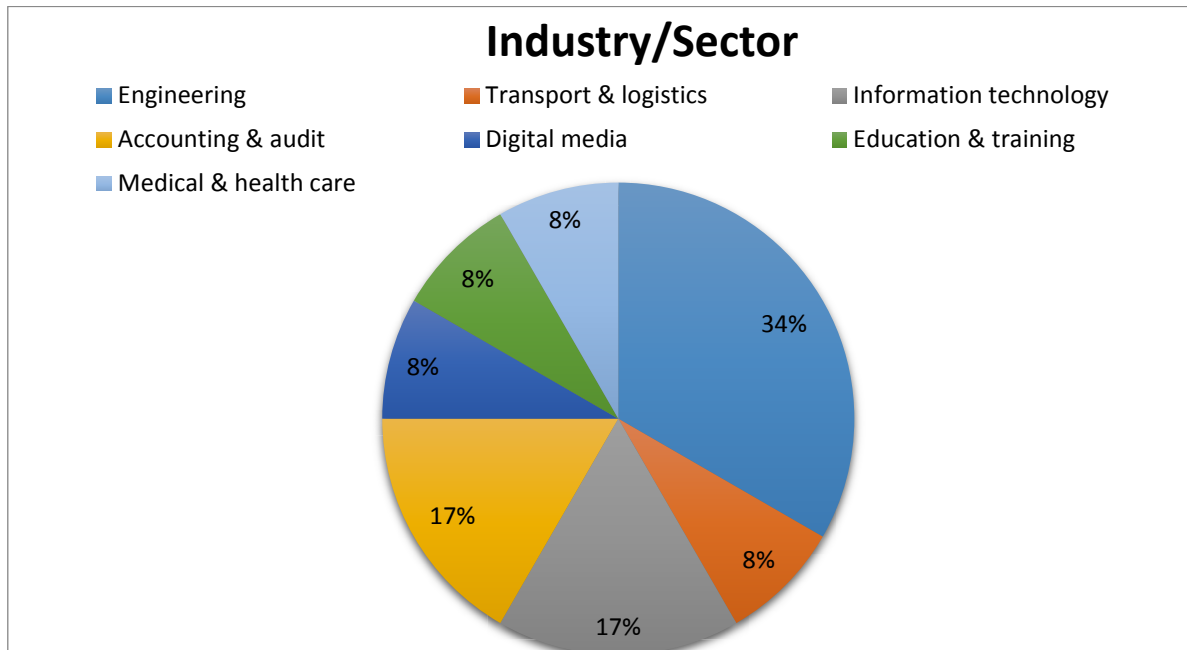


Figure 7.2: Participating Firms by Industry/Sector

Interviews were conducted with twelve (12) participants who worked in senior management and executive roles across diversified service industry firms. The broad mix of participants' job functions, qualifications, skills and industry experiences effectively served the purpose of qualitative data diversity. All the participants were nominated by the HRM/Administration departments of their respective firms. The other demographic information of the participant gathered included their gender, age, education, current job position, years of experience, type of firm etc. Most of the participants aged above 26 years to over 45 years and majority had more than 7 year work experience and possessed master degree. Before beginning with the interviews, written consent for conducting interview was sought from all the participants and they were assigned with unique identifier codes (i.e. I₁, I₂,.....I₁₂) including their firms (Firm A, Firm B,.....Firm K). As some firms nominated two participants, hence in such cases the same Firm Identifier Code was assigned. Below given are some important demographic details of the respondents along with their profiles.

S #	INDUSTRY/ SECTOR	TYPE OF PSF	INTERVIEWEE POSITION/ DESIGNATION	FIRM SIZE	GENDER	AGE GROUP	TYPE OF FIRM	EDUCATION	WORK EXPERIENCE	FIRM IDENTIFIER CODE	INTERVIEWEE IDENTIFIER CODE
1	Engineering	Telecom Services	National Technology Lead	Large	Male	36-45	International	Master Degree	Over 15 Years	Firm A	I ₁
2	Transport & Logistics	Shipping & Cargo Handling Services	Senior Consultant (Software Development)	Large	Male	26-35	National	Master Degree	7-10 Years	Firm B	I ₂
3	Information Technology	IT & Technology Services	Senior Technology Lead	Large	Male	26-35	International	Master Degree	11-15 years	Firm C	I ₃
4	Accounting & Audit	Accounts & Audit Services	Audit Manager	Large	Male	26-35	International	Master Degree	7-10 Years	Firm D	I ₄
5	Accounting & Audit	Accounts & Audit Services	Employee Engagement Manager	Large	Male	26-35	International	Master Degree	4-6 Years	Firm D	I ₈
6	Engineering	Energy Efficiency Services	Technical Services Manager	Medium	Male	26-35	International	Master Degree	7-10 Years	Firm E	I ₁₃
7	Digital Media	Digital Marketing Services	Senior Manager/ Head of Finance	Small to Medium	Male	26-35	International	Master Degree	7-10 Years	Firm F	I ₆
8	Engineering	Telecom Services	Head of Market Research for Brand & Advertising	Large	Male	Above 45	International	Master Degree	Over 15 Years	Firm G	I ₇
9	Engineering	Telecom Services	Agile Project Manager	Large	Male	36-45	International	PhD	Over 15 Years	Firm G	I ₁₁
10	Information Technology	IT and Management Consulting	Project Manager	Small to Medium	Male	26-35	National	Master Degree	4-6 Years	Firm I	I ₉
11	Higher Education	Education and Training Services	Deputy Director (HR)	Large	Female	Above 45	National	Master Degree	Over 15 Years	Firm J	I ₁₀
12	Medical & Healthcare	Sports Injury Prevention Services	Chief Technology Officer and Sports Scientist	Small to Medium	Male	36-45	National	PhD	11-15 Years	Firm K	I ₁₄

Table 7.1: Interview Participant Profile and Demographic Information

7.2. High Performance Work Practices

Following the AMO model, we explored the level of implementation of HPWPs in the service firms in order to examine how they assisted in building their intellectual capital and enabled value creation for multi-stakeholders. We specifically asked managers on 8 set of practices which we categorized within [Ability, Motivation and Opportunity]-enhancing bundles. Figure 7.3 below indicates the influence (in percentage) for each bundle of practices.

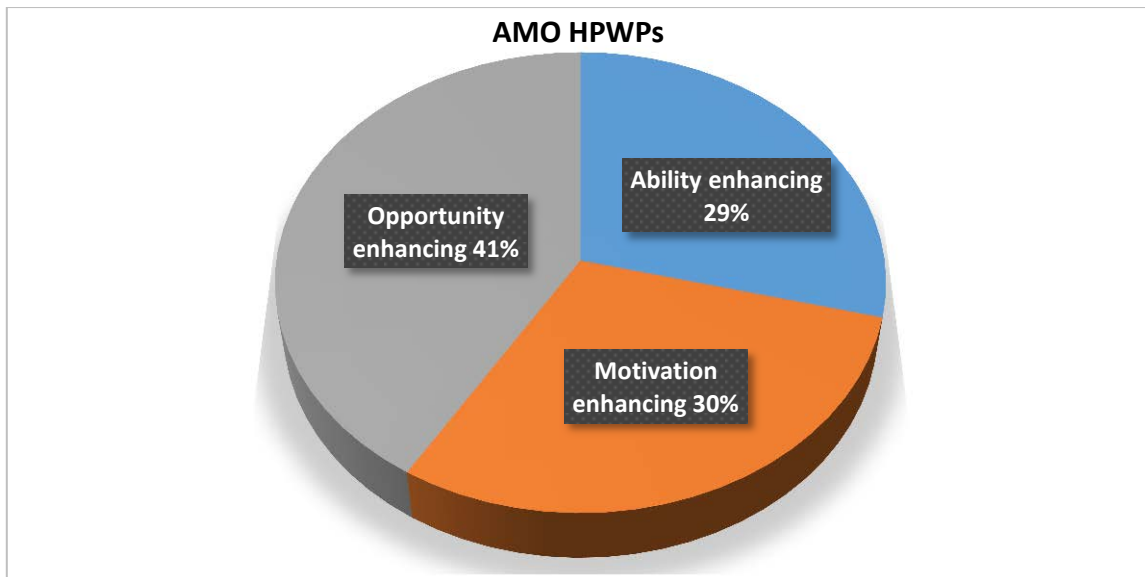


Figure 7.3: Influence of (Ability, Motivation & Opportunity)-Enhancing Practices in PSFs

From the figure 7.3, we can see that PSFs put a lot of emphasis on opportunity-enhancing practices (n=134 mentions; 41%), that involved 'Interpersonal Trust', 'Open & Collaborative Communication' and Teamwork Quality. PSFs put second highest emphasis on motivation-enhancing practices (n=97 mentions; 30%) that covered 'Employee Empowerment', 'Performance Based Reward' and 'Shared Leadership'. Lastly the emphasis was made on ability-enhancing practices (n=94 mentions; 29%) that constituted 'Training & Development' and 'Knowledge Sharing'.

7.2.1. Managers' Perspective on Ability-Enhancing HPWPs

To explore the ability-enhancing HPWPs, we asked managers about the training, development, capacity building and knowledge sharing practices in their firms. Table 7.2 presents interview questions and the coding categories for ability enhancing HPWPs.

Main Research Question	Interview Questions Within Ability-enhancing HPWPs	Coding Category	No. of Mentions
RQa: How Do (Ability, Motivation and Opportunity)-enhancing bundles of HPWPs influence intellectual capital development in PSFs?	What do you think about your firm's initiative on training, development and capacity building of the employees?	Employee Training and Development	44
	How knowledge is shared by the employees and using what methods? What information & knowledge sharing tools are utilized by the employees?	Employee Knowledge Sharing	50

Table 7.2: Interview Questions and Coding Categories for Ability-enhancing HPWPs

7.2.1.1. Ability-enhancing Category: Employee Training and Development

All 12 participants mentioned that their firms provided training & continuous learning opportunities, aimed at skills enhancement of their employees. Figure 7.4 presents the eight codes and the number of mentions for 'Employee Training and Development' in their firms.



Figure 7.4: Number of Codes and Mentions for Employee Training and Development

Participants mentioned that their firms provided continuous employee training (n=8), for instance, one participant explained:

"The firm does take a continuous professional development due towards training and development. Predominately, our training is through electronic videos, courses and quizzes that we have to do as part of our mandatory training, we also have classroom sessions every 3-4 months which are quite useful" (Interviewee I4).

Similarly, another participant talked about the diversity of trainings provided by their firm:

"Our training program is for all levels of staff, no matter technical or management staff. We have formal 6-month intensive training for new hires which is subsequent to on-job trainings. And from time to time, we also send employees on short courses that are relevant to areas of priority for our company and these courses are fully paid by the company" (Interviewee I13).

Firms also offer specialised as well as general training programs (n=10), which could be a mixture of optional and mandatory training (n=3) and that such training is offered to all employees (n=6). In this regard, one participant explained:

"We have different type of trainings option like technical skills trainings, soft skills trainings, product & services related trainings etc. Some of them are mandatory and some are optional" (Interviewee I₁).

While another participant shared his firms' vision on management and leadership trainings:

"For professional staff, we provide various development options. We may have in-house courses, we have executive development courses and we do a lot of leadership trainings and development" (Interviewee I₁₀).

Some participants explained about mentoring opportunities and guidance activities offered to the staff in their firms to get into technical or leadership positions (n=8). That is to say, some firms ensured that manager mentored or coached junior staff for future leadership roles. A respondent stated:

"We also provide coaching, so if you're a manager or supervisor, we provide individual coaching with an individual coach such that you have face to face coaching. If you are a new leader that comes to 'Firm J', we provide transition coaching, so we provide you with a coach to help you, may be for the first six or twelve months, while you are filling your new role" (Interviewee I₁₀).

In some occasions, participants indicated that their firms offered career expos, conferences, workshops, and seminars (n=2); they also offered flexible working arrangements to allow for further training (n=3); and that some firms made huge investments in employee training (n=4). According to a participant at Firm G:

"Over the time, there has been a lot of investment on trainings" (Interviewee I₇). Further on highlighting the commitment and investment in training and development, a respondent said: *"The other thing obviously is the employee engagement and employee learning & skill development, so our organization is spending a lot of money in this area" (Interviewee I₁₁).*

7.2.1.2. Ability-Enhancing Category: Employee Knowledge Sharing

All 12 participants endorsed that their firms provided their staff opportunities to promote and enable knowledge sharing practices in their firms. Figure 7.5 presents the nine codes and the number of mentions of employee knowledge sharing practices in firms.



Figure 7.5: Number of Codes and Mentions for Employee Knowledge Sharing

When asked about knowledge sharing practices, majority of participants (n=11 of 12) mentioned that their firms utilised document-sharing tools. One respondent at Firm I uttered:

"If we dive into specific details of the projects, our core knowledge base and our skills & capabilities, we have an online document management tool called 'CONFLUENCE'. So we usually use that and keep all our documentation and we encourage people to write articles and requirements and other documentations or whatever core knowledge that they have is put up there so that it can be looked into by everyone" (Interviewee I7).

Another participant at Firm-J while quoting an example from her firm, said:

"I mean, it [TEAM SITE] is not open for everybody but it is open to the teams, every member of the team who is working on something, they can share documents, see documents, and update them" (Interviewee I10).

On top of document sharing tools, firms also relied on collaborative software to support knowledge sharing among the teams. Interviewee (I10) continued to explain:

"If you know there is someone doing some work on a particular project or topic, you can search and see who is working on it and then approach them, or you can have access to the file if it is not confidential. So we are trying to use a lot of Microsoft office tools and other collaborative tools to create knowledge repositories".

Besides document sharing and collaborative tools, participants mentioned practices like creating formal training and learning environments (n=1) to allow employees to assist each

7.2.2. Managers' Perspective on Motivation-Enhancing HPWPs

To explore the motivation-enhancing HPWPs, we asked managers about empowerment, reward system and shared leadership practices in their firms. Table 7.3 presents interview questions and the coding categories for motivation enhancing HPWPs.

Main Research Question	Interview Questions Within Motivation-Enhancing HPWPs	Coding Category	No. of Mentions
RQa: How Do (Ability, Motivation and Opportunity)-enhancing bundles of HPWPs Influence IC Development in the PSFs?	What do you think about your firm's initiative on empowerment of the employees?	Employee Empowerment	32
	What do you think about your firm's reward system for outstanding/high-performing employees?	Performance Based Reward	39
	What leadership style and practices are followed by your firm?	Shared Leadership	26

Table 7.3: Interview Questions and Coding Categories for Motivation-enhancing HPWPs

7.2.2.1. Motivation-Enhancing Category: Employee Empowerment

All 12 participants highlighted a number of practices provided by their firms that enabled a culture of empowerment. Figure 7.7 presents the nine codes and their number of mentions for employee empowerment practices in their firms.

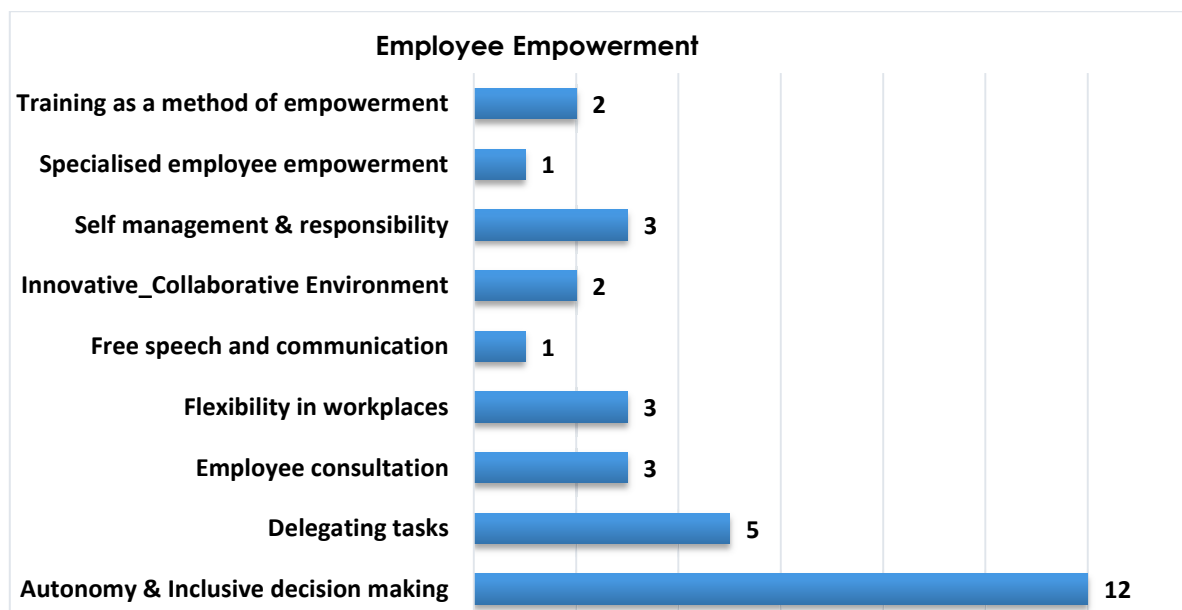


Figure 7.7: Number of Codes and Mentions for Employee Empowerment

The majority of participants mentioned two key practices that empowered employees, i.e. autonomy and inclusive decision-making (n=8), and delegation of tasks (n=4). One participant explained that their company encouraged involvement of employee in the decision making (Interviewee I2). Similarly, interviewee (I13) mentioned: *"We also encourage them [employees] to use their judgment abilities and engage in decision making process"*. Another participant at Education and Training firm said:

"Certainly our academic staff has a lot of work autonomy, we value them off course for their expertise and they are given quite a lot of autonomy in the way they design their working hours, where they work and how they perform their work" (Interviewee I10).

With regard to delegation of tasks, all participants strong supported this practice as the fundamental aspect of employee empowerment. For instance, one participant stated:

"We believe in delegating tasks to the staff and empower them to perform work at their discretion" (Interviewee I6).

Another participant, while explaining the importance of task delegation, stated:

"When it comes to making negotiations on commercial outcomes, dealing with issues, resolutions and solutions, there has been a lot of empowerment and task delegation to the employees" (Interviewee I8).

The practice of inclusive decision-making and delegation occurs closely with other practices, specifically, employee consultation (n=3), self-management and responsibility (n=3), and allowing for flexibility at the workplace (n=3). On flexibility, participants mentioned different ways to offer such as, one mentioned: *"We also have very flexible working hours, which brings balance to our work life" (Interviewee I1)*. The other participant in support of this mentioned: *"Another way we enable our employees to deliver their best is that we give them a flexibility to work from home" (Interviewee I13)*. Yet another participant shared on flexible workplaces: *"Employees take responsibility for what they do at the place of work. These empowerment initiatives lead to creative employee behaviour (Interviewee I2)*. Furthermore, one participant explained:

"We believe in delegating tasks to the staff and empower them to perform work at their discretion. This not only gives them sense of responsibility but also helps them take the ownership of the task" (Interviewee I6).

In addition, another participant stated:

“As director of the firm, I also encourage employees to give their feedback on various aspects of our company. I think this enables employees to feel empowered and inclusive” (Interviewee 114).

In some occasions, although a bit rarely, firms empowered employees by allowing free speech and communication (n=1), recognising special cases and empowerment needs (n=1) and offering some forms of training (n=2). On training as a form of empowerment, a participant mentioned: *“Most of them [firm’s initiatives] are focused around training so that is the main source of this empowerment” (Interviewee 17).* In view of the similar arguments, another participant explained:

“Being an organization where our only asset is our people, the employee empowerment practices are quite strong in terms of training, in terms of building the intellectual capital through our people, through the experiences, formal trainings and on-the-job coaching” (Interviewee 18).

7.2.2.2. Motivation-Enhancing Category: Performance Based Reward

For all participants, their firms undertake some performance rewarding which could be related to goal attainment or best performance, and such rewards could come in formal or informal ways. We created four codes to capture participant responses on performance-based rewards. In Figure 7.8 we indicate the number of mentions in each code.

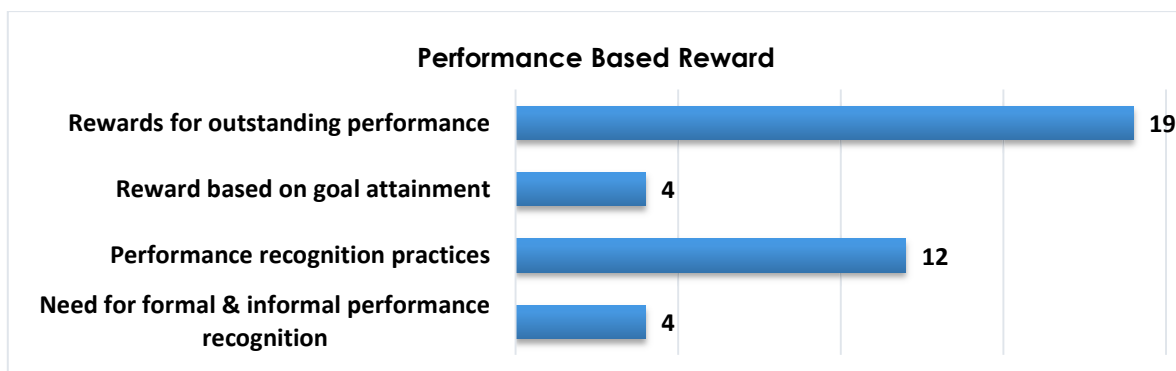


Figure 7.8: Number of Codes and Mentions for Performance Based Reward in PSFs

We found that all firms recognised and executed some forms of reward practices (n=12); but most commonly, the firms rewarded employees based on their outstanding performance (n=11). Fellow employees usually nominated teams or team members for best performance awards. A participant mentioned that such awards came in different forms. He informed:

"We have an excellent reward system in our organization. We have individual performance awards e.g. star, hero and legend award. We have service award, a nice little award for staying with the firm" (Interviewee I1).

Another participant adds that:

"Every year, we arrange 'Awards Night' for best performers in different categories. The awards are given strictly on performance and achievement in the year. These rewards motivate high-performers to keep performing and motivate other staff to match them" (Interviewee I14).

Yet another participant reported in the same way:

"We also arrange annual award events to recognize employees who deliver extraordinary performance" (Interviewee I2).

Nevertheless, some firms also offered rewards based on goal attainment (n=4), and such rewards could come as formal or informal rewards (n=2). Goal attainment rewards are usually based on the outcomes of performance appraisals and KPIs. A participant explained:

"We also conduct performance appraisal on quarterly basis which helps staff know where they stand as compared to the set KPIs. Staff is given feedback in the areas they need to improve with reward linked to the achievement of set performance goals" (Interviewee I6).

One more participant explained that unlike outstanding performance awards, rewards for goal attainment usually come in the form of remuneration bonus. He stated:

"It's predominantly based around remuneration, so at the end of a given financial year, if you seem to meet or exceed the target then you would get a bonus, team members would get a bonus and manager as well would get a bonus" (Interviewee I7).

Nonetheless, in view of the improvements needed in their existing reward system, the same manager expressed his view as follow:

"But I think what is probably lacking is what I call informal reward like you say 'good job', 'well done' to the people getting stressed as there is sometimes more pressure on the team, so that type of informal day to day rewarding

probably feels a bit by the right side. I always try to do it but I think my peers might not be necessarily doing it as much" (Interviewee I7).

7.2.2.3. Motivation-Enhancing Category: Shared Leadership

Most of participants (n=11) stated that their firms encouraged shared leadership style which took the form of collective decision making, shared responsibility, decentralised and flat leadership structure etc. We created ten codes to capture participant responses on shared leadership practices. In Figure 7.9, we indicate the number of mentions in each code.

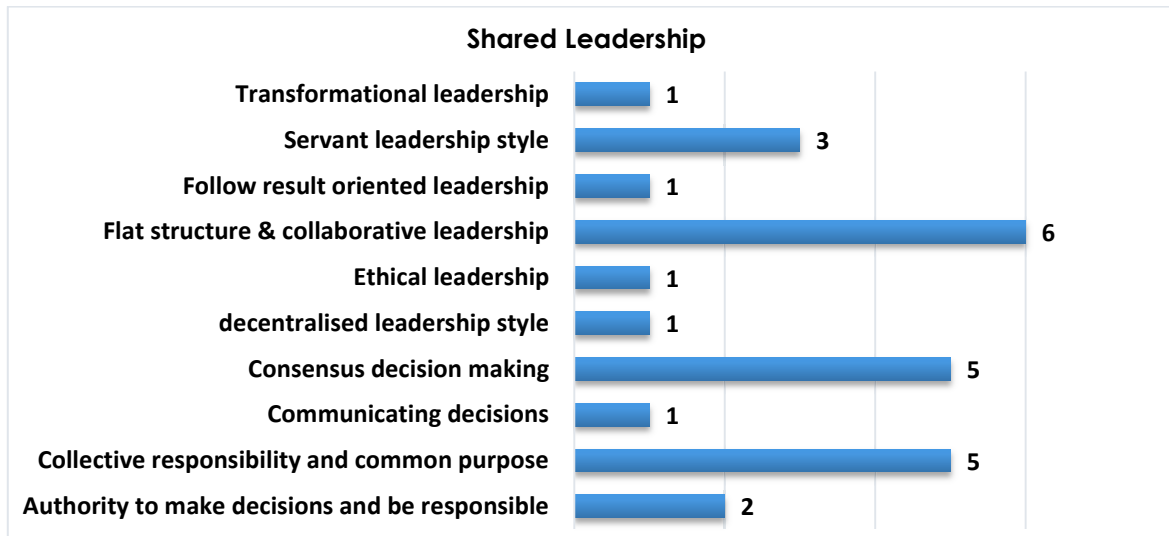


Figure 7.9: Number of Codes and Mentions for Shared Leadership

It was also evident that PSFs applied a wide array of shared leadership practices, most common ones included: enabling a flat and collaborative leadership approach (n=4), others focused on consensus based decision making (n=4), while some encouraged collective responsibility and common purpose (n=4). In this regard, three participants believed that their firms followed flat or horizontal leadership style. One participant accordingly explained:

"I would say, it's more like a flat structure and we encourage people to take lead on their own projects. We do have one person who will be overlooking the project and managing all the activities from performance point of view but we encourage individuals to take their own lead, I mean to be the leaders of their own. I would say leadership style is more towards the flat structure because we give more accountability and ownership of the task to the person" (Interviewee I9).

Similarly, another participant enlightened:

"We follow a leadership style which is more of a horizontal one, where initiatives can be driven by anyone and everyone feels at ease to share their thoughts. This allows

everyone to contribute responsibly without a fear of not being heard or decisions being micromanaged" (Interviewee I14).

Most of the firms implemented a flat or horizontal leadership style with common practice of consensual decision-making, collective responsibility and common purpose. Giving his view on consensus based decision-making, a participant said:

"Consensus based style of leadership is applied from the senior management which allows employees to have their say in the decision-making. This in return boosts employee morale and efficiency" (Interviewee I6).

One participant at Firm E shared similar thoughts and explained:

"We believe in a leadership style that enables everyone to have a say in the decision making. All staff members engage in a shared decision processes after building collective agreement on the actions to be taken so that everyone takes the ownership of the tasks and leads" (Interviewee I13).

Given the shared leadership style, some participants related it be same as collaborative style leadership. For instance, one participant mentioned:

"Our teams are very collaborative and collaborative in a sense of not just that all team members make shared decision but there is also an empowerment of the individual managers to make decisions and be responsible for their decisions" (Interviewee I7).

Participants also mentioned some other leadership styles that were in one way or other similar to or represented shared leadership behaviour. These included: Democratic, Ethical, result-oriented, transformational and servant style leadership. In particular terms, the participants explained these leadership styles as follow:

"We have democratic style of leadership in our organization. Our managers and leaders make decisions by taking on-board all the employees" (Interviewee I1).

"The other thing that we are very much focused on is ethical leadership, so we are very much aware that we are funded in part by government, by public money, and our students' fees, we consider ourselves a public organization. So we spend

Main Research Question	Interview Questions Within Opportunity-Enhancing HPWPs	Coding Category	No. of Mentions
RQa: How Do (Ability, Motivation and Opportunity)-enhancing bundles of HPWPs Influence IC Development in the PSFs?	<ul style="list-style-type: none"> How knowledge is shared by the employees and using what methods? What information & knowledge sharing tools are utilized by the employees? 	Interpersonal Trust	24
	<ul style="list-style-type: none"> How communication takes place within your firm and what style of communication is followed? How do you see collaboration in the communication between the employees? 	Open and Collaborative Communication	60
	<ul style="list-style-type: none"> How do you see teamwork between the employees? How cooperation, coordination and mutual support among the employees in a team environment enhance quality of teamwork? 	Teamwork Quality	50

Table 7.4: Interview Questions and Coding Categories for Opportunity-enhancing HPWPs

7.2.3.1. Opportunity-Enhancing Category: Interpersonal Trust

All 12 participants mentioned certain aspects of interpersonal trust culture in their firms that mainly covered characteristics like transparency, healthy relationships, information sharing, etc. So, we came up with five codes that captured participant responses on interpersonal trust in their firms. In Figure 7.11, we indicate the number of mentions for each code.

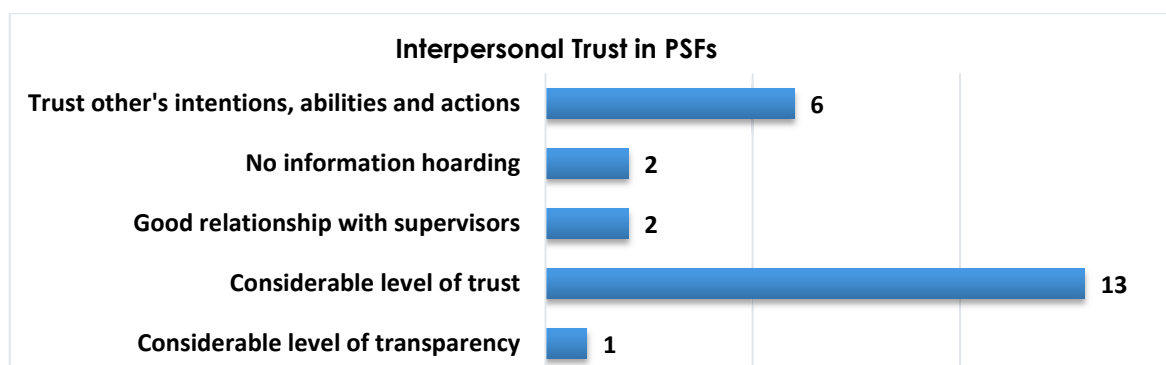


Figure 7.11: Number of Codes and Mentions for Interpersonal Trust

Majority of participants, on the overall, believe that there is reasonable level of trust among employees in their firms (n=11); but most commonly, employees trust their colleagues intentions, abilities and actions (n=5). One participant outrightly expressed, "Our employees are very skilled, very much skilled, they know what exactly they are doing being part of one of the world's reputed firms" (Interviewee I3). Another participant explained:

"There is sort of an expectation that if you tell someone to do something and they are doing it, that's kind of accountability within the employees and that does promote a level trust in both ways in a sense that when you trust someone to do something, they are going to do it" (Interviewee I8).

The trust built within firms extends beyond work activities, as one participant expressed:

"A lot of people become friends when working. People tend to trust each other not only with work but also with their problems outside of work. I think that's a signal that trust is high in general" (Interviewee I4).

Interpersonal trust also resonates with different practices, particularly, when there is some level of transparency (n=1), when employees increasingly share information with others (n=2), delegate tasks to others, and build healthy working relationships with their supervisors (n=2). One participant commented:

"In my team, there is a lot of trust. I mean you have periods of conflicts but conflicts are dealt with very openly. There is not so much talking behind each other's back and hiding information. I must say it was all fostered by the head of our entire department. She is very very open in herself and I think we modelled her vision to achieve that" (Interviewee I7).

Another participant believed:

"It is difficult to comment on trust as it is subjective opinion. However, most things in the firm are transparent and we have not had any trust issues. In my opinion, a culture of trust prevails" (Interviewee I14).

On trust and relationship with bosses and managers, a participant explained:

"We ask questions about the relationship with their immediate supervisors and that's very strong as well. We also ask questions about each staff members, what they think about the executive, what they think about their Dean and Associate Dean. Compared to other universities, we have a pretty good level of trust and engagement with our staff. Yes, it's quite positive" (Interviewee I10).

7.2.3.2. Opportunity-Enhancing Category: Open and Collaborative Communication

We found that open and collaborative communication appeared to be the strongest contributor and most observable opportunity-enhancing practices (see Table 7.4). We generated eight codes to capture open and collaborative communication practice in PSFs. In figure 7.12, we indicate the number of mentions for each of its code.

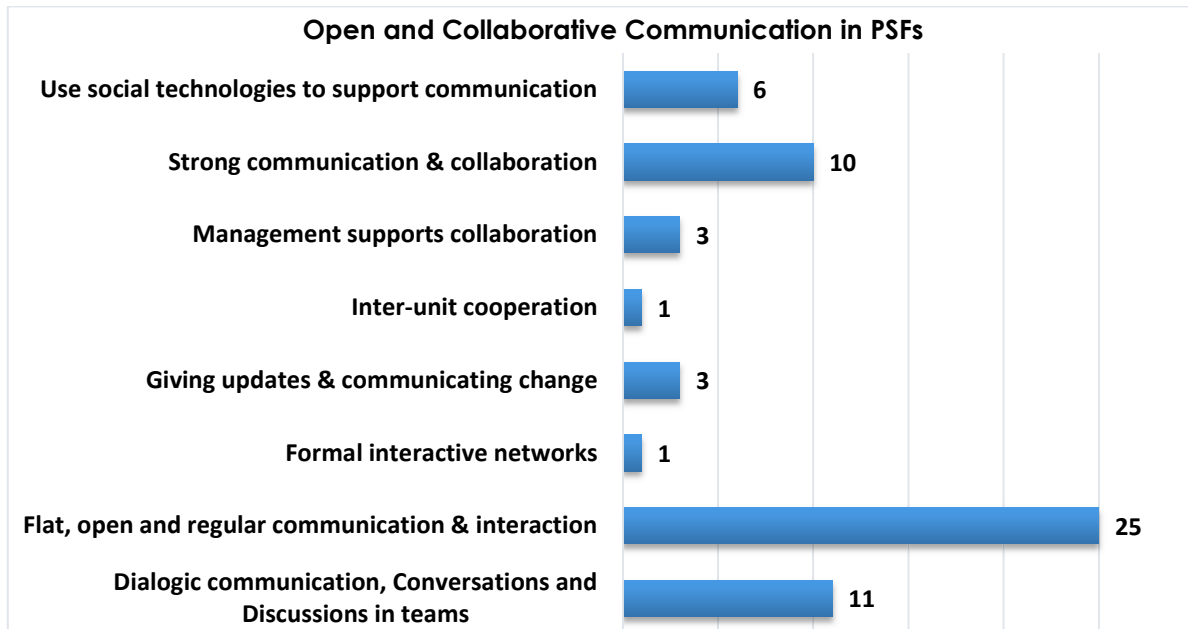


Figure 7.12: Number of Codes and Mentions for Open and Collaborative Communication

With regard to open and collaborative communication, we found that all participants mentioned that there were no hierarchical streams of communication and therefore, communications and interactions among the employees were quite frequent and followed a flat system. For instance, one participant mentioned:

“Communication among the employees is very collaborative no matter it is within the department, teams or between the individual employees. Every aspect of communication is well-coordinated as we use different collaborative technological tools” (Interviewee I2).

The same participant while sharing one specific example said:

“We follow agile methodology in which we arrange a 5-min stand-up meeting every day. In this 5-min stand up meeting, we are informed about the progress of each tasks and what employees are trying to achieve this” (Interview I2).

Overall, a number of participants (n=7) believed that there was strong communication and plenty of collaboration. In the same context, one participant mentioned that:

"I think it's extremely strong especially when it's hard to deal with things. The best example is when things are not going well and that if there is something which results in a high risk or loss to the organization, that's where you see everyone coming together discussing the facts, forming views, forming panels and quickly resolving some of these issues, so I guess there is a certain agility to it. Probably, that's how I would describe it" (Interviewee I8).

Another participant indicated:

"I think the communication from top to bottom and bottom to top within the teams is very good and open between the teams" (Interviewee I11).

Some participants (n=3) stated that the communication in their firms was often dialogic conversation and involved discussions among the team members. In particular, one participant mentioned:

"Communication is more of dialogic conversation and collaboration style. Particularly, when it comes to dealing with issues, it's an open discussion, and the strong focus is on two-way listening" (Interviewee I8).

In some firms, participants said that there was management support for ensuring collaborative and open communication (n=2). This indicated that some firms have moved towards strong inter-unit collaborations and interactions (n=1). Participants also mentioned the use of collaborative softwares (n=4) and formal networks (n=1) for ensuring smooth communications. For instance, a participant explained:

"Employees are more collaborative in recent times due to the use of advanced communication technologies and intranet tools. Online collaborative tools like SKYPE video chat and enterprise collaboration tool like 'WORKSPACE' are the best examples of collaborative tools used by our firm" (Interviewee I1).

7.2.3.3. Opportunity-Enhancing Category: Teamwork Quality

We found that teamwork quality is the second strongest contributor and observable opportunity-enhancing practice after open and collaborative communication (see table 7.4 above). We found eleven codes for teamwork quality in the PSFs. In figure 7.13, we indicated the number of mentions for each code.

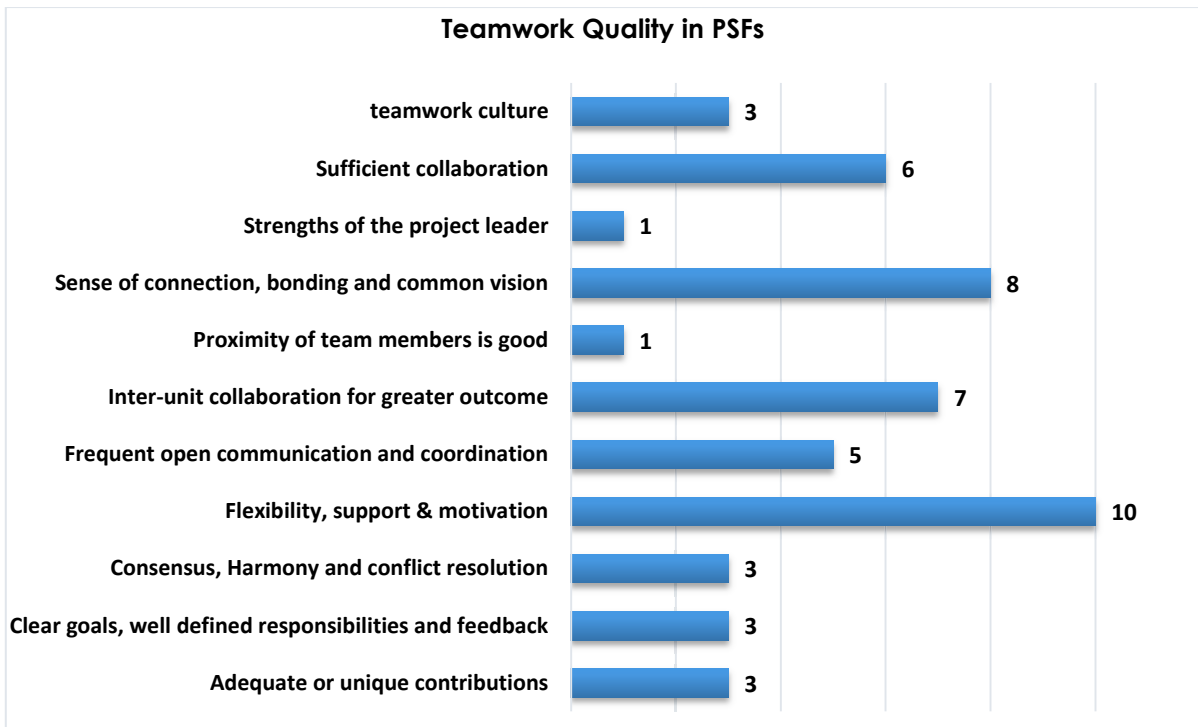


Figure 7.13: Number of Codes and Mentions for Teamwork Quality

Our findings suggested that service firms promoted teamwork and quality aspects in teamwork using a number of approaches such as flexibility, support and motivation (n=8), frequent communication and coordination (n=5), inter-unit collaboration for greater outcomes (n=2), promoting a team culture (n=3), a sense of connection, bonding and common vision (n=7). In this regard, a participant said:

“We do feel very strongly connected when it comes to working together because it serves as an area for learning new things and speaking-up” (Interviewee I9).

Similarly, another participant indicated:

“Each employee shares a common vision, which is aligned with company’s mission statement. To improve bonding, we have retreats where staff member inter-mingle and also get to know each other’s personalities. This helps in building teams and future collaborations” (Interviewee I13).

With regard to frequent communication, bonding and a sense of connection, participants indicated that teams tended to develop their own teambuilding culture to support task coordination. For instance, a participant stated:

"Teamwork is one of the key ingredients of our organizational culture. I believe teamwork fosters collective wisdom in the employees and aids them in dealing with tasks of complex nature efficiently" (Interviewee I6).

Some participants indicated that the quality of teamwork aided in building consensus & harmony and resolution of conflicts (n=3), well defined goals, responsibilities and feedback (n=1), adequate and unique contributions (n=2), a strong leadership (n=1) and proximity of team members (n=1). On team consensus, one participant mentioned as follow:

"Teamwork is appreciably high. All employees know what their roles are as every role is defined so there is no conflict. Due to this, teamwork is very high (Interviewee I2).

In general, consensus between and within the teams is supported by an open communication and great sense of trust, as one participant stated:

"A consensus based approach combined with open communication fosters strong sense of trust and cooperation among the employees and result in enhanced quality of teamwork" (Interviewee I6).



Figure 7.14: Combined Word Cloud for Opportunity-Enhancing HPWPs in PSFs

7.3. Intellectual Capital in PSFs

Regarding intellectual capital development and utilisation, we explored its three key dimensions with a view to understanding their influence in multi-stakeholder value creation in the service firms. We asked employees about use of human, structural & relational capital resources in their firms. Figure 7.15 indicates the mentions for IC dimensions.

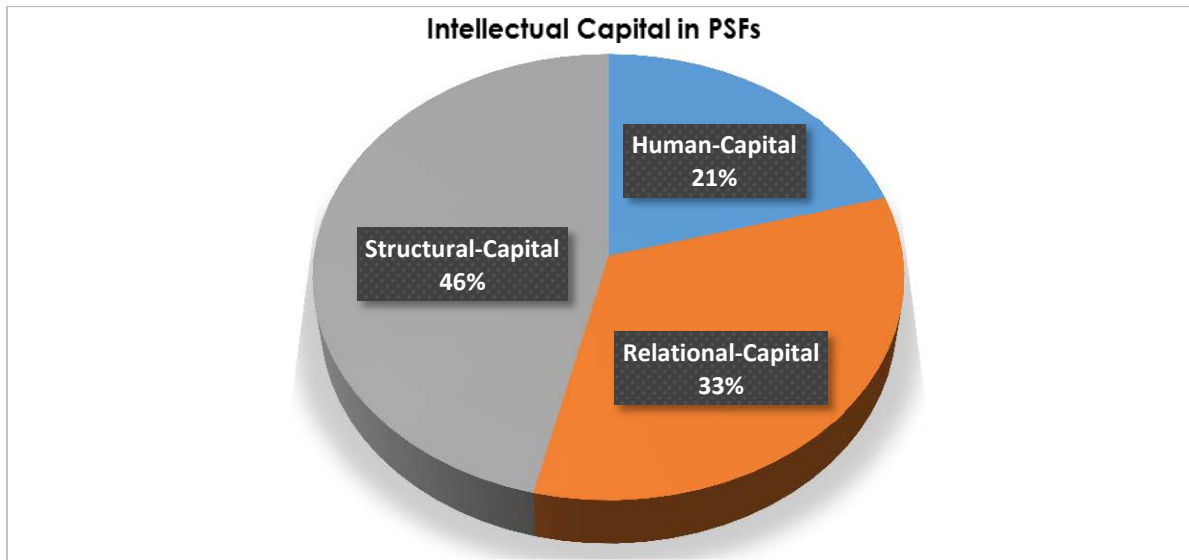


Figure 7.15: Influence of IC Dimensions in PSFs

It can be seen that the service firms largely focused on structural capital (n=56 mentions; 46%), followed by relational capital (n=40 mentions; 33%) and lastly the human capital (n=25 mentions; 21%). Participants shared following perspective about the each dimension of intellectual capital in their firms.

7.3.1. Intellectual Capital Dimension: Human Capital

On human capital, participants mentioned that their firms' had put in place a number of employee development programs. Participants said their firms recognised employee experience, skills and knowledge, competencies for creativity and innovation (n=3), creating organisational knowledge (n=3), and using employee knowledge to support decision-making (n=1). Hence, we found above four codes as representative of human capital in the PSFs. Figure 7.16 indicates the number of mentions in each code.

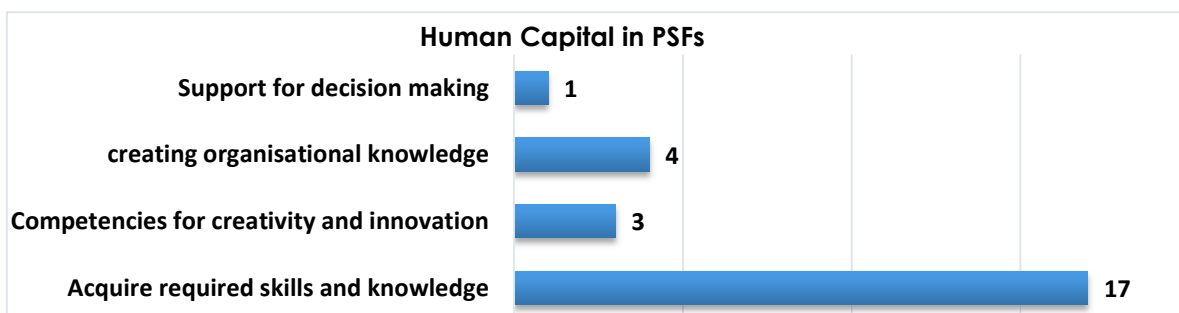


Figure 7.16: Number of Codes and Mentions for Human Capital in PSFs

Human capital that primarily involves firm's knowledge assets, all participants mentioned employees' skills, experience and expertise as the most common aspects of the human capital (n=12). Participants explained that their firms recognised, appreciated and strived to maintain and retain employee knowledge. For instance, one participant explained:

"Being part of engineering department, I am fully aware of the importance of technical knowledge & skills for every employee. Higher qualifications, work related skills & experience are always required to get into a key position. And also the talent pool of our skilled human resources and the technologies we have deployed, these have augmented the knowledge capital of our firm" (Interviewee I1).

Most of the participants acknowledged human capital being fundamental to operational performance and success of the firm. A senior software development consultant at Firm B (a transport and logistics service firm) mentioned:

"I believe the capabilities of our human resource are crucial to success of our firm. It ensures our firm effectively takes advantage of the existing expertise. If we have the required human skillset and competencies, we would be able to perform tasks properly" (Interviewee I2).

Regarding other aspects of human capital in their firms, participants explained that their firms not only recognised employee knowledge, but they build competencies for creativity and innovation (n=3), created organizational knowledge (n=3), and used organizational knowledge to support decision-making (n=1). One participant, in particular, explained:

"Once your clients/customers know about the innovative skills & capabilities of your firm, they would be able to take a decision on giving you more projects or contracts" (Interviewee I2).

Another participant who was serving as Head of Market Research for Brand and Advertising at Firm-G talked about the capabilities of his team as firm's intellectual property and said:

"We got very forward-looking design teams and we got highly creative minds coming up with different products and service ideas. So in that sense, we are very much contingent on using our intellectual property to drive future innovations and then intellectual capital management is very important in coaching people and risk taking to drive ideas and things" (Interviewee I7).



Figure 7.17: Word Cloud for Human-Capital in PSFs

7.3.2. Intellectual Capital Dimension: Structural Capital

Structural capital was the most common and widely utilized dimension of the intellectual capital in the firms. On structural capital, participants mentioned that their firms utilised data, information and knowledge (DIK) systems, collaborative technologies and possessed sufficient IT capabilities in addition to others in-house infrastructure and resources. We found ten codes that represented structural capital in the PSFs. In figure 7.18, we indicate the number of codes and mentions for each code.

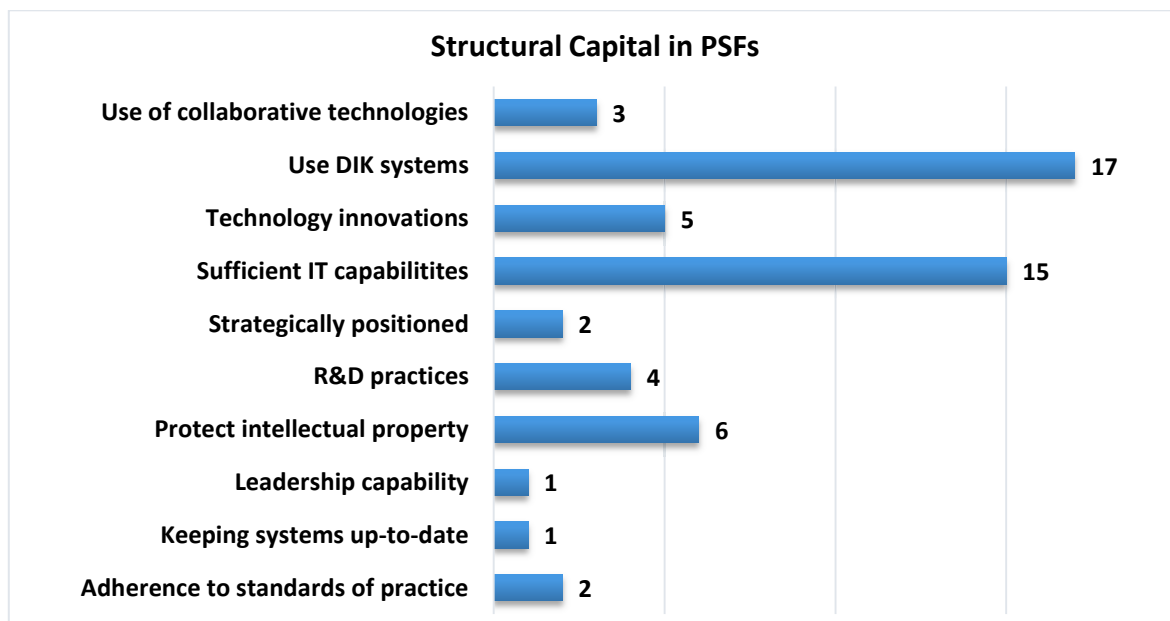


Figure 7.18: Number of Codes and Mentions for Structural Capital in PSFs

On structural capital, participants stated that Data, Information and Knowledge (DIK) systems (n=8), collaborative systems (n=3), technological innovations (n=3) and IT/IS capabilities (n=9) formed crucial part of a firm's in-house assets and resources. Some participants thus indicated that they kept updated systems (n=1) and demonstrated sound leadership behaviour (n=1) to develop firm's structural capabilities. A participant explicated:

"Regarding use of innovative tools and methods, our firm has its own internally created software that helps us throughout do our jobs. The main one is AURA software, which is yearly updated, and a lot of money is invested in it to make our jobs easier and have tasks to be automated that probably used to be manual" (Interviewee I4).

Other participants, while explaining the role of robust IT systems and in-house data analytics capabilities in their firms, said:

"Recently we have deployed some of the tools to have data analytics capabilities from our own data to see what we are doing. One particular case I can discuss is - we have collected all the data related to the problems we have faced and what are the common problems we have spent lots of time on, what are the problems kept repeating. So we are using this information and based on the data analytics, we are further enhancing our in-house systems and capabilities" (Interviewee I11).

Similarly, in support of using technological tools, another participant stated:

"Our organizational IT capabilities, data sharing technologies and automation tools that we employ form an integral part of our business operations" (Interviewee I13).

In terms of staying informed and updated with regard to the information on customers and competitors, one participant, the head of Market Research for Brand & Advertising at Firm-G stated:

"Another important thing is our marketing and competitive intelligence system, for which database systems are there, the CRM system in particular, which then has a lot of trajectory of information about customers which then can be used by every single bit you can think of is very critical for our sales team targeting customers" (Interviewee I7).

Because these firms continuously strived for creativity and innovation, participants showed that their firms built research and development avenues (n=4), protected intellectual property (n=5) and adhered to well-defined standards of practice (n=2). In support of this argument, one participant told:

"We follow structured processes since we are CMI-5 level company so we have to adhere to levels of CMI-5 as we are regularly audited. We follow industry standards to maintain this level to the customers" (Interviewee I3).

Another participant also shared similar views and said: *"We have a stringent policy on non-disclosure agreements and patents" (Interviewee I14).* One R&D focus, one participant at a telecom service provider firm underscored:

"We have a strong focus on R&D initiatives. We have heavily capitalized on improved network operations and performance capabilities and this has helped us in transforming the way we engage in business and extend our services as one of the leading telecommunications services provider" (Interviewee I1).

On research spending, another participant elucidated

"Since we have spent a lot in the R&D of our products & services and because our services are unique, we have captured a niche market segment" (Interviewee I14).



Figure 7.19: Word Cloud for Structural Capital in PSFs

7.3.3. Intellectual Capital Dimension: Relational Capital

On relational capital, most of the participants highlighted that their firms' recognised the role of stakeholder relationships, building business collaborations & engagement. In particular, we found five codes that represented relational capital in the PSFs. In figure 7.20, we indicate the number of codes and mentions for each code.

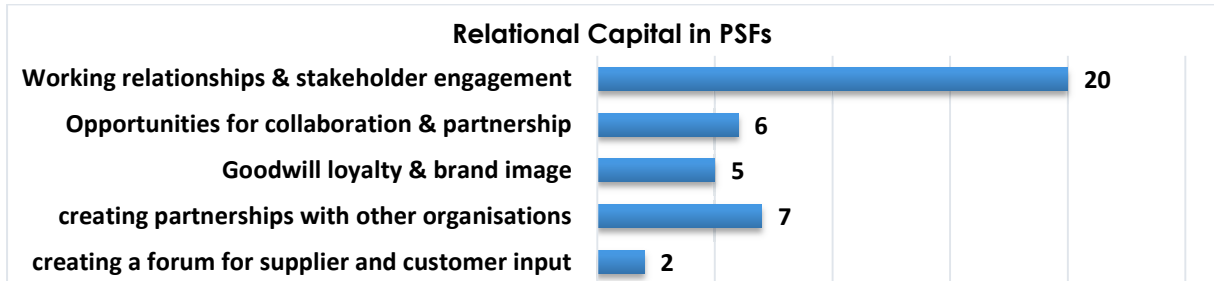


Figure 7.20: Number of Codes and Mentions for Relational Capital in PSFs

Participants showed that their firms engaged and built working relationships with the stakeholders (n=11). Such relationships established element of trust & respect with the stakeholders, promoted opportunities for long-term partnerships. A participant enlightened:

"In my viewpoint, the way 'Firm A' has maintained relationship with partners, it has helped us to be innovative and have access to R&D partnership locally and globally" (Interviewee I1).

Also, a senior software development consultant at 'firm B' said:

"Effective supplier relationship is crucial to the success of our projects. Maintaining a long-term relationship with the supplier minimizes the risk. So by trusting our suppliers, we can execute projects very well" (Interviewee I2).

We observed that these firms continuously identified and utilised opportunities for collaboration and partnership with the stakeholders (n=5). This was because of the competitive nature of service industry, and hence in view of the survivability of these firms, it was extremely important to invest in relationship-building and continue to maintain their collaborations and partnerships. As one participant (Head of Finance Operations at Digital Marketing Service Firm) stated:

"Client relationship is extremely important as without clients, our firm would simply not exist. We work in a highly competitive environment and it is easy to lose clients if they are not looked after well so it is very important for our firm to manage and strengthen working relationships" (Interviewee I6).

Participants also showed that their firms maintained brand image and client loyalty as key aspects of their customer/client relationship (n=4). They also indicated that they created a forum for suppliers and customers input towards enhancing their service quality (n=2). In this respect, one respondent at Firm-D, an Audit and Accounts firm, mentioned:

"The firm does operate on a low margin, so customer's loyalty is very important so they are able to generate fee increases each year" (Interviewee I4). Another respondent at the same firm opined:

"I think the goodwill aspect is extremely key because if we don't have our customers' goodwill through, for example, our reputation as being an independent provider. Without that we don't get paid and given how competitive the market place is, it is one of our key focuses" (Interviewee I8).

Yet another respondent, a Senior Technical Manager at an energy efficiency firm, shared:

"The satisfaction of clients and customers being our external stakeholders is vital for us. And given the increasing competition, complexity and dynamicity of the market, it is our top priority to provide quality offerings, as this would help us maintain better image of our firm. Our team of technical experts, commercial and account managers and business analysts continually work towards understanding client requirements and expectations and addressing their concerns in a timely manner. So in this regard, client feedbacks and annual surveys are taken quite seriously. Moreover, our offerings have come a long way since the company inception 25 years ago and our team focus is to continually develop new and improve existing suite of products and services" (Interviewee I13).

With regard to maintaining efficient supplier & partner relations, the same respondent said:

"Since most of our offerings are built in-house, our suppliers and partners are required to follow stringent ISO-compliant regulations and procedures. This also limits our supplier selection pool. So building a working relationship with these suppliers and partners is strategically critical for us. As we can't be everywhere and do everything we wish to, so this is where business collaboration comes in picture. Every project brings a different set of opportunities and challenges and requires specific skillset. We partner with industry leaders to fill-in any gap and provide optimum solution to our clients" (Interviewee I13).

In Figure 7.22, we can see that the firms, besides creating value for themselves as the primary stakeholder (i.e. Organization Value Creation 28%; n=37 mentions), these were also capable of creating value for other stakeholders such as: Employees Value Creation (32%; n=42 mentions), Customer Value Creation (29%; n=38 mentions) and supplier-partner Value Creation (11%; n=14 mentions). The following sections present different aspects of value creation for each of above stakeholders based on the participant responses.

7.4.1. Multi-stakeholder Value Creation Category: Employee Value Creation

All 12 participants mentioned certain aspects of employee value creation in their firms, which included professional growth & development, promotion & compensation, opportunities to build social network, work-life balance etc. We derived eight codes that captured participant responses on employee value creation in their firms. In Figure 7.23, we indicate the number of mentions in each code.

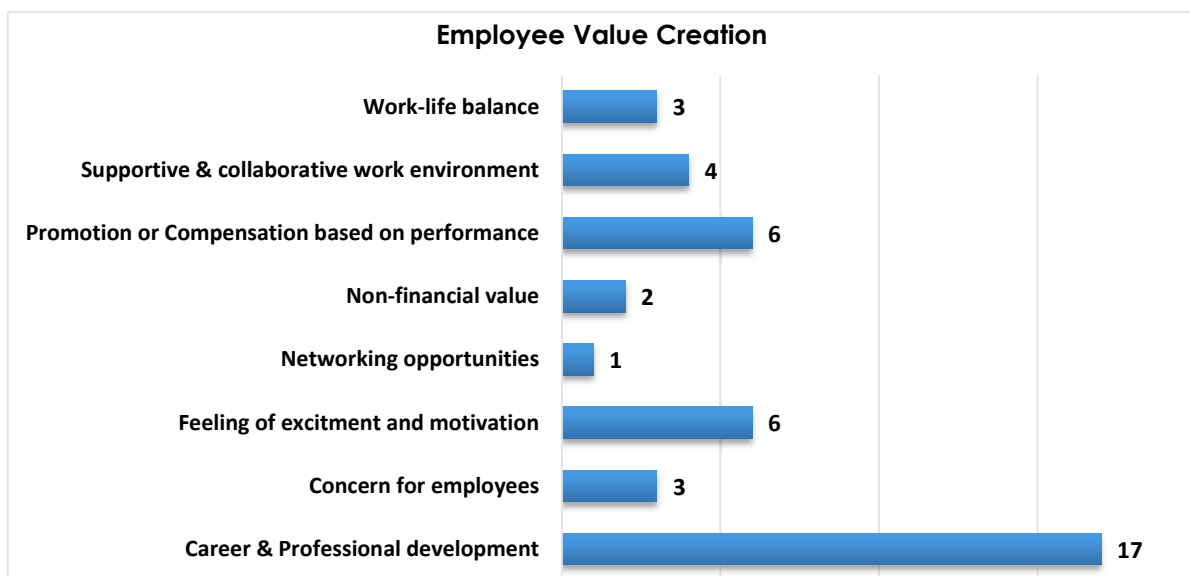


Figure 7.23: Number of Codes and Mentions for Employee Value Creation in PSFs

Participants indicated that employee value was mainly created in the form of career growth and professional development (n=9) as well as in form of promotion and compensation (n=5). One participant in this respect mentioned: “We work on skills enhancement of the employees so they grow in their career accordingly” (Interviewee I2). Another participant explained:

“For employee career growth, we have a quarterly review where we provide them with a feedback on which area they need to grow and our firm accordingly helps them get trained and pays for their career development kind of things” (Interviewee I3).

Yet another employee, while highlighting the value benefits offered to the employees, said:

"The main value our firm creates for its employees is rapid growth in promotion, so promotion to the next grade will tend to be expected every 2-3 years which is a lot quicker when you see in similar industries outside the firm, and that's one thing. And another thing is exposure to senior clients. You're given opportunity to take on projects early in your career opportunities you wouldn't see elsewhere. The firm does see its people as its assets so there is value. There is also support for certifications like CFA and other training programs like from industry recognized bodies we get support to do that, so that's a lot of value add" (Interviewee I4).

However, the same respondents, while mentioning the lacking aspects when it came to creation of value for employees in their firm, said:

"But I think the firm doesn't remunerate financially on the same level as the firms in the related industry and given this, people may leave and go somewhere else,. But for career growth and profile, you get very quickly promoted to management position, it wouldn't be that quick somewhere else. So career growth is quick but at the expense of remuneration which needs a balance. The work environment generally is a good one, is very supportive, you get access to a lot of very experienced people at the top of the profession both internal and the clients and there is a lot to be learnt. There are interesting projects to work on, and a lot of uninteresting projects to work on as well, so experience varies drastically between different people. But overall, I think the firm has good value for its employee" (Interviewee I4).

Yet another way firms created value was by showing concern for the employees (n=3), offering an exciting, motivating & engaging work atmosphere (n=4), creating a supportive and collaborative work environment (n=3). While indicating that his firm was concerned about the employees, one respondent stated:

"As I mentioned earlier, we have a culture of 'Put your people first' in our company. We match employee skills as per goal requirements" (Interviewee I1).
Another participant stated:

"We try to address their [employees] concerns and complaints on high priority basis. And also there is a client-service provider setup within the company. For example, if the technical services team is not satisfied with the quality of new product or service, they can voice their opinion and flag any potential issues. This will then lead to the internal discussions and appropriate actions will immediately be taken. This maintains employee motivation and sense of satisfaction. And also, our company believes in career advancement of the employees by encouraging them to engage in continuous professional development" (Interviewee I13).

One participant, while sharing his firm's policy on flexible working arrangement, explained:

"We offer employees many things, which other companies do not. For example, if an employee is ill or has family problems, we allow him to work from home. We also help them with many other things and in many other ways. So we give them what they require and what can help them to stay with us because employee skills are our skills and we don't want to lose them" (Interviewee I3).

Considering the overall work environment, we observed that the most of the firms not only created collaborative workplaces but also encouraged an environment that was culturally diverse and inclusive. For instance, a participant explained:

"Our firm values are based on multiculturalism and inclusivity. Therefore, the employees feel comfortable and at ease when working on different projects. We respect their religious and cultural festivities and have events at office to celebrate them. This creates collegiality and enhances trust. Congenial work atmosphere is at the core of what we do" (Interviewee I14).

In addition to the above, another unique aspect of employee value creation was to encourage employees to build their social and professional networks (n=1). One participant specifically mentioned in this regard:

"Being here is thorough exposure to and networking with top companies as our clients. So one of the key things attracting talent here is our clients' portfolio, the culture within the firm, and I guess, the networking that we have internally within the firm and having a young collaborative workforce" (Interviewee I8).

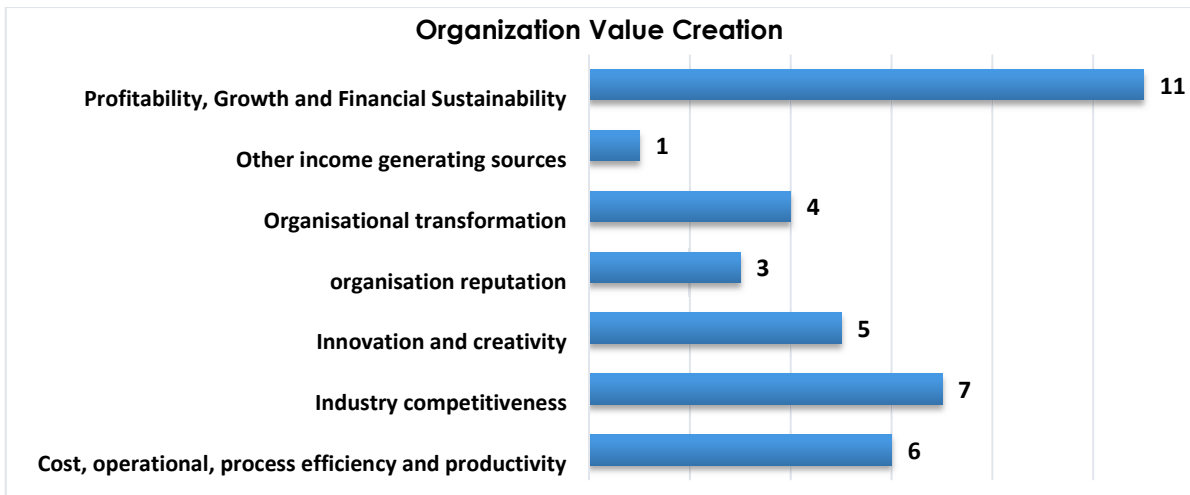


Figure 7.25: Number of Codes and Mentions for Organization Value Creation in PSFs

Participants mentioned organization financial value creation in several aspects. First, the profitability, growth, and financial sustainability of the firm (n=9) and other income-generating sources (n=1). In view of financial value indicators, a number of participants shared their opinion as follow:

"We frequently measure financial performance of the company using the matrices like sales turnover, profit growth, number of new clients added, assets growth" (Interviewee I13).

"We have recorded a double-digit sales growth consistently and anticipate it to grow in future. All this can be attributed to the intellectual capabilities of our firm that reside in our human resources and organizational systems" (Interviewee I6).

"I think what we are doing is crucial to both sales growth and longer-term profitability. So at my department, we evaluate advertising campaigns and advise our firm to improve the advertisements as much as advertising can stimulate sales and have end effect on sales. We do have a direct effect on sales as we do that through improved advertisements" (Interviewee I7).

Moreover, the participants mentioned non-financial performance (non-financial value creation) in good variety of terms such as firm's industry reputation (n=2), long-term market competitiveness (n=5), innovation & creativity (n=5), organizational transformation (n=4) and operational efficiency & productivity (n=6). On market sustainability in particular, some participants explained as follow:

"Our organizational intellectual resources and cutting edge technologies that we employ are the key sources of long-term business advantage. These unique firm-based abilities serve as prime mover for achieving organizational performance benchmarks" (Interviewee I6).

"The unique capabilities of our firm have contributed to the firm's reputation in the industry. Our firm has been one of the market leaders in accounting services and our firm will always be their number one choice to go to for any client. So our overseas drives and revenues contributed by the firms' developed processes and people make it more efficient as compared to the competitor firms" (Interviewee I4).

For other non-financial value/performance indicators like innovation & creativity and organizational transformation, two participants explained as follow:

"Obviously, teamwork culture at our firm has derived innovation and creativity by enabling team members to put forward unique perspectives to the table" (Interviewee I1).

"Well I suppose we have been learning on how to make things better, faster and more effective. It means, we have spent more time on research and teaching and doing better. So I suppose our effective systems, technologies, innovative capabilities and research culture enable us to deliver on the main goals of the university and our main vision which is to have a positive impact on society so all of those things help us achieve that" (Interviewee I10).

Last but not the least, one participant, while specifically highlighting on his firm's operational effectiveness, efficient processes and automation systems, said:

"I would probably say that value is being created by existing intellectual capital in terms of efficiency and doing things as quickly. I guess 60-70% of the firm value is created by the employees who have worked on the same project in past, and as a result, they are able to apply their learning from their previous project experience and bring it forward. Other side of core capabilities comes from technology and employees bringing in new ways of doing things such as automation, improved software and removing duplication of work and compliance related tasks" (Interviewee I8).



Figure 7.26: Word Cloud for Organization Value Creation in PSFs

7.4.3. Multi-stakeholder Value Creation Category: Customer Value Creation

Within the ‘customer value creation’ category, our primary focus was on measuring value created for customers & clients. In general, most of the participants mentioned customer value creation in terms of cost-effective services, service quality, customised and relevant services, increased customer satisfaction, etc. We accordingly derived eight codes that captured participant responses on customer value creation in their firms. Figure 7.27 indicates the number of mentions for each code.

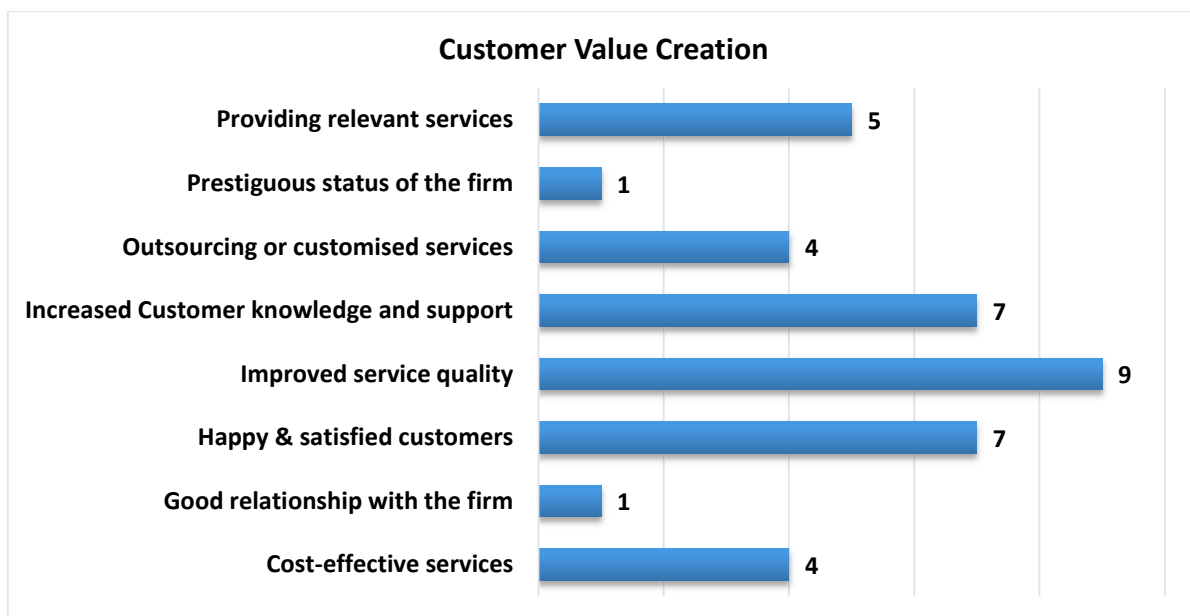


Figure 7.27: Number of Codes and Mentions for Customer Value Creation in PSFs

Participants explained that their firms offered customer value in a number of ways. Some of these included: improved service quality (n=7), enabling customer knowledge and customer support (n=6), enhanced customer satisfaction (n=6). Two participants, while sharing their views on offering greater value for money and services at competitive rates, mentioned:

"As an energy-efficiency service provider, our clients and customers get better value for money" (Interviewee I13).

"We give our customers cost-effective solutions at the best price and warranties at no additional costs. Our service contracts are very clear and well-defined so our customers know what they are getting, and there are no surprises at the end" (Interviewee I2).

On quality of service and offering better deals, few participants shared views as below:

"We have measures of quality and quantity, so quality and quantity improvement comes in our day to day business processes and that's where our high-scale employees come in and take these measures one by one" (Interviewee I3).

"We strongly believe in providing promising service quality and better value for money to our valuable customers" (Interviewee I1).

Among those who talked about providing customer support and knowledge about their products and services, one participant explained:

"We give them knowledge in advance so they can understand our products and services. So, we have created our online portal, where once a customer signs up for a product or service, they get quick training material that tells them how they can fix the problems and best use our services" (Interviewee I11).

Other ways the firms offered value benefit to their clients/customers included: offering cost effective services (n=4), outsourcing to customise services (n=4), and offering relevant services (n=4). In this regard, one participant specifically mentioned:

"I would probably have to say the key value for our customers and clients is 'better products at a better price'. Because what we are trying to understand is the 'value-price balance' and also the desirable features and usability testing

as part of it. So overall, it's 'better quality products at a better price' (Interviewee I7).

On outsourcing, customising, and offering relevant services, two participants explained:

"Our partner firms mostly run like the same as an overall brand but with different cost centres and revenues. We engage with these firms to provide us a service that contributes to our final service" (Interviewee I4).

"I think, the key part of that is our in-house intellectual capital within the firm in terms of experience and knowledge that our employees have as well as the network that we do have overseas and the ability to bring staff across multiple projects" (Interviewee I8).

Moreover, some participants indicated that their firms maintained good customer relationships (n=1) and that trust based association, given the prestigious status of their firms, was a source of great value for the customers (n=1). One participant, for instance, mentioned:

"Along these lines of our business philosophy [the concept of innovation and technology for improved fitness and health outcomes], we showcase our products & services and try to maintain client relationships that are based on trust and respect. This trust factor would lead to even more clients and customers in future" (Interviewee I14).



Figure 7.28: Word Cloud for Customer Value Creation in PSFs

7.4.3.1. Supplier-Partner Value Creation

Having captured in detail the value insights on customers, we additionally enquired respondents about the value outcomes for external stakeholders such as: suppliers & partners being critical to PSFs as part of their external relationship network. In this regard, some participants (n=5) indicated numerous aspects of value creation for suppliers and partners. These indicators mainly included: enhancing market influence, better products, business opportunities, expertise etc. We accordingly derived seven codes that captured participant responses on supplier and partner value outcomes in their firms. Figure 7.29 indicates the number of mentions for each code.

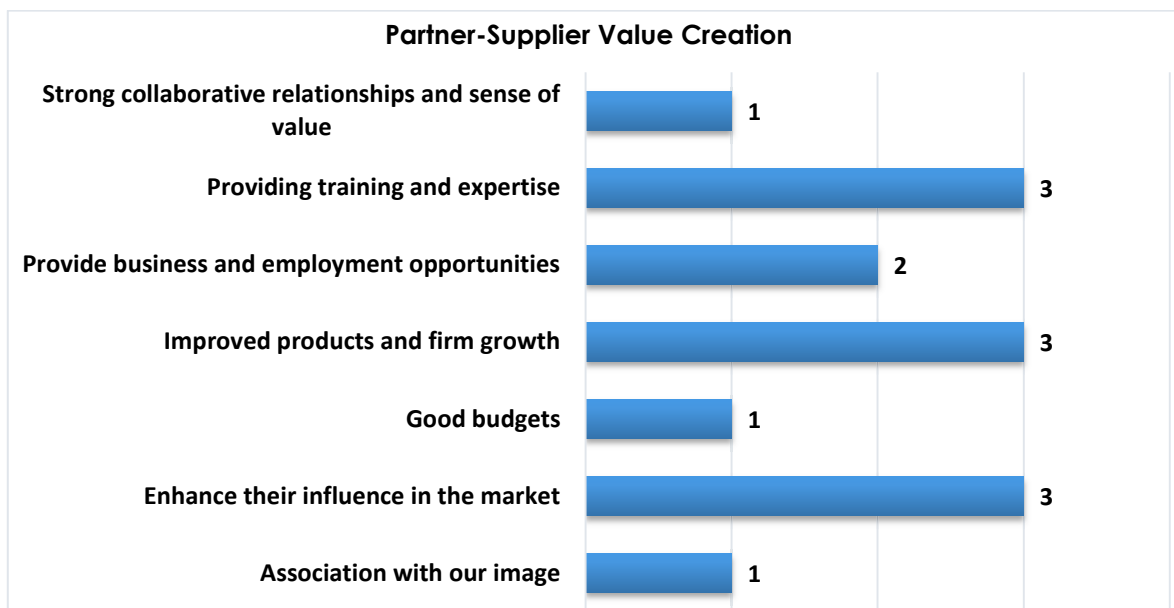


Figure 7.29: Number of Codes and Mentions for Supplier & Partner Value Creation in PSFs

Upon our additional enquiry on supplier-partner value creation, participants explained that they encouraged partners and suppliers to associate with their firms' image, which increased partners' influence in the market (n=2) through innovation and technology. One participant mentioned:

"For our partners, our main partners are the people within the operational marketing area and, I guess, it's their job to kind of steer that area because we are directly in the internal operations area. So the value we provide to our partners is, I guess, the avenues to make their job more relevant and the avenues to be able to influence because the partners can't influence without their intellectual knowledge and intellectual capital" (Interviewee I7).

Respondents in some of the firms mentioned that they worked with partners and suppliers to improve the supplier products and firm growth (n=2). For instance, a participant indicated:

"With our collaborations with the industry, it means they have the research that they can use in their work, may be in creating better products" (Interviewee I10).

In view of the firms offering business opportunities to suppliers & partners, the same participant indicated:

"In terms of the value we create for the suppliers, with all our buildings, we are keeping big builders in business. So we generate employment, we generate business for our suppliers because we are a big organization" (Interviewee I10).

Moreover, we observed yet another unique way of creating value for partners by one of the firms i.e. by providing training and expertise through the local staff to their overseas partners as a way of creating value (n=2). In this regard, one participant mentioned:

"I guess it's the chain of network with the partner firms we have overseas, I would say that the key value is the experience of working on multinational clients and looking at different ways of doing things. That's probably the key value driver for them because that kind of results in centre of excellence model where teams which are overseas benefit from expertise of teams having local and globally diverse experience" (Interviewee I8).

Another way one firm created value for its supplier-partner network was to build trusted-backed collaborative relationships that resulted in value being mutually created for both of the stakeholders. Accordingly, one participant was of the opinion:

"Overall, we have very good and positive relationships with our suppliers and partners. So I think, it's an 'intrinsic sense of value feeling' and a very strong collaborative relationship. And I think the projects [the contracts] that we give to our suppliers stretch them from a growth point of view of their own skills, knowledge and intellectual property, which could be challenging for them in our projects, so I think that's the value created for our suppliers" (Interviewee I7).

7.5. Qualitative Confirmation/Validation of the Research Model

The objective behind qualitative confirmation of our research model was to ascertain whether the findings from quantitative data assessment as explained in the last chapter corroborate and support the qualitative results under examination. For this purpose, we conducted an exploratory enquiry on all the variables/constructs of the research model. The in-depth exploratory examinations of the model variables enabled us to corroborate the research model in chapter 6. The additional validation also confirmed that the qualitative data collected via the interviews were consistent and in harmony with quantitative data, thereby leading to improved research model validity and research reliability as a whole.

7.6. Relationship Between HPWPs and Intellectual Capital

This section investigates the consistencies of qualitative interviews observations with the quantitative findings of the hypotheses. The exploratory qualitative enquiry also enabled us to draw additional insights, themes and meanings out of rich qualitative data. In view of evaluating the relationship between HPWPs and IC, we first developed a project map to give an overview of the association between various HPWPs bundles with IC dimensions.

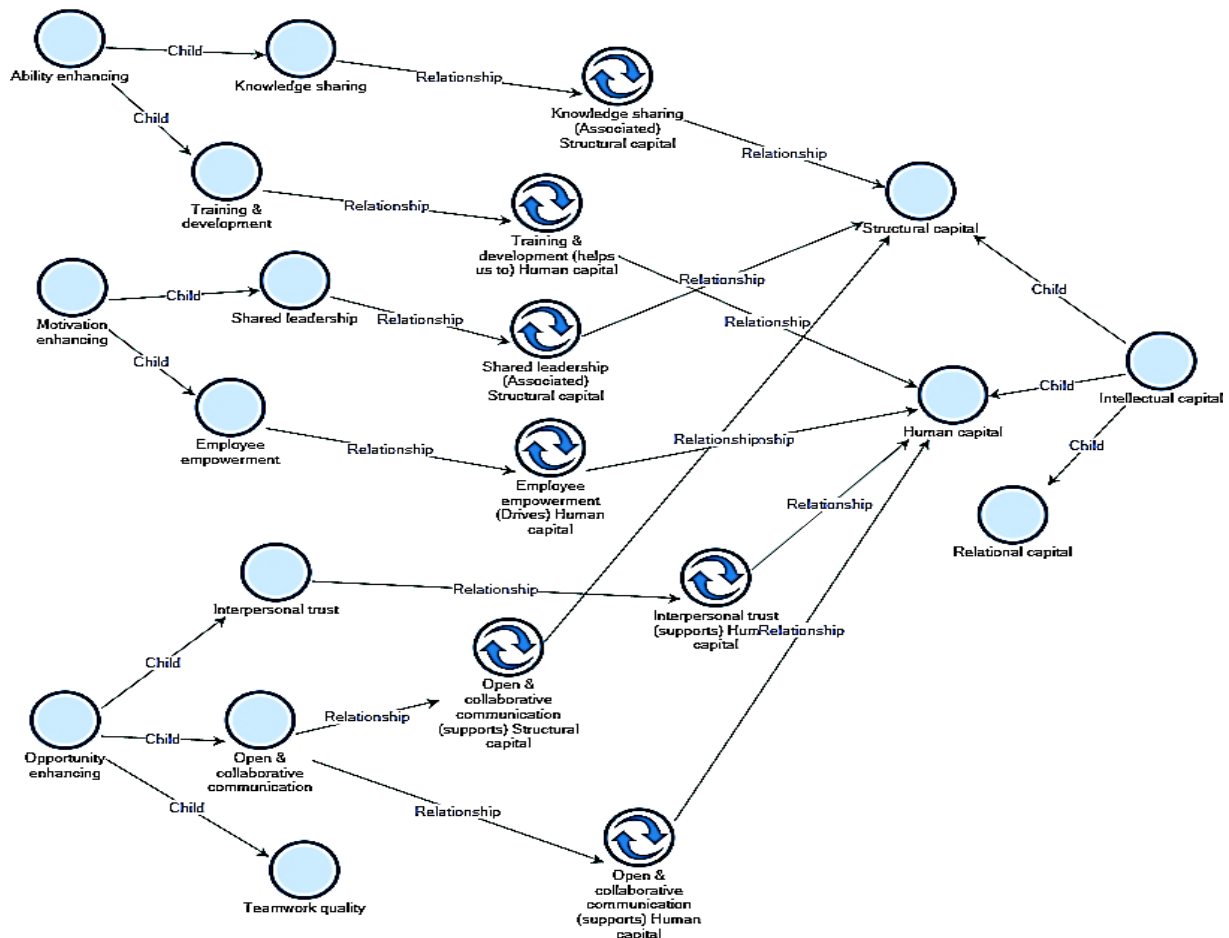


Figure 7.30: Project Map of the Relationship Between HPWPs and IC

7.6.1. Relationship Between Ability-Enhancing-HPWPs and IC

We first analyzed the relationships between Ability-Enhancing-HPWPs (AEH) and IC. In support of this relationship, a participant (Interviewee I9) explained that employee training and development not only improved employee knowledge but also the firm's overall knowledge capabilities and resources in general. We found this observation to be related to human capital development which supported H_{1a} using the quantitative data. While this hypothesis was not completely supported by survey data results, however, the interview findings suggested that it was because of 'employee training & development' that supported the development of the firm's human capital. In addition to that, some participants (I11, I13 and I14) indicated that knowledge sharing was commonly associated with enhancement of the firm's structural capital i.e. the firms that sought to encourage knowledge sharing among their employees also tended to develop the necessary support processes and multiple tools to achieve this. We found this observation being related to H_{1b} in the research model which was also supported by the survey results. Lastly, we also observed some notable arguments (I10 & I13) to support the relationship between AEH and relational capital. This relationship was also supported as H_{1c} in the quantitative surveys.

Relationship Between the Factors	Quantitative Equivalent (Supporting Hypothesis Statement)	Qualitative Equivalent (Supporting Interview Excerpts)
Ability-enhancing HPWPs and Intellectual Capital	<p><i>H_{1a}: Ability-enhancing-HPWPs have significant positive effects on human-capital in the PSFs.</i></p> <p><i>H_{1b}: Ability-enhancing-HPWPs have significant positive effects on structural-capital in the PSFs.</i></p> <p><i>H_{1c}: Ability-enhancing-HPWPs have significant positive effects on relational-capital in the PSFs.</i></p>	<p><i>"We have certification courses that sometimes our people do. They are also encouraged to spend one hour to brief everyone about the course they have taken, how helpful it was and how it can add value to the company and if there is any documentation or the training material, they received so that they can share with us. That is how we try to grow everyone's knowledge and our firm's intellectual capital" (Interviewee I9).</i></p> <p><i>"The most common knowledge tools, data storage systems and communication technologies that we use in performing our routine business activities are TeamViewer, Dropbox and business version of Skype" (Interviewee I13).</i></p> <p><i>"We have 'Teaching Collaborative</i></p>

		<p>Conference' where people come together and share their experiences. There are also other opportunities throughout the year where we call 'communities of practice'. So we have communities of practice around different types of teaching. We have communities of practice around project management, we have communities of practice in various research areas, where people form groups and then meet periodically to share ideas" (Interviewee I10).</p> <p>"Building a working relationship with these suppliers and partners is strategically critical for us. As we can't be everywhere and do everything we wish to, so this is where business collaboration comes in picture. Every project brings a different set of opportunities and challenges and requires specific skillset. We partner with industry leaders to fill-in any gap and provide optimum solution to our clients" (Interviewee I13).</p>
<p>Conclusion: AEH, particularly, employee training and development helps in building human capital, which relates to and supports H1a. AEH, particularly, knowledge sharing is associated with the development of organizational processes & tools (i.e. structural capital) and therefore relates to and validates H1b. AEH, in particular, employee knowledge sharing is vital in promoting external stakeholder network through collaborative engagements and building communities of practice which relates to relational capital and hence corroborates H1c.</p>		

Table 7.5: Relationship Between Ability-enhancing HPWPs and IC

7.6.2. Relationship Between Motivation-enhancing HPWPs and IC

Table 7.6 below presents the observations from interview data that provided insights on hypotheses tested via surveys. Some participants indicated that motivation-enhancing HPWPs (MEH) such as 'employee empowerment', in conjunction with training and shared leadership, improved employee knowledge and work-related competencies and consequently enhanced the firm's human capital. This provided strong evidence to support

H_{2a}, which suggested that MEH had positive affect on firms' human capital. Furthermore, MEH practice like 'shared leadership' tended to influence the firm's processes and overall organizational structure via transitioning from a centralised approach to a decentralised and more collaborative approach, which was linked to the use of collaborative tools and systems. Given this observation made using the interview data, it endorsed the H_{2b} from the survey findings stating that MEH positively affected the firm's structural capital. For the relational dimension of intellectual capital, the interview participants did not provide enough insights on this aspect as opposed to the survey results that supported the hypothesis that MEH practices positively affected the firm's relational capital.

Relationship Between the Factors	Quantitative Equivalent (Supporting Hypothesis Statement)	Qualitative Equivalent (Supporting Interview Excerpts)
<p>Motivation-enhancing HPWPs and intellectual capital</p>	<p>H_{2a}: Motivation-enhancing-HPWPs have significant positive effects on human-capital in the PSFs.</p> <p>H_{2b}: Motivation-enhancing-HPWPs have significant positive effects on structural-capital in the PSFs.</p> <p>H_{2c}: Motivation-enhancing-HPWPs have significant positive effects on relational-capital in the PSFs.</p>	<p>"How, it [employee empowerment] has impacted the overall intellectual capabilities of the organization is that it's more organized because if people are working in their separate silos, we can't capitalize on their abilities" (Interviewee I11).</p> <p>"Being an organization where our only asset is our people, the employee empowerment practices are quite strong in terms of training, in terms of building the intellectual capital through our people, through the experiences, formal trainings and on-the-job coaching" (I8).</p> <p>"We believe in a leadership style that enables everyone to have a say in the decision-making. All staff members engage in a shared decision processes after building</p>

		<i>collective agreement on the actions to be taken so that everyone takes the ownership of the tasks and leads" (Interviewee 113).</i>
<p>Conclusion: MEH particularly, employee empowerment enhances human capital, which relates to and endorses H_{2a}. MEH particularly, shared leadership, is associated with building firm's structural capital in terms of implementing decentralised structures and decision making process; this relates to and validates H_{2b}. None of the MEH supports the relational capital and hence H_{2c} couldn't be supported.</p>		

Table 7.6: Relationship between Motivation-enhancing HPWPs and IC

7.6.3. Relationship between Opportunity-enhancing HPWPs and IC

In case of Opportunity-enhancing practices, participants provided a strong indication that HPWP such as 'interpersonal trust' between the employees coupled with 'open and collaborative communication' created sufficient grounds for human capital development. As indicated in Table 7.7 below, participants (19 and 113) opined that a collaborative culture backed by mutual trust and credibility was instrumental towards exchange of knowledge and free flow of ideas and supported employee problem-solving abilities. These observations provided evidence to confirm hypothesis H_{3a} from the quantitative survey findings.

In addition to these, 'open and collaborative communication' as HPWP proved to be strongly associated with the firm's development of its structural capital by means of the communication processes, tools and technologies. In support of this relationship, participants (113) indicated that encouraging open and collaborative communication supported the enablement of both inter and intra departmental communication processes and practices. These observations provided insights on and supported the hypothesis H_{3b} that was also supported in the quantitative survey findings. Lastly, in support of the relationship between opportunity-enhancing practices and relational capital, one participant (12) claimed that a trusting culture served as a driving force towards successfully maintaining and sustaining effective relationships with their suppliers. In the same manner, another participant (18) mentioned that his firm was able to achieve customer goodwill which was made possible due to a trust-based relationship with their customers.

Relationship Between the Factors	Quantitative Equivalent (Supporting Hypothesis Statement)	Qualitative Equivalent (Supporting Interview Excerpts)
<p>Opportunity-enhancing HPWPs and intellectual capital</p>	<p>H3a: Opportunity-enhancing-HPWPs have significant positive effects on human-capital in the PSFs.</p> <p>H3b: Opportunity-enhancing-HPWPs have significant positive effects on structural-capital in the PSFs.</p> <p>H3c: Opportunity-enhancing-HPWPs have significant positive effects on relational-capital in the PSFs.</p>	<p><i>"I would say it's very high trust level because at end of the day, we do not have lack of transparency. Things are very transparent and we share sometimes quite sensitive details as well with everyone which, kind of, directly impacts the different parts of our intellectual capital. Even it is financial details, we freely share with everyone so that everyone understands the trajectory of the firm and where it's going. So I would say the trust values are high and primarily our communication channels and our flat structure have helped us in that" (Interviewee I9).</i></p> <p><i>"Well, the company feels our employees should be subject to mutual learning and exchange of knowledge. But this culture of sharing can only sustain if there is a sense of trust at all levels of the employees. So we take every step that cultivates trust and cohesiveness in the employees in order to help them solve complex problems" (Interviewee I13).</i></p> <p><i>"And because of our free-flow communication and very intense collaboration, we do a lot of trial & error and we try to replicate the</i></p>

		<p>processes. So that, kind of, gives us confidence and strength and something that helps us take more risk and we are able to proceed further and grow quickly" (Interviewee I9).</p> <p>"Effective supplier relationship is crucial to the success of our projects. Maintaining a long-term relationship with the supplier minimizes the risk. So by trusting our suppliers, we can execute projects very well" (Interviewee I2).</p> <p>"I think the goodwill aspect is extremely key because if we don't have our customers' goodwill through, for example, our reputation as being an independent provider. Without that we don't get paid and given how competitive the market place is, it is one of our key focuses" (Interviewee I8).</p>
<p>Conclusion: OEH particularly, interpersonal trust enhances human capital and relational capital, which relates to and endorses H3a and H3c. OEH, in particular, open and collaborative communication supports structural capital, which relates to and supports H3b.</p>		

Table 7.7: Relationship between Opportunity-enhancing Practices and Intellectual Capital

7.7. Emerging Associations Between HPWPs and MSVC

Although, we anticipated relationships between HPWPs & IC and between IC & MSVC in the research model, therefore, we did not hypothesize the direct relationship between HPWPs and Multi-stakeholder Value Creation in our research model. However, the interview data indicated some potential of the relationship between these two factors (see Table 7.8). We also present a project map below that broadly highlights the association between various bundles of HPWPs and value creation categories.

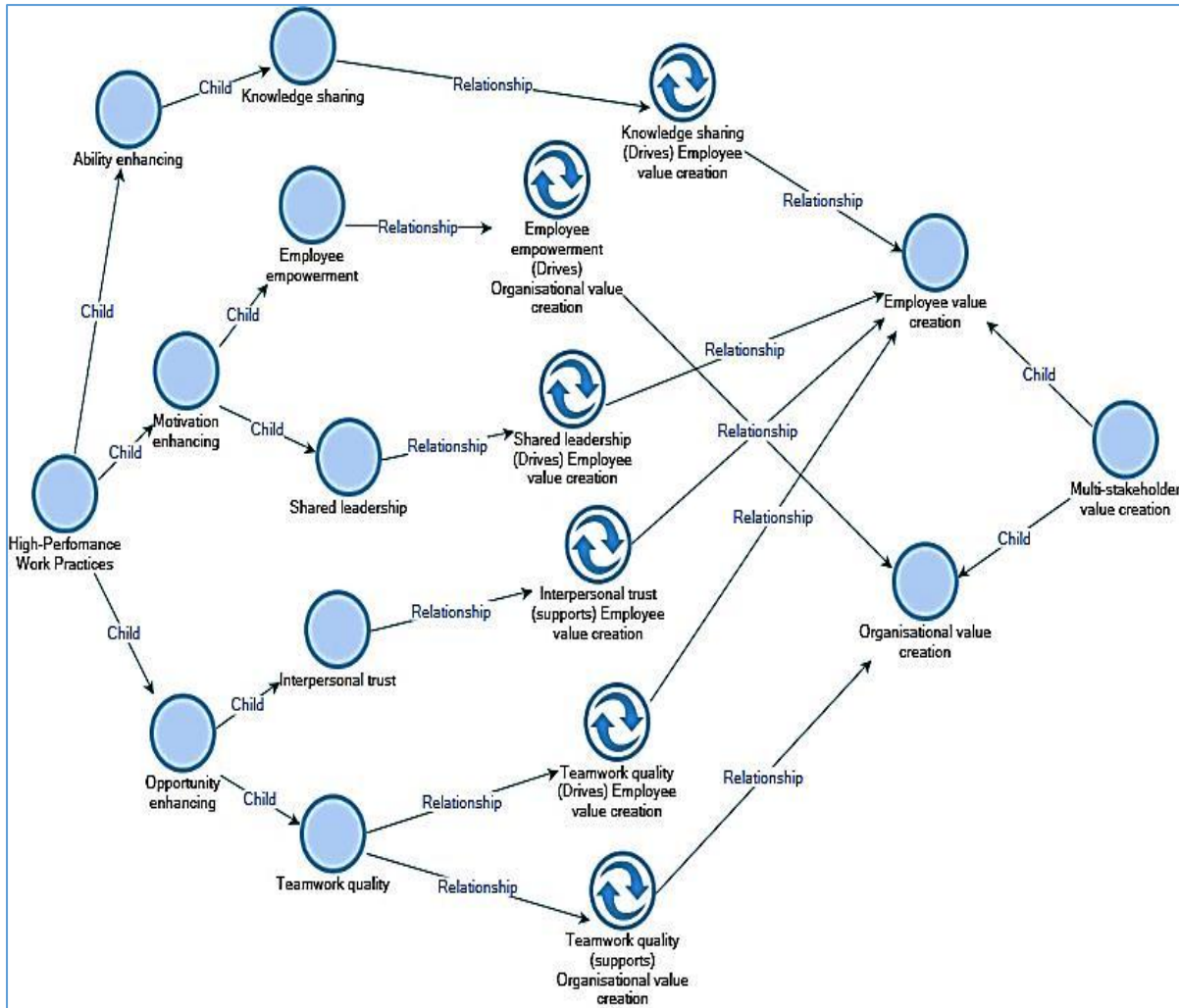


Figure 7.31: Project Map of Relationship Between HPWPs and MSVC

It was observed that some of the HPWPs directly created value for employees and organization. Firstly, Ability-enhancing HPWPs, particularly 'knowledge sharing practice', derived employee value creation in the PSFs. Accordingly, a participant (I9) explained that knowledge sharing enabled employees to learn new skills, take initiatives and improve their confidence, thereby boosting their enthusiasm towards the projects.

Secondly, Motivation-enhancing HPWPs, in particular, 'employee empowerment' practice, derived organization value creation in the PSFs, whereas, the 'shared leadership' practice derived employee value creation in the PSFs. A participant (I2) explained that when the firm empowered employees especially by enabling them to make decisions, it created employee value because of the enhanced employee motivation which spurred productivity and creativity at the workplace. Another participant (I6) explained that when a firm implemented shared leadership practice, it augmented their ability to take actions by inculcating in them a responsible work attitude.

Thirdly, Opportunity-enhancing HPWPs, specifically, the 'interpersonal trust practice' and 'teamwork quality practices' generated employee value in the PSFs. Participants (I1 and I9)

explained that when employees worked in teams, they built a mutual support system through which they leveraged each other's strengths, ideas & abilities and improved their own job performance. Similarly, opportunity-enhancing HPWPs, particularly, teamwork quality derived organization value in the PSFs.

Additionally Supported Relationship Between the Factors	Quantitative Equivalent (Additionally Supported Hypothesis Statement)	Qualitative Equivalent (Supporting Interview Excerpts)
AEH and Multi-stakeholder Value Creation	<i>Ability-enhancing-HPWPs, particularly knowledge sharing, drive employee value creation in the PSFs.</i>	<i>"Primarily because we have the culture of taking initiatives and learning new things, everyone feels excited and enthusiastic about moving into different projects that we have on an ongoing basis. So we do feel very strongly connected when it comes to working together because it serves as an area for learning new things and speaking-up" (Interviewee I9).</i>
MEH and Multi-stakeholder Value Creation	<i>Motivation-enhancing HPWPs, particularly, shared leadership, drive employee value creation in the PSFs.</i>	<i>"Consensus based style of leadership is applied from the senior management which allows employees to have their say in the decision-making. This in return boosts employee morale and efficiency" (Interviewee I6).</i>
	<i>Motivation-enhancing HPWPs, particularly, employee empowerment, drive organization value creation in the PSFs.</i>	<i>"Our company encourages involvement of employee in the decision-making. Employees take responsibility for what they do at the place of work. These empowerment initiatives lead to creative employee behaviour" (Interviewee I2).</i>

OEH and Multi-stakeholder Value Creation	<p>Opportunity-enhancing HPWPs, particularly, interpersonal trust and teamwork quality, drive employee value creation in the PSFs.</p>	<p>"Mutual cooperation, synergy and learning support among the employees are the core components for improving quality of teamwork in whatever we do. To improve bonding, we have retreats where staff member intermingle and also get to know each other's personalities. This helps in team building and future collaborations" (Interviewee 114).</p> <p>"Primarily, I think it's the confidence, trust in their abilities that we show in them that improve their performance" (Interviewee 19).</p>
	<p>Opportunity-enhancing-HPWPs, particularly, teamwork quality, drives organization value creation in the PSFs.</p>	<p>"Obviously, teamwork culture at our firm has derived innovation and creativity by enabling team members to put forward unique perspectives to the table" (Interviewee 11).</p>

Table 7.8: Relationship Between HPWPs and MSVC

7.8. Intellectual Capital and Multi-Stakeholder Value Creation

In this section, we compare qualitative interview observations with quantitative survey findings with an aim to validate hypotheses in the research model and also to draw some additional/complementary observations from the qualitative data. Considering the association between IC and MSVC, we separately explored the relationship between IC dimensions and value-creation categories (i.e. employees, organization, client/customers and suppliers & partners). We first present a project map to give a preliminary understanding of their relationship and subsequently compare the quantitative and qualitative findings governing these relationships.

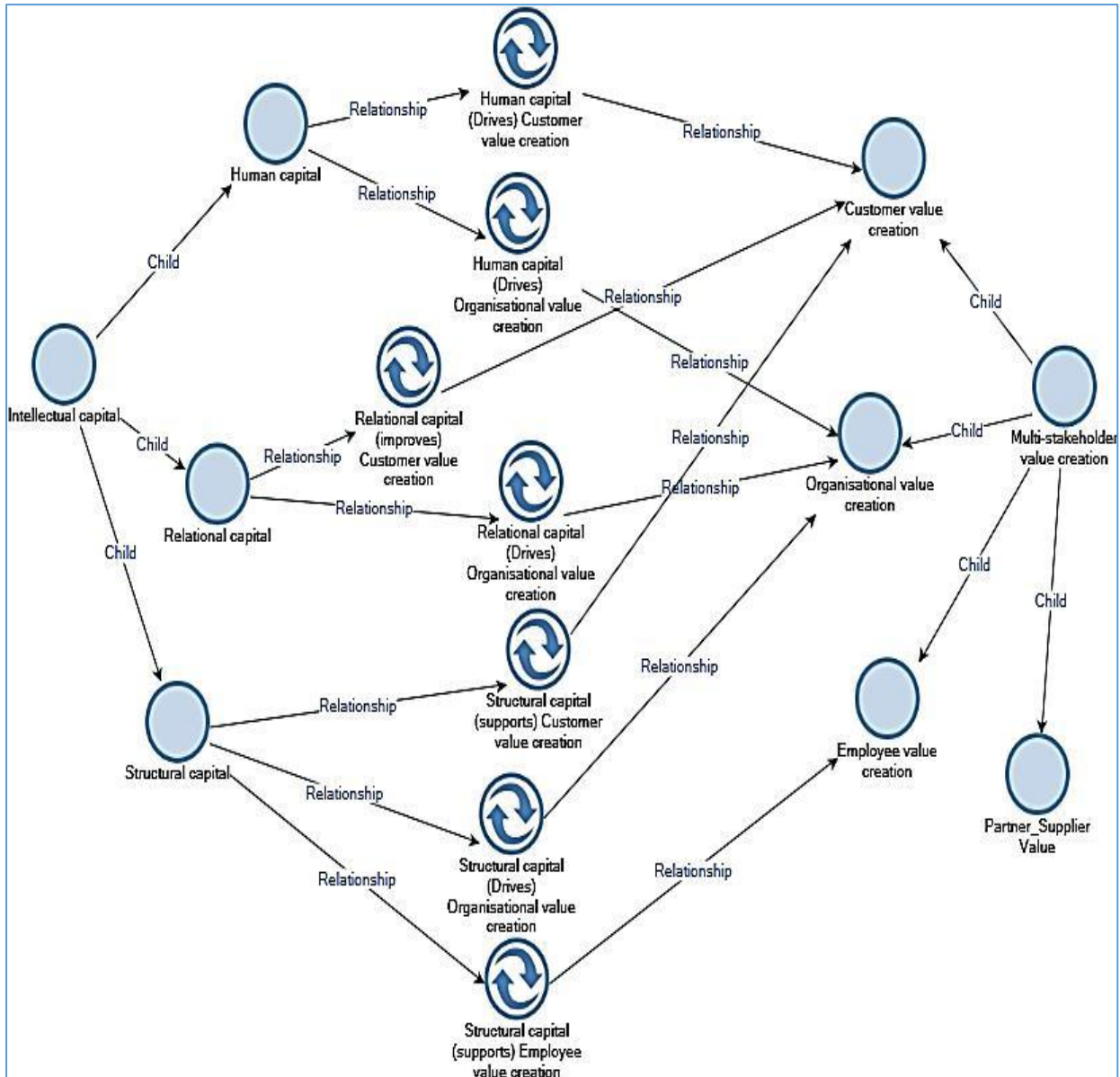


Figure 7.32: Project Map of Relationship Between IC and MSVC

7.8.1. Relationship Between Human Capital and MSVC

According to participants (I4, I6, I8, I9 and I13), the human capital played an instrumental role in creating organization value. Participants explained that human resources played a key role in stimulating organizational performance due to their productive behaviour and efficient execution of the tasks assigned. In this respect, one respondent mentioned:

“Without having right sets of people at the right places, we won't be able to move and progress as we are doing right now. The more certification courses that our employees do, we do become certified partners so if we want to pitch ourselves to any potential new client or getting a new project then those

certifications bring a lot of value. That way we are able to demand or quote more because we can say that we have good intellectual capital and qualified employees who have received a lot of trainings and have good experience in that domain, so all these things collectively help us to demand more from our clients" (Interviewee I9).

Hence, we can infer that the firm's human capital also enhances organizational image, bargaining power and helps attract new clients and customers. Human capital not only assists in organizational value creation but also supports customer value creation. According to a participant:

"With well-trained, skilled and experienced staff, the firm is able to offer high quality services to the clients, which improves customer satisfactions and retention" (Interviewee I8).

Another participant based at training & education services firm explained that they produced well-qualified graduates because of the knowledge of their academic staff. She explained:

"How we develop our students and produce effective graduates for the community, it's really based on our employees. How skilled they are, the knowledge they have, how motivated they are, so it's not just about their knowledge and experience but is really about their engagement and motivation as well" (Interviewee I10).

In view of the professional career growth of the employee, two respondents mentioned that they encouraged staff to continually enhance their knowledge & skills through training/certification programs. They shared their views as below:

"The firm does see its people as its assets so there is value. There is also support for certifications like CFA and other training programs like from industry recognized bodies we get support to do that, so that's a lot of value add" (Interviewee I4).

"We work on skills enhancement of the employees so they grow in their career accordingly" (Interviewee I2).

Above observations are consistent with and confirm H_{4a}, H_{4b} and H_{4c} hypotheses of the model which suggested that the human capital supported value creation for employees, organization and customers.

Relationship Between the Factors	Quantitative Equivalent (Supporting Hypothesis Statement)	Qualitative Equivalent (Supporting Interview Excerpts)
Human Capital and Multi-stakeholder Value Creation	<p>H_{4a}: Human capital supports employee value-creation in the PSFs.</p> <p>H_{4b}: Human capital supports organization value-creation in the PSFs.</p> <p>H_{4c}: Human capital supports customer value-creation in the PSFs.</p>	<p>"We work on skills enhancement of the employees so they grow in their career accordingly" (Interviewee I2).</p> <p>"We have recorded a double-digit sales growth consistently and anticipated it to grow in future. All this can be attributed to the intellectual capabilities of our firm that reside in our human resources and organizational systems" (Interviewee I6).</p> <p>"Without having right sets of people at the right places, we won't be able to move and progress as we are doing right now" (Interviewee I9).</p> <p>"Our people are the ones constantly relied on. We are hired only for the purpose of intellectual capital and the knowledge our employees have that enable us to oblige our clients. It's the main thing we get paid for, I guess" (Interviewee I8).</p>
<p>Conclusion: Human capital drives employee, organization and customer value creation, which is related to and supports H_{4a}, H_{4b} and H_{4c}.</p>		

Table 7.9: Relationship Between Human Capital and MSVC

7.8.2. Relationship between Structural Capital and MSVC

A number of participants (I1, I6, I9, I10, I11 and I13) confirmed that like human capital, structural capital also supported creation of organization value. As provided in table 7.10, a participant (I1) explained that the firm's communication infrastructure and operations network increased their customer base and market share. Likewise, participant (I6) highlighted that the firm's in-house information systems improved their operational and financial efficiency hence created value for the firm. Another participant (I10) attributed value creation to the use of effective systems, innovative capabilities and promotion of R&D culture in their firm. Another participant (I9) expressed that the firm's efficient processes and organizational flexibility were valuable to the employees because these created a shared and interactive work environment.

On the other hand, participants (I1, I7, and I11) also indicated that structural capital enabled the firm creating value for the customers, in terms of service quality, price affordability, and customer satisfaction. For instance, one participant explained:

“Organizational ICT tools and systems are very important for speedy communication between the employees in order to efficiently deliver end-user services. These not only ensure speedy provision of services but also the quality of service and end-to-end transparent visibility of the processes for management and staff. ‘Firm A’ also takes advantage of the technological tools that deliver services to our customer with a single click. Telecommunications market is very competitive in Australia therefore it is quite important for our firm to maintain network reliability, and innovative products & services to achieve maximum customer satisfaction” (Interviewee I1).

These observations led us to confirm that structural (organizational) capital supported employee, organization and customer value creation, which was also related to H_{5a}, H_{5b} and H_{5c} already tested via quantitative surveys.

Relationship Between the Factors	Quantitative Equivalent (Supporting Hypothesis Statement)	Qualitative Equivalent (Supporting Interview Excerpts)
Structural Capital and Multi-stakeholder Value Creation	<p>H5a: Structural capital supports employee-value-creation in PSFs.</p> <p>H5b: Structural capital supports organizational-value-creation in PSFs.</p> <p>H5c: Structural capital supports customer-value-creation in PSFs.</p>	<p>“Our in-house built billing system to bill our clients in an easy and convenient manner. This resource is vital for the operations of our company. We also use other financial systems, which play key part in driving value for the company” (Interviewee 16).</p> <p>“We offer better voice quality of service and higher network coverage at affordable price and this is because our communications infrastructure and operations network are frequently monitored, upgraded and improved” (Interviewee 11).</p> <p>“So we try to be flexible so that we take advantage of the current processes and kind of mould ourselves accordingly so that way it's very smooth for them to incorporate us and they feel much more comfortable” (Interviewee 19).</p> <p>“Telecommunications market is very competitive in Australia therefore it is quite important for our firm to maintain network reliability, and innovative products & services to achieve maximum customer satisfaction” (Interviewee 11).</p> <p>“I think ultimately, I would again be talking about my teams. Because we do a lot of product related research, I would probably have to say the key value for our customers and clients is ‘better products at a better price’” (Interviewee 17).</p>
<p>Conclusion: Structural capital drives employee, organization and customer value creation, which relates to H5a, H5b and H5c.</p>		

Table 7.10: Relationship Between Structural Capital and MSVC

7.8.3. Relationship Between Relational Capital and MSVC

Many participants (I1, I2, I3, I4, I8, I9, I11 and I13) indicated that relational capital created value for the organization in terms of product & service innovation, attracting new clients projects and gaining new partners (see table 7.11). In this backdrop, a participant mentioned:

"Again I come back to intellectual capital. All of our financial value-created for the firm is because of intellectual capital and without it, we are nothing and that's what we get paid for. An example would be, say, as a firm we are strong in a particular industry group, and we have relationships with all the top banks and top members of this industry group" (Interviewee I8).

In support of maintaining working relationship between a firm and its suppliers & partners, one participant explained:

"In any business, your suppliers and partners are very important because many times we deliver services & products, which are not entirely our own products & services, we need to get things from the other partner organizations, and if any of the partners is giving any kind of trouble or low quality products, eventually it will impact our business. So it's very important that we have a good relationship with the partners & suppliers. And as I mentioned earlier, we have a preferred partner list and that is openly available to the partners, it shows how we grade them and how we weigh them. So they can, in turn, deliver the best services for us. It works like if a partner or a supplier is providing good services, value and quality outputs and timely responding to all of our queries and requests, we will increase their grading level in our list of preferred partners, which means they will be preferred in the next project, so that's why there is also a competition between our partners and suppliers" (Interviewee I11).

Such observations enabled us to conclude that relational capital assisted in deriving organization value. This relationship was also supported in the quantitative survey part via H_{6b}. Furthermore, the views of the participants (I4, I7, I10 and I11) also supported the relational capital role in customer value creation in terms of improving service quality, creating customised offerings, better customer support service. One participant while highlighting the significance of building customer relationships, explained:

"So I think the relationship with the customers and external stakeholders is very critical. For us to influence them, we need to cultivate a good working relationship. That involves two things. One is developing a personal relationship, which goes down to engaging at a personal level on a coffee, lunch or go out, and then another is sharing the information relevant to them like product innovations and offcourse delivery of successful projects. So in that sense, we influence their decisions to prefer our offerings and the input they give us helps us improve our service quality" (Interviewee I7).

One participant while talking about the robustness of their supplier/partner network, said:

"With the university, collaboration is absolutely critical. We have partnerships with industry and government at every level. We have collaborative partnerships with universities overseas, we have research partnerships and we also have not just with universities and industry and government, we have partnerships with our precinct. So where we are located at the moment, we collaborate with ABC News, which is one of our neighbours, we collaborate with power house museum. We collaborate with start-ups, we are trying to create a start-up hub and we have actually got an initiative to do that. We have set aside space so that start-ups can come and work here. And we are trying to look at our environment as well. So those sorts of partnerships are extremely important" (Interviewee I10).

The same participant also shared her opinion on how her firm engaged with their suppliers:

"And also we look after our suppliers as well, we are a very large organization and we consume a lot of stuff, we are very aware of our partnerships with suppliers. And sometimes we can use those partnerships with suppliers to provide opportunities for our students as well" (Interviewee I10).

The above observations gathered from the interviews led us to conclude that relational capital drives customer value and this was also confirmed by H_{6c} via survey method.

Relationship Between the Factors	Quantitative Equivalent (Supporting Hypothesis Statement)	Qualitative Equivalent (Supporting Interview Excerpts)
Relational Capital and Multi-Stakeholder Value Creation	<p>H_{6a}: Relational capital supports employee-value-creation in PSFs.</p> <p>H_{6b}: Relational capital supports organization-value-creation in PSFs.</p> <p>H_{6c}: Relational capital supports customer-value-creation in PSFs.</p>	<p>“Being here is thorough exposure to and networking with top companies as our clients. So one of the key things attracting talent here is our clients’ portfolio, the culture within the firm, and I guess, the networking that we have internally within the firm and having a young collaborative workforce” (Interviewee I8).</p> <p>“In my viewpoint, the way ‘Firm A’ has maintained relationship with partners, it has helped us to be innovative and have access to R&D partnership locally and globally” (Interviewee I1).</p> <p>“I think to increase sales growth, it is vital for our company to maintain good relationships with customers and clients. If the clients are happy, they would always award you with contracts and projects which would bring in new sales” (Interviewee I2).</p> <p>“So client relationship is very important for our firm because maintaining quality in my line of service is not only a regulatory requirement but also linked to our reputation and the value that can be added. In addition to the contracted work, this whole value the firm gives to the customer and the recommendations we give can improve business processes of the customers. That’s the sort of things that keeps the customers loyal.” (Interviewee I4).</p>
<p>Conclusion: Relational capital drives value for employees, organization and customers, which relates to and supports H_{6a}, H_{6b} and H_{6c}.</p>		

Table 7.11: Relationship between Relational Capital and MSVC

7.9. Comparative Summary of Quantitative-Qualitative Data Findings

Finally, we compare the qualitative results on the relationship between HPWPs, IC and MSVC with the same relationships that we hypothesized previously in the research model. The face2face interviews conducted as a qualitative mode of research enquiry additionally supported all research model hypotheses with an exception of one relationship. The comparative summary is shown in the below table.

Main Research Question	Quantitative Findings		Qualitative Findings
	Hypothesized Relationship	Hypotheses Result	Relationship Validated/ Corroborated Through Interviews?
RQ) How Do HPWPs support the growth and development of IC for multi-stakeholder value creation in the PSFs?			
High Performance Work Practices and IC			
a) How Do (Ability, Motivation and Opportunity)-enhancing bundles of HPWPs influence IC development in the PSFs?	H1a: AEH → HC	Not Supported	Supported
	H1b: AEH → SC	Supported	Supported
	H1c: AEH → RC	Supported	Supported
	H2a: MEH → HC	Supported	Supported
	H2b: MEH → SC	Supported	Supported
	H2c: MEH → RC	Supported	Not Supported
	H3a: OEH → HC	Supported	Supported
	H3b: OEH → SC	Not Supported	Supported
	H3c: OEH → RC	Not Supported	Supported
IC and Multi-stakeholder Value Creation			
b) How does IC create value in the Professional Service Firms when viewed in organization multi-stakeholder perspective?	H4a: HC → EVC	Supported	Supported
	H4b: HC → OVC	Supported	Supported
	H4c: HC → CVC	Supported	Supported
	H5a: SC → EVC	Not Supported	Supported
	H5b: SC → OVC	Supported	Supported
	H5c: SC → CVC	Supported	Supported
	H6a: RC → EVC	Not Supported	Supported
	H6b: RC → OVC	Not Supported	Supported
	H6c: RC → CVC	Supported	Supported

Table 7.12: Summary of Quan-Qual Results on Relationship Between HPWPs, IC and MSVC

7.10. Summary

In this chapter, we conducted qualitative analyses of the data collected via 12 face-to-face interviews using the Thematic Analysis technique. Analyses were done in two stages. The first stage involved data collection relating to all the model constructs/variables using an open-ended exploratory enquiry. Subsequently, the data were analyzed in terms of identification of the thematic codes, categories and patterns with an aim to understand the meaning in their entirety. In the next step, data governing the relationship between various factors of the research model such as HPWPS, IC and MSVC and their constructs were analyzed and subsequently compared with their corresponding hypotheses developed in the research model chapter. In the end, it was evident that the qualitative findings not only demonstrated the research model reliability, it also complemented the quantitative findings.

CHAPTER-8

DISCUSSIONS, IMPLICATIONS AND CONCLUSION

8.1. Introduction

The concluding chapter resolves to discuss overall research findings, contributions, implications, limitations and conclusion. The chapter starts with presenting a quick rundown on the research problem context. It then offers comprehensive discussions on research findings that lead to research contributions and implications, finally culminating in the limitations and conclusion.

8.2. Research Overview – Revisiting Background and Problem Context

Given the increased business competitiveness in the current knowledge age and the fact that global services sector has witnessed more than quadrupled growth as compared to the manufacturing sector, the physical work is being gradually replaced by the knowledge-based work. As such, the underlying challenge for HRM professionals these days is to adopt a configuration of strategic HRM practices that help in strategic redesign of the work processes and building empowered workplaces in order to effectively meet competing market needs. These empowered workplaces appear to be compatible with the challenges faced by the contemporary service firms in the modern knowledge economies.

In this regard, the review of past 20-year literature makes it evident that HR executives have developed expertise in leveraging HPWPs mostly in manufacturing and routine business environment, the concept of HPWPs application in knowledge-intensive environment like PSFs appears to be relatively less researched as expounded by the recent studies like Fu et al. (2017; 2015), Teo et al. (2014), Georgiadis and Pitelis (2012) etc. Moreover, the current PSFs literature demonstrates extraordinary significance of and reliance on employee knowledge and intellect in these firms, and this is where PSFs differentiate from rest of the business firms.

Besides, given the changing business dynamics, market competitiveness, employer-employee relations and client expectations, PSFs of today must unarguably realize the significance of resilient, adaptable and high-performing workforce as an indispensable organizational reality and the fact that continuous capacity development of and investments in human resource would be the cornerstone of

competitive success as envisioned by these service firms in today's knowledge economy. As a result, the PSFs must embrace empowered work practices (HPWPs) characterized by flexible organization structures and shared/interactive work processes if they ought to spark innovation and create quantum of knowledge-based value.

Consequently, this research uncovered the 'black-box' of how HPWPs indirectly support the creation of multi-stakeholder value in knowledge-intensive environment. In doing so, the key aim was to recommend a theoretically applicable as well as practically feasible framework that assists scholars and practitioners in understanding how HPWPs nurture IC to derive multi-stakeholder value bottom-line in PSFs.

8.3. Discussions on Key Research Findings

This research evaluates HPWPs effectiveness in PSFs and examines to what extent these practices nurture IC to consequently derive multi-stakeholder value advantage in the service firms. In view of the findings, it goes without saying that the strategic management of knowledge in PSFs necessitates a culture of HPWPs that is instrumental to building the knowledge capital and resultantly translating these knowledge assets into value. Thus, the PSFs exhibiting HPWPs would be better able to utilize human, structural and relational capabilities for sustaining a competitive advantage. Put differently, HPWPs would help in efficiently organizing work processes, managing people and leveraging technologies, thereby supporting the competitive repositioning of these resources with the firm's strategy of attaining long-term market competitiveness.

In addition to many interesting findings and new insights discussed herein, the findings also corroborate work of recent scholars undertaken within PSFs like Fu et al. (2017), Fu et al. (2015), Teo et al. (2014), Georgiadis and Pitelis (2012), Jiang et al. (2012), McClean and Collins (2011), Chang and Chen (2011), Youndt and Snell (2004) etc. that evaluated HPWPs contribution in intellectual capital context for driving firm performance. Besides, this is one of very few researches that explored HPWPs effectiveness in Professional Service Firms as HPWPs application was previously overlooked in these knowledge-intensive firms. Thus, the findings offer solid empirical support for purposefully adopting strategic HRM practices in these firms. Methodologically speaking, the quantitative data analyses and findings are in conformity with the analyses and findings of qualitative data and as such most of the hypotheses were supported in both of the research modes of enquiry. Therefore,

this research also successfully achieved its methodological objective of 'complementarity' and 'corroboration/confirmation'.

Overall, in view of the HPWPs effectiveness in PSFs as evident from the above discussions, capitalizing on strategic HRM initiatives are likely to offer lucrative paybacks in terms of growth and development of firm's knowledge capital. However, it is essential for the managers to realize that HPWPs implementation in IC building process takes some time before its true bottom-line benefits could be reaped. Equally important in this regard is to attain a thorough understanding of the supporting HPWPs implementation activities, processes and mechanisms which PSFs must undertake for more meaningfully impacting their performance and value bottom-line.

8.3.1. Discussions: High Performance Work Practices and Intellectual Capital

This research immensely supports the viewpoint that HPWPs role in building IC and consequently guiding multi-stakeholder value is phenomenal. In other words, the strategic utilization of HPWP functions demonstrates enormous impact on PSFs' IC performance. This suggests that the HRM departments in PSFs have important role to play by strategically designing and applying IC-enhancing HPWPs needed to build intellectual capabilities required to impact PSFs' knowledge bottom-line. While these HPWPs do reveal direct positive effects on human, structural & relational capitals, this is extremely critical for PSFs as their key selling-point is the staff's intellect. These findings were evident from the fact that most of hypotheses were strongly supported in the model in addition to their qualitative validation. In specific terms, these findings are presented below.

The Ability-enhancing HPWPs indeed demonstrate positive effects on structural and relational capitals but their effect was observed to be less significant on human capital. This makes it evident to support the hypotheses H_{1b} and H_{1c} but not H_{1a}. However, all three hypotheses were qualitatively supported. This implies that investments made in attracting the brightest individuals and their continuous capacity-building through training & upskilling coupled with facilitating smooth exchange of knowledge would help PSFs boost their stock of IC assets in particular, the structural & relational capital assets. Hence, PSFs intending to build their structural & relational capital strengths, the ability-enhancing practices may be utilized.

Regarding Motivation-enhancing HPWPs, a positive effect was observed on all three IC dimensions. The findings hence support the hypotheses H_{2a}, H_{2b} & H_{2c}. All hypotheses were also confirmed using the qualitative data except H_{2c}. Thus, it can be suggested that it makes great sense to empower staff by involving them in

decision-making processes, thereby rewarding them for high-performance and creativity. In other words, empowered individuals that share responsibility and leadership authority are at the core of intellectual capital growth. So, the PSFs striving to become knowledge smart, application of motivation-enhancing HPWPs would be indispensable.

In case of Opportunity-enhancing HPWPs, these exhibit positive effects on human capital, making it obvious to confirm hypothesis H_{3a}. Besides, their effects on relational & structural capitals were although positive but not significant. Hence, there was no substantially strong evidence to support hypotheses H_{3b} and H_{3c}. On the other hand, all three hypotheses were qualitatively supported. These results indicate that cultivating trust among the coworkers, eliminating communication hierarchies by enabling open interactions and encouraging egalitarian connections through quality of teamwork and mutual cohesiveness among the teams would augment the growth of IC in PSFs, in particular, the growth of human capital assets. This also suggests that PSFs aiming to boost their pool of HR capabilities and strengths, implementation of opportunity-enhancing HPWPs would be crucial.

8.3.2. Discussions: Intellectual Capital and Multi-stakeholder Value Creation

Broadly speaking, multi-stakeholder value creation was found to be in control of and linked with the flow of intellectual capital across the firms. The quantitative & qualitative data analyses and results revealed enormous IC potential towards deriving value for multi-stakeholders such as: Employees, Organization, Customers/Clients and suppliers & partners. Needless to say, this research investigated multi-stakeholder value creation as an indispensable organizational priority and the ultimate success bottom-line for PSFs, nevertheless, it is as such essential to identify, understand and discuss which of the value-creation outcome(s) are precisely derived by each of the three value-creating IC dimensions and whether there are any tradeoffs governing value outcomes derived. The specific effects of each IC dimensions on different value indicators are discussed below:

The Human capital significantly promoted value creation for employees, organization, customers and suppliers & partners hence supporting the hypotheses H_{4a}, H_{4b} and H_{4c}. These hypothesized relations were also confirmed using qualitative enquiry, making the human capital the most critical of all the IC dimensions. It can be inferred from the results that human capital i.e. HR capability in PSFs is the prime mover of knowledge-based value maximization. Therefore, if PSFs ought to optimally achieve multi-stakeholder value bottom-line (i.e. for employees, organization and

customer), human capital taking the form of employee competencies and expertise must be utilized to the fullest.

The Structural capital was found to considerably stimulate the organization and customer value creation. It, however, insignificantly affected the employee value creation. This makes it apparent to support the hypotheses H_{5b} and H_{5c}, but not H_{5a}. Moreover, from the viewpoint of the qualitative data enquiry, all three hypotheses were supported, making the structural capital second most important dimension after the human capital. Stated differently, these results suggest that the structural capital being the most stable element of IC, maximizing the use of in-house technological capabilities, smart procedures & processes and shared knowledge resources would augment PSF's operational excellence and ability to swiftly deliver value-added customer/client services, thereby building customer base, boosting profits and enhancing firm reputation.

Last but not the least, Relational capital was found to significantly support customer value creation. It, however, marginally but positively affected the employee value creation. Moreover, its effects on organization value creation were observed to be insignificant. These results enabled to support hypothesis H_{6c} but little evidence was found to support hypotheses H_{6a} and H_{6b} in the research model. On the other hand, these hypotheses were fully supported using qualitative data. It can implied from the overall results that while relational capital supported employee and organization value outcomes to some extent, it indeed overwhelmingly promoted the value creation for customers/clients in addition to suppliers & partners as evident from the results of both qualitative & quantitative data. This perhaps could be owing to organization's continuous emphasis on externally enhancing its relational strengths that resultantly helped in cultivating customer intimacies and connections, leading to better alignment with the customer benefits and improved service leadership. Accordingly, PSFs targeting to enhance their external relations and stakeholder networks, they must focus on optimizing and utilizing the relational capital.

Overall, research findings support the notion that individuals' brainpower as opposed to machines is eventually the cornerstone of organizational agility, business innovation, staff wellbeing and customer service leadership. As a whole, the PSFs striving to maximize value must optimize the use of their intangible IC assets so as to achieve strategic alignment between the firm's IC capabilities and stakeholders' value perception.

8.4. Research Contribution

The key impetus behind this research was to assess HPWPs effectiveness in stimulating IC and explore how various IC dimensions enabled multi-stakeholder value creation in PSFs. Based on research findings, it makes following significant contributions.

8.4.1. Theoretical Contribution

This research overwhelmingly contributes to strategic HRM, Organizational Behaviour and IC literature by being the first to analyze and evaluate the nexus between HPWPs and Value Creation in multi-stakeholder setting through the optimum utilization of IC in the service firms. The results also support underlying theories and frameworks such as AMO Framework (Appelbaum et al., 2000), SCT (Nahapiet and Ghoshal, 1998), KBV (Grant, 1996) and RBV (Barney, 1991) that formed the theoretical basis of this research. In particular, it makes following theoretical contributions.

- First, unlike most of the prior HPWPs studies that examined HPWPs influence on the firm performance, this research offers valuable insights on how systematically identified HPWPs, when operationalized as configuration of AMO bundles, uniquely develop intellectual capital to guide Multi-stakeholder Value-Creation (MSVC) in the service firms.
- Second, the HPWPs perspective of IC would serve as a critical lens towards understanding the influence of HPWPs on organization's intellectual assets as this relationship was insufficiently investigated in the previous research.
- Third, it introduces multi-stakeholder perspective to the notion of value creation by examining how various IC dimensions derive tangible & intangible value outcomes for key organization stakeholders such as: employees, organization and clients/customers including suppliers & partners, thereby further enriching IC and value creation literature. The proposed multi-stakeholder viewpoint would add new organizational perspective and fill the gap in IC literature as this relationship has not been investigated by the prior researchers.
- Fourth, from the viewpoint of the research framework proposing that HPWPs could guide the IC-enabled multi-stakeholder value creation, this characterizes a novel aspect of their relationship compared to the conventionally examined link between IC and value creation in the IC literature.
- Lastly, by evaluating the HPWPs influence on firm's IC and consequently the effect of IC towards deriving multi-stakeholder value outcomes, it overall offers an empirically-tested framework that simultaneously presents a collective picture of the nexus between HPWPs, IC and MSVC i.e. (HPWPs→IC→MSVC) as the extant

literature lacks any such developed framework. This represents a unique perspective and hence serves as a basis for future empirical studies.

8.4.2. Methodological Contribution

Most of the recent studies on HPWPs such as Fu et al. (2017), Jerez-Gómez et al. (2017), Coder et al. (2017), Shin and Konrad (2017), Fareed et al. (2016), Riaz (2016), Lin and Liu (2016), Gojny-Zbierowska (2015), Jiang and Liub (2015), Chen and Wang (2013), Kroon et al. (2013), Jiang et al. (2012), Wu et al. (2011), Boselie (2010), Martynov and Zhao (2010), Liao et al. (2009) etc. utilized quantitative methods with an exception of some studies such as Özçelika et al. (2016), Tregaskis et al. (2013), Chow (2005), Teo et al. (2005) and O'Dri coll (1998) that adopted either qualitative or mixed-method approaches. Hence, this research implemented a blend of quantitative & qualitative methods with an aim to methodologically contribute and enrich the literature. The application of mixed-methods helped avoid many drawbacks of the single-method research and enabled additional corroboration of the results, thereby enhancing research reliability.

8.4.3. Practical Contribution

This research covered a broad spectrum of Professional Service Firms (PSFs) and specifically looked at how AMO HPWPs contribute to IC and which of these practices influence which IC asset in a manner to create competitive value advantage. As part of its practical contribution to the success of PSFs, this research:

- Assists PSFs in understanding how investment in HPWPs can help maximize their triple value bottom-line for multi-stakeholders by making most of their IC resources.
- Creates new knowledge and understanding on how managers can optimally reap finite intellectual assets and knowledge resources in a manner to promote engagement, improve relationship and maximize value creation for multi-stakeholders such as:
 - ✓ Employees (in terms of increased employee engagement, higher level of commitment & motivation, better prospects for promotion & career growth, better employee profiles, improved knowledge & professional skillset and opportunities to build industry network);
 - ✓ Organization (via sales & profit growth, shareholder return on investment, cost efficiency, operational excellence, increased firm market value, organizational transformation and sustained competitive advantage);
 - ✓ Customer/Client (in the form of customized value-added services, improved service quality & efficiency, value for money and overall service leadership).

- ✓ Suppliers & Partners (in terms of improved supplier & partner relationship, opportunities for business collaboration with suppliers and strategic alliance with partners).
- Offers in-depth insights to the managers in PSFs on effective IC management in HPWP-enabled work environment, aimed at fostering organizational performance and value as a whole.
- Recommends an empirically-tested combination of AMO HPWPs that can be applied as the best managerial practices for deriving triple value bottom-line in PSFs.

8.4.4. Sectoral Contribution

With an exception of work of a few scholars such as Fu et al. (2017; 2015), Teo et al. (2014), McClean and Collins (2011), Georgiadis and Pitelis (2012), Chang and Chen (2011), HPWPs research within Professional Service Firms (PSFs) is relatively insufficient as compared to the other sectors and industries. The previous scholars such as: Katou and Budhwar (2010), De Oliveira and Da Silva (2015), Datta et al. (2005), Appelbaum et al. (2000), Ichniowski and shaw (1999), Gant et al. (2002) mostly focused on manufacturing or non-profit sector, whereas other studies such as: Obeidat et al. (2016), Jiang and Liub (2015), Ma-Prieto and Pérez-Santana (2014), Ramdani et al. (2014), Kehoe and Wright (2013), Batt (2002) and Richard and Johnson (2001) covered routinized service firms such as call centers, banks etc. Hence, HPWPs effectiveness was examined in PSFs to contribute to this sector.

8.5. Research Implications

The study findings reported herein have range of implications for theory & practice. These accordingly add following theoretical perspectives to the literature.

8.5.1. Theoretical Implications

- First, the AMO HPWPs bundles operationalized in this research introduce PSF-specific practice indicators for strategic HRM scholars, suggesting them on how these practices can be effectively leveraged to redirect IC assets in the optimum attainment of the broader value outcomes, and also which of these IC assets serve value-creation needs of which stakeholders.
- Second, by enabling tactful application of HPWPs in a knowledge-intensive environment, it offers PSF managers an improved understanding on the

identification, measurement and utilization of intangible IC assets and KM resources and using these assets and resources as key value-creating levers.

- Third, it overall offers a quantitatively-tested and qualitatively-corroborated (HPWPs→IC→MSVC) framework that gives a holistic understanding of the linkages between HPWPs, IC and MSVC, thereby enhancing understanding on the strategic realignment of the intervention mechanisms with the firm's competing goals. In addition, the empirically-validated framework offers scholars with renewed opportunities and perspectives to further examine and unlock the maximum value potential, as this aspect was either overlooked or not systematically addressed by the prior scholars. Resultantly, the new research findings would further enrich strategic HRM, IC and PSFs literature.
- Fourth, this research empirically witnessed the significance of investing in HPWPs as was evident from the application of these practices in the service firms chosen for this research. This implies that the firms that extensively implemented HPWPs demonstrated superior performance and value-based competitive advantage.
- Finally, while this research has empirically demonstrated that strategic HRM practices influence value creation and success, however, drawing upon the resource-based-view, these HPWP factors should be further developed to an extent that these become unique HRM strengths and strategic resource capabilities in service firms. With that being said, the further scholarly research in PSFs in the strategic HRM context would help build more sense of how HPWPs translate into a competitive advantage.

8.5.2. Managerial Implications

From the practical perspective, several insights can be drawn for the PSF managers:

- First, it is principally advisable to look beyond and undergo complete transformation from conventional HRM to strategic HRM approaches wherever possible and whenever required. Because focusing on strategic approaches to HRM would not only aid PSF managers in smoothly resolving complex HRM affairs and client issues but also help purposefully revisit strategic goals and successfully execute those goals.
- Second, instilling the suggested strategic HRM concepts by enabling empowerment & flexibility, encouraging openness of communications, inculcating trainings, incentivizing performance, cultivating trust-based relations, facilitating exchange of knowledge, infusing quality of teamwork and promoting shared leadership are likely to stimulate knowledge capital in PSFs, thereby steering them to the path of competitive success and glory.

- Third, in an event when strategic management plans are being developed or reviewed, it is essential for the PSF managers to precisely identify and measure the strength of key IC assets and KM resources possessed by their firms that demonstrate value-creating capabilities. This offers competitive space to sensibly manage and leverage firm's IC as a key differentiator and value-driving tool.
- Fourth, additionally exploring IC from broader value perspective would help strategically realign IC resources with multi-stakeholder value-creation priorities and focuses, enabling judicious allocation of scarce IC resources. For example, focusing on and maximizing the use of in-house relational capital strengths would enable PSFs undergo strategic partnerships and attract new business opportunities because of their improved understanding of the client markets and varying client preferences. Consequentially, this would also assist PSFs in strategic decision-making by enabling them to carefully evaluate the effectiveness and thus maximize the use of scarce IC resources in the best achievement of bottom-line value goals.
- Fifth, as the corporate pressures of service competitiveness continue to creep at local and global services sector landscape, PSFs are finding it hard to compete in a competitive client market as more is being demanded or at least expected by the clients amidst finite and limited resources. As a consequence, it has become imperative for the service firms even more than ever to carefully manage and maximally utilize their IC assets, particularly the intangible assets, and at the same time be mindful of the other stakeholders' expectations if they ought to perpetually reap strategic advantage over the rival firms.
- Sixth, it now goes without saying that the HPWPs-enabled and consequent IC-derived transformations must, therefore, be at the heart of managerial practices and efforts in PSFs. This research practically established the prominence of strategic HRM and KM efforts that were mainly aimed at demonstrating how individuals cooperate, collaborate, build trust, share insights and empower each other to co-create a knowledge-enabled work culture. Ingrained within and nurtured by these planned managerial practices are three value-creating capitals that are characterized by individual skills, organizational infrastructure and external social relations, highlighting the efficiency of the processes, procedures and practices within an organization. As already demonstrated, each of these articulates strong value-driving potential for key stakeholders in PSFs, notably the employees, organization, customers and suppliers & partners, it is thus critical for HRM and KM managers to maximize value-creation opportunities in their firms.

- Last but not the least, smoothly sailing through two decades of research and practice, the strategic HRM practices (HPWPs) have now proudly entered into the current knowledge era where these must become strategic KM partners for the modern PSFs, enabling them to develop indigenous brainpower and consequently utilize that in achieving knowledge-based transformations and competitiveness. Now, given this competing desire to engage strategic HRM practices in PSF's knowledge partnership, it is conclusively recommended to both HRM and KM practitioners to understand this as an inevitable necessity and a source of competitive advantage in PSFs.

8.6. Some Additional Recommendations Amidst COVID-19 Pandemic

While this research essentially concentrated on maximizing the use of employee knowledge and intellectual competencies by infusing a culture of empowerment and application of creative work practices in the best attainment of organizational value bottom-line, it's equally important for the PSF managers to optimize work processes and be able to utilize organizational knowledge even more responsibly and meaningfully amidst the testing COVID-19 times. Presented below are some additional recommendations.

- The post-COVID business landscape is likely to enhance the criticality of social and emotional intelligence skills such as: self-awareness, self-control, mental resilience, empathy, mutual credibility, social cohesiveness, diversity etc. that are inevitably going to become 'NEW POST-COVID ORDER'. Hence, continually mobilizing knowledge, promoting cognitive thinking, building social intelligence skills and encouraging continuous learning behavior among the employees would help PSFs meet the competing needs of the post-COVID workplaces.
- In the face of the current COVID-feared work environment, building and enhancing mental resilience of the employees would require renewed application of the suggested HPWPs as the 'NEW WORKPLACE NORM' in the contemporary service firms.
- As and when required, managers in PSFs should review and redesign HPWPs in a manner to minimize their possible adverse effects on staff's mental & physical health. While the responsibility of maintaining psycho-physiological wellbeing primarily rests with the employees themselves, it is nevertheless essential, particularly in the case of workaholic employees, to introduce a mandatory policy of or at least encourage a culture of 'RELAX, REVITALIZE & REVIVE' in the instances when employees feel extremely exhausted and stressed.

- In view of the overwhelmingly anticipated post-COVID remote working trends, the social skills and emotional intelligence attributes like self-awareness, resilience, adaptability, empathy, diversity and emotional engagement must constitute core part of the remote working philosophies for virtually-connected teams in the culturally-diverse PSFs of today.
- Managers and executives in PSFs should continually concentrate on skills upgradation and building technological competencies of the workforce in terms of their hands-on learning, adoption and application of the advanced work-from-home technologies, remote data access platforms and digital workplace engagement tools.
- The urge to become knowledge and skills competitive has enhanced PSFs' reliance on the tacit capabilities of their workforce. In the wake of COVID-led economic slowdowns, staff capabilities could be augmented by utilizing virtual communication technologies including remote working tools as competitive and strategically differentiating success factors to surpass rival firms and become market leader within the PSF industry.
- Lastly, in their quest to stay competitive, PSF managers must devise formal policies on and provisions for work-from-home by enabling employees to conveniently set their own working schedules and locations in order to help them reduce work-related burnout and stress, thereby leading to improved work-life balance and psycho-physiological satisfaction.

8.7. Limitations and Future Research Recommendations

Like all other researches, this work is also prone to certain limitations.

- While the study findings are more or less in conformity with the theoretical and empirical expectations, however, as this research was undertaken in Australian service industry context, the findings would be more relevant to western countries because of considerably similar culture, workplace norms and shared values. Reasonably, the levels to which study findings could be generalised to other cultures and workplaces are somewhat limited. Therefore, future studies in other cultural and national settings would help additionally validate the findings.
- Another limitation lies in the assumption that the targeted PSFs possessed a considerable knowledge about the customer perception on the 'Customer Value Creation'. In other words, the customers' value perceptions and to what extent value was created for customers were captured from understanding of the staff surveyed and managers interviewed. Although, it was evident that these firms

employed range of customer value-capturing measures like 'voice of customer', 'customer reviews', 'customer satisfaction survey' etc., nevertheless, future researchers should additionally consider 'customers' viewpoint being the direct stakeholder/beneficiary to the 'customer value creation' process.

- While this research presents deeper understanding on the linkage between HPWPs, IC and Multi-stakeholder Value Creation in terms of HPWPs building IC and subsequently IC driving multi-stakeholder value, nonetheless, there could also be possibilities for other causal associations (e.g. interchanging/reciprocal relations between these factors) that future scholars might additionally want to examine.
- Yet another important suggestion is that the future scholars should frequently employ more qualitative and mixed methods studies to draw improved awareness on the idiosyncrasies governing effective IC management enabled through a system of HPWPs in knowledge-intensive environment.
- Last but not the least, this research has extracted and evaluated intrinsic organizational factors that guide competitive advantage in PSFs. The discussions mainly revolve around building organization performance and value-control levers to help maintain core competencies. As an interesting dimension of future research, it is recommended to dig deeper into each aspect of this research so as to acquire further knowledge of the linkages between strategically significant factors and how they affect PSFs' ability to attain and sustain long-term market advantage.

Despite above set of limitations, the findings nevertheless significantly enrich the understanding of the linkage between HPWPs, IC and Multi-stakeholder Value Creation in PSFs environment.

8.8. Conclusion

It is essential that PSFs now need to embrace more proactive and agile approaches to managing their knowledge workers, achieving operational excellence, enhancing quality of client services and identifying emerging business markets. However, accomplishing this necessitates renewed approaches to employee management coupled with an investment in building intellectual competencies, infrastructures and robust knowledge capital as a whole. Put simply, PSFs need to look things in a bigger perspective by continually building hard-to-replicate and unmatched competencies and resource capabilities so that these act as entry barriers to their competitor firms. Once acquired, these unparalleled capabilities would open new business opportunities and future growth prospects, enabling them to surpass their competitors.

Moreover, increased market competitiveness has influenced customer behavior, hence service firms are busy enhancing service quality attributes and exploring new avenues of value-added possibilities so as to achieve a win-win pricing and exceed customer expectations. Such a growth mindset warrants strong service leadership and must be facilitated by egalitarian workplaces that are characterized by improved collaboration, self-directed thinking and effectiveness of the teamwork among the individuals as these elements serve as essential ingredients towards positively impacting performance and value bottom-line in PSFs. This is because employee emotions and shared beliefs shape their behavior at workplace, forming the basis of commitment to the organization. Hence the PSFs embracing HPWPs-enabled work culture would be better positioned to understand their employees' expectations and capitalize on their creative abilities in improving operational efficiencies and productivities. Besides, gaining a deeper understanding of the employee priorities and value beliefs would help meaningfully chalk-out strategies aimed at enhancing workforce diversity and building their key skillsets to sustain knowledge based innovations at workplace.

To finally sum up, it is now apparent that examining and successfully testing the relationships between HPWPS, IC and MSVC in a knowledge-intensive PSF environment highlights unique contributions of this scholarly work to the theory & practice of strategic HRM, KM and IC, and as such serves as suitable starting-point for future doctoral research in these areas. In view of building future collaborative opportunities, the contemporary PSFs should establish joint partnerships with the scholars and academics for formally adopting renewed HPWP approaches, processes and mechanisms.

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**LETTER OF INVITATION
(PARTICIPANT INFORMATION SHEET)**

Dear Survey Participants,

My name is Junaid Rehman and I am PhD Candidate (Information Systems) at School of Information, Systems and Modeling, Faculty of Engineering and IT, University of Technology (UTS), Sydney, Australia. I am currently recruiting participants for an online survey as part of my research entitled '**Creating Multi-Stakeholder Value By Leveraging High Performance Work Practices: An Intellectual Capital Perspective**'.

This research is approved by UTS Human Research Ethics Committee (Approval no: UTS HREC REF NO. ETH18-2986). The main objective of this study is to investigate how High Performance Work Practices (HPWPs) stimulate organizational knowledge capital to derive multi-stakeholder value in the Professional Service Firms (PSFs).

I am inviting employees of Professional Service Firms (PSFs) in Australia to participate in this study. If you wish to participate, please read the following terms of participation including your rights as a participant.

You will be requested to participate in an online survey questionnaire to the best of your knowledge and understanding. There is no right or wrong answer as your responses would only reflect your opinion. You will be receiving/would have received this online survey link at your email address. However, if you wish to fill the hard copy of the questionnaires, it can be requested from the researcher through email. The entire survey questionnaire should take between **8-10 minutes**. It is expected to complete the survey in one sitting.

The completed online survey data-sets would be secured electronically in the researcher personal computer and university-provided secure research database. This research involves minimal risk. The only likely risk associated with your participation is your time as a participant. While there is no financial incentive linked, the participation in this research is voluntary. You have every right to refuse or withdraw your participation at any stage of this research and this will not affect your job or organizational affiliation.

You may also ask for a brief summary of findings upon the completion of this research. If you need further information or clarification, please feel free to reach the Researcher – Junaid Rehman at (Junaid.Rehman@student.uts.edu.au), Principal Supervisor – Prof. Igor Hawryszkiewicz (Igor.Hawryszkiewicz@uts.edu.au; +61295141809) or Co-supervisor – Dr. Osama Sohaib (Osama.Sohaib@uts.edu.au; +61295143893). Besides, If you have any questions relating to your participation that can't be resolved by the researcher or supervisory panel, please contact the UTS Research Ethics Officer at (+61295149772; research.ethics@uts.edu.au).

I thank you in advance for your time and cooperation.

Sincerely,

Junaid Rehman

PhD Candidate (Researcher)

School of Information, Systems and Modeling

University of Technology, Sydney, Australia

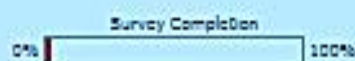
<https://www.linkedin.com/in/junaidshaikh86>

PARTICIPANT CONSENT FORM

I hereby agree to participate in the online research survey being conducted as a part of doctoral research entitled – ‘**Leveraging High Performance Work Practices for Multi-stakeholder Value Creation: An Intellectual Capital Perspective**’. I am aware that:

- My participation in this online survey is completely voluntary.
- I can withdraw my participation in this research at any time and in such an instance, my responses would be removed from this research.
- My responses would be anonymously used in this research.
- All collected data-sets would be protected and secured by the researcher in both electronic and printed format and be made available only to the supervisory panel and concerned research ethics office at UTS (if required).
- All collected data relating to this research would be only used for academic and research purposes.
- I have an opportunity to seek additional information including use of data relating to this research.

- Yes, I agree to participate in this survey.
- No, I don't agree to participate in this survey



[Back](#) [Next](#)

SURVEY QUESTIONNAIRE

SECTION-I: SURVEY QUESTIONNAIRE**EMPLOYEE EMPOWERMENT****Employees at our firm are:****Encouraged to take actions and participate in decision making.**

Strongly Agree Agree Neutral Disagree Strongly disagree

Empowered to work in self-managed teams to effectively perform their job duties.

Strongly Agree Agree Neutral Disagree Strongly disagree

Delegated to exercise discretionary efforts without the involvement of the supervisors.

Strongly Agree Agree Neutral Disagree Strongly disagree

Allowed flexibility at the workplace such as work from home or other locations.

Strongly Agree Agree Neutral Disagree Strongly disagree

PERFORMANCE BASED REWARD**Employees at our firm:****Receive reward/incentive for their outstanding performance and contribution at the workplace.**

Strongly Agree Agree Neutral Disagree Strongly disagree

Receive compensation package based on their performance such as extra allowance, bonus, commission or other financial benefits etc.

Strongly Agree Agree Neutral Disagree Strongly disagree

Are recognized for their contribution in the form of awards and recognition programs such as letter of appreciation, acknowledgements, employee of month/year award etc.

Strongly Agree Agree Neutral Disagree Strongly disagree

Are recognized for their productive work behavior which may include helping team members, solving problems, improving work processes etc.

Strongly Agree Agree Neutral Disagree Strongly disagree

EMPLOYEE TRAINING & DEVELOPMENT

Our firm offers:

Various kinds of trainings and professional development programs to the employees.

Strongly Agree Agree Neutral Disagree Strongly disagree

Continuous development opportunities to the employees.

Strongly Agree Agree Neutral Disagree Strongly disagree

Mentoring and guidance on work-related knowledge, skills and competencies.

Strongly Agree Agree Neutral Disagree Strongly disagree

Training and learning opportunities to both new and existing employees.

Strongly Agree Agree Neutral Disagree Strongly disagree

SHARED LEADERSHIP

Leadership at our firm:

Shares a common purpose and collective responsibility with the employees.

Strongly Agree Agree Neutral Disagree Strongly disagree

Encourages employees to share ideas and suggestions for improvement.

Strongly Agree Agree Neutral Disagree Strongly disagree

Communicates decisions to the employees.

Strongly Agree Agree Neutral Disagree Strongly disagree

Makes decisions having consensus of the employees.

Strongly Agree



Agree



Neutral



Disagree



Strongly disagree



OPEN & COLLABORATIVE COMMUNICATION

Employees at our firm:

Are encouraged to freely communicate and interact with each other to collectively achieve set goals.

Strongly Agree



Agree



Neutral



Disagree



Strongly disagree



Frequently collaborate to support the work activities of each other.

Strongly Agree



Agree



Neutral



Disagree



Strongly disagree



Cooperate across various organizational units to solve problems and improve processes.

Strongly Agree



Agree



Neutral



Disagree



Strongly disagree



Are satisfied with the level of communication and collaboration that exist between them.

Strongly Agree



Agree



Neutral



Disagree



Strongly disagree



INTERPERSONAL TRUST

At our firm:

A considerable level of trust relationship exists between the employees.

Strongly Agree



Agree



Neutral



Disagree



Strongly disagree



Employees demonstrate mutual trust on the intentions of each other.

Strongly Agree



Agree



Neutral



Disagree



Strongly disagree



Employees possess mutual trust on the actions of their colleagues.

Strongly Agree



Agree



Neutral



Disagree



Strongly disagree



Employees extend confidence in the abilities of each other when it comes to performing routine tasks.

Strongly Agree Agree Neutral Disagree Strongly disagree

EMPLOYEE KNOWLEDGE SHARING

Employees at our firm:

Share knowledge and learn from the experiences of each other.

Strongly Agree Agree Neutral Disagree Strongly disagree

Frequently help their colleagues through exchange of knowledge and expertise.

Strongly Agree Agree Neutral Disagree Strongly disagree

Participate in knowledge-sharing and mutual learning activities such as meetings, workshops, discussions, trainings, mentoring etc.

Strongly Agree Agree Neutral Disagree Strongly disagree

Utilize various information and knowledge-sharing tools & technologies such as email, VPN, intranet, online knowledge databases, video-conferencing etc. to ease sharing of knowledge.

Strongly Agree Agree Neutral Disagree Strongly disagree

TEAMWORK QUALITY

Employees at our firm

Frequently communicate and coordinate in teams through emails, phone calls, meetings, conversations etc.

Strongly Agree Agree Neutral Disagree Strongly disagree

Adequately contribute in teams to the best of their knowledge and abilities.

Strongly Agree Agree Neutral Disagree Strongly disagree

Take efforts for resolving issues and conflicts arising within teams with consensus.

Strongly Agree Agree Neutral Disagree Strongly disagree

Work in harmony and mutually support each other in a team environment.

Strongly Agree Agree Neutral Disagree Strongly disagree

HUMAN CAPITAL

Employees at our firm:

Possess required knowledge and skills for successfully performing their job duties.

Strongly Agree Agree Neutral Disagree Strongly disagree

Possess relevant qualification and experience in their particular job functions.

Strongly Agree Agree Neutral Disagree Strongly disagree

Possess flexible attitude towards learning new knowledge and adapting changes.

Strongly Agree Agree Neutral Disagree Strongly disagree

STRUCTURAL CAPITAL

Most of our firm's data/information/knowledge is stored in the form of electronic records, databases, policy documents, manuals, reports etc.

Strongly Agree Agree Neutral Disagree Strongly disagree

Our firm's information systems and IT capabilities efficiently support business processes and activities.

Strongly Agree Agree Neutral Disagree Strongly disagree

Our firm protects its intellectual property and organizational knowledge through copyrights/trademarks/design secrets/patents etc.

Strongly Agree Agree Neutral Disagree Strongly disagree

RELATIONAL CAPITAL

Our firm maintains working relationships with its external stakeholders such as clients, customers, end-users, suppliers, partners etc.

Strongly Agree Agree Neutral Disagree Strongly disagree

Our firm maintains goodwill, loyalty and better brand image of the clients/customers/end users.

Strongly Agree Agree Neutral Disagree Strongly disagree

Our firm successfully negotiates and creates new opportunities for business collaboration and partnership with suppliers and partners.

Strongly Agree Agree Neutral Disagree Strongly disagree

EMPLOYEE VALUE CREATION

Employees at our firm:

Feel motivated and engaged to the work they perform.

Strongly Agree Agree Neutral Disagree Strongly disagree

Receive compensation based on their performance in the form of increased pay, allowances, or similar benefits.

Strongly Agree Agree Neutral Disagree Strongly disagree

Receive promotions and career growth prospects.

Strongly Agree Agree Neutral Disagree Strongly disagree

Develop their professional skillset and industry network.

Strongly Agree Agree Neutral Disagree Strongly disagree

ORGANIZATION VALUE CREATION

Our firm:

Performs well in terms of sales growth, profitability and shareholder Return on Investment (RoI).

Strongly Agree Agree Neutral Disagree Strongly disagree

Performs well in terms of cost efficiency and productivity.

Strongly Agree Agree Neutral Disagree Strongly disagree

Strives for organizational transformation and change.

Strongly Agree Agree Neutral Disagree Strongly disagree

Maintains industry competitiveness because of its Intellectual Property (IP) such as trademarks, copyrights, creative designs, innovative processes, management capabilities etc.

Strongly Agree Agree Neutral Disagree Strongly disagree

CUSTOMER VALUE CREATION

Our customers/clients/end-users are happy and satisfied with our services.

Strongly Agree Agree Neutral Disagree Strongly disagree

Our firm offers cost-effective and quality services at competitive rates to the customers/clients/end-users.

Strongly Agree Agree Neutral Disagree Strongly disagree

Our firm continually improves service quality and efficiency based on customer/client/end-user feedback.

Strongly Agree Agree Neutral Disagree Strongly disagree

Our firm undertakes mutually beneficial agreements with the suppliers and partners.

Strongly Agree Agree Neutral Disagree Strongly disagree

Would you like to make extra comments or provide additional information on any section of this survey questionnaire? (Optional)

SECTION II: BACKGROUND AND DEMOGRAPHIC INFORMATION

Please provide following information.

Your gender

Male

Female

Prefer Not to Answer

Your age group

18-25

26-35

36-45

Above 45

Your Firm's Current Industry/Sector (If not listed, please select the one closely related to you or use 'other' option)

IT/IT Consulting

Accounting & Audit

Sales & Marketing

Engineering

Legal

Commerce & Trade

Medical & Healthcare

Science & Technology

Transport & Logistics

Education & Training

Research & Development

Hospitality & Tourism

Management Consulting

Design & Architecture

Other

Banking & Finance

Digital Media

Number of people working in your firm (If not sure, please make a guess)

25-100

101-200

201-500

501-1000

Over 1000

Your overall work experience

1-3 years

4-6 years

7-10 years

11-15 years

Over 15 years

Size of your firm (According to OECD, Firms/Enterprises having: 10-49 employees = small; 50-99 employees = small to medium; 100-249 employees = medium to large; 250 or more employees = large).

Small

Small to Medium

Medium to Large

Large

Your Job title/Category (If you are a working professional such as doctor, engineer, accountant, programmer, researcher or similar but not involved in managerial responsibilities at any level, please choose employee option).

Senior Manager

HR Manager

Project Manager

Frontline Manager

Supervisor

Employee

Your Education Level

PhD

Master Degree

Postgraduate Diploma

Bachelor

Diploma

Other

INFORMED CONSENT FORM – INTERVIEW RESPONDENTS

- The interview would be recorded using a smart phone and responses would be transcribed.
- Interview recordings would be kept in a secure database and be erased upon research completion.
- In case of any participant not clear with the questions, interviewer would additionally probe/comment/repeat questions for the sake of clarity.
- All participants would be provided with unique identifier codes for themselves and for their firms.
- Interviewer would anonymously analyze data and present the results as aggregated summaries.
- In case of any question participants don't want to answer, interviewer would be advised accordingly.
- Participants would be offered to review their transcripts and endorse the responses (if needed.)

Interviewer Name: _____	Interview Mode: <input type="checkbox"/> Telephonic <input type="checkbox"/> Face-to-Face
Participant's Demographic Information	
Interviewee Name: _____	Job Designation: _____
Gender: <input type="checkbox"/> Male <input type="checkbox"/> Female	Age group <input type="checkbox"/> 18-25 <input type="checkbox"/> 26-35 <input type="checkbox"/> 36-45 <input type="checkbox"/> Above 45
Name of the Firm: _____	Contact Details Phone: _____
Location: _____	Email: _____
Type of the firm <input type="checkbox"/> Government <input type="checkbox"/> Semi Government <input type="checkbox"/> Private Sector <input type="checkbox"/> Not for Profit <input type="checkbox"/> Other	
Whether the firm is <input type="checkbox"/> National <input type="checkbox"/> International	
Current industry/sector (If not listed, please select the one closely related to you or use 'other' option) <input type="checkbox"/> Information Technology <input type="checkbox"/> Engineering <input type="checkbox"/> Medical & Healthcare <input type="checkbox"/> Education & Training <input type="checkbox"/> Management <input type="checkbox"/> Banking & Finance <input type="checkbox"/> Accounting & Audit <input type="checkbox"/> Legal <input type="checkbox"/> Design & Architecture <input type="checkbox"/> Research & Development <input type="checkbox"/> Science & Technology <input type="checkbox"/> Sales & Marketing <input type="checkbox"/> Digital Media <input type="checkbox"/> Commerce & Trade <input type="checkbox"/> Transport & Logistics <input type="checkbox"/> Hospitality & Tourism <input type="checkbox"/> Other	
Overall work experience <input type="checkbox"/> 1-3 years <input type="checkbox"/> 4-6 years <input type="checkbox"/> 7-10 years <input type="checkbox"/> 11-15 years <input type="checkbox"/> Over 15 years	
Size of your firm <input type="checkbox"/> Small <input type="checkbox"/> Small to Medium <input type="checkbox"/> Medium <input type="checkbox"/> Large	
Education Level <input type="checkbox"/> PhD <input type="checkbox"/> Master Degree <input type="checkbox"/> Postgraduate Diploma <input type="checkbox"/> Bachelor Degree <input type="checkbox"/> Diploma <input type="checkbox"/> Other	
Participant Unique Identifier Code: _____	Interview Date: _____
Participant's Firm Unique Identifier Code: _____	
Participant's Signature: _____	Interviewer Signature: _____

INTERVIEW GUIDE/PROTOCOL

This interview Guide is only for Managers/Executives of Professional Service Firms (PSFs)

*****Start Recording*****

QUESTIONS ON HIGH PERFORMANCE WORK PRACTICES (HPWPs)

Please think about HPWPs and the way they can potentially support the growth and development of your firm's Intellectual Capital (IC)? Accordingly, please specifically talk about the following eight HPWPs (I will ask one by one):

PROBES

Employee Empowerment

Q1) What do you think about your firm's initiative on empowerment of the employees?

Performance Based Reward

Q2) What do you think about your firm's reward system for outstanding/high-performing employees?

Training and Development

Q3) What do you think about your firm's initiative on training, development and capacity building of the employees?

Shared Leadership

Q4) What leadership style and practices are followed by your firm?

Open and Collaboration Communication

Q5a) How communication takes place within your firm and what style of communication is followed?

Q5b) How do you see collaboration in the communication between the employees?

Interpersonal Trust

Q6) How do you see trust relationship between the employees?

Employee Knowledge Sharing

Q7a) How knowledge is shared by the employees and using what methods?

Q7b) What information & knowledge sharing tools are utilized by the employees?

Teamwork Quality

Q8a) How do you see teamwork between the employees?

Q8b) How cooperation, coordination and mutual support among the employees in a team environment enhance quality of teamwork?

QUESTIONS ON INTELLECTUAL CAPITAL

Please think about the Intellectual Capital of your firm (i.e. employee knowledge & competencies, systems & processes and relationship with the customers & clients) and the way it creates value for the employees, for the firm as a whole and for the external stakeholders such as: customer, client, supplier & partner. Accordingly, please answer the following questions on Intellectual Capital (which I will ask one by one):

PROBES

Human Capital

Q9) Please think about the knowledge, skills, competencies and experience of your employees. How do you see their importance for your firm??

Structural Capital

Q10a) Please think about your firm's IT systems, communication tools, information & knowledge sharing technologies. How do you see their importance for your firm??

Q10b) Please think about your firm's innovative processes, management capabilities and intellectual property. How do you see their importance for your firm??

Relational Capital

Q11a) Please think about your firm's relationship with customers, clients or end-users. How do you see its importance for maintaining their goodwill and loyalty??

Q11b) Please think about your firm's relationship with suppliers and partners. How do you see its importance for creating opportunities for business collaboration and partnership?

QUESTIONS ON MULTI-STAKEHOLDER VALUE CREATION

Please think about the various stakeholders internal and external to your firm. Please specifically talk about the value created by your firm for the following three stakeholders (which I will ask one by one):

PROBES

Employee Value Creation

Q12) Please think about the employees of your firm. What value your firm creates for them?

Organizational Value Creation

Q13a) Please think about your firm as a whole. What value in terms of financial performance (e.g. sales growth, profits) is created by the intellectual capabilities of your firm?

Q13b) What value in terms of non-financial performances (viz. operational performance, efficiency, process improvements) is created by the intellectual capabilities of your firm?

Customer Value Creation

Q14a) Please think about the customers, clients or end-users of your service. What value your firm creates for them?

Q14b) Please think about your suppliers and partners. What value your firm creates for them?

OTHER QUESTION

Would you like to additionally discuss or provide more information on any aspect of HPWPs, Intellectual Capital and Multi-stakeholder Value Creation that is not covered in the above questions?

*****End Recording*****