

Appraising and Enhancing a Leadership in Innovation Model

Monica George, Hiyam Al-Kilidar and Grant Mooney

The University of Technology Sydney, Australia

Monica.George@student.ute.edu.au, Hiyam.al-Kilidar@uts.edu.au, Grant.Mooney@uts.edu.au

Abstract

Innovation is a significant contributor to effective economies worldwide. This paper aims to apprise a model of Innovation and Leadership created by Grant Mooney and Ken Dovey (Mooney & Dovey 2008). The model examines the resource of individual creativity and organisational innovation through the use of constructs and metrics. Recent developments have identified constructs that were used to appraise and enhance the model as a result of the strong correlations identified in literature and their high level of relevance. The new factors are (1) 'followership' or confidence in top leadership, and (2) 'return on investment' which measures the innovation efforts in an organisation.

Keywords: Innovation, Innovation models, Creativity.

Introduction

Innovation is a significant contributor to effective economies worldwide (Borjesson and Lofsten, 2012; Vaccaro et al., 2010; Piperopoulos and Scase, 2009; Christensen and Raynor, 2003). Literature describes a number of innovation models that consider innovative capabilities of organisations and propose methods to measure such individual or organisational capabilities. However, the adoption and/or applicability of many models are hindered by the lack of a uniform scale to measure and monitor each organisation's level of innovativeness. This is due to organisations being unique and range in their readiness and or ability to monitor their existing innovation levels. We detail the particulars of an innovation and creativity model created by Grant Mooney and Ken Dovey (Mooney & Dovey 2008), as well as presents a literature survey of other more recent existing innovation models. This paper aims to apprise the (Mooney & Dovey 2008) and enhance it with knowledge from more recent models reported in the literature.

The paper is organised as follows: Section 2 illustrates and explains the Mooney-Dovey Model of Innovation and Leadership. Section 3 reports on recent innovation models as reported in literature. In Section 4 a discussion of how recent literature is able to inform the Mooney-Dovey model is presented. Section 5 presents the enhanced model. Section 6 presents the limitations of this study and section 7 concludes the paper and indicates possible future directions of this research.

2. The Mooney-Dovey Model of Innovation and Leadership

The Mooney –Dovey model is selected because, unlike others, it is informed by not only technology but also business aspects and links an individual's creativity and the organisation's contribution to innovation. It is also a model that qualifies measurable value based on metrics for both individual creativity and organisational innovation. This model also presents a detailed account and metrics of how leaders of successfully innovative companies enable their staff to execute their strategic intent to produce

new products, services and value propositions for customers. The framework includes work practices that enable a continuous flow of ideas from stakeholders and the conversion of ideas into profitable products and services for a firm. The contemporary nature of this model reflects successful business practices. Figure 1 illustrates the model of Mooney and Dovey (Mooney & Dovey 2008).

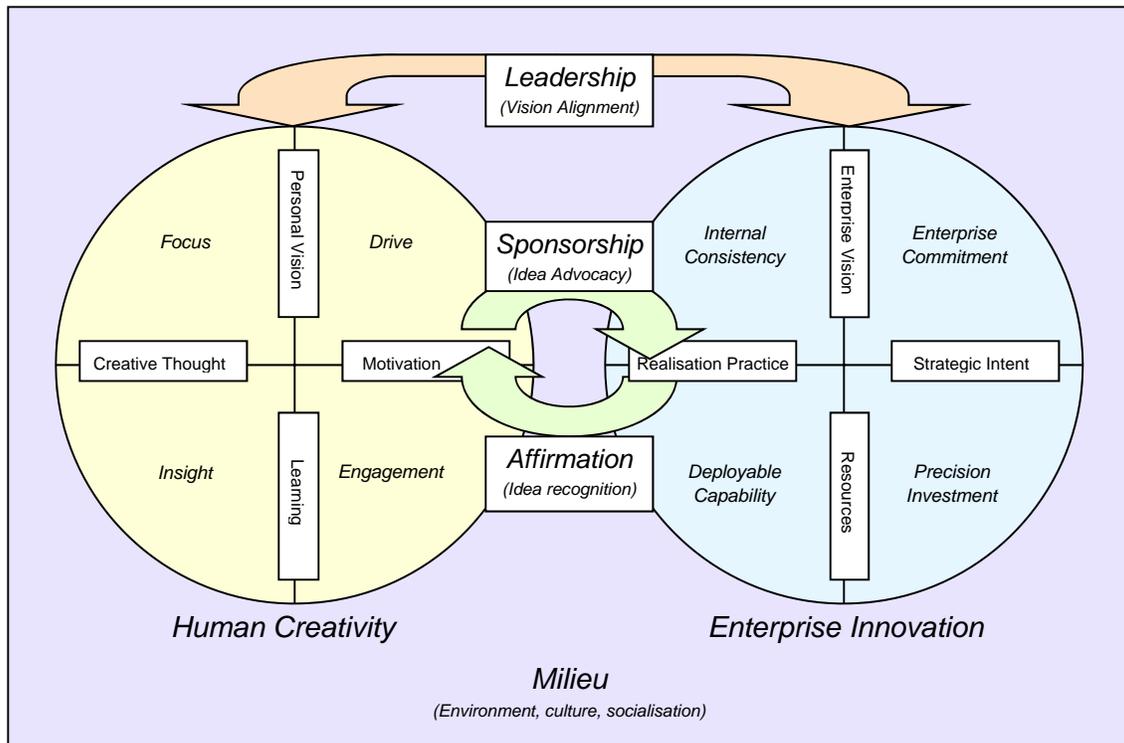


Figure 1: Model Of Innovation And Leadership (Mooney & Dovey 2008).

The Innovation and Leadership model by Grant Mooney and Ken Dovey (Mooney & Dovey 2008) represents how idea generation starts with human creativity derived from personal vision, learning and motivation, and divergent thinking. These traits when paired reveal inherent individual capabilities as illustrated in each quadrant. Together the collectives provide a local potential for new concept generation.

After an idea is generated and available for sponsorship, a motivated advocate will submit the idea to be assessed by the organisational process to see the idea being executed. The corporate vision guides these systems along with the firm's resources to help build a potential for the action and implementation of the idea. The repetition of the innovation cycle is encouraged by organisational recognition of the success filtered back to individuals who were idea originators. The process reinforces self-value and affirms commitment to the creative process. The facilitating influence of the milieu and leadership give the surrounding system environment for healthy alignment of the innovation cycle.

The combination of individual and organisational process at different levels working together internally and externally contributes to the complex innovation phenomenon.

The model examines individual creativity using four constructs – personal vision, individual motivation, learning and divergent thought. A combination of these constructs forms the basis through which

individual creativity is expressed and measured. The model also includes constructs of work practices that catalyse creative ideas and convert them into innovative products. These constructs include enterprise vision, strategic intent, resources and realisation practices emerging from research and aligned with business practices, resource deployment and idea delivery with enterprise vision. The model brings out the importance of leadership and proves that it is critical to the evocation of realised innovation. Effective leadership creates and maintains many connections that bond individuals and the organisation and provides encouragement to seek improvements to move forward.

The limitation of this model is that it has not been revisited post the global financial crisis of 2008 and has a scope of being informed and improvement by recent advancements found in literature. Though the model illustrates leadership in great detail, it does not include the degree to which leadership is acknowledged by others in an enterprise. In other words, the degree of employee confidence in top leadership is overlooked. Inspiration cannot be mandated into existence and it can be argued that confidence in top leadership can influence individual inspiration.

3. Recent Innovation Models

Numerous research reports call for leadership and individual creativity and enterprise and resource factors that contribute to innovation in organisations. Rarely do they consider all factors holistically and simultaneously.

Table 1 provides a summarised account of innovation models illustrating their contribution to the body of knowledge and practice and identifying observed gaps in them.

Table 1: Highlights from Recently Published Literature Demonstrating Their Relevance to the Existing Mooney-Dovey Model Model

Author	Contribution	Gap
Mooney & Dovey (2008)	<ul style="list-style-type: none"> • Illustrates metrics for individual creativity and organisational innovation factors. 	Although leadership is identified as a key aspect that catalyses innovation, the degree of followers' confidence in leadership is not given its due importance in this model.
Deschamps (2005)	<ul style="list-style-type: none"> • Acknowledges the importance of leadership skills in championing innovation effort and identifies the initiative leadership qualities that drives innovation. • Describes salient leadership imperatives in different innovation efforts and the importance of bottom-up innovation. • Advocates that developing confidence in the leader is 	Do not link the bottom up innovation with the typology of innovation by strategic focus.

	fundamental to drive innovation.	
Braun et al. (2016)	<ul style="list-style-type: none"> Argues that innovation and creativity are in constant tension with external structures and procedures. Leadership is approached as an individual property as well as a collective phenomenon. 	In drawing leadership lessons for organisations to follow, the notion of 'followership' is indirectly included as an enabling condition for sustained success in innovativeness and creativity.
Prasad et al. (2016)	<ul style="list-style-type: none"> The relationship between leadership and innovation in an organisation and the role of the environmental dynamics supporting innovation leadership is examined. Leadership skills highly influence innovative capabilities of an organisation and benefits are greater when leadership is supported in a dynamic environment. 	The premise that the operating environment influences the ability of leadership to drive innovation is supported. However this support is not defined or classified clearly.
Tung et al. (2016)	<ul style="list-style-type: none"> Explores the effects of innovation leadership on employee creativity. Indicates positive correlations between participative and supportive leadership and individual creativity. 	Though the link between leadership and individual creativity is supported, there is scope to study the degree of employee confidence in top leadership.
de Zilwa (2016)	<ul style="list-style-type: none"> Authentic followership is introduced in light of strengthening leader-follower relationships and deepening positive organisational culture and performance. Contends that authentic followership components have significant practical implications such as trust, increased leadership effectiveness and organisational culture. 	Supports the contributing factors to organisational innovation as illustrated in Grant and Ken Dovey's model.
Manning, Robertso	<ul style="list-style-type: none"> Bring attention to follower roles after reviewing previous research 	Authors considered how leadership models can be applied to

<p>n & Smith (2016)</p>	<p>and theory on leadership.</p> <ul style="list-style-type: none"> • Based on 360 degree assessments, provides evidence and both internal and external validity for measures of followership and leadership. • Results showed that leadership skills develop from and build on follower roles. • Practical implications indicate that organisations require both effective leadership and followership equally and that effective leaders are developed out of effective followers. • Followership perspectives expressed in this paper challenge the widely held leadership pre-occupation. 	<p>followership but the effect on organisational innovation is not considered in the scope.</p>
<p>Kottke, Pelletier & Agars (2013)</p>	<ul style="list-style-type: none"> • Defined followership as a construct of confidence in top leadership. 	<p>The scale is supported by many academic and subject matter experts. However the relevance in industry and practical applications of the measure is a direction for future research.</p>
<p>Knicht et al. (2005)</p>	<ul style="list-style-type: none"> • A customisable set of innovation metrics is introduced and it combines three views on innovation - Resource, capability, and leadership. 	<p>The validity of the metrics proposed require further research.</p>

Of the models reviewed, two gaps were identified in the Mooney–Dovey model of Innovation and Leadership Ken Dovey (Mooney & Dovey 2008).

4. Discussion

a. Followership

Based on the synthesis of the above models, followership appeared to be a concept that would enhance the Mooney-Dovey model. Kottke et al (2013) define the concept ‘Followership’ as confidence in leadership and developed a measure of this confidence (Kottke, Pelletier & Agars 2013). Some of the significant contributions in this field, including Deschamps (2005) acknowledge the importance of followership or confidence in top leadership in the role of innovation. The Innovation and Leadership

model similarly brings out the influence of leadership on innovation. However it overlooks the importance of the backing provided by other employees towards an organisations top leadership. The argument that this gap can be filled with a followership construct is supported by Deschamps(2005).

Braun and Prasad (2016) also support the notion that leadership is both an individual and collective phenomenon and the interrelationship between sustained innovativeness and confidence in leadership by the milieu. This explains that a followership construct is a variable that fits in the environmental aspect of innovation and cannot be assigned to individual or organisational cycles of innovation specifically. An inference from this insight is that it is reasonable to introduce a followership construct symmetrically below leadership.

Zilwa and Tung (2016) propose similar conceptual ideologies and their contributions are supported by both academic principles and industrial practices. The preoccupation that leadership can exist on its own is challenged by Manning et al (2016). Their demonstration that leadership itself originates from followership is justified by logical and rational reasoning. Therefore the link between followership and innovation is evident and is a direction for future research.

The addition of the followership variable leads to the question of whether it is a measurable item as compared to other items of the existing model. An answer to this can be identified in more recently published literature. Kottle et al (2013) explicitly illustrate that the degree of support from followers towards their leadership can be gauged with a measure introduced in their paper. The measure of followership together with the support to the argument that followership and innovation are related is a noteworthy observation. Their method of designing the scale is derived from reputable and extensively utilised models followed by statistical analysis to provide evidence to its relevance. This observation supports a proposal that items with the highest correlations to the followership construct should be included in a scale to measure the degree of followership of any organisation in a standardised way.

b. Return on Investment

A study by AON Hewitt (2011) concluded that innovative organisations averaged 38% higher return on investment and 22% higher gross margin than other market counterparts. The original Mooney-Dovey model also did not provide mechanism to measure/ evaluate the return on investment. On further critical analysis of the Innovation and Leadership model, the terms enterprise vision and strategic intent have similar descriptions. To overcome this, the idea of introducing 'return on investment' is supported by Knight et al (2005). Moreover, the contribution is assisted with a customisable scale that measure the level of return on investment from different viewpoints. This approach makes it applicable to organisations that may be in any given stage of their level of innovation. Put succinctly, to enhance and update the Innovation and Leadership model with the new knowledge from other models, the constructs of followership and return on investment along with their respective scales of measurements, as compared with the existing scales for other axis, can be added and edited on to the existing model.

5. Appraisal and Enhancement of the Mooney-Dovey model

The methodology adopted to design and validate an appraisal to the Mooney-Dovey model included a literature search. High statistical correlations were found between factors of Leadership, creativity and innovation and the followership construct. Those factors that resulted in high levels of correlation are included in the proposed addition to the model.

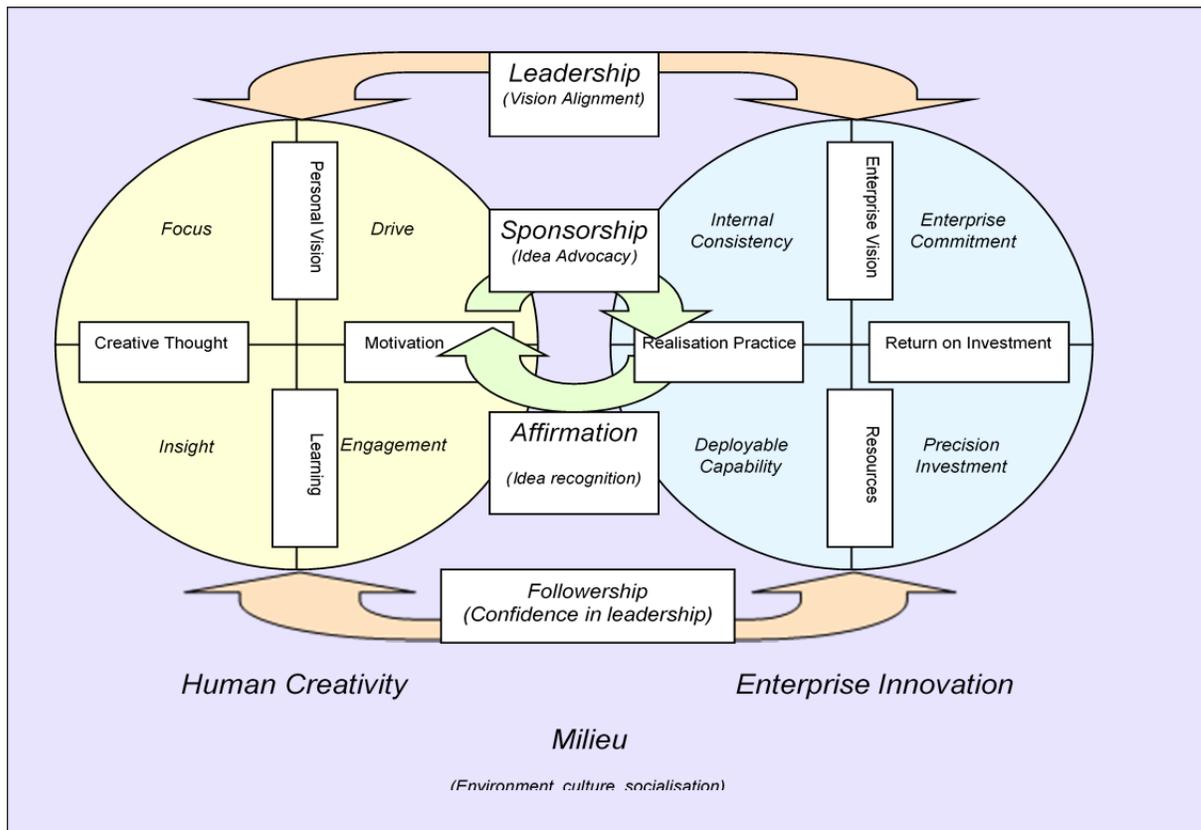


Figure 2: Proposed Enhanced Model

Where Followership = Organizational coordination + Extrinsic satisfaction + Degree of employee trust being heard + Organizational Commitment + Meetings with top leadership.

Links between followership, leadership and innovation has been established in literature such as (Kellerman 2008; Kottke, Pelletier & Agars 2013). Support for this argument is derived from studies conducted among working adults measuring work related attitudes with a scale that demonstrated convergent and divergent validity with like and unrelated constructs (Kellerman 2008; Kottke, Pelletier & Agars 2013). Those factors with a high positive correlation are included in this formula for enhancing the model under consideration because of the results that provide validity of the new constructs measure.

The second contribution to the existing model comes in the form of metrics to measure organisational innovation. The Return on Innovation Axis replaces Strategic Intent and comprises of the following:

Return on Investment = Returns on resources + Returns on Capabilities + Returns on Processes

Where *Returns on resources mean:*

- Number of new products, services, and businesses launched in the past year.
- Percentage of revenue from products or services introduced in the past three years.
- Share of wealth, i.e., the change in the company's market value during the past year divided by the change in the total industry's market value during the same period.

Return on capability means

- Number of new competencies (i.e. distinctive skills and knowledge domains that spawn innovation) measured as a simple count among a threshold proportion of employees
- Number of strategic options (i.e. newly created opportunities to significantly advance an existing business).
- Number of new markets entered in past year

Return on processes means

- Number of ideas submitted by employees in the past three, six, and twelve months.
- Ratio of successful ideas to ideas submitted.
- Number of ongoing experiments and ventures.
- Average time from idea submission to commercial launch

These specific metrics are based on critically analysed and justified recommendations derived from studies in literature supported by experience with innovation and strategy consulting firms, benchmarking best innovation processes and a management research laboratory which purposes to promote organizational resilience and renewal (Knight et al. 2005)

Explanation - The resources view argues that companies should balance optimization (tactical investment in current businesses) and innovation (strategic investments in new businesses). This view also considers the allocation of resources to adjust a balance. Resource inputs include capital, labour and time. The return on investment, output in strategic innovation is included in the metric. (Sommer, Dukovska-Popovska & Steger-Jensen 2013). Secondly, the capability view examines the degree of support from the company's competences and culture towards the conversion of innovation resources into business renewal leads. Capability view includes inputs such as innovation preconditions, i.e. the level to which a company's skills, tools, culture, and values adapt towards innovation. For illustration, does the company consider past evidence of innovativeness while selecting recruits? Outputs, as seen in the proposed metric include new skills and knowledge development domains that spawn innovation and strategic options (i.e. opportunities to considerably progress a prevailing business or invest in new businesses). Thirdly, the leadership view examines the grade of support towards innovation from leadership and assesses leaders' involvement in innovation activities, formal processes establishments, innovation promotions and dissemination of innovation goals.

Knight et al. (2005) offered recommendations to increase return on investment through the three constructs as follows:

1. Resource view: Increase capital, talent and time.
 - By increasing the percentage of capital that is invested in innovation activities such as submitting and reviewing ideas for new products and services and developing ideas through an innovation pipeline.
 - Increase number of entrepreneurs in the company, i.e. individuals who have previously started a business, either within the company or before joining the company.
 - Increase percentage of workforce time that is currently dedicated to innovation projects.
2. Capability view: Create favourable preconditions.
 - Increase percentage of employees for whom innovation is a key performance goal
 - Increase percentage of employees who have received training in innovation – for example, instruction in estimating market potential of an idea.

- Increase number of innovation tools and methodologies available to employees.
3. Leadership view:
- Increase percentage of executives' time spent on strategic innovation rather than day-to-day operations.
 - Increase percentage of managers with training in the concepts and tools of innovation.
 - Increase number of times during the past 5, 10, and 20 years in which senior management has redefined the company's core business.

6. Limitation of study

The limitations of this study include the possibility of a biased variance because data from the reviewed literature was gathered using surveys from one source. However, scales may not have variance errors as often estimated. Moreover, the fact that the two studies undertaken resulted in similar scale properties reduces such concerns. A direction for future research is to include multilevel units, as opposed to an individual level, in the measurement and analysis to further validate this scale.

It is suggested that users of these metrics assess existing metrics. If a company is a veteran of innovation, an assessment is encouraged to check whether the metrics already in use are suitable. For standardization purposes, consensus sought among other managers on a set of metrics is recommended. Reconciling metrics with existing methodologies is also advised. If a company uses methodologies like value-based management or the Balanced Scorecard, innovation metrics could be reconciled with that methodology.

7. Conclusion and Future Direction

On comparing recent literature on models that measure individual or organisational influences that foster innovation, it is evident that leadership is an essential contributing factor to organisational innovativeness. The argument is supported by a number of models that highlight the critical link between leadership and innovation. However, an element that is often overlooked with regards to leadership is the supporting followership associated with it. The importance and features of the followership construct are illustrated by many authors. (Ezziane et al. 2012) The proposed addition to the existing model is well supported by their concepts. Another contribution to enhance the existing model is identified as Return on Investment using the resource, capability and leadership views on innovation. The proposed measure is identified as a suitable replacement for the 'Strategic Intent' axis of the Leadership and Innovation model. .

Two new factors, 'followership' and 'return on investment' were introduced to enhance the existing 'Leadership for Innovation' model. The 'return on investment' axis replaced the 'Strategic Intent' axis because it was not very different from the existing 'Enterprise Vision' axis. The 'followership' measure was introduced because of its suitability to both leadership and innovation as argued in recent literature. Both the introduced factors are backed by research and their associated measures are validated. A direction for future research is to test the updated model with its measures in an organisational setup to confirm its relevance and accuracy.

Directions for future research include validating the relevance of the enhanced model by conducting analysis in organisations reputed for innovation. The enhanced model can then be recommended to different organisations that aim to measure the level of their innovation.

Reference

- AON Hewitt (2011) *Trends in Global Employee Engagement*, AON Hewitt Ltd, London.
- Birley, S. and Westhead, P. (2006) Growth and performance contrasts between 'types' of small firms, *Strategic Management Journal*, Vol. 11 No. 7, pp.535-557.
- Borjesson, S. and Lofsten, H. (2012) Capabilities for innovation in small firms – a study of 131 high-tech firms and their relation to performance, *International Journal of Business Innovation and Research*, Vol. 6 No. 2, pp. 149-176.
- Braun, S., Peus, C., Frey, D. & Knipfer, K. 2016, 'Leadership in academia: Individual and collective approaches to the quest for creativity and innovation', *Leadership lessons from compelling contexts*, Emerald Group Publishing Limited, pp. 349-65.
- Christensen, C. and Raynor, M. (2003) *The Innovator's Solution*, Harvard Business School Publishing, Boston.
- de Zilwa, D. 2016, 'The strengths and capacities of Authentic Followership', *Leadership & Organization Development Journal*, vol. 37, no. 3, pp. 310-24.
- Deschamps, J.-P. 2005, 'Different leadership skills for different innovation strategies', *Strategy & Leadership*, vol. 33, no. 5, pp. 31-8.
- Ezziane, Z., Maruthappu, M., Gawn, L., Thompson, E.A., Athanasiou, T. & Warren, O.J. 2012, 'Building effective clinical teams in healthcare', *Journal of health organization and management*, vol. 26, no. 4, pp. 428-36.
- Kellerman, B. 2008, *Followership: How followers are creating change and changing leaders*, Harvard Business School Press Boston.
- Knight, D., Randall, R.M., Muller, A., Välikangas, L. & Merlyn, P. 2005, 'Metrics for innovation: guidelines for developing a customized suite of innovation metrics', *Strategy & Leadership*, vol. 33, no. 1, pp. 37-45.
- Kottke, J.L., Pelletier, K.L. & Agars, M.D. 2013, 'Measuring follower confidence in top leadership direction', *Leadership & Organization Development Journal*, vol. 34, no. 4, pp. 292-307.
- Manning, T., Robertson, B. & Smith, B. 2016, 'A Three Factor Model of Leadership. Part 1. Introduction to Followership, Leadership and the Three Factor Model of Leadership', *Industrial and Commercial Training*, vol. 48, no. 6.
- Mooney, G. & Dovey, K. 2008, *Leadership for Innovation*, Panthalassa.
- Piperopoulos, P. and Scase, R. (2009) Competitiveness of small and medium sized enterprises: towards a two dimensional model of innovation and business clusters, *International Journal of Business Innovation and Research*, Vol. 3 No. 5, pp. 479-499.

Prasad, B., Junni, P., Adcroft, A. & Lohrke, F. 2016, 'CEO transformational and transactional leadership and organizational innovation: the moderating role of environmental dynamism', *Management Decision*, vol. 54, no. 7.

Sommer, A.F., Dukovska-Popovska, I. & Steger-Jensen, K. 2013, 'Activity-based process model for customer-driven product development', *Industrial Engineering and Engineering Management (IEEM)*, 2013 IEEE International Conference on, IEEE, pp. 1259-64.

Tung, F.-C., Yu, T.-W., Humphreys, P. & Humphreys, P. 2016, 'Does innovation leadership enhance creativity in high-tech industries?', *Leadership & Organization Development Journal*, vol. 37, no. 5.

Vaccaro, A., Parente, R. and Veloso, F. M. (2010) Knowledge management tools, inter-organizational relationships, innovation and firm performance, *Technological Forecasting & Social Change*, Vol. 77, pp. 1076-1089.