School of Built Environment > Faculty of Design, Architecture & Building >

University of Technology Sydney

# The development of a conceptual framework of the competitive strategies used by consulting engineering companies in New South Wales

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A thesis submitted in fulfillment of the requirements for the degree of Doctor of Philosophy 2020

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### **CERTIFICATE OF ORIGINAL AUTHORSHIP**

I, Daren Maynard, declare that this thesis is submitted in fulfilment of the requirements for the award of PhD Built Environment, in the School of Built Environment, Faculty of Design, Architecture & Building at the 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.

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Date:09	9 Feb 2020

### **DEDICATION**

I dedicate this PhD degree to my parents: Mr Wayne (deceased) and Mrs Earlyn Maynard. They have always encouraged me to study even if it took me far away from Trinidad and Tobago. Thank you for the love and support over the years as I pursued my studies and dreams of becoming Dr Maynard.

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### **STATEMENT OF THE THESIS**

This thesis is a conventional thesis as defined by section 9.1.1 in the UTS Graduate Research Candidature Management, Thesis Preparation and Submission Procedures (2019 version).

This thesis was edited using the Australian Standards for Editing Practice. The editing practice was limited to proofreading. The Australian Style Manual 6th Edition, the Macquarie Dictionary and Harvard (UTS) Reference Style were applied in the editing of this PhD submission.

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### **LIST OF ABBREVIATIONS**

AEC Architecture, Engineering and Construction

ANZSIC Australian and New Zealand Standard Industrial Classification

B2B Business-to-business

B2C Business-to-customer

CEC Consulting engineering companies

CIA Comparative institutional analysis

CIT Critical incident technique

D&C Design and construct

FTE Full-time equivalent

HIT Historical institutional analysis

GDL Goods-dominant logic

M&A Mergers and acquisitions

NSW New South Wales

OSI Open source information

PSF Professional services firms

SDL Service-dominant logic

### **ABSTRACT**

Consulting engineering companies (CECs) compete to be selected for various built environment projects. These CECs have various competitive strategies, which are governed by economic theories. The relationship between the CECs and their client firms is a business-to-business (B2B) one. The research investigates what economic theories are applicable to the competitive strategies used by CECs in New South Wales in their B2B relationships. The research explores how economic theories can explain the commercial behaviours of the CECs in the marketplace. The research questions are answered using a positivist research paradigm applying a mixed methodology. The mixed methodology consists of quantitative and qualitative data collection and analysis methods. The research developed a multidimensional conceptual framework, which explains the competitive strategies used by the CECs. The framework incorporates microeconomics, institutional economics, strategy, value and pricing theories.

**Keywords:** consulting engineering company, micro-economics, institutional economics, competitive strategies, value.

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