

Exploring How Information and Communications Technology (ICT)
Firms Create 'Value' for Organizational Stakeholders

by

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A thesis
presented to the University of Waterloo
in fulfillment of the
thesis requirement for the degree of
Doctor of Philosophy
in
Management Sciences

Waterloo, Ontario, Canada, 2015

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AUTHOR'S DECLARATION

I hereby declare that I am the sole author of this thesis. This is a true copy of the thesis, including any required final revisions, as accepted by my examiners.

I understand that my thesis may be made electronically available to the public.

Abstract

The understanding of how firms create value for their stakeholders is important for advancing the empirical body of knowledge on stakeholder theory. This is especially relevant for the exploration of technology companies operating at different organizational life cycle (OLC) stages. Our study investigates if the use of business-stakeholder engagement models differs among firms at various OLC stages. We have identified three distinct categories of business-stakeholder engagement models from the literature, including: ‘corporate social responsibility’ (CSR), ‘creating shared value’ (CSV) and ‘creating value for all stakeholders’ (VAS) (Freeman et al., 2010; Strand & Freeman, 2013). Drawing from the stakeholder theory and organizational life cycle (OLC) frameworks, we hypothesize that ‘start-up’ firms are more receptive toward VAS model; ‘growth’ firms toward CSR; and ‘mature’ firms toward CSV.

We apply a ‘pragmatist’ worldview (Creswell, 2009) to collect empirical evidence on Information and Communications Technology (ICT) firms. Our analyses include two extensive perception based exploratory studies, described as ‘Phase-1’ and ‘Phase-2’. In the first phase of our exploratory study we use repertory grid technique (Kelly, 1955) to systematically elicit personal constructs from the ICT-sector business experts. We used a partial repertory grid method to interview 18 ICT-sector business experts from Central Canada. Selected sample groups comprised of three scholars and three practitioners from each of the start-up, growth and mature OLC stages. RepGrid and RepSocio features of the Rep 5 enterprise software were used to conduct idiographic and nomothetic data analyses to establish how firms at OLC stages perceive ‘value-creation’ for their stakeholders. Evidence from this exploratory study suggested that start-up stage firms are perceived to consider factors beyond creating economic value for both primary and secondary stakeholders. Whereas, growth and mature stage firms are perceived to consider socioeconomic (consisting of financial as

well as non-financial) scenarios for ‘value-creation’. In the second phase of research, we use survey study design to test our proposed hypotheses. A total of 132 ICT-sector senior level practitioners, located in the United States of America (USA) participated in our study. A one-way repeated measures ANOVA, and factor analyses were used to systematically conduct data analyses for common method variance, and hypotheses testing. The results from the study showed that start-up, growth, and mature OLC stage firms are perceived to be at least partially receptive toward VAS, CSR, and CSV models, respectively.

Our study contributes to the literature on stakeholder theory, ICT-sector organizational life cycle framework, and methods for measuring organizational decision makers’ perceptions about stakeholder engagement. The empirical evidence from our research strengthens Donaldson and Preston (1995), Jones and Wicks (1999), and Jawahar and McLaughlin’s (2001) ideas about descriptive stakeholder theory for effectively understanding business organizations. We believe that these findings better equip us for further exploring claims of stakeholder theory – providing divergent narratives for understanding organizations in stakeholder terms (Jones, 1995; Freeman, 1999).

Some practical implications follow as well. For example, assuming our findings replicate, a society that seeks to encourage technology companies to broaden their range of stakeholders for innovation (e.g., to include communities, environment) might direct instrumental change toward ‘start-up’ firms as appreciative of VAS — even if these new firms require some time to develop perspectives of ‘jointness of interest’ as they strive to become ‘growth’ and ‘mature’ firms.

Acknowledgements

I express my utmost gratitude to my PhD supervisor, Dr. Paul Guild for his guidance, mentorship and faith in me. I thank him for his time, energy, insight, criticism, and appreciation in the last four years.

Beside my supervisor, I am grateful to my PhD committee members, Dr. Darren Meister, Dr. Douglas Sparkes, Dr. Mark Weber, and Dr. Michael Wood for their indispensable guidance and liberal research insights.

I wish to acknowledge the support received for conducting this study from The Ontario Centres of Excellence (OCE) and the Institute For Innovation Research (IIR) at the Department of Management Sciences, University of Waterloo.

My heartfelt gratitude to my teachers and guides in academe and life, Anjum Shahzad, Dr. Selcuk Onay, Dr. Vanessa Bohns, Dr. Jonathan Fugelsang, Dr. Jonathan Oakman, Dr. Clifford Blake, Dr. Peter Carr, Dr. Zafar Iqbal, Talha Ali Kushvaha, and Moeen Naseer. I would like to express my sincere gratitude to Dr. Samir Elhedhli as the chair of our department for his support and encouragement. My profound acknowledgement to Wendy Fleming, Kathy Tytko, Shelley Vossen, Gini Kennings, Ian Taylor, and Kimberly Dunne for their exceptional support in the department.

I would like to extend sincere thanks to my dear friends and colleagues, Dr. Muhammad Batouk, Dr. Julio Noriega, Lulu Resendiz, Dr. Biao Wang, Dr. Shahed Alam, Rodrigo Eng Castillo, Sanaz Hosseini, Inta Guild, Tara Scanlan, Abdul Al Haimi, Musab Ameen, Sohail Javvad, Umair Javed, Farhan Mirza, Usman Tariq, Mustafa Shah, Omer Butt, Gul Hassan, Usama Muhammad, Rafael Chaudhry, Waqas Riaz, Ahsan Khalid, Hassan Khalid, Yasir Ali, Maila Akbar, Shehryar Khalid, Ahsan Zaka, Umair Rehman, Shazia Ilahi, Usman Ilahi, Fahad Sohail, Daniyal Naeem, Ali Niaz, and

Farhan Ghani who were with me in every step of this endeavor with their relentless encouragement and valuable insights.

This thesis is a fruit of the endless love and encouragement of my family that I much treasure. I am forever indebted to my parents, Nuzhat and Tahir Shah for their unconditional love and support in all my pursuits. A special note of thanks to my brother, Usman Shah, is for being an epitome of resilience in my life. His courage has been an inspiration for me in the completion of this thesis. I appreciate the love and care of my sisters, Sabina Shah, and Hafsa Arman in this journey. I am thankful to my mother-in-law, Shabnam Sabah for her love and prayers. My special thanks is for my brothers-in-law, Hussnain Zia, Arman Khawar and Rafay Ghumman for their well wishes. I acknowledge with great gratitude the support of Fatima and Asif Hashmi in this process. Also, my deepest thanks go to Salman Khan, an extraordinary childhood friend for his continuous prayers and encouragement.

Most of all, my special thanks is for my best friend and loving wife, Almas Razzaq. It is her unconditional love, support and care, which brought this dream from conception to realization. Her strength and patience encourages me to accept bigger challenges in life.

Dedication

To my mentors in life, Dr. Paul Guild, Anjum Shahzad and Usman Shah.

You empowered me with knowledge.

Thank you for showing me the light.

Thank you for the gift of knowledge that I shall forever treasure.

Table of Contents

| | |
|---|------|
| AUTHOR'S DECLARATION | ii |
| Abstract | iii |
| Acknowledgements | v |
| Dedication | vii |
| Table of Contents | viii |
| List of Figures | xi |
| List of Tables | xii |
| Chapter 1 Introduction | 1 |
| Chapter 2 Literature Review | 7 |
| 2.1 Scope Of The Review | 7 |
| 2.2 Corporate Social Responsibility (CSR) | 8 |
| 2.2.1 CSR Between The Era Of 1950s And 1980s | 8 |
| 2.2.2 CSR Post 1980s | 9 |
| 2.2.3 CSR In The New Millennium (2000 And Beyond) | 11 |
| 2.3 Creating Shared Value (CSV) | 12 |
| 2.4 Creating Value For All Stakeholders (VAS) | 14 |
| Chapter 3 Theoretical Framework and Hypotheses | 16 |
| 3.1 Stakeholder Theory | 16 |
| 3.2 Organizational Life Cycle | 22 |
| 3.2.1 Start-up Stage | 24 |
| 3.2.2 Growth Stage | 26 |
| 3.2.3 Mature Stage | 29 |
| 3.2.4 Decline Stage | 31 |
| Chapter 4 Research Method | 33 |
| 4.1 Overview Of The Studies | 33 |
| 4.2 Phase-1: Exploratory Field Study | 33 |
| 4.2.1 Sample Selection | 35 |
| 4.2.2 Repertory Grid | 36 |
| 4.2.3 Element Selection | 37 |
| 4.2.4 Construct Elicitation | 38 |
| 4.2.5 Reliability And Validity Of Repertory Grids | 39 |
| 4.2.6 Phase-1 Interview Protocol | 39 |

| | |
|---|-----|
| 4.3 Phase-2: Survey Study Design | 41 |
| 4.3.1 Measurement Scale And Survey Instrument Development | 43 |
| 4.3.2 Sample Selection | 45 |
| 4.3.3 Validity And Reliability Of Phase-2 Study Design | 48 |
| Chapter 5 Findings Of Phase-1: Exploratory Field Study | 51 |
| 5.1 Participants | 51 |
| 5.2 Repertory Grid Idiographic Data Analyses | 52 |
| 5.2.1 Cluster Analysis Of Individual Grids..... | 54 |
| 5.2.2 Principal Component Analysis..... | 55 |
| 5.2.3 Variance Explained | 58 |
| 5.3 Repertory Grid Nomothetic Data Analyses | 59 |
| 5.3.1 Mode Grids Analyses..... | 60 |
| 5.4 Content Analysis Of Various OLC Stages | 69 |
| 5.4.1 Definitions Of ICT Sector Start-Up, Growth, And Mature OLC Stage Firms | 70 |
| 5.5 Discussion For Phase-1 | 72 |
| Chapter 6 Findings Of Phase-2: Survey Study Design | 78 |
| 6.1 Participants | 78 |
| 6.2 Internal Consistency Of The Measurement Constructs..... | 81 |
| 6.3 Assessment Of Common Method Biases | 83 |
| 6.4 Relationship Between OLC Stages And Business-Stakeholder Engagement Models..... | 84 |
| 6.4.1 OLC Stages And Their Relationship With Firms' Cooperative Strategic Posture | 86 |
| 6.4.2 OLC Stages And Their Relationship With Narrowly Economic View Of Firms..... | 89 |
| 6.4.3 OLC Stages And Their Relationship With Firms' Jointness Of Interest..... | 91 |
| 6.5 Relationship Between ICT-Sector Occupational Experience And Organizational Stakeholders | 94 |
| 6.6 Discussion For Phase-2 | 99 |
| Chapter 7 Conclusion, Limitations And Future Research..... | 103 |
| 7.1 Conclusion..... | 103 |
| 7.2 Research Limitations..... | 106 |
| 7.3 Future Research..... | 107 |
| Appendix A Phase-1 Interview Protocol..... | 109 |
| Appendix B Cue Cards Of Elements And Definitions Of Stakeholders And OLC Stages..... | 131 |
| Appendix C Elicited Differentiating Constructs Among Various OLC Stages | 135 |
| Appendix D Categorical Differentiating Constructs Among Various OLC Stages | 147 |
| Appendix E Repeated Measures Survey Design | 151 |

| | |
|---|-----|
| Appendix F Determining Value-Creating Constructs Data Outliers..... | 168 |
| Appendix G Determining Value-Creating Constructs Data Normality | 187 |
| Appendix H Comparison With Equal Sample Sizes In Each Self Reported OLC Group | 188 |
| Appendix I Scale Reliability Analysis | 189 |
| I.1: Reliability Analyses For Start-Up Stage ‘Jointness of Interest’ Construct..... | 189 |
| I.2: Reliability Analyses For Growth Stage ‘Jointness of Interest’ Construct..... | 191 |
| I.3: Reliability Analyses For Mature Stage ‘Jointness of Interest’ Construct..... | 193 |
| Appendix J Factor Analysis For Common Method Bias | 195 |
| Appendix K One-Way Repeated Measures ANOVA – SPSS Output | 197 |
| Appendix L Determining Occupational Experience Data Normality | 204 |
| Appendix M One-Way ANOVA Results Of Occupation Experience Data..... | 205 |
| M.1: Boxplot Graphical Representation Of Data Before Removing Significant Outliers..... | 205 |
| M.2: Boxplot Graphical Representation Of Data After Removing Significant Outliers | 210 |
| References | 216 |

List of Figures

| | |
|--|----|
| Figure 1: Overview Of Phase-1 Research Design..... | 34 |
| Figure 2: Overview Of Research Design In Phase-2 | 42 |
| Figure 3: Online Survey Response Timeline | 47 |
| Figure 4: Focus Output Of Constructs And Elements Of Individual ‘Scholar 1M’ | 55 |
| Figure 5: PrinGrid Output Of Individual ‘Practitioner 1G’ To Show Construct Structure..... | 56 |
| Figure 6: PrinGrid Output Of Individual ‘Scholar 2M’ To Show Construct Structure | 56 |
| Figure 7: PrinGrid Mode Output Of Group Perception At Start-Up OLC Stage..... | 61 |
| Figure 8: Focus Mode Output Of Group Perception At Start-Up OLC Stage | 62 |
| Figure 9: PrinGrid Mode Output Of Group Perception At Growth OLC Stage | 64 |
| Figure 10: Focus Mode Output Of Group Perception At Growth OLC Stage..... | 65 |
| Figure 11: PrinGrid Mode Output Of Group Perception At Mature OLC Stage..... | 67 |
| Figure 12: Focus Mode Output Of Group Perception At Mature OLC Stage | 68 |

List of Tables

| | |
|--|-----|
| Table 1: The Three Business-Stakeholder Engagement Models | 15 |
| Table 2: Relationship Between Start-Up Firms And Business-Stakeholder Engagement Models | 26 |
| Table 3: Relationship Between Growth Firms And Business-Stakeholder Engagement Models | 28 |
| Table 4: Relationship Between Mature Firms And Business-Stakeholder Engagement Models | 31 |
| Table 5: Specifications Of Measures Used In Phase-1 Interview Protocol | 40 |
| Table 6: Section Details Of Questions Used In Phase-1 Interview Protocol | 40 |
| Table 7: Summary Details Of Interview Process And Validation Checks During Phase-1 Study | 41 |
| Table 8: Specifications Of Questions Used In Phase-2 Survey Instrument | 44 |
| Table 9: Section Details Of Questions Used In Phase-2 Survey Instrument | 44 |
| Table 10: Overview Of Survey Responses | 47 |
| Table 11: Descriptive Characteristics Of Participants In Phase-1 Study | 53 |
| Table 12: Principal Component Loadings For Each Participant | 57 |
| Table 13: Details About The PVAFF | 58 |
| Table 14: Mode Constructs And Elements Of Group Perception At Start-Up OLC Stage | 62 |
| Table 15: Mode Constructs And Elements Of Group Perception At Growth OLC Stage | 66 |
| Table 16: Mode Constructs And Elements Of Group Perception At Mature OLC Stage | 69 |
| Table 17: Summary Of ‘Value-creation’ Constructs For An Informative Phase-2 Study | 77 |
| Table 18: Descriptive Characteristics Of Participants In Phase-2 Study | 79 |
| Table 19: Test Of Between Subjects Self-Reported OLC Expertise In Phase-2 | 81 |
| Table 20: Details Of Multiple Items Scale To Measure Jointness Of Interest | 82 |
| Table 21: Statistical Results Of Relationship Between OLC Stages And ‘Cooperative Focus’ | 87 |
| Table 22: Statistical Results Of Relationship Between OLC Stages And Narrowly Economic View Of Firms | 89 |
| Table 23: Statistical Results Of Relationship Between OLC Stages And Firms’ Jointness Of Interest | 91 |
| Table 24: Statistical Results Of Relationship Between Occupational Experience And Stakeholders | 96 |
| Table 25: Summary Of Hypotheses Test Results In Phase-2 Study | 101 |

Chapter 1

Introduction

There are over seven billion people on planet Earth, persons with diverse economic conditions and living standards. These can be divided into five types of economies: surviving, emerging, developing, transitioning and developed (Carayannis & Zedtwitz, 2005). In the past, various efforts were made to try to eradicate poverty and economic inequality in world communities. For instance, foreign monetary aid programs were once considered strategically important to deal with this inequality predicament (Papanek, 1973). But later, due to lack of accountability mechanisms in under-developed and developing regions of the world, some of these programs earned bad reputations. Researchers concluded that such assistance programs promoted nothing but corruption, and unequal distribution of wealth in those regions, which caused new problems (Boone, 1996; Alesina & Dollar, 2000; Dalgaard et al., 2004; Moyo, 2009; Shah, 2011).

Among other approaches, using businesses to eradicate societal issues has gained popularity. It is generally agreed that wealth creation, either directly or indirectly (such as through jobs, taxes, capital circulation) adds to any economy's stability. Rosling (2009) and Prahalad (2010) predicted that these gaps would close if we promote meaningful and value-creating businesses in global markets. We have several examples of companies like Microsoft, Apple, and Google that have positively contributed toward creating value and resolving societal issues. At the same time, we have examples like Enron (2001), WorldCom (2002), Lehman Brothers (2008), Fannie Mae (2008), and MF Global (2011) that have committed business fraud and added to societal problems. Such practices raise our concerns about the role of business in societies. Studies have been conducted to review the events of economic crises (2008) and social movements like Occupy Wall Street (2011) that protested actions that deprived millions of people from their jobs, savings, and homes (Amaeshi et al., 2013). Given this scenario, academics, as well as practitioners demanded that corporations discontinue their profit

taking at society's expense and to review their business policies toward achieving real sustainability and 'value-creation' (Porter & Kramer, 2011; Freeman et al, 2010; Haque, 2009).

In the past, movements such as 'corporate philanthropy' (CP) or 'corporate social responsibility' (CSR) emerged to connect societies with businesses (Freeman, et al. 2010). Andrew Carnegie (a Scottish-American businessman of 19th and early 20th century) stated that wealthy members in a society must take care of the poor (Carnegie, 2006 – first published in 1889). Even to date, we can find several foundations and non-governmental organizations (NGOs) run by wealthy business families that strive to extend greater good in communities (Freeman et al. 2010). The concept of CSR promoted partnerships between businesses and societies. It formally started in 1950s in the United States (Carroll, 1999; Freeman et al., 2010) and gained a lot of popularity in 1990s (Henderson, 2001). Historically, the 1992 Rio Earth Summit played an important role in legitimizing this type of business-stakeholder collaborative model (Grayson & Nelson, 2013). The suggestions put forward to curb societal issues through technology and innovation by business leader participants of the summit were viewed with suspicion and doubt at first (Grayson & Nelson, 2013). But later the world witnessed technology and innovation enabling rescue workers to save lives during the Haiti disaster in 2010, providing evidence that value-creating business services or initiatives can resolve some societal challenges (Tapscott & Williams, 2012). A similar case was witnessed during the Arab Spring (2010) where the masses of repressed communities, most from the Arab World (Tunisia, Egypt, Libya, and Yemen) used social media technologies to get organized and oust their rulers from power.

We can find several definitions and interpretations of the CSR phenomena in the literature (Amaeshi et al., 2013). It is an old concept, one that has evolved significantly in the past few decades. There are arguments for and against it. For instance, Friedman (1970) heavily criticized the CSR concept as it disrupts the core business function of wealth creation for shareholders. Similarly,

Drucker (1994) suggested that businesses must breakeven with their cost of capital to be deemed as responsible. Henderson (2001) advocated that CSR initiatives reduce business competition, which may result in market destabilization. In another study conducted by Kotchen and Moon (2011), a relationship was observed between companies doing ‘more harm’ (by acting irresponsibly), might actually be the ones doing ‘more good’ (through programs like CSR). For instance, Lehman Brothers (bankrupted in 2008) had an elaborate CSR program in place but became one of the causes for the financial meltdown of 2008. It is suggested that CSR is not going far enough toward resolving world problems (Freeman, 2013)¹. Some evidence suggests that it is uncertain to achieve societal uplifting goal through CSR-led programs (Jenkins, 2005). Such arguments raise questions as to the integrity of the CSR approach.

The CSR concept is not limited to only Western demography, rather it has become a global phenomena (Grayson & Nelson, 2013). Thus, in the absence of a strong systematic explanation of where CSR fits in today, how CSR has evolved, and how new models of business-social partnerships have emerged globally, makes the advocacy of newer ways of managing business-stakeholder partnerships difficult to understand and support. By newer ways of conducting business-stakeholder collaborations, we refer to the idea of businesses ‘creating value for all its stakeholders’ (VAS) (Freeman et al. 2010).

Some scholars view that the dominant business narrative of creating profits in the short-run has caused a lot of damage to the reputation of capitalism and corporations *per se* (Freeman et al, 2010; Haque, 2009; Porter & Kramer, 2011; Grayson & Nelson, 2013; Amaeshi et al., 2013). This kind of unregulated profit-making has brought distressing social costs to humanity (Carroll et al., 2012). But not everyone accepts this dominant business narrative; in fact, some denounce activities that involve

¹ Edward Freeman (2013) presented it in an online course on ‘New Models of Business in Society’, available at www.coursera.org.

irresponsible conduct by the firms. For instance, a group of consumers stopped purchasing Nike products after they learned about foul labor conditions at some of Nike production facilities in the developing countries (Porter & Kramer, 2006; Brugmann & Prahalad, 2007). With the help of advancement in the media sector, penetration of NGOs, and rising of civil societies, today's businesses are expected to be more accountable for their actions than ever before (Porter & Kramer, 2006).

In 2011, Porter and Kramer formulated a business-stakeholder collaborative model to respond to the criticism of CP and CSR programs. They proposed that businesses should focus on creating 'social' value in order to be able to create long-term 'economic' value. They called this idea 'creating shared value' (CSV). This business engagement model highlights the fundamental need for integrating business strategy with societal needs (Porter & Kramer, 2011). For instance, a mobile telecom company offering online mobile banking in regions where it seeks to resolve societal issues – while keeping in perspective matters like affordability, accessibility, and security – qualifies for mutual 'value-creation'. Telenor's (telecom service company) Easy Paisa initiative in countries like Pakistan and M-Pesa service by Safaricom in Kenya surely speak about extending business initiatives to bring convenience of banking to millions of people living in these underdeveloped/developing countries².

Contrary to CP, CSR and CSV models, Freeman (1994) advocated that the distinction made between social and economic paradigms is a 'separation fallacy'. According to him (Freeman, 1994; Freeman et al., 2010), creating 'value' is more central than defining which parts of 'value-creation' are 'social' or which parts are 'economic'. Hence, firms should strive to 'create value for all stakeholders' (VAS). By using this argument Freeman et al., (2010) equate CSV model with CSR

² Facts taken from a report by CNN (2010), published by the name, "model for the future", retrievable at <http://www.cnn.com/2010/TECH/01/14/mobile.phone.banking/index.html>.

practices, primarily because they cater too much to firms' shareholders and owners (Strand & Freeman, 2013).

To summarize, we know that in response to the dominant business narrative, organizations initially started using CP, and CSR models of business-stakeholder engagement. Later, the ideas of VAS and CSV emerged – where firms draw a greater harmony among its multiple stakeholders (Freeman, 1984; Porter & Kramer, 2011; Freeman, et al. 2010).

In theory and practice, other models of business-stakeholder engagement also exist but these could potentially be termed synonymous to rather closely defined CSR, CSV, and VAS models. For instance, concepts like 'serving at the bottom of the pyramid' among others can be narrowly associated with the characteristics of the CSV model. In order to address the issue of how to distinguish among some major business-stakeholder engagement models, this study uses the construct of 'value-creation' – as per Freeman and Strand's (2013) definitions of the three tenets of stakeholder theory. These three tenets are the, 'cooperative strategic posture', 'jointness of interest', and 'narrowly economic view of the firms' addressing about how firms create value for their stakeholders.

In our study, we seek emerging evidence as to whether different paradigms of business-stakeholder partnerships are perceived to be more receptive toward firms at various organizational life cycle stages (OLC). These OLC stages are important for exploring the idea of how firms with idiosyncratic characteristics at different stages of development perceive 'value-creation' for their stakeholders. This study explores the ICT-sector organizations to better understand the phenomena of 'value-creation' for the reasons of its high potential impacts around the world. For that we conduct a focused literature review on the topics related to corporate social responsibility (Chapter 2); build upon stakeholder theory and organizational life cycle premise to ground testable hypotheses (Chapter 3); use a pragmatic framework (Creswell, 2009) and research methods to empirically underpin the

evolutionary premise of creating ‘value’ and assess the perceived readiness of today’s ICT-sector firms’ toward these business-stakeholder engagement models (Chapter 4); gather and analyze the exploratory evidence using a systematic, repertory grid technique (Chapter 5); analyze an exploratory survey study to further explore the perceived receptiveness of ICT-sector practitioners toward various business-stakeholder engagement models (Chapter 6); and finally conclude the study, its limitation, and future research directions (Chapter 7).

Chapter 2

Literature Review

2.1 Scope Of The Review

In this chapter we discuss literature on topics related to business-stakeholder collaboration, such as: corporate philanthropy (CP), corporate social responsibility (CSR), residual view of corporate social responsibility (R-CSR), integrated view of corporate social responsibility (I-CSR), corporate social performance (CSP), corporate financial performance (CFP,) creating shared value (CSV), social entrepreneurship (SE), and social innovation (SI). In addition, some recent views on new business models, namely emergence of stakeholder approaches in businesses, their relevance with different organizational development stages, and their impact in creating value for all stakeholders (VAS) are examined.

The scope of the study allowed us to conduct an exclusive literature review on the topics mentioned above. For this we used key terminologies, such as: corporate social responsibility (both, residual and integrated), strategic corporate social responsibility, corporate philanthropy, corporate social performance, corporate financial performance, creating shared value, inclusive business models, serving at the bottom of the pyramid (BoP), social entrepreneurship, corporate citizenship, sustainable responsible businesses, management of organizational stakeholders, and impact of social ventures in our search queries. We used these items separately, as well as with different combinations in online search engines, such as Google Scholar, Microsoft Academic Search and online databases, such as JSTOR, Emerald, and Scopus (amongst others available at University of Waterloo's Library) to uncover a rather vast literature.

We acknowledge that this chapter does not include a complete list of business-stakeholder engagement models from a rather vast literature. However, our discussion comprises of only those

three models (namely, CSR, CSV and VAS) – that are distinguishable with the help of contributions in the literature on stakeholder theory. We believe that it is more important to highlight the key differentiating characteristics of various business-stakeholder engagement models from literature – rather than discussing every variant model to gain better learning.

2.2 Corporate Social Responsibility (CSR)

Due to limitations of space, only major contributors to the CSR literature are included in this chapter. In the beginning, a brief history of the evolution of the CSR ideology is discussed, leading to an overview of some recent CSR narratives. The fact remains that there is no universally accepted definition of CSR (Grayson & Nelson, 2013). Many different theories can be found in literature describing these CSR approaches – often representing the relationship between businesses and societies with different objectives (Levall & Prejer, 2013).

2.2.1 CSR Between The Era Of 1950s And 1980s

The research contributions made by Carroll in the past two decades have played a pivotal role in analyzing the origins of CSR and its alternative concepts. We will include here some of the main ideas and findings of Carroll (1979, 1999), and the work done by Aguinis and Glavas (2012) in our brief historical overview of the CSR concept. The concept of CSR is mostly considered to be a phenomenon of 20th Century (Carroll, 1979). Half a century ago, CSR was defined as, “an obligation of the businessmen to pursue those policies, to make those decisions, or to follow those lines of actions which are desirable in terms of the objectives and values of the society” (Bowen, 1953). It is quite intriguing to see the way that Bowen (1953) described the concept; essentially he points CSR strategy toward gearing businesses to create value for their societies. It may make one wonder why the concept of CSR became so complicated and started to contradict (in certain cases) some fundamental assumptions of creating value for the societies in the later years. Theoretically speaking,

the definition presented by Bowen in 1953 draws very close meaning to the recent work done by Porter and Kramer (2011) about CSV (discussed later in the chapter). Perhaps, one could argue that the CSR concept was theoretically about ‘value-creation’ for the societies but somehow the execution or practical implementation of it did not go well; this is evident from our later discussions in this chapter.

Almost a decade after Bowen’s definition of CSR, this concept was sometimes viewed as partially beyond the interest of economic, technical and legal obligations of the firm (Davis, 1960; McGuire, 1963; Walton, 1967). However, Friedman (1970) opposed these interpretations of Davis (1960), McGuire (1963) and Walton (1967) and advocated instead that the ultimate purpose of any business is to create value for its owner, or stock/shareholders. In the early 70s, Johnson (1971) explained the phenomenon of a socially responsible (SR) firm in multiple complementary ways. According to him, a SR firm is one “whose managerial staff balances a multiplicity of interests. Instead of striving only for larger profits for its stockholders, a responsible enterprise also takes into account employees, suppliers, dealers, local communities, and nations”. This idea seems quite similar to Freeman’s Stakeholder Theory (Carroll, 1999); details of which are discussed in Chapter 3. Toward the end of the 70s era, Carroll (1979) presented a definition of CSR, expressing that “the social responsibility of business encompasses the economic, legal, ethical, and discretionary expectations that society has of organizations at a given point in time”³. He later summarized that there is no sequence or set pattern for satisfying economic, legal, ethical, and discretionary categories (Carroll, 1999).

2.2.2 CSR Post 1980s

Post 1980s, with new research, the CSR field became more specialized. Dahlsrud (2008) studied 37 definitions of CSR (from 1980 to 2003), originating from America, Europe, India and Canada. This

³ To understand the significance and meaning of economic, legal, ethical, and discretionary expectations, see the literature review by Carroll (1999).

analysis used only the definitions consisting of the term ‘corporate social responsibility’ to ensure consistency of the results (Dahlsrud, 2008). In this study, it was pointed out that the challenge is not to define CSR, but to understand how CSR is socially assembled in a particular framework and how it is incorporated into developing specific business strategies. Five dimensions, namely, ‘the environmental’, ‘the social’, ‘the economic’, ‘the stakeholder’, and ‘the voluntariness’ were identified by Dahlsrud (2008) to reflect on the content of the CSR definitions.

During this era, the radius of CSR approach expanded as it promoted a multi-stakeholder engagement perspective (as suggested by Dahlsrud, 2008). It was concerned with the ethical treatment of the internal and external stakeholders of the firm, as the idea was to promote human development (inside and outside the firm) by behaving responsibly (Hopkins, 1999).

Between 1980 and 2000, much of the focus shifted to exploring the relationship between ‘corporate social performance’ (CSP) and ‘corporate financial performance’ (CFP) – which showed a variety of positive, negative and inconclusive results (Anderson & Frankle, 1980; Cochran & Wood, 1984; Aupperle et al., 1985; Davidson & Worrell, 1988; Bromiley & Marcus, 1989; Johnson & Greening, 1994; Waddock & Graves, 1994). According to Griffin and Mahon (1997), academics and practitioners expressed concerns over these inconsistent results – perhaps arising from unclear understanding of the concepts of social and financial performance. On a similar note, Crane et al. (2014) discussed the struggle of CSR to effectively deal with the tensions between social and economic goals in the real business world. They acknowledged that having a simple and narrow perspective about social performance fails to address these complex business and societal challenges (Crane et al., 2014).

2.2.3 CSR In The New Millennium (2000 And Beyond)

According to World Business Council for Sustainable Development (WBCSD, 2000), CSR explained “the continuing commitment by business to behave ethically and contribute to economic development while improving the quality of life of the workforce and their families as well as the local community and society at large”. This definition, however, seems a bit vague and does not explicitly address all other stakeholders associated with the firm. Similarly, the Commission of the European Communities (2001) defined CSR as “a concept whereby companies integrate social and environmental concerns in their business operations and in their interaction with their stakeholders on a voluntary basis”. More recently, according to the European Commission, CSR can be defined as “the responsibility of enterprises for their impact on society” (European Commission, 2011). The meaning associated with the ‘impact on society’ is to capitalize on the creation of shared value for their (multiple) stakeholders (European Commission, 2011). We noticed that in late 90s and post 2000, the word: ‘stakeholder’ became a part of the vocabulary in CSR literature.

The above discussion shows that over the course of half a century, continuous research has been conducted on the theories, as well as practices (including merits/demerits) of different CSR approaches. One of the major and consistent criticisms of this practice has been that organizations with a strong profit-maximization drive propagate social responsibility as one of their central objectives, which in reality may not be true. This phenomenon is described by Johnson (1971) as the ‘lexicographic view of social responsibility’⁴. For instance, many studies have claimed that adapting to the CSR approach have caused firms to achieve competitive advantage, higher customer satisfaction and better financial returns (Maignan et al., 1999; Bansal & Roth, 2000; Sharma, 2000; Sen & Bhattacharya, 2001; Orlitzky et al., 2003; Brammer & Pavelin, 2006). According to the literature, personal preferences influence decisions regarding the CSR programs (Johnson &

⁴ See the literature review by Carroll (1999) to learn more about this phenomenon.

Greening, 1999; Neubaum & Zahra, 2006; Aguinis & Glavas, 2012). Firm owners use their CSR budget according to their own personal likings – causing discontinuation of CSR initiatives during financial turmoil. This view of CSR approach is similar to the Residual-CSR view presented by Freeman et al. (2010). According to this view firms that give back to societies from the residual profits are not doing enough toward making business-stakeholder model sustainable (Freeman et al., 2010).

2.3 Creating Shared Value (CSV)

Porter and Kramer (2011) presented a case to reinvent capitalism through their ‘Creating Shared Value’ (CSV) concept. They posed it as an alternative to a much criticized (residual) CSR approach. According to them organizations can achieve long-term, sustainable value by focusing on the societal issues (Porter & Kramer, 2011). This can be achieved by ‘re-conceiving products and markets’, ‘redefining productivity in the value chain’, ‘enabling local cluster development’ with a motive to resolve societal issues at large⁵ (Porter & Kramer, 2011). In other words by aligning core business strategies with social needs, corporations gain sustainability, competitive advantage, power to resolve societal issues and gain profits at the same time (Porter & Kramer, 2006; 2011; Michelini, 2012).

Many scholars, practitioners and thinkers belonging to this field have explored business-stakeholder phenomenon with terms like ‘creative capitalism’, ‘inclusive business’, ‘doing well by doing good’, ‘harnessing core competencies’, ‘social business’, ‘ethical trade’, and ‘delivering shared value’ (Ashley, 2009)⁶. The common understanding of these terms is allowing businesses with commercial value to bring prosperity to poor people in the developing or under-developed regions of

⁵ According to FSG (Social Impact Consultants – www.fsg.org), a not-for-profit organization that provides local and global organizations may include corporations, governments, non-profit organizations, school systems, for-profit private firms, and community foundations. They have published a list of their existing 261 client organizations that, as of September, 2015, are moving toward CSV business-stakeholder engagement model.

⁶ For more details about the origin of these terminologies, see Ashley (2009).

the world. This can be achieved with balanced social and commercial value-creating initiatives (Ashley, 2009).

There are several other business models that advocate for organizations to create value for societies and businesses simultaneously which may link them with CSV ideology. For instance, 'social entrepreneurship' (SE) is considered as an innovative utilization of available resources to exploit opportunities for addressing social needs as a primary objective, while treating wealth generation as a by-product for achieving organizational sustainability (Dees, 1998). The number of social entrepreneurs is believed to have multiplied in volume with increased penetration in various geographies (Schwartz, 2012). The economic benefit can be utilized by the poor for improving their living standards and bringing prosperity. This phenomenon can also be called 'social business model' (Mair & Marti, 2006; Easterly & Miesing, 2007; Yunus 2011). Similarly, 'social intrapreneurship' is another model for achieving shared value, which is termed as an organizational drive to bringing social change through its core-business products and services for building long-term business and societal values (Brenneke & Spitzeck, 2009). Micheline and Fiorentino (2012) introduced 'inclusive business model', as another defining term toward creating value in societies through business intervention (originally stated by the World Business Council for Sustainable Development, 2008). This concept is similar to the concept proposed by Prahalad (2010) to serve the masses at the 'bottom of the pyramid (BoP)'. According to this model multi-national organizations generate growth by altering their products and services to suit demands and needs of mass consumers, converting them into micro-consumers, micro-producers, micro-investors, and innovators (Prahalad & Hart, 2002; Prahalad & Hammond, 2002; Prahalad 2010). On a further note, Kanter (1999), terms 'corporate social innovation' as a way of developing corporate solutions for social problems and treating them as learning laboratories. Haque (2009) argued that businesses making profits at the expense of the society are not beneficial for anyone. Organizations should focus on developing 'meaningful'

products and services for their customers, which has been referred to as creating ‘thick value’ (Haque, 2009).

From our discussion above, we can identify variations in the business-stakeholder engagement models. Nevertheless, CSV may complement the existing schemes of CP, CSR and sustainability (Leth & Hems, 2013), and it still may be unfair to compare models like SE with CSV (the former model focusing on social sustainability; whereby the latter driven by profit motives). To be able to differentiate among the fundamentals of these models, we use a stakeholder theoretical lens, presented by Freeman et al. (2010).

Among the most prominent critics of the CSV model, Crane et al. (2014) highlighted some of its valid shortcomings, such as this model lacking in originality (for being very similar to the likes of ‘strategic CSR’, ‘BoP’, and ‘social innovation’ concepts among others), and not addressing the core complexities of balancing economic and social interests. However, Crane et al. (2014) still acknowledged the potential of this model to create awareness about socially beneficial business practices in both practice and theory.

2.4 Creating Value For All Stakeholders (VAS)

In the literature, we can also find a third type of business-stakeholder engagement model, known as ‘Creating Value for All Stakeholders’ (VAS) (Freeman et al., 2010). According to which, firms must treat all its stakeholders equally to create value while avoiding tradeoffs (Freeman, 1984; Freeman et al, 2010). According to Crane et al. (2014), the stakeholder theory approach has the potential to effectively drive firms toward fulfilling their multi-purposes – which models like CSV lack. The three tenets of ST (i.e. ‘jointness of interest’, ‘cooperative strategic posture’ and ‘rejections of a narrowly economic view of the firm’) allow us to distinguish among our outlined models (i.e. CSR, CSV and VAS) of business-stakeholder engagement as shown in Table 1 (Strand & Freeman, 2013). According

to them, ‘jointness of interest’ enables organizations to create value by exerting efforts to align their interests with the interests of their stakeholders. Similarly, ‘cooperative strategic posture’ allows organizations to consider their stakeholders as partners in cooperation as opposed to considering them as potential competitors. This tenet of stakeholder theory assists in developing harmony amongst businesses and stakeholders as partners in cooperation. However, ‘rejection of a narrowly economic view of the firm’ guides organizations to downplay the phenomenon of profit maximization as the sole objective of the firm.

Strand and Freeman (2013), advocated that, despite CSV showing ‘jointness of interest’ and promoting ‘cooperative strategic posture’, it still practices a ‘narrowly economic view of the firm’ – that is where it is different from the newer paradigm of VAS.

Table 1: The Three Business-Stakeholder Engagement Models

| CSR ⁷ | CSV | VAS |
|---|---|---|
| <ul style="list-style-type: none"> • More Narrowly Economic View of the Firm • Less Cooperative Strategic Posture • Less Jointness of Interest | <ul style="list-style-type: none"> • More Narrowly Economic View of the Firm • More Cooperative Strategic Posture • More Jointness of Interest | <ul style="list-style-type: none"> • Less Narrowly Economic View of the Firm • More Cooperative Strategic Posture • More Jointness of Interest |

It is evident from the above discussion that there is a need to better understand business-stakeholder engagement opportunities. We seek to better understand this phenomenon through empirical evidence, making it an applied research problem (Booth et al., 2003).

⁷ To simplify the complexities in our research, we decided to refer to ‘residual-CSR’ concept as just ‘CSR’. According to Freeman et al. (2010) residual-CSR can be defined as conventional, non-strategic initiatives of firms that respond to the societal claims only after maximizing their profits.

Chapter 3

Theoretical Framework and Hypotheses

Continuing with the ideas presented above, we propose to use the ‘Stakeholder Theory’ and ‘Organizational Life Cycle’ (OLC) narratives (conceptual frameworks) to understand the readiness of today’s firms toward use of various paradigms of business-stakeholder collaboration. In this section, we identify an opportunity to investigate the perceptions of practitioners, representing firms from different developmental stages about the paradigms of CSR, CSV, and VAS.

Drawing from the discussions on stakeholder theory and organizational life cycle framework, we seek the emerging evidence as to whether different OLC stages influence the perceived receptiveness toward various business-stakeholder partnerships. The underlying assumption is that when an organization moves typically from one stage to another in organizational development life cycle – based on its idiosyncratic characteristics – it responds differently to organizational stakeholders. Our study attempts to explore the models of business-stakeholder engagement as suggested by the stakeholder theory and the various developmental stages of ICT-sector organizations to better understand the phenomena of ‘value-creation’. New learning may enable us to understand the topic of stakeholder engagement in a more holistic manner.

3.1 Stakeholder Theory

According to the literature, stakeholder theory is an organizational theory (Phillips, et al., 2003) which promotes creating value for all stakeholders by avoiding tradeoffs among each other (Jones & Wicks, 1999; Freeman et al., 2010). The concept of stakeholders has been around since 1960s, from an era when business was seen as an essential element of society rather than a narrow profit-centric pursuit (Freeman & Liedtka, 1997). This theory emerged as an opposing concept to the widely used

‘shareholder’ theory of organizations (Freeman, 1984; Freeman et al., 2010). According to the stakeholder theory, management of an organization does not only have a fiduciary duty to the shareholders, but also have obligations to other stakeholders of the firms (Hasnas, 2013). Some key stakeholder theorists, such as Freeman, Wicks and Parmar (2004) elaborated this distinction and stressed that stakeholder theory does not underplay the importance of financial stakeholders; instead, it promotes firms to harmonize their interests with all, including non-economic stakeholders. Owing to that, a stakeholder theory approach has been said to provide a better path for managers and entrepreneurs to articulate broader purpose of the firms (Freeman et al., 2004).

The antithesis of the stakeholder theory posits that organizations ultimately exist to maximize their profits and economic returns (Friedman, 1970), which would seem to negate the views of Bosse, Phillips, and Harrison (2009) about organizational stakeholders wanting things other than just achieving economic benefits. According to Harrison and Wicks (2013), paying attention to these other factors may provide useful directions for understanding what enables firms to become thriving and sustainable in the longer-term.

In the stakeholder theory literature, not many empirical studies exist to help in advancing our understanding about how firms at different OLC stages perceive ‘value-creation’ for their stakeholders. Prior to approaching this gap in the literature, we must highlight the legitimacy of stakeholders through their interactivities. Typically, managers and entrepreneurs consider the interests of “those groups and individuals who can affect (or be affected by) their activities” as their legitimate stakeholders (Freeman, 1984; Donaldson & Preston, 1995). These include customers, employees, financiers, communities, suppliers, and sometimes others to whom firms have responsibilities (Freeman, 1999; Phillips et al., 2003; Freeman et al., 2007; Freeman et al., 2010).

In the past, several discussions were made to advance stakeholder theory on descriptive, instrumental, and normative aspects of the theory. Donaldson and Preston (1995) shared some of the distinctions, challenges and implications of it in their research work. According to these authors, it is important to understand the reasons for accepting stakeholder theory over alternative ideas, such as ‘management serving the shareowners’. They (Donaldson & Preston, 1995) argued that stakeholder theory mutually supports the descriptive, instrumental, and normative aspects of the theory. At the first (descriptive) level, the theory explains associations that are observed in the real world. At the next (instrumental) level, the cause and effect relationship of certain practices resulting in definite outputs advance the descriptive observation. At the third (normative) level, the function to offer guidance on the basis of some fundamental moral and philosophical values is exercised.

The idea falls short in supporting accuracy of descriptive, as well as instrumental aspects of the stakeholder theory by examining the criticism and support found in the literature (Donaldson & Preston, 1995). However, the argument of stakeholder theory being fundamentally normative is supported, especially in the light of theory of property rights (Donaldson & Preston, 1995). To compliment the typology of stakeholder theory by Donaldson and Preston (1995), Jones and Wicks (1999) identified two divergent approaches: 1) social science based research and, 2) normative ethics account prevailing in the stakeholder literature. However, in response, they proposed an integrative or convergent stakeholder theory, connecting normative arguments and supporting it with instrumental or practical approaches (Jones & Wicks, 1999).

Freeman (1999) criticized the convergent stakeholder approach, as well as the assumptions on which it was built – that is normative, instrumental, and descriptive aspects of stakeholder theory suggested by Donaldson and Preston (1995), and the association between the instrumental and normative theories as pointed out by Jones and Wicks (1999). According to him (Freeman, 1999) this kind of distinction gives birth to a phenomenon called ‘*separation thesis*’ – separating businesses

from ethics. It is because almost every business decision arguably has some ethical grounds attached to it (Freeman, 1994; 1999; Freeman et al., 2010). The researchers should focus more on theory that ‘diverges’ for developing narratives that can show that organizations can succeed by promoting cooperation amongst various ‘stakeholders’ (Freeman, 1999; Freeman et al, 2010). It was further elaborated that the stakeholder approach was built upon instrumental foundations following a pragmatic framework, which drives the notion that, for organizations to be successful, they must solely satisfy those being affected or those that can affect (Freeman, 1999). As instrumental narrative requires some reasoning, it is not necessary to have a normative justification when using this approach (Freeman, 1999). There is a need to put more emphasis on increasing studies backed by instrumental theory – primarily because there is more than one way to effectively manage stakeholder groups (Freeman, 1999).

While acknowledging the aforementioned three aspects of the stakeholder theory, we consider benefiting from our research by initially framing questions in a descriptive manner; this could potentially prepare us better for further exploring the instrumental aspect of the stakeholder theory eventually.

We can utilize stakeholder theory as a framework to develop several other testable theories (Wheeler et al., 2003; Freeman et al., 2010). For instance, through studying the relationship between businesses and their stakeholder groups as a unit of analysis, one can address the contemporary issues about ‘value-creation’ and trade, ethics of capitalism, and managerial mindsets (Freeman et al., 2010). Although the stakeholder theory dialogue has been extended to various industries and academic disciplines, very little research addresses different perspectives as to how firms create ‘value’ for their stakeholders. Harrison and Wicks (2013) developed a four-factor perspective for defining the ‘utility’ that stakeholders seek from firms. This maybe a good starting point to realize a broader understanding of the term ‘value’, one that extends beyond a narrowly-defined perspective of ‘economic returns’ to

yield a legitimate expression about ‘value’ (Friedman, 1970; Donaldson & Preston, 1995; Mitchell et al., 1997; Berman et al., 1999; Argandoña, 2011; Harrison & Wicks, 2013).

As we discuss the measurement of firm performance using a multi-stakeholder focus, we note that some researchers have established KLD data⁸ as a way of learning about firms creating or destroying the overall firm ‘value’ (Berman et al., 1999; Hillman & Keim, 2001; Harrison & Wicks, 2013). This may be an efficient way to analyze the total worth of publically listed firms; however, it does not fully capture the notion of how firms at initial or intermediary stages of development create value for their stakeholders. In the literature, we have not found an empirical study that addresses how firms at different development stages perceive ‘value-creation’ or explain the responsibilities toward their primary or secondary stakeholders.

In an attempt to pursue this opportunity we suggest applying organizational life cycle theory (OLC) to conceptualize and capture a broader view about how firms at OLC stages vary in terms of creating value for stakeholders. Prior research supports the approach of using OLC in research question similar to ours (see Milliman et al., 1991; Jawahar & McLaughlin, 2001). Interestingly, Jawahar and McLaughlin (2001) proposed that, depending upon the importance of satisfying their needs, certain stakeholders would be more critical than others to organizations at different OLC stages.

Stakeholder theory is relevant to our work as it differs from the ‘shareholder’ dominant business narrative and promotes the ‘value-creation’ concept. In an interview with Moutchnik (Freeman & Moutchnik, 2013), Freeman highlighted five major postulates of the ‘stakeholder’ view that differentiate it from ‘shareholder’ perspective. Accordingly, first, businesses are not just about economics, they have other purposes too. Second, ‘businesses’ are about creating (or sometimes

⁸ KLD STATS (Kinder, Lydenberg and Domini) is a statistical tool for analyzing trends in social, environmental, and governance performance of firms using data gathered annually from US-Publically listed companies. KLD data are now known as ESG (environmental, social, and governance) after being acquired by MSCI.

destroying) value. To lead a business, managers and owners should focus on getting their company interests aligned with stakeholders. Third, humans are not simple beings who get motivated only to create wealth. Our complexity, with many wants and needs, allows capitalism to work; indeed, such complexity enables us to create value for each other. Fourth, we should assume that most people are honest and responsible. Fifth, competition in free markets is not bad as it increases options for people; however, the underlying objective of capitalism is the creation of value. Also related, due to technological advancements and the emergence of new political realities, Freeman says we must understand new ways of connecting businesses in societies (Freeman & Moutchnik, 2013).

In the mid 20th Century, Schumpeter (1939; 1994 – originally published in 1942) presented a similar rationale in support of capitalistic structure. He referred to capitalism as ‘evolutionary’ rather ‘static’, where ‘creative destruction’, ‘innovation’ and ‘entrepreneurship’ builds its foundation. The paradigm of VAS redefines the narrative of capitalism and ethics by realizing that businesses are created with a purpose to create ‘stakeholder value’ and not just ‘shareholder value’ (Freeman, 2007; Freeman et al., 2010; Harrison & Wicks, 2013).

In the recent past, scholars and researchers have made efforts to measure and define the concept of VAS (Argandona, 2011; Tantaló, 2011; Harrison & Wicks, 2013). Previously, the term ‘value’ has been either examined from the legitimacy viewpoint or from the economic perspective (Friedman, 1970; Donaldson & Preston, 1995; Mitchell et al., 1997; Berman et al., 1999; Argandona, 2011; Harrison & Wicks, 2013). In the given scenario, ample research opportunities exist for scholars to determine which of the models of business-stakeholder interaction are most sustainable for organizations. More research is required to know how firms with different characteristics explain their ‘company customer responsibility’, ‘company employee responsibility’, ‘company financier responsibility’, ‘company supplier responsibility’, and ‘company community responsibility’

(Freeman et al., 2010) and then how it reflect upon adopting the right fit of business-stakeholder engagement model.

In our opinion this gap in the literature may be explored with these questions:

- 1) How do firms at different developmental stages describe their responsibilities of creating idiosyncratic ‘value’ for organizational stakeholders?
- 2) How do firms at different development stages perceive receptiveness toward various business-stakeholder engagement models?
- 3) How can such exploration be informed by evidence?

In order to address these exploratory research questions objectively, we decided to initially focus on business firms from one specific industry. It was believed that different industries may have their unique classifications of the OLC stages and running a generic exploratory study might not serve our research goals. For the purpose of scoping our research project better, we decided to focus on the ICT-sector for-profit business firms. One of the major reasons for choosing the ICT industry was its significant impact on the sustainable development of businesses and the economic development of many societies in recent times (Tapscott & Williams, 2012).

3.2 Organizational Life Cycle

We suggest applying organizational life cycle theory (OLC) to conceptualize empirically a business-stakeholder cooperative framework for firms at different OLC stages. Previous research supports the approach of using OLC in research questions similar to ours (Milliman et al., 1991; Jawahar & McLaughlin, 2001). Interestingly, Jawahar and McLaughlin (2001) proposed that depending upon the importance of satisfying their needs, certain stakeholders would be more critical

than others when comparing organizations at different OLC stages⁹. The top-level managers belonging to different organizational development stages have different priorities (Smith et al., 1985) that could predict the effectiveness of their firms (Quinn & Rohrbaugh 1983).

According to the literature, there are multiple stages in the OLC model. These stages consist of different sets of organizational activities and structures (Dodge, et al., 1994), which are often classified into three to ten stages (Miller & Friesen, 1984; Hanks et al., 1993; Lester et al., 2003; Bonn & Pettigrew, 2009). The attributes of firms at various development stages define the firms' priorities accordingly (Miller & Friesen, 1984; Greiner, 1972; Lewis & Churchill, 1983; Moores & Yuen, 2001). It has been demonstrated empirically that different stages of OLC have a significant effect on the firms adopting management control systems (Miller & Friesen, 1984; Moores & Yuen, 2001; Auzair & Langfield-Smith, 2005; Davila, 2005).

Managerial practices and policies to make the organization successful can differ in each phase of organizational development (Randolph & Posner, 1982). The results gathered by Kallunki and Silvola (2008) confirmed that firms adopt formal accounting management systems (e.g. activity-based-accounting practice) at the later stages of the life cycle as compared to the firms at the early stages. This may be because the firms at different developmental stages operate and compete in diverse environments, requiring unique administrative approaches and business strategies (Miller & Friesen, 1984) to increase their market share and reduce costs to deal with rising competition as they progress from birth to maturity stages (Kallunki & Silvola, 2008). The exact length of each phase is not constant and can vary according to the circumstances (Randolph & Posner, 1982). This implies that the use of different business-stakeholder collaboration models may vary across the stages of OLC. It creates an opportunity for exploring how business-stakeholder partnership strategies vary as organizations develop and transition from one stage to another.

⁹ See the four propositions by Jawahar and McLaughlin (2001).

A longitudinal study conducted by Miller and Friesen (1984) was an effort to categorize empirically organizational development stages on the basis of structure (organization), strategy, context (situation) and decision-making styles. Recent studies by Bonn and Pettigrew (2009), and Wang and Singh (2014) employed a four-stage organizational life cycle model, (start-up, growth, mature and decline) for their studies on firms' board members and CEO compensation plans respectively – thereby providing substantial evidence that these four stages can empirically describe the organization development cycle (Wang & Singh, 2014). We used the common features from Miller and Friesen (1984), and Kallunki and Silvola (2008) to define the criteria to operationalize our participant recruitment process. For instance, according to Kallunki and Silvola (2008), a typical start-up stage firm can be less than 13 years; a growth stage organization can be 13 to 49 years; and a typical mature stage firm can be over 49 years, among other differences¹⁰. Our study excluded the 'declining' stage of firm development from the analyses because of practical constraints of obtaining information from their representative sample group.

The operational definitions of these stages (start-up, growth, mature and decline) reduce the chances of misinterpretation of the measuring variables (Singleton & Straits, 1993). Our study excluded the 'declining' stage of firm development from the analyses because of practical constraints of obtaining information from their representative sample group. Also, from a previous study, self-reporting approach of categorizing firms at different organizational stages showed insignificant response from the respondents belonging to the declining stage of OLC framework (Kallunki & Silvola, 2008).

3.2.1 Start-up Stage

In the context of our research, 'start-up' firms are small enterprises trying to build up as a viable/feasible unit with no established reputation (Bonn & Pettigrew, 2009). The organizational

¹⁰ The details about the differentiating characteristics of start-up, growth, mature and decline OLC stages can be found in the work of Miller and Friesen (1984, page 1163), and Kallunki and Silvola (2008, page 69).

structures of these firms remain informal and flexible with the ownership held by one or a few individuals (Miller & Friesen, 1984; Bonn & Pettigrew, 2009). The age of the firm is also defined to be typically less than 13 years (Kallunki & Silvola, 2008). We are aware that some authors do not classify all 'start-up' businesses as 'entrepreneurial' (Drucker, 1985). This may be because some entrepreneurs do not require a profit purpose; instead they value innovation (Schumpeter, 1939; 1994; Drucker, 1985; Dees, 1998).

As discussed earlier, we plan to study the case of technology enterprises, which are often considered to be innovative so as to attain sustainable advantage (Guild & Bachher, 1996). This understanding compels us to include 'entrepreneurial ventures' in the category of 'start-up' firms. In order to define (in detail) the characteristics of 'start-up' stage, we rely on the features defined by Miller and Friesen (1984) under the category of 'birth phase'.

According to Balkin and Swift (2006), and Gomez-Mejia et al. (2011), the founding owners/CEOs or top management of 'start-up' firms are often motivated more by their altruism, emotions and other non-economic, intrinsic values than financial gains. We suggest (in the light of stakeholder theory) that 'start-up' firms are not simply driven by the purpose of making profits and therefore they place emphasis on equally satisfying other non-financial stakeholders too. This may be because they are not yet heavily invested in the 'status quo'. Therefore, we propose that VAS business-stakeholder practice is likely to be greater among firms in the 'start-up' phase than in firms belonging to the 'growth' and 'maturity' phases (as shown in Table 2).

If the distinctions described above are reliable and valid, we should expect to see the following hypotheses confirmed:

Hypothesis 1a. With respect to VAS, ‘Start-up’ firms are perceived to be more likely to demonstrate cooperative strategic posture than are the ‘Growth’ firms.

Hypothesis 1b. With respect to VAS, ‘Start-up’ firms are perceived to be less likely to demonstrate a narrowly economic view of the firm than are the ‘Growth’ and ‘Mature’ firms.

Hypothesis 1c. With respect to VAS, ‘Start-up’ firms are perceived to be more likely to demonstrate “jointness of interest” than are the ‘Growth’ firms.

Table 2: Relationship Between Start-Up Firms And Business-Stakeholder Engagement Models

| | | Business-Stakeholder Engagement Models | | |
|--|----------------------|---|---|---|
| | | CSR | CSV | VAS |
| | | <ul style="list-style-type: none"> • More Narrowly Economic View of the Firm • Less Cooperative Strategic Posture • Less Jointness of Interest | <ul style="list-style-type: none"> • More Narrowly Economic View of the Firm • More Cooperative Strategic Posture • More Jointness of Interest | <ul style="list-style-type: none"> • Less Narrowly Economic View of the Firm • More Cooperative Strategic Posture • More Jointness of Interest |
| <i>Organizational Life Cycle Stage</i> | START-UP FIRM | | | ✓ |

3.2.2 Growth Stage

Firms belonging to the ‘growth’ stage of OLC are more formalized in structure with the likelihood of the owner being replaced by professional managers and placing better coordinated internal processes and systems to analyze complex decision making problems (Miller & Friesen, 1984; Smith et al., 1985; Bonn & Pettigrew, 2009). Usually, in this stage the emphasis is on rapid growth of sales

and transfer of some of the authority to middle management (Miller & Friesen, 1984). The expansion prospects in terms of employees, customers, products, and geographies are also catered in this stage (Jawahar & McLaughlin, 2001; Kazanjin & Drazin, 1989; Kallunki & Silvola, 2008; Bonn & Pettigrew, 2009; Wang & Singh, 2014). Our 'growth' phase is suggested by the "growth" phases of Miller and Friesen (1984) and Kallunki and Silvola (2008). According to which, the sales growth of the firms is the highest (typically up to 28%) with the increase in its bureaucracy and formalization of policies. However, the approximate age would be typically between 13 to 49 years (Miller & Friesen, 1984; Kallunki & Silvola, 2008).

The 'growth' firms are expected to be preoccupied with the older paradigm of CSR. It may be that, while making a transition to this new (growth) stage through coordination, firms decide on giving back to the society from the surplus profits. We also assume that they do not align the business-stakeholder initiatives with their core business strategy. The study conducted by Elsayed and Paton (2009) has shown no significant relationship between 'growth' firms' financial support and the successful implementation of social-environmental initiatives. At the 'growth' stage of OLC, emphasis remains on catering to the shareholders' interests (Wang & Singh, 2014). Furthermore, professional managers or CEOs adapt agency like behavior – for which firms use compensation packages (e.g. stock options) that safeguard personal interests of their top leadership (Gomez-Mejia & Wiseman, 1997; Wang & Singh, 2014). At this stage of development, more importance is given to establish the financial performance of firms (Miller & Friesen, 1984) and building its legitimacy for potential collaborators (Bonn & Pettigrew, 2009). Perhaps, the introduction of business-stakeholder programs by the firms could be catered as one of the ways to establish that authenticity. Hence, we propose that CSR business-stakeholder practice is likely to be greater among firms in the 'growth' phase than in firms belonging to the 'start-up' and 'maturity' phases (as shown in Table 3).

If the distinctions described above are reliable and valid, we should expect to see the following hypotheses confirmed:

Hypothesis 2a. *With respect to CSR, ‘Growth’ firms are perceived to be less likely to demonstrate cooperative strategic posture than are the ‘Start-up’ and ‘Mature’ firms.*

Hypothesis 2b. *With respect to CSR, ‘Growth’ firms are perceived to be more likely to demonstrate a narrowly economic view of the firm than are the ‘Start-up’ firms.*

Hypothesis 2c. *With respect to CSR, ‘Growth’ firms are perceived to be less likely to demonstrate “jointness of interest” than are the ‘Start-up’ and ‘Mature’ firms.*

Table 3: Relationship Between Growth Firms And Business-Stakeholder Engagement Models

| | | Business-Stakeholder Engagement Models | | |
|--|--------------------|---|---|---|
| | | CSR | CSV | VAS |
| | | <ul style="list-style-type: none"> • More Narrowly Economic View of the Firm • Less Cooperative Strategic Posture • Less Jointness of Interest | <ul style="list-style-type: none"> • More Narrowly Economic View of the Firm • More Cooperative Strategic Posture • More Jointness of Interest | <ul style="list-style-type: none"> • Less Narrowly Economic View of the Firm • More Cooperative Strategic Posture • More Jointness of Interest |
| <i>Organizational Life Cycle Stage</i> | GROWTH FIRM | ✓ | | |

3.2.3 Mature Stage

The 'mature' stage in the OLC consists of large organizations having strong cash flows with the ability to raise further capital with comparative ease (Dodge et al., 1994). They have established product selling markets with the focus on preserving or further improving their market position (Dodge et al., 1994; Bonn & Pettigrew, 2009). The organizational structure becomes very formal and bureaucratic with professional managers replacing the founders of the business (Miller & Friesen, 1984; Bonn & Pettigrew, 2009). At this stage of the OLC, firms' management exerts strong emphasis on diversifying the products, introduces sophisticated management controls and systems, and develops divisions for superior results (Miller & Friesen, 1984).

Our 'mature' phase is suggested by the "maturity" and "revival" phases of Miller and Friesen (1984) and Kallunki and Silvola (2008). According to which, the annual sales growth of the firms drop significantly while progressing from 'growth' to 'maturity' stages (Wang & Singh, 2014). Using Miller and Friesen's (1984) model and findings of Kallunki and Silvola's (2008) study – the annual sales growth of our defined 'mature' stage firms would be typically up to 4%; whereby the number of employees would be large; with firm age of approximately 49 years and beyond.

The 'mature' firms are expected to be preoccupied with the paradigm of CSV. Perhaps, firms at this stage of development may be prepared to look for uncontested opportunity by aligning their business interest with societal interests, known as CSV. It may be because this technique is lucrative for new investment opportunities, which is in line with the rationale presented by Miller and Friesen (1984), Kallunki and Silvola (2008), and Wang and Singh (2014) about 'mature' firms needing to improve their services and products to off-set competition. The firms in this stage put more emphasis on managing market competitiveness for improved profits (Miller & Friesen, 1984; Kallunki & Silvola, 2008). Also, since the firms at this stage are largest in size and operate at economies of scale (Liao, 2008), the overall focus shift toward achieving further efficiency for its survival (Dickinson, 2011).

On the other hand, those that do not succeed or comply with the above mentioned narrative are more likely to become 'declining' firms.

With respect to 'mature' firms' performance (as per stakeholder theory), we can argue that these firms give first priority to profit maximization and follow a 'narrowly economic view of the firm'. We can also deduce from the above discussion that there remains 'cooperative strategic posture' among firms and their stakeholders. Hence, we propose that CSV business-stakeholder practice is likely to be greater among firms in the 'mature' phase than in firms belonging to the 'start-up' and 'growth' phases (as shown in Table 4).

If the distinctions described above are reliable and valid, we should expect to see the following hypotheses confirmed:

Hypothesis 3a. *With respect to CSV, 'Mature' firms are perceived to be more likely to demonstrate cooperative strategic posture than are the 'Growth' firms.*

Hypothesis 3b. *With respect to CSV, 'Mature' firms are perceived to be more likely to demonstrate a narrowly economic view of the firm than are the 'Start-up' firms.*

Hypothesis 3c. *With respect to CSV, 'Mature' firms are perceived to be more likely to demonstrate "jointness of interest" than are the 'Growth' firms.*

Table 4: Relationship Between Mature Firms And Business-Stakeholder Engagement Models

| | | Business-Stakeholder Engagement Models | | |
|--|--------------------|---|---|---|
| | | CSR | CSV | VAS |
| | | <ul style="list-style-type: none"> • More Narrowly Economic View of the Firm • Less Cooperative Strategic Posture • Less Jointness of Interest | <ul style="list-style-type: none"> • More Narrowly Economic View of the Firm • More Cooperative Strategic Posture • More Jointness of Interest | <ul style="list-style-type: none"> • Less Narrowly Economic View of the Firm • More Cooperative Strategic Posture • More Jointness of Interest |
| <i>Organizational Life Cycle Stage</i> | MATURE FIRM | | ✓ | |

3.2.4 Decline Stage

According to Miller and Friesen (1984) at this stage, the innovation level of firms reaches its low and profit margins decline, as consumers do not demand the products or services. At this stage, organizations are threatened about their survival (Jawahar & McLaughlin, 2001). They experience reduction in the market share with limited or expensive funding opportunities (Black, 1998). The shareholders and board of directors largely favor preservation of the company resources instead of keeping customers as their priority (Miller & Friesen, 1984).

According to Bonn and Pettigrew (2009), the ‘decline’ stage consists of different issues faced by organizations than those in the other OLC stages. For instance, the firms belonging to this stage are large in size, but have less innovative and diversified product and service offerings (Wang & Singh, 2014). These firms also face the challenge of getting merged or acquired in order to manage their losses (Jawahar & McLaughlin, 2001).

Our proposed study of firms at different OLC stages inclining toward various paradigms of business-stakeholder engagement does not include the ‘decline’ stage of the firm. We exclude it because of practical constraints of obtaining information from their representative sample groups. The self-reporting approach of categorizing firms at different organizational stages also showed insignificant response from firms belonging to this stage (Kallunki & Silvola, 2008).

It is to be noted that the above discussions on OLC (start-up, growth, mature, and decline) stages of business firms are not limited to the ICT-sector. Yet, in order to make more complete sense of the theoretical rationale for this research project, we decided to conduct exploratory studies to advance these learning in the context of ICT-sector (see Chapter 4).

Chapter 4

Research Method

4.1 Overview Of The Studies

Our research method followed a pragmatists' worldview (Creswell, 2009). We applied mixed technique (both qualitative and quantitative methods) to collect data through exploratory field research (referred as 'Phase-1') and then expanded on it with structured survey design study (indicated as 'Phase-2').

As an initial step toward testing the outlined hypotheses in Chapter 3, it is important to find a common meaning of terminologies used in research publications and by business practitioners. We conducted our study's exploratory phase (Phase-1) by conducting a systematic, semi-structured interview protocol, called, repertory grid methodology with a mix of open and closed ended questions to a conveniently selected set of respondents.

In Phase-2 of our research, we expanded on Phase-1 findings through a survey design study. It allowed us to either support or reject the proposed hypotheses empirically. Having multiple data collection methods help in condensing methodological weaknesses and attaining internal, external validity (Singleton & Straits, 1993; Chatman & Flynn, 2005; Merriam, 1998; Creswell, 2009; Yin, 2009).

4.2 Phase-1: Exploratory Field Study

In Phase-1 of our exploratory research study, we worked with the perceived value-creating scenarios about business-stakeholders, elicited by sample experts associated with the ICT-sector, including scholars and practitioners from the region of Southern Ontario, Canada. In addition to that, our Phase-2 of research focused on how a sample of practitioners from the ICT-sector in North

America – belonging to start-up, growth and mature OLC stages – perceived various characteristics of stakeholder ‘value-creation’.

Figure 1: Overview Of Phase-1 Research Design

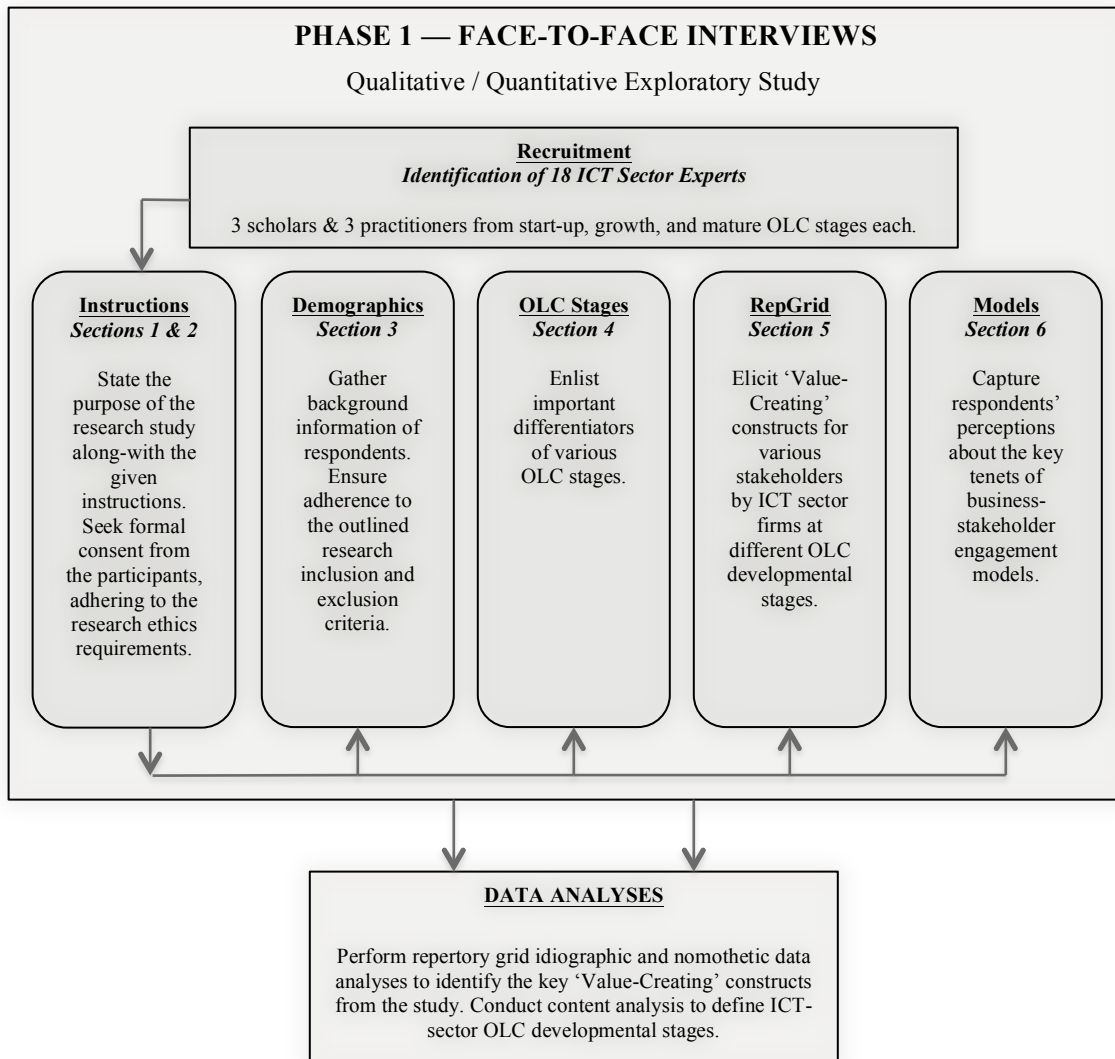


Figure 1 elaborates on the face-to-face interview design study that engaged a total of eighteen (18) ICT-sector experts¹¹. We used internet-scanning technique to identify potential respondents for this

¹¹ The details about the recruitment processes are given in Sections 4.2.1 and 5.1 of this document.

phase. Sections 1 and 2 of the designed study protocol were dedicated to explaining the purpose of the study to the respondents and placing the instructions for the respondents to follow during the interview respectively. Questions in Section 3 focused on the background information to justify with our inclusion / exclusion criteria of participants recruitment. Section 4 looked at extracting key differentiators between various OLC stages, including start-up, growth, small-to-medium, mature and decline stage for-profit firms. Section 5 of the protocol systematically followed a repertory grid technique to elicit value-creating constructs ('value-scenarios') by firms for their business stakeholders. Section 6 focused on establishing the 'older' versus 'newer' paradigms of various business-stakeholder engagement models as perceived by the respondents¹².

In summary, Phase-1 exploratory study enabled us to:

- 1) Consider the extent of meaningfulness of various stakeholder groups in terms of 'value-creation' as suggested by the stakeholder theory,
- 2) Notice differences in constructs as they find useful for describing the start-up, growth and mature stages of organizational life cycle (OLC), and
- 3) Make a decision about whether to go with 'normative-interest' versus 'vested-interest' judgments in designing our successive empirical studies.

4.2.1 Sample Selection

Our criteria for inclusion of respondents in the study comprise: (1) of two expert groups; scholars and practitioners, (2) specializing in the domain of mobile, software, Internet, media, and social interaction technologies, (3) doing so from the region of Southern Ontario (Canada). These specific industries were chosen from a broader ICT spectrum because of their significant impact on sustainable development of businesses and the economic development of many societies (Tapscott &

¹² See the interview protocol in Appendix A for more details.

Williams, 2012). We believed that, by narrowing our focus on a particular industry, the participants may more consistently perceive the meaning associated with both internal and external stakeholders. A fourth criterion of inclusion was to recruit our participants from start-up, growth and mature OLC stages according to the rules outlined by Miller and Friesen (1984), and Kallunki and Silvola (2008). We also considered that by incorporating both, theory-based and industry-based views, we could present a more holistic picture about how firms at multiple stages of development respond to stakeholder 'value-creation'.

Prior to engaging our participants, the preliminary background check of all participants was done through Internet scanning (for further details see Noriega, 2013). After carefully identifying the companies and scholars that fit our criteria through professional social web platforms, an e-mail invitation was exchanged with them. Once our invitation was accepted, a face-to-face interview of hour duration was scheduled at their convenient time and place.

4.2.2 Repertory Grid

Repertory grid is a technique originally developed by George Kelly (1955), a personal construct psychologist. He did this to investigate people's behavior without influencing their references for diagnosing complex matters that required expert knowledge (Eden & Jones, 1984; Bannister & Fransella, 1986; Hisrich & Jankowicz, 1990; Easterby-Smith et al., 1996; Hunter & Beck, 2000; Diaz De Leon & Guild, 2003; Gaines & Shaw, 2003; Jankowicz, 2004; Fransella & Bannister, 2004; Caputi et al., 2011). The personal construct psychology (PCP) has the comprehensiveness that enables a researcher to explore the construing of both, individuals and groups. This theory is widely applied in the fields of counseling, psychotherapy, clinical practice, understanding of culture and society, and study of organizations (Winter, 1992; Scheer & Sewell, 2006; Neimeyer, 2009; Cummins, 2006; Dobosz, 2003; Raja et al., 2013).

This probing technique was relevant to our investigation as it allowed us to systematically incorporate personal views of ICT-sector business experts in understanding ‘value-scenarios’ for their stakeholders. Raja et al. (2013) used a similar study design to understanding customers’ views on integrated products and service and the related value-in-use. To all intents and purposes, a systematic technique like repertory grid helped us in developing paths between ‘elements’ (which in our case were the ‘stakeholders’) and the objective of the study (which was to understand ‘value-scenarios’ through various personal ‘constructs’). These ‘constructs’ were generally described as ideas expressing perceptions of the participants for making sense of ‘elements’ introduced by the researcher (Bjorklund, 2008; Jankowicz, 2004).

The repertory grid technique required a question to be presented in a particular way to the study participants. In our study, the question for the practitioner participant group stated, “in terms of your firm creating value for stakeholders, how are two of this triad of elements similar to each other and different from the third”? The question description was slightly modified to suit the scholar participant group, which stated, “in terms of a firm most familiar to you creating value for its stakeholders, how are two of this triad of elements similar to each other and different from the third”? The same question was posed to the participants belonging to the start-up, growth and mature OLC stages. We conducted these repertory grid interviews and generated various levels of analyses using the Repertory Grid’s version 5 enterprise software package that we refer to as Rep 5 here onwards (Gaines & Shaw, 2010).

4.2.3 Element Selection

Elements in this study were purposefully selected, which allowed us to analyze multiple partial repertory grids together (Shaw, 1980). Offering the elements to participants also ensured the researchers’ control over the interview goals (Stewart et al., 1981). It was advised to include at least

one set of nine discrete and homogenous elements – covering both sides of the defining boundary while working with elements (Easterby-Smith, 1980; Stewart et al., 1981; Bjorklund, 2008).

Following this strategy in our study, a total of nine business stakeholders were identified as elements and were allocated as customers, financiers, communities, suppliers, employees, environment, government, trade associations, and non-governmental organizations (NGOs). This chosen set showed a balanced representation of both internal / external, primary / secondary, as well as economic / non-economic stakeholders that was intended to allow us to capture a broader view of a standard technology-driven business organization creating value for a variety of stakeholders.

4.2.4 Construct Elicitation

The data in a repertory grid were recorded when a participant provided two bi-polar anchors to a construct on a continuum of 1 to 9. This was done after reviewing three randomly drawn elements (triadic elicitation) – categorizing two of the elements similar to each other while differentiating them from the third. The participant was then asked to name the property defining the two similar elements. This construct was anchored at one pole while the respondent was again asked to name the opposite pole with a contrasting extreme. A ‘laddering’ technique was used to further understand the theme behind the elicited constructs. This was for the purpose of reducing any compounded attributes. Next the remaining elements were then rated on each elicited bi-polar construct continuum of 1 to 9 (where the similarity pole was anchored at 1 and the different pole at 9). This process was repeated until all the elements were exhausted or respondents ran out of fresh constructs (Diaz De Leon & Guild, 2003; Bjorklund, 2008; Shah, 2011; Day, 2013).

4.2.5 Reliability And Validity Of Repertory Grids

Considering the reliability and validity of using repertory grids for exploratory studies has been an important topic of discussion in the literature. A recent article by Edwards et al. (2009) explained about the role of repertory grids to attain high-level face, content and construct validity (especially, in the case of partial repertory grid designs where the researchers supplied elements and elicited constructs). This was because the content of the grids emerged directly from the study participants. They also discussed that repertory grid technique supported the reliability issue of internal consistency due to its ability to reveal significant correlations among the elicited constructs. However, the test-re-test reliability issue remained questionable when using repertory grids for exploratory research designs. This notion was consistent with Kelly's original claim that human beings were constantly evolving and test-retest reliability measure showed how a person had developed (or not) over time (Diaz De Leon & Guild, 2003; Edwards et al., 2009; Day, 2013). By using repertory grids, we may not fully duplicate the findings when replicating the same study, but that may allow the advancement of new learning about the research question under exploration (Edwards et al., 2009).

4.2.6 Phase-1 Interview Protocol

The interview protocol in Phase-1 was designed for an hour-long meeting with the participants and it included open-ended, partially open-ended and close-ended questions (see Table 5 & Appendix A). A hard copy of the interview protocol was also provided to the participant during the meeting. They were given the option to write their answers for open-ended or partially open-ended questions themselves or let the graduate researcher take notes.

Table 5: Specifications Of Measures Used In Phase-1 Interview Protocol

| OPEN-ENDED QUESTIONS | PARTIALLY OPEN-ENDED QUESTIONS | | CLOSE-ENDED QUESTIONS | | |
|--|----------------------------------|--|-----------------------|------------------|--------------------------------|
| | Nominal Variable | Interval Variable / 9 – Point Likert Scale | Nominal Variable | Ordinal Variable | Semantic Differential Variable |
| Q1b, Q4, Q10, Q11, Q12a, Q12b, Q13, Q17a, Q17b, Q17c, Q17d, Q17e | Q1a, Q2, Q3, Q5, Q7, Q8, Q9, Q14 | Q21a, Q21b, Q21c, Q22a, Q22b, Q22c | Q6, Q15, Q18, Q19 | Q24 | Q16, Q20a, Q20b, Q20c, Q23 |
| 12 Questions | 8 Questions | 6 Questions | 4 Questions | 1 Question | 5 Questions |

Table 6 summarizes the focus of each section in the questionnaire used in Phase-1 protocol, along with the question item specifications.

Table 6: Section Details Of Questions Used In Phase-1 Interview Protocol

| Section 1 | Section 2 | Section 3 | Section 4 | Section 5 | Section 6 | Section 7 |
|--------------------|---------------------|--------------------------------|------------------------------------|---|--|---------------------|
| <i>Purpose</i> | <i>Instructions</i> | <i>Demographic Information</i> | <i>Understanding of OLC Stages</i> | <i>Repertory Grid Technique</i> | <i>Understanding of Business-Stakeholder Engagement Models</i> | <i>Appreciation</i> |
| Information Letter | Consent Form | Q1 – Q16 | Q17 – Q19 | Rep Grid Enterprise Application / Cue Cards ¹³ | Q20 – Q24 | Feedback Letter |

At the beginning of the interview, the graduate researcher asked for participants’ written consent to audio record the interview sessions, for re-confirming notes and ensuring high face validity of the given answers. All 18 participants in the Phase-1 study expressed their agreement to the audio recordings. For the analyses of gathered data from Phase-1, the doctoral researcher conducting interviews compared documented notes with audio-recorded files and the answers written by the participants on their hard copies of the provided instrument. Table 7 summarizes the interview

¹³ See cue card in Appendix B.

duration and total time spent on verifying gathered qualitative and quantitative data. Out of all 18 audio-recorded files, one file became corrupted during data transferring from the recorder to the computer. However, the researcher contacted that participant later to validate the qualitative answers during the interview.

Table 7: Summary Details Of Interview Process And Validation Checks During Phase-1 Study

| No. Of Face-To-Face Interviews | Total Duration Of Interviews | Interview Duration Range | Average Interview Duration Per Participant | No. Participants Agreeing To Audio Digital Recording | Total Duration Of RepGrid Sessions | Duration Of Rechecking Of Valid Construct Categories And Qualitative Data |
|--------------------------------|------------------------------|--------------------------------------|--|--|------------------------------------|---|
| 18 | 20 Hours (approx.) | 40 Minutes (min) – 127 Minutes (max) | 70 Minutes | 18 | 11 Hours | 15 Hours |

The doctoral researcher was responsible for handling both, paper-based questionnaire and computer-based Rep 5 application during the interview. Prior to this project, the doctoral researcher had extensively worked on similar research projects, involving both paper based and computer aided research protocols. It was believed that a well-trained doctoral researcher could effectively and efficiently conduct the interviews single handedly without having to train new research assistants. At the end of the interview, the participants were also offered C\$25 Amazon gift cards as token of appreciation.

4.3 Phase-2: Survey Study Design

In the second phase of our exploratory study we used an online survey platform to conduct a repeated measures study design. This study design helped us to expand on the Phase-1 observations and focused on finding the receptiveness of ICT-sector firms at different OLC stages toward understanding various business-stakeholder engagement models.

Figure 2: Overview Of Research Design In Phase-2

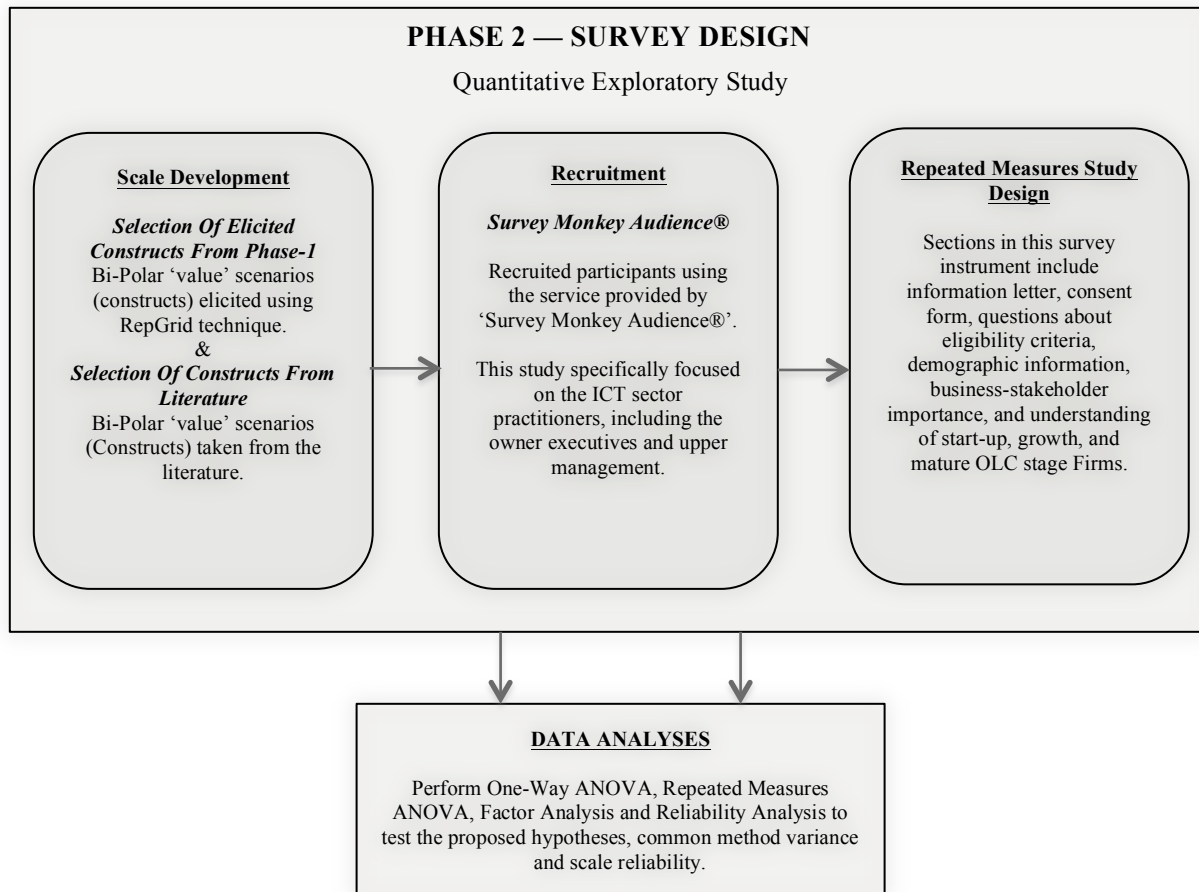


Figure 2 shows an overview of the Phase-2 of our exploratory study. We worked with the elicited constructs from Phase-1, along-with the constructs gathered from literature to develop a measurement scale. We decided to conduct this experiment using online survey method for the reasons of low cost, reduced survey return time, and easier accessibility (Ilieva et al., 2002; Evans & Mathur, 2005; Sue & Ritter, 2007; Babbie, 1990).

In summary, Phase-2 exploratory study enabled us to:

- 1) Test our proposed hypotheses about ICT-sector firms at three OLC stages (start-up, growth, mature) creating ‘value’ for their stakeholders,
- 2) Evaluate internal consistency of the measurement scale developed after Phase-1 to capture business-stakeholder engagement ‘value’, and
- 3) Develop well-directed questions about Stakeholder and OLC theories for further research in the light of gathered evidence.

4.3.1 Measurement Scale And Survey Instrument Development

The development of the measurement scale for this stage (Phase-2) is based on the new learning from Phase-1 study and the existing concepts from the relevant literature (see Chapter 3). The approach to use what was already available from literature along-with the findings of exploratory studies, a well established approach in the scale development literature (Churchill, 1979; Strauss & Cobin, 1990). In this section, we presented our rationale behind the structure of the questionnaire and the measurement scales used in the study.

Our focus of inquiry was limited to only three ICT-sector firm developmental phases, viz., start-up, growth, and mature stages – henceforth, we started with the scale items already developed by Kallunki and Silvola (2008, page 77-78), and the demographic section developed by Noriega (2013). The sequence and wordings of relevant items used in that scale were modified to match the purpose of our research. We also excluded the items related with the ‘activity-based costing’ in the instrument developed by Kallunki and Silvola (2008).

A repeated measures survey protocol, with multiple items scale was designed, requiring less than 15 minutes of participant’s engagement. It included open-ended, partially open-ended and close-ended questions (see Table 8 & Appendix E). Following the requirements from the office of research ethics (ORE) involving human participants, a detailed information letter was provided to the

participants at the start of the survey. A consent form along-with our contact information was also provided to encourage participants to express their feedback and concerns directly.

Table 8: Specifications Of Questions Used In Phase-2 Survey Instrument

| OPEN-ENDED QUESTIONS | PARTIALLY OPEN-ENDED QUESTIONS | CLOSE-ENDED QUESTIONS | | | |
|---------------------------------|---------------------------------|-----------------------|--------------------|-----------------------------------|--------------------------------|
| | Nominal Variable | Dichotomous Variable | Nominal Variable | Interval / 7 – Point Likert Scale | Semantic Differential Variable |
| Q8, Q9, Q16, Q17, Q18, Q19, Q20 | Q6, Q7, Q10, Q11, Q14, Q15, Q21 | Q1, Q2, Q3, Q4, Q5 | Q12, Q13, Q22, Q24 | Q25, Q26, Q27, Q28 | Q23, Q29 |
| 7 Questions | 7 Questions | 5 Questions | 4 Questions | 4 Question | 2 Questions |

Table 9 summarizes the focus of each section in the questionnaire used in Phase-2 protocol, along-with the question item specifications.

Table 9: Section Details Of Questions Used In Phase-2 Survey Instrument

| Section 1 | Section 2 | Section 3 | Section 4 | Section 5 | Section 6 | Section 7 |
|--------------------|---------------------|-----------------------------|--------------------------------|--|--|---------------------|
| <i>Purpose</i> | <i>Consent Form</i> | <i>Eligibility Criteria</i> | <i>Demographic Information</i> | <i>Declaration of Relevant OLC Stage And Stakeholder Importance View</i> | <i>Understanding of Business-Stakeholder Engagement Models</i> | <i>Appreciation</i> |
| Information Letter | Q1 | Q2 – 5 | Q6 – Q23 | Q24 – Q25 | Q26 – Q29 | Feedback Letter |

In our survey, we included 14 open-ended and partially open-ended questions with a purpose to validate our selected sample of well-experienced ICT-sector experts. These targeted questions were included in the demographic section of survey.

4.3.2 Sample Selection

Our criteria for inclusion of respondents in Phase-2 of the study comprise of participants: (1) physically located in the region of United States of America, (2) affiliated, either full-time or part-time, with a for-profit business organization, (3) affiliated with an Information and Communications Technology (ICT) sector organization, specializing in any of the domains of mobile, software, hardware, Internet, social interaction, and media related technology, (4) affiliated with a firm that operates in the region of United States of America, and (5) be at least 18 years old.

For this exploratory phase, we were interested in recruiting owner executives and senior management individuals at the ICT-sector firms fulfilling our inclusion / exclusion criteria to participate. The range of targeted respondents included, CEOs, directors, assistant directors, and company managers. We hired paid services of SurveyMonkey Audience® (SMA) to recruit an approximate sample of 150 participants who fulfilled our required criteria. With an objective of reducing error variance associated with differences among individuals and increasing statistical power of our results, a repeated measures survey study was designed.

In Phase-2, one major consideration influenced our decision to hire a paid recruitment service was Canada's new anti-spam legislation (CASL), which prohibits researchers from sending study recruitment e-mails without recipients' consent. To receive consent from relevant firms' gatekeepers about their employees participating in the study was believed to be impractical and time consuming. Therefore, to ensure respondents' anonymity, privacy, confidentiality and random selection of sample from the focused population, we decided not to continue with convenience samples by recruiting students or personal contacts. Alternatively, the option of hiring a reliable and externally valid online recruitment service was selected. According to Brandon et al. (2014), SMA is classified as one of the effective non-traditional online participant recruitment platforms – specializing in recruiting targeted

and externally valid audience for academic research studies¹⁴. They (Brandon et al., 2014) also argued that the survey instrument must be simple, easily understandable and not very lengthy to be effective for tools like SMA.

We followed a set procedure of requesting a quotation from SMA in Phase-2, which is based on survey length, targeting criteria and number of fully completed responses. We provided our study's web-link to their representative, along-with the outlined recruitment criteria and an approximate number of 150 fully completed responses for an accurate cost and time estimation. The project was estimated at a total cost of USD 2,437.50 (i.e. USD 16.25 per completed response) with an expected survey completion time of less than 15 minutes. SMA used their partner company CINT, to administer our project as they deal with more specialized pools of participants¹⁵. Two project managers from SMA were assigned to overlook the project progress. The online survey collection remained open for 24 days (from February 4 to February 27, 2015). Two e-mail reminders were sent with a 10-day gap to encourage potential participants – one on February 14 and the next on February 25, 2015 (see Figure 3). On March 1, 2015, the researcher closed the project with SMA, as the list of potential respondents was fully exhausted. The respondents were given an incentive of up to USD 5 by CINT (SMA's partner firm) for this survey. As per their reward policy, the respondents had the options to 1) donate their earnings to charity, 2) take it in cash via PayPal, or 3) use it for online purchases. Such

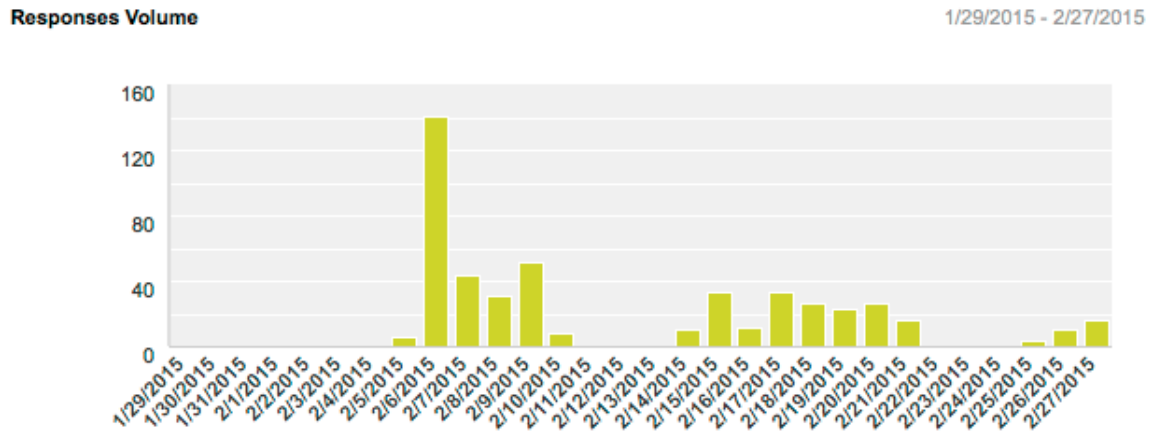
¹⁴ For more details about alternative platforms to SMA, see Brandon et al. (2014). The readers can also review various advantages, disadvantages, and comparative details about SMA, Qualtrics and Amazon's Mechanical Turk (AMT) as effective online recruitment services in the context of behavioural accounting research.

¹⁵ Visit the following URL for more information about online research guidelines of CINT, a specialized recruitment platform partnered with SMA:

<http://clearslide.com/view/mail?iID=JUNR4WTHLYTL93V7HJB6>

incentive levels were set by CINT to discourage professional respondents who have a sole purpose of obtaining monetary remuneration¹⁶.

Figure 3: Online Survey Response Timeline



SMA platform offers access to approximately 1,000,000 respondents from diverse backgrounds and age (Kavanaugh et al., 2013; Brandon et al., 2014); however, the relevant pool of respondents was estimated at 2,200 individuals – that consist of owner executives and senior managers from the targeted ICT-sector.

Table 10: Overview Of Survey Responses

| Invitations To SMA’s Population Of Interest | Survey Attempts | Removed Data Cases | | | Usable Data Cases |
|---|-----------------|-----------------------------|--------------------------|-------------|-------------------|
| | | No. Of Ineligible Responses | No. Of Invalid Responses | Total | |
| 2,200 | 489 (22.2%) | 189 (8.6%) | 168 (7.6%) | 357 (16.2%) | 132 (6.0%) |

¹⁶ For more details on the reward system of CINT, see Slide 4 (Question 14) at the link provided in Footnote 13.

The overall response rate of this survey was 22.2% with 489 response attempts, which is consistent with the findings of a study conducted by Sheehan (2001), showing the average response rate to be decreasing with the increase of online data collection¹⁷. Out of these 489 attempts, 189 were considered ineligible following our eligibility questionnaire at the beginning of the instrument. These respondents did not proceed further than the Eligibility Section of the survey. The remaining 300 respondents were then vetted on the grounds of incomplete data and nonsensical responses with the help of two SMA project managers. The criteria for excluding responses at this stage were based on invalid characters and information provided in the demographic section of the questionnaire, which was purposefully designed to confirm the validity of responses (Section 4.3.1). As a result, a total of 132 fully completed respondents were considered usable for data analyses (see Table 10).

4.3.3 Validity And Reliability Of Phase-2 Study Design

This section is focused on acknowledging the issues related with reliability and validity of Phase-2 research design. In an effort to maintain quality of scientific research process and its findings, we took certain measures for designing and administering the survey study. We also understand that the objective of conducting Phase-2 study was to further explore the perceptions of ICT-sector experts from the United States of America toward various business-stakeholder engagement models. In terms of generalizability, we do not claim that the findings from this study would become generalizable to other ICT-sector settings or industries. However, we believe that the results from Phase-2 exploratory study would equip us to conduct more controlled confirmatory studies in future with an objective to further enhance the internal validity, but at the same time conduct it with a more generalizable inclusion / exclusion criteria to provide better externally valid results.

¹⁷ In year 2000, the mean response rate of e-mail surveys dropped to 24% from a 61.5% response rate in year 1986.

According to Campbell and Stanley (1963), several external factors can produce confounded effects that undermine the inferences from experimental design research studies. Ferguson (2004) suggested that strict controls for the purpose of improving internal validity of research could compromise the findings' generalizability. Therefore, we tried to address the issues of external validity, along-with strategies to measure and control for internal validity to infer stronger and valid research results. By randomly selecting the sample from a representative population of senior ICT-sector practitioners does not resolve the external validity issue (Cook & Campbell, 1979; Singleton & Straits, 1993). In our study design we acknowledge that there was little ecological control – limiting the ability to generalize research findings.

For the purpose of ensuring construct validity, we provided definitions of the three OLC stages, along-with the characterization about various organizational stakeholders in the survey. One of the main purposes of conducting Phase-1 study was to identify more valid definitions of the constructs for further analysis in Phase-2. The three OLC conditions and the dependent variables in our survey were presented to the respondents in a random order. We pre-tested our survey instrument on a similar sample of representation to further improve the instrument and clarify potential ambiguities in its wordings. Following the suggestion by Shadish et al. (2002), we refrained from using wording that could result in an expected and desirable outcome. In terms of addressing the issue of reliability, we have clearly stated the rules of inclusion / exclusion of participation, along-with step-by-step process details of conducting Phase-1 and Phase-2 studies.

In addition to the issues of validity and reliability of study results in research like ours, we further tested the results for having significant common method biases that are generally associated with similar behavioral studies (discussed in Chapter 6, Section 6.3). According to Podsakoff et al. (2003), research method biases create systematic errors in the research results, which affect the validity of research results. In their (Podsakoff et al., 2003) list of potential causes of biases in social research,

common ‘method rater effects’, ‘item characteristic effects’, ‘item context effects’, and ‘measurement context effects’ are discussed¹⁸. To deal with the problem of social desirability, we provided our respondents with an option to skip any question. We also ensured our participants that their identities will be kept confidential and anonymous. To account for any serious limitations posed by common method bias, we applied a widely used Harman’s single-factor technique to test our results (discussed in Section 6.3).

¹⁸ See the summary of potential sources of common method biases by Padsakoff et al. (2003) for more details. In this list with some sub-items are more prominent and relevant to our study than others.

Chapter 5

Findings Of Phase-1: Exploratory Field Study

In our first phase of research exploration, we elicited value-creating constructs gathered from scholars and practitioners from the start-up, growth, and mature OLC stage ICT-sector firms. The purpose was to investigate the perceived emergent constructs about ICT-sector firms creating ‘value’ for various primary and secondary organizational stakeholders. In this chapter we present idiographic and nomothetic results gathered from the study. These are distributed over five sections. First section provides descriptive characteristics of Phase-1 study participants (Section 5.1). Second section assesses the repertory grid idiographic data analyses (Section 5.2). Third section evaluates the repertory grid nomothetic data analyses (Section 5.3). Fourth section presents the differentiating characteristics between start-up, growth, and mature OLC stages (Section 5.4). Fifth section summarizes the discussion of the overall Phase-1 results (Section 5.5).

5.1 Participants

Our study included a heterogeneous sample of eighteen ICT-sector business ‘scholars’ and ‘practitioners’, persons who were specialized in mobile, software, hardware, media and social interaction technological domains. These inclusion criteria were purposefully followed to comprise adult respondents from the region of Southern Ontario, participants who self-stated their association with one of the three selected OLC stages for our study.

For the ‘scholars’ group, nine graduate students from the programs related to computer sciences, business administration, social innovation, and technological entrepreneurship were selected for the interview with three participants representing each of the start-up, growth and mature developmental stages. Similarly, another group of nine senior level practitioners were interviewed from the ICT-

sector with three participants characterizing each of the start-up, growth and mature stages. A demographic descriptive detail about our sample groups can be seen in Table 11.

According to the literature, the use of the repertory grid technique often necessitates operating with a relatively small sample size to elicit adequate unique constructs for a study (Botterill & Crompton, 1996; Tan & Hunter, 2002; Naoi et al., 2006). This approach has proven to be useful in further developing research instruments, such as survey questionnaires for conducting studies that were suited for larger sample sizes (Tan & Hunter, 2002).

5.2 Repertory Grid Idiographic Data Analyses

We have performed idiographic analyses to understand how experts (scholars and practitioners) from the ICT-sector – representing the start-up, growth and mature OLC stages – perceived the notion of creating ‘value’ for their perceived range of stakeholders. Individual level hierarchical cluster analysis was conducted to focus on how each participant grouped their constructs and elements together. Then we conducted principal component analysis, along with studying the percentage of variance accounted for by the first factor (PVAF) to determine the cognitive complexity of our study participants.

Table 11: Descriptive Characteristics Of Participants In Phase-1 Study

| | Start-Up OLC Group | Growth OLC Group | Mature OLC Group |
|-------------------------------------|---------------------------------------|--|---------------------------------------|
| Recent ICT Role Experience (Years) | <i>Mean 4.3; SD 2.6; Range 1 – 9</i> | <i>Mean 9; SD 6.1; Range 1 – 20</i> | <i>Mean 3.8; SD 2.5; Range 1 – 8</i> |
| Total ICT Sector Experience (Years) | <i>Mean 8.5; SD 7.2; Range 4 – 23</i> | <i>Mean 14.3; SD 6.6; Range 5 – 25</i> | <i>Mean 9.3; SD 5.6; Range 2 – 18</i> |

| | Sample Size | No. Of Responses | Sample Size | No. Of Responses | Sample Size | No. Of Responses |
|--|--------------------|-------------------------|--------------------|-------------------------|--------------------|-------------------------|
| Recent ICT Role | | | | | | |
| Scholars | 3 (50.0%) | | 3 (50.0%) | | 3 (50.0%) | |
| Practitioners | 3 (50.0%) | | 3 (50.0%) | | 3 (50.0%) | |
| Total | 6 (100 %) | | 6 (100 %) | | 6 (100 %) | |
| <i>Entrepreneur</i> | 4 (66.7%) | | 1 (16.7%) | | - | |
| <i>Business Manager</i> | - | | - | | 4 (66.7%) | |
| <i>Academic Researcher</i> | 1 (16.7%) | | - | | - | |
| <i>Consultant</i> | 1 (16.7%) | | - | | 2 (33.3%) | |
| <i>Software Developer</i> | - | | 1 (16.7%) | | - | |
| <i>Project Manager</i> | - | | 2 (33.3%) | | - | |
| <i>Product Developer</i> | - | | 1 (16.7%) | | - | |
| <i>Head of Marketing</i> | - | | 1 (16.7%) | | - | |
| ICT Sector Focus | | | | | | |
| <i>Mobile</i> | | 2 (33.3%) | | 3 (50.0%) | | 5 (83.3%) |
| <i>Software</i> | | 6 (100 %) | | 6 (100 %) | | 6 (100 %) |
| <i>Hardware</i> | | 2 (33.3%) | | 2 (33.3%) | | 2 (33.3%) |
| <i>Internet</i> | | 5 (83.3%) | | 6 (100 %) | | 4 (66.7%) |
| <i>Social Interaction</i> | | 2 (33.3%) | | 2 (33.3%) | | 1 (16.7%) |
| <i>Media</i> | | 1 (16.7%) | | 2 (33.3%) | | - |
| Job Title | | | | | | |
| <i>Researcher</i> | 1 (16.7%) | | 1 (16.7%) | | 4 (66.7%) | |
| <i>Consultant</i> | 1 (16.7%) | | - | | - | |
| <i>Product Developer</i> | - | | 1 (16.7%) | | - | |
| <i>Software Developer</i> | - | | 1 (16.7%) | | - | |
| <i>Manager</i> | - | | 1 (16.7%) | | 1 (16.7%) | |
| <i>Director</i> | - | | 1 (16.7%) | | 1 (16.7%) | |
| <i>Business Owner</i> | 1 (16.7%) | | - | | - | |
| <i>Chief Executive Officer</i> | 2 (33.3%) | | 1 (16.7%) | | - | |
| <i>Chief Technology Officer</i> | 1 (16.7%) | | - | | - | |
| Highest Completed Education Level | | | | | | |
| <i>College Diploma</i> | - | | 2 (33.3%) | | - | |
| <i>Undergraduate Degree</i> | - | | 1 (16.7%) | | 2 (33.3%) | |
| <i>Master's Degree</i> | 6 (100 %) | | 3 (50.0%) | | 4 (66.7%) | |
| Education & Training | | | | | | |
| <i>Life Sciences</i> | | 1 (16.7%) | | - | | - |
| <i>Computer Sciences</i> | | 3 (50.0%) | | 6 (100 %) | | 3 (50.0%) |
| <i>Physical Sciences</i> | | 1 (16.7%) | | 1 (16.7%) | | - |
| <i>Arts/Humanities</i> | | 3 (50.0%) | | 1 (16.7%) | | - |
| <i>Engineering</i> | | 2 (33.3%) | | 2 (33.3%) | | 2 (33.3%) |
| <i>Social Sciences</i> | | - | | - | | 2 (33.3%) |
| <i>Mathematics</i> | | 2 (33.3%) | | 1 (16.7%) | | - |
| <i>Business</i> | | 6 (100 %) | | 3 (50.0%) | | 4 (66.7%) |
| Age | | | | | | |
| <i>Between 26 and 35 years</i> | 6 (100%) | | 3 (50.0%) | | 4 (66.7%) | |
| <i>Between 36 and 45 years</i> | - | | 3 (50.0%) | | 1 (16.7%) | |
| <i>Between 46 and 55 years</i> | - | | - | | 1 (16.7%) | |

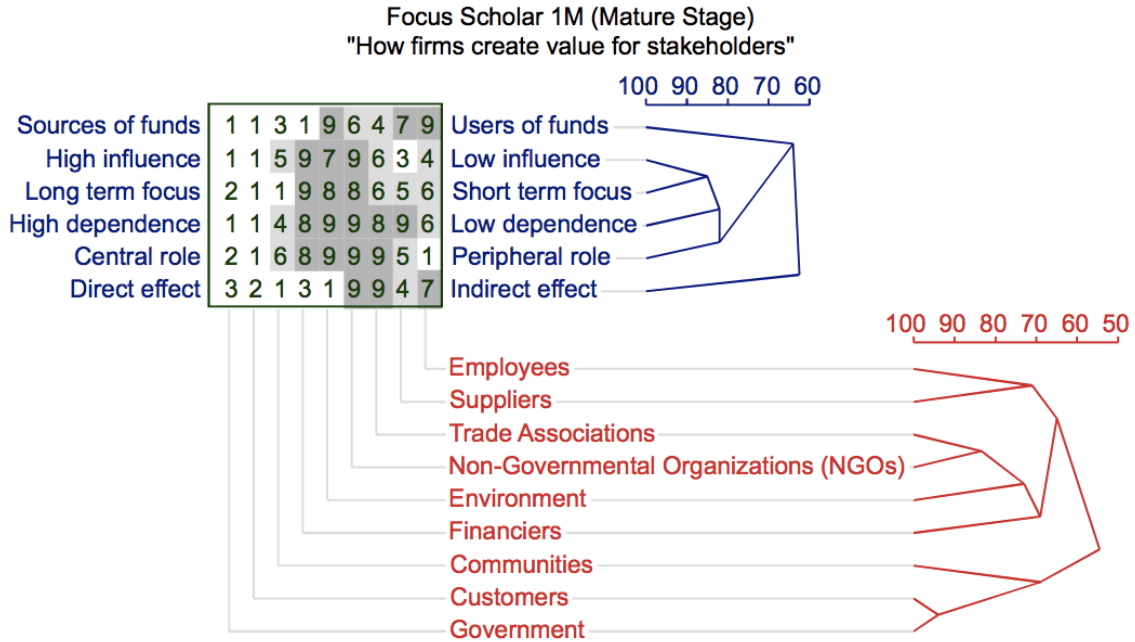
5.2.1 Cluster Analysis Of Individual Grids

A standard ‘focus’ algorithm setting in Rep 5 with the ‘power’ value of 1.0 and the ‘cut off’ values of 25.0 for both elements and constructs allowed us to compute the matching scores and developed a visual output for each of our study participants (Shaw, 1980; Gaines & Shaw, 2010).

We performed hierarchical cluster analysis for individuals belonging to each of the start-up, growth and mature OLC groups to determine similarity of constructs and elements in a hierarchical illustration. Instead of showing each grid analysis here, a scholar participant (Scholar 1M) from mature stage OLC group was selected as an example that demonstrated the interpretation of dendograms created from repertory grid interviews. The algorithm used in ‘focus’ program calculated the summed differences by columns and rows for each grid and provided a graphical output with similarity patterns between the elements and constructs on a 9-point rating scale (Shaw, 1980).

Figure 4 displayed six constructs elicited by Scholar 1M during the interview, thus describing how he perceives a firm most familiar to him creating ‘value’ for their given stakeholders. The data set shows perceived contribution to ‘value-creation’ by nine type of stakeholders (elements) using six emergent constructs. The elicited constructs, ‘High influence—Low influence’ and ‘Long term focus—Short term focus’ on a continuum of 1 to 9 are highly matched together at 84.7%. These constructs also link with ‘Low dependence—High dependence’ and ‘Peripheral role—Central role’ constructs at 81.9%. This high degree matching of constructs permit the researcher to group them together in a meaningful manner. Similarly, the stakeholder elements, ‘Customers’ and ‘Government’ were linked at the highest level of 93.8% – construing government to be exhibiting similar meaning of customers for this participant. Also, the stakeholders, ‘Trade Associations’ and ‘Non-Governmental Organizations’ (NGOs) formed a match at 83.3% level.

Figure 4: Focus Output Of Constructs And Elements Of Individual ‘Scholar 1M’



5.2.2 Principal Component Analysis

We conducted principal component analyses using *PrinGrid* feature of Rep 5 to understand each individual’s description of the connections between stakeholders (elements) and the elicited ‘value’ scenarios (constructs). This also provided us with a view about the cognitive complexity that ICT-firm experts from different OLC stages use when assessing stakeholders. For instance, Figure 5 showed an example of a loose construct structure; further, Figure 6 showed a tight construct structure, characterizing high and low cognitive complexity respectively (Smith & Stewart, 1977; Diaz De Leon & Guild, 2003).

Figure 5: PrinGrid Output Of Individual ‘Practitioner 1G’ To Show Construct Structure

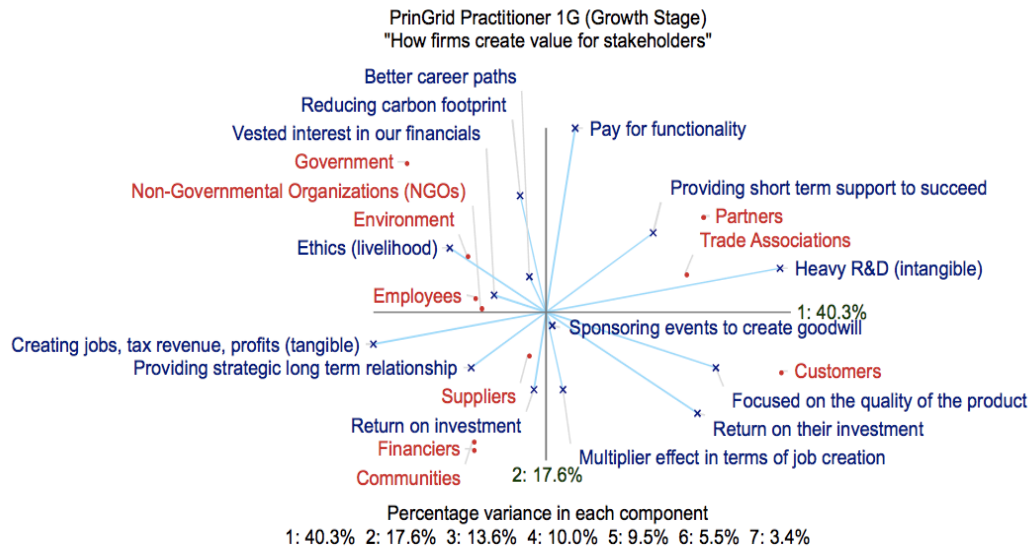
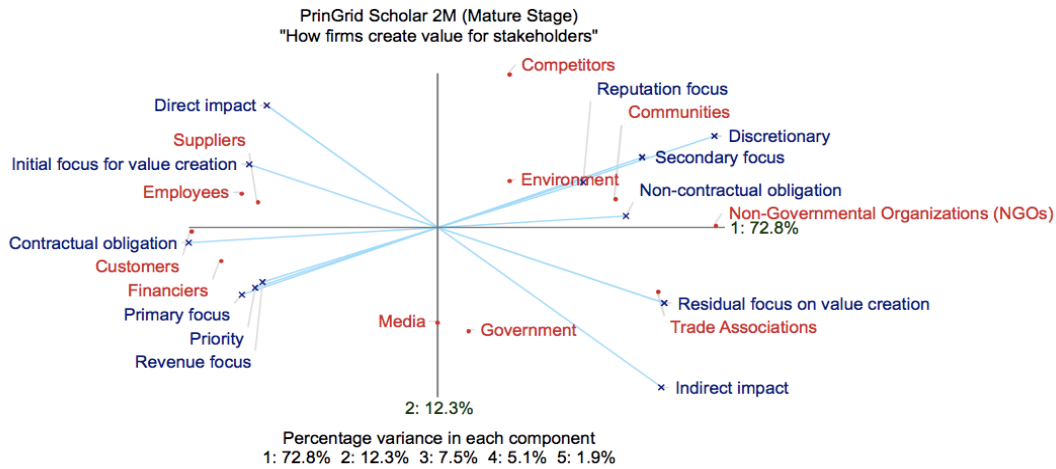


Figure 6: PrinGrid Output Of Individual ‘Scholar 2M’ To Show Construct Structure



The PrinGrid output reflects on the elements plotted in a 2-dimensional space (rotated through principal component analysis), which is defined by the constructs as axes centered on the means of

the elements (Gaines & Shaw, 2010). The relative length of the line connecting bi-polar constructs shows the variance of ratings (from 1 to 9) on the elicited constructs (Jankowicz, 2004).

A summary Table 12 showed the variances explained by each component for our study participants. ‘Practitioner 1G’ exhibited the lowest (72%) cumulative variance being explained by its components 1, 2 and 3 (Table 12) – demonstrating multi-dimensionality in eliciting ‘value’ scenarios about stakeholders. Similarly, ‘Scholar 2M’ demonstrated the highest (93%) cumulative variance being explained by its components 1, 2 and 3 – signifying lesser dimensionality in responses.

Table 12: Principal Component Loadings For Each Participant

| | Principal Components | | | | | 1+2+3 (%) |
|------------------------|----------------------|------|------|------|-----|-----------|
| | 1 | 2 | 3 | 4 | 5 | |
| Start-up Stage | | | | | | |
| <i>Scholar 1S</i> | 43.8 | 19.0 | 15.1 | 12.3 | 4.6 | 78 |
| <i>Scholar 2S</i> | 50.4 | 23.5 | 9.1 | 7.8 | 5.0 | 83 |
| <i>Scholar 3S</i> | 50.0 | 21.2 | 11.8 | 9.5 | 5.3 | 83 |
| <i>Practitioner 1S</i> | 42.9 | 22.7 | 20.4 | 7.9 | 6.2 | 86 |
| <i>Practitioner 2S</i> | 44.4 | 25.6 | 14.6 | 6.7 | 5.1 | 85 |
| <i>Practitioner 3S</i> | 33.2 | 23.2 | 17.1 | 11.7 | 6.7 | 74 |
| Growth Stage | | | | | | |
| <i>Scholar 1G</i> | 44.4 | 29.2 | 15.8 | 7.7 | 2.8 | 89 |
| <i>Scholar 2G</i> | 55.3 | 16.3 | 10.8 | 9.8 | 5.5 | 82 |
| <i>Scholar 3G</i> | 52.3 | 20.8 | 18.3 | 7.1 | 1.4 | 91 |
| <i>Practitioner 1G</i> | 40.3 | 17.6 | 13.6 | 10.0 | 9.5 | 72 |
| <i>Practitioner 2G</i> | 47.9 | 25.7 | 11.0 | 10.8 | 2.4 | 85 |
| <i>Practitioner 3G</i> | 44.8 | 22.4 | 14.9 | 9.3 | 6.1 | 82 |
| Mature Stage | | | | | | |
| <i>Scholar 1M</i> | 62.6 | 17.7 | 12.5 | 4.4 | 2.0 | 93 |
| <i>Scholar 2M</i> | 72.8 | 12.3 | 7.5 | 5.1 | 1.9 | 93 |
| <i>Scholar 3M</i> | 52.9 | 25.5 | 9.7 | 8.0 | 3.9 | 88 |
| <i>Practitioner 1M</i> | 41.7 | 20.6 | 10.6 | 10.5 | 6.8 | 73 |
| <i>Practitioner 2M</i> | 36.3 | 33.8 | 16.8 | 6.8 | 4.1 | 87 |
| <i>Practitioner 3M</i> | 39.4 | 26.0 | 16.5 | 10.4 | 5.6 | 82 |

5.2.3 Variance Explained

A closer analysis of percentage of variance accounted for by the first factor (PVAFF) allowed us to examine how each of the participant's 'cognitive complexity' varied across the different sample groups (Table 13). With repertory grids, a lower value of PVAFF indicates multiple dimensions in expressing the main meaning, whereby; a higher value depicted the meaning in fewer dimensions (Baldauf et al., 2010).

Table 13: Details About The PVAFF

| | No. Of Bi-Polar Constructs | PVAFF | Mean (SD) | Range |
|------------------------|-------------------------------|-------|--------------------|--------------------|
| Start-up Stage | | | | |
| <i>Scholar 1S</i> | 7 | 43.8 | | |
| <i>Scholar 2S</i> | 7 | 50.4 | | |
| <i>Scholar 3S</i> | 6 | 50.0 | 48.1 (3.7) | 43.8 – 50.4 |
| <i>Practitioner 1S</i> | 5 | 42.9 | | |
| <i>Practitioner 2S</i> | 7 | 44.4 | | |
| <i>Practitioner 3S</i> | 8 | 33.2 | 40.2 (6.1) | 33.2 – 44.4 |
| Group Total | 40 | | 44.1 (6.2) | 33.2 – 50.4 |
| Growth Stage | | | | |
| <i>Scholar 1G</i> | 5 | 44.4 | | |
| <i>Scholar 2G</i> | 6 | 55.3 | | |
| <i>Scholar 3G</i> | 5 | 52.3 | 50.7 (5.6) | 44.4 – 52.3 |
| <i>Practitioner 1G</i> | 7 | 40.3 | | |
| <i>Practitioner 2G</i> | 7 | 47.9 | | |
| <i>Practitioner 3G</i> | 6 | 44.8 | 44.3 (3.8) | 40.3 – 47.9 |
| Group Total | 36 | | 47.5 (5.5) | 40.3 – 52.3 |
| Mature Stage | | | | |
| <i>Scholar 1M</i> | 6 | 62.6 | | |
| <i>Scholar 2M</i> | 6 | 72.8 | | |
| <i>Scholar 3M</i> | 5 | 52.9 | 62.8 (10.0) | 52.9 – 72.8 |
| <i>Practitioner 1M</i> | 8 | 41.7 | | |
| <i>Practitioner 2M</i> | 6 | 36.3 | | |
| <i>Practitioner 3M</i> | 6 | 39.4 | 39.1 (2.7) | 36.3 – 41.7 |
| Group Total | 37 | | 51.0 (14.5) | 36.3 – 72.8 |

Overall, the means of PVAFF for the scholars in the start-up, growth and mature group samples were 48.1 (*SD* 3.7; *Range* 43.8 to 50.4), 50.7 (*SD* 5.6; *Range* 44.4 to 52.3), and 62.8 (*SD* 10.0, *Range* 52.0 to 72.8) respectively. Relative to the level of cognitive complexity of the grids in the practitioners group, the means for the start-up, growth and mature groups turned out to be 40.2 (*SD* 6.1; *Range* 33.2 to 44.4), 44.3 (*SD* 3.8; *Range* 40.3 to 47.9), and 39.1 (*SD* 2.7; *Range* 36.3 to 41.7) respectively. We take this to mean that individuals differ in their construction of the universe according to the ‘individuality corollary’ of Personal Construct Psychology (PCP).

The variability of data across individuals portrayed idiosyncrasies of personal constructs that allowed for knowledge acquisition according to the original perspective of ‘constructive alternativism’ by George Kelly (Shaw & Gaines, 1982). It means that experience construes people’s reality and redefinition of their constructs appraises their understanding of the universe (Kelly, 1955). According to the ‘commonality corollary’ of Personal Construct Psychology (PCP), the variability in individual responses should not stop us from analyzing them together as a group. Kelly (1955) reasoned that unique constructs of individuals might be classified together according to the general meaning associated based on their common considerations and features.

5.3 Repertory Grid Nomothetic Data Analyses

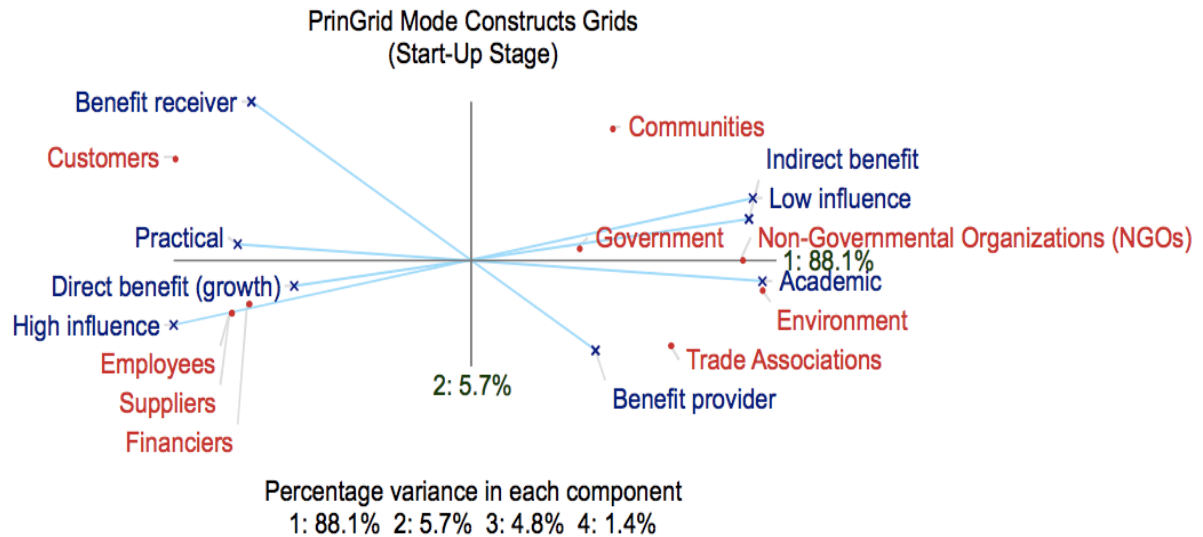
Subsequently, nomothetic analyses were conducted by combining the grids to reveal how the participants in the start-up, growth and mature groups perceive ‘value’ scenarios for their stakeholders. We aggregated the data for each of the start-up, growth and mature groups (comprising of three scholars and three practitioners in each) by using the *mode grid* feature of the RepSocio function in Rep 5.

5.3.1 Mode Grids Analyses

The purpose of these analyses was to find common constructs. The mode grids for each of the start-up, growth and mature stage groups were computed using standard Rep 5 settings with a match level ‘cut off’ statistic of 78.0. As a result, mode constructs represented the overall perceptions of the participants for common elements through the highest matched scores of the constructs in all grids within that group at or above the pre-determined match level (Shaw, 1980; Yeung & Watkins, 2000; Gaines & Shaw, 2010). According to Shaw (1980), mode grids are most helpful for examining the relative positions, terms and values of the members of the groups under investigation. In Rep 5 we can set the cut off threshold to any level; in this case, by selecting 78.0 as the cut off statistic, we were able to elicit these mode constructs as the most representative ‘value’ scenarios of the start-up, growth and mature OLC groups for their stakeholders. We take the perspective of analyzing each OLC group separately to better understand the differentiating constructs among them. The gathered mode grid does not represent a ‘consensus grid’ by merely averaging out the idiosyncrasies of individuals to concoct an imitation of the group – instead it stipulates common interactions of group construing in a strongly weighted manner (Shaw, 1980).

The graphical *PrinGrid* output of start-up group mode constructs (Figure 7) pre-dominantly represented a single dimension, represented by four constructs (displayed on the horizontal axis) that explained 88.1% of the calculated variance (Table 14). Similarly, the *focus* mode constructs output (Figure 8) for the start-up group demonstrated matching of similar constructs and elements through a hierarchical clustering technique. Reversed construct, ‘Practical—Academic’ linked strongly with constructs ‘High influence—Low influence’ at 87.5% and with ‘Direct benefit of growth—Indirect benefit of growth’ at 86.1% (Figure 8). Note that the *focus* algorithm reversed the construct ‘Academic—Practical’ in this case to determine the highest match with other constructs (Shaw, 1980; Gaines & Shaw, 2010).

Figure 7: PrinGrid Mode Output Of Group Perception At Start-Up OLC Stage



Further considering elements, ‘Employees’ are linked together with ‘Suppliers’ at 100% and with ‘Financiers’ at 96.9%. The output also shows that ‘Suppliers’ are linked with ‘Customers’ at 87.5% – forming a cluster of elements that comprise of internal / primary stakeholders together as shown in Figure 8. We can observe another prominent cluster of elements comprising of ‘Communities’, ‘Government’, ‘Trade Associations’, ‘Environment’, and ‘Non-Governmental Organizations’ (NGOs) together. These stakeholder groups can be identified as being external or secondary to a business organization.

Figure 8: Focus Mode Output Of Group Perception At Start-Up OLC Stage

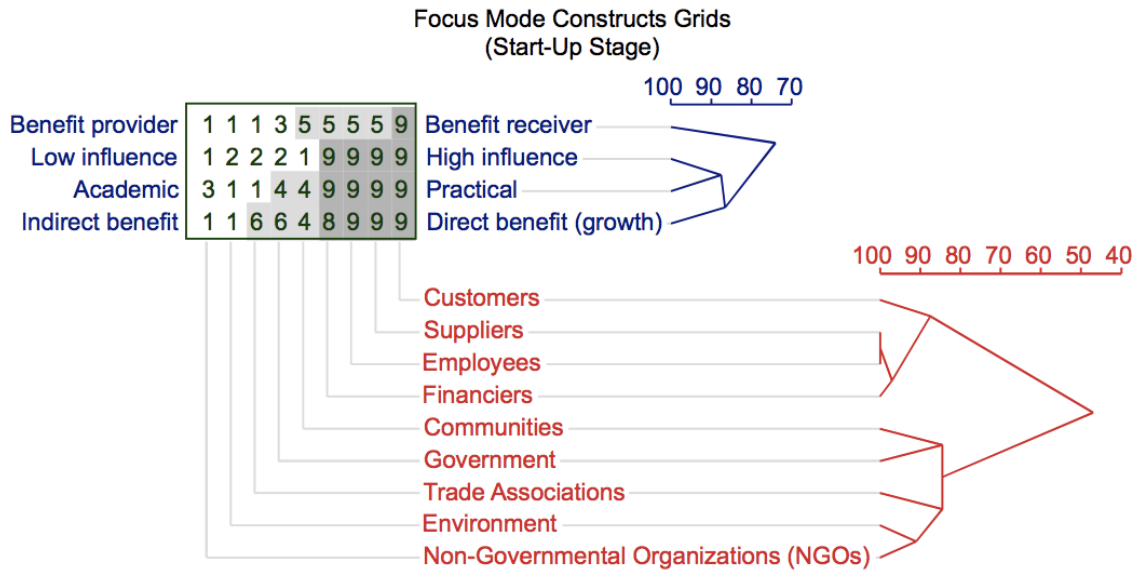


Table 14: Mode Constructs And Elements Of Group Perception At Start-Up OLC Stage

Percentage Variance In Each Component For Start-up Stage Firms

| 1 | 2 | 3 | 4 | |
|-------|-------|-------|-------|--------------|
| 88.13 | 5.73 | 4.76 | 1.38 | % |
| 88.13 | 93.86 | 98.62 | 100.0 | Cumulative % |

Element (Stakeholder) Loadings On Each Component For Start-up Stage Firms

| | 1 | 2 | 3 | |
|---|--------------|-------|-------|---------------------------------------|
| 1 | -1.56 | -0.28 | 0.04 | Employees |
| 2 | -1.92 | 0.57 | -0.05 | Customers |
| 3 | -1.44 | -0.23 | 0.25 | Financiers |
| 4 | -1.56 | -0.28 | 0.04 | Suppliers |
| 5 | 0.90 | 0.73 | -0.13 | Communities |
| 6 | 1.87 | -0.16 | 0.40 | Environment |
| 7 | 0.69 | 0.08 | -0.41 | Government |
| 8 | 1.75 | 0.02 | 0.50 | Non-Governmental Organizations (NGOs) |
| 9 | 1.28 | -0.45 | -0.65 | Trade Associations |

Construct ('Value-Scenario') Loadings On Each Component For Start-up Stage Firms

| | 1 | 2 | 3 | |
|---|--------------|------|-------|---|
| 1 | -2.43 | 0.15 | 0.40 | Academic—Practical |
| 2 | 2.68 | 0.51 | -0.39 | Low influence—High influence |
| 3 | 2.11 | 0.27 | 0.88 | Indirect benefit of growth—Direct benefit of growth |
| 4 | -1.60 | 0.98 | -0.10 | Benefit provider—Benefit receiver |

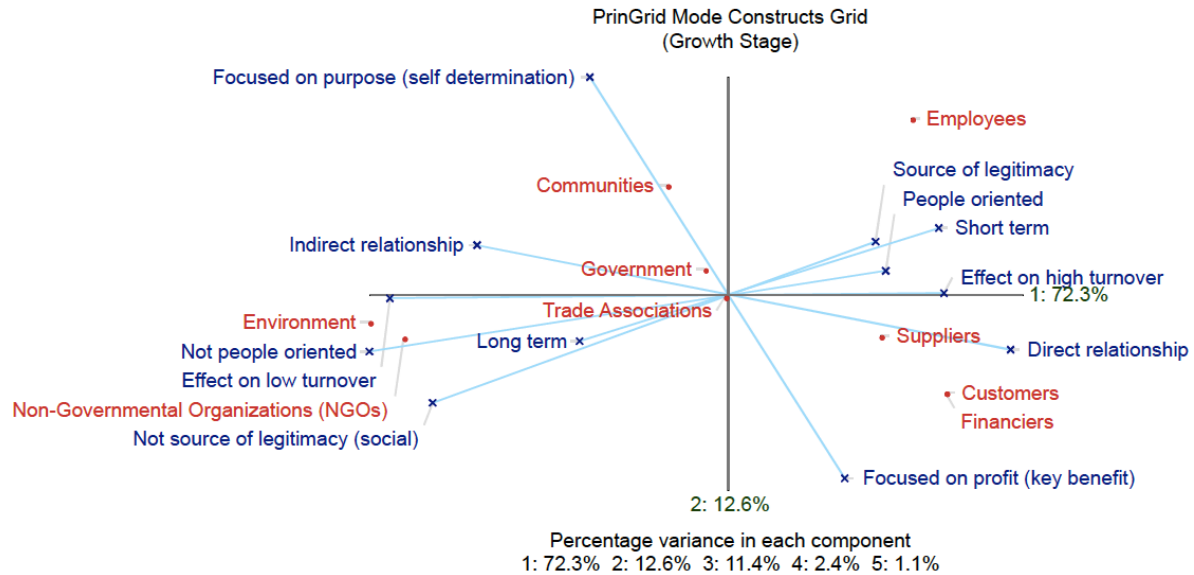
The mode construct analysis of start-up OLC group extracted four components in total, out of which Component 1 (88.13% variance) is of particular significance (Table 14). By using an arbitrary cut-off of 1.0 for the construct loadings on first three components, all of the four constructs loaded on Component 1 (Table 14 – represented by bold typeface). Elements, such as, 'Employees', 'Customers', 'Financiers', 'Suppliers', 'Environment', 'Non-Governmental Organizations' (NGOs) and 'Trade Associations' loaded on Component 1. The negative sign associated with the component loadings in Table 14 simply tells us the direction of the construct.

On closer examination, these four constructs loaded on Component 1 (88.1% variance) revealed that ICT-sector start-up stage firms perceive 'value' creating scenarios for their stakeholders broadly, rather than only a narrow economic view. In other words, the major theme that explains most of the variance in the start-up group revolves around creating influence, demonstrating practicality, and extending benefits to multiple stakeholders.

The graphical *PrinGrid* output of growth group mode constructs showed five component loadings (Figure 9), one of which, Component 1 was seen to be of particular interest as it explained high variance of 72.3% within the model. *Focus* analysis of mode constructs belonging to growth OLC group displayed strong links between 'Effect on high turnover—Effect on low turnover' with 'People oriented—Not people oriented' at 88.9%, and with 'Direct relationship—Indirect relationship' at 83.3% level. Construct, 'Not source of social legitimacy—Source of social legitimacy' was linked at 86.1% with 'Not people oriented—People oriented', while, 'Long term—Short term' construct

matched at 80.6% with ‘Indirect relationship—Direct relationship’. Graphically these constructs formed a cluster as shown in Figure 9 that separated itself from a construct, ‘Focused on purpose (self determination)—Focused on profit (key benefit)’.

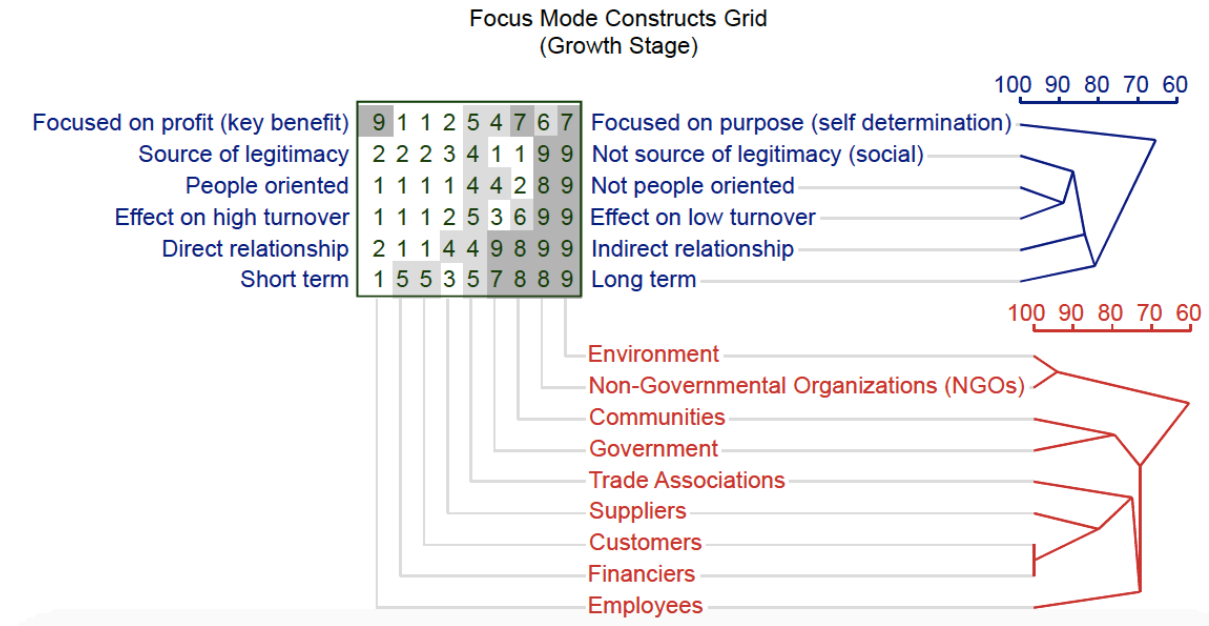
Figure 9: PrinGrid Mode Output Of Group Perception At Growth OLC Stage



Similarly, elements, such as ‘Customers’ and ‘Financiers’ linked at 100.0%, with no difference in the ratings of six mode constructs exhibited in Figure 10. ‘Environment’ and ‘Non-Governmental Organizations’ (NGOs) also linked closely at 93.8%, whereas, ‘Suppliers’ connected with ‘Customers’ at 83.3%, then with ‘Trade Associations’ at 75.0%. Elements ‘Communities’ and ‘Government’, and ‘Employees’ and ‘Financiers’ formed links at 79.2%, and at 72.9% respectively. We take this to mean that stakeholder elements for growth stage ICT-sector firms form more than two – primary and secondary – stakeholder clusters as observed in case of start-up stage firms (as shown in Figure 7). We can observe a cluster with ‘Customers’, ‘Financiers’, ‘Suppliers’ and ‘Employees’ together. Another cluster comprising of ‘Environment’ and ‘Non-Governmental Organizations’

(NGOs) can be observed. A third cluster of ‘Communities’, and ‘Government’ stakeholders can also be seen. However, ‘Trade Associations’ did not emerge in any of the elicited clusters (as shown in Figure 9).

Figure 10: Focus Mode Output Of Group Perception At Growth OLC Stage



Using our arbitrary cut-off value of 1.0 for the construct loadings on the first three components (Table 15 – represented by bold typeface) revealed that only three constructs, ‘Low turnover—High turnover’, ‘People oriented—Not people oriented’, and ‘Longer term—Short term’ have exclusively loaded on Component 1. The remaining constructs, ‘Not source of legitimacy (social)—Source of legitimacy’, and ‘Direct relationship—Indirect relationship’ loaded on both Components 1 and 3 respectively. Further, construct ‘Focused on profit (key benefit)—Focused on purpose (self-determination)’ loaded simultaneously on Components 1 and 2. Next, elements, such as, ‘Customers’, ‘Financiers’, ‘Suppliers’, ‘Environment’, and ‘Non-Governmental Organizations’ (NGOs)

exclusively loaded on Component 1. ‘Government’ also exclusively loaded on Component 3.

However, one of the elements, ‘Employees’ shared its loadings on Components 1 and 2.

In summary, the ‘value’ creating perspective of ICT-sector growth OLC group can be distinguished as both, economically and non-economically driven for stakeholders (cumulative 84.83% variance in Components 1 and 2). The major themes however, explaining most of the variance in the model (72.25% in Component 1) revolved around the notion of ‘value’ (being created for stakeholders) related with human involvement, including effects on turnover, people focus and direction intervals.

Table 15: Mode Constructs And Elements Of Group Perception At Growth OLC Stage

Percentage Variance In Each Component For Growth Stage Firms

| 1 | 2 | 3 | 4 | 5 | |
|-------|-------|-------|-------|-------|--------------|
| 72.25 | 12.58 | 11.43 | 2.39 | 1.12 | % |
| 72.25 | 84.83 | 96.26 | 98.65 | 99.77 | Cumulative % |

Element (Stakeholder) Loadings On Each Component For Growth Stage Firms

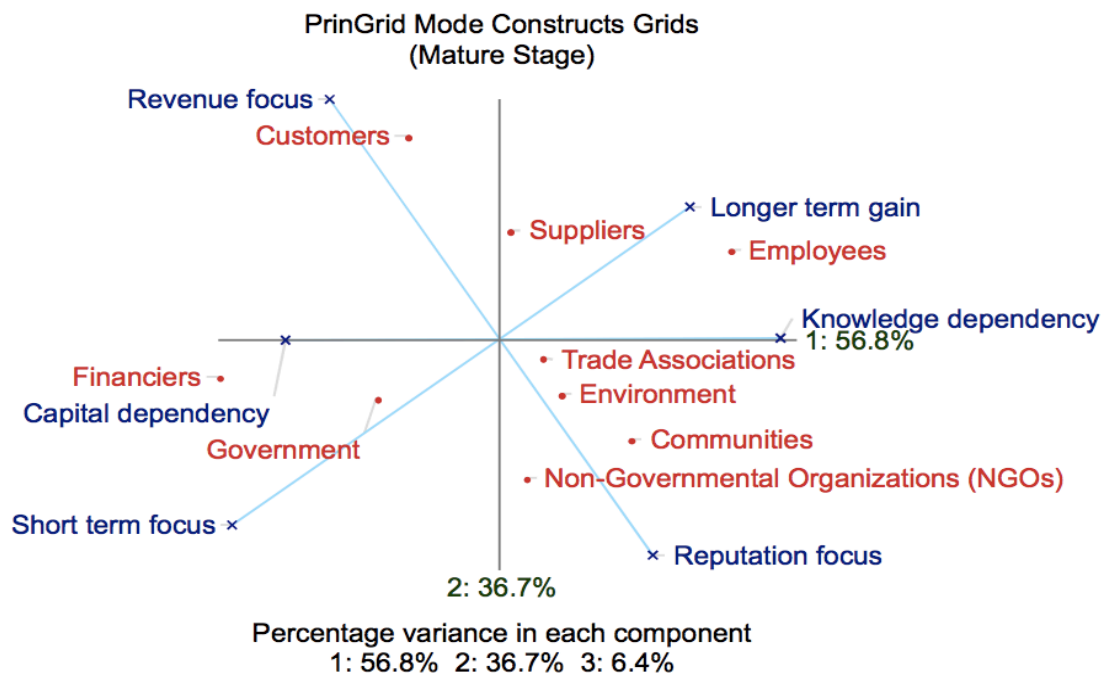
| | 1 | 2 | 3 | |
|---|--------------|-------------|-------------|---------------------------------------|
| 1 | 1.35 | 1.30 | -0.90 | Employees |
| 2 | 1.60 | -0.72 | 0.01 | Customers |
| 3 | 1.60 | -0.72 | 0.01 | Financiers |
| 4 | 1.12 | -0.31 | -0.05 | Suppliers |
| 5 | -0.45 | 0.80 | 0.93 | Communities |
| 6 | -2.63 | -0.21 | -0.37 | Environment |
| 7 | -0.18 | 0.20 | 1.11 | Government |
| 8 | -2.38 | -0.32 | -0.37 | Non-Governmental Organizations (NGOs) |
| 9 | -0.03 | -0.01 | -0.35 | Trade Associations |

Construct (‘Value-Scenario’) Loadings On Each Component For Growth Stage Firms

| | 1 | 2 | 3 | |
|---|--------------|-------------|-------------|---|
| 1 | 2.27 | 0.03 | 0.08 | Effect on low turnover—Effect on high turnover |
| 2 | -2.11 | -0.34 | -0.33 | Not People oriented—People oriented |
| 3 | 1.82 | 0.66 | 1.10 | Not source of legitimacy (social)—Source of legitimacy |
| 4 | -2.19 | 0.43 | 1.00 | Indirect relationship—Direct relationship |
| 5 | -1.04 | 1.64 | -0.54 | Focused on purpose (self determination)—Focused on profit (key benefit) |
| 6 | 1.47 | 0.47 | -0.84 | Longer term—Short term |

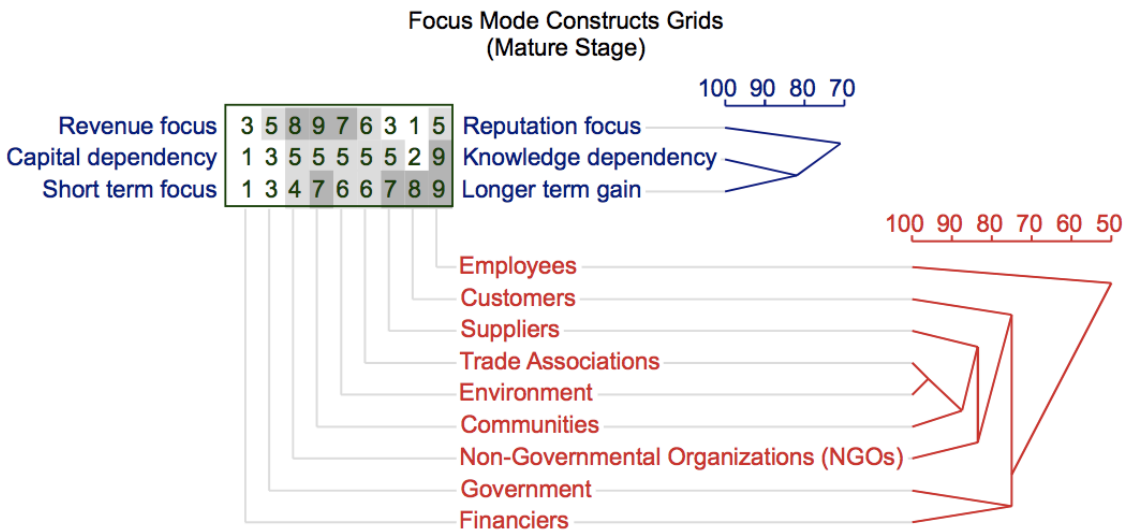
The graphical *PrinGrid* output of mature group mode constructs showed three component loadings (Figure 11) – two of which, Components 1 and 2 with cumulative variance of 93.6% of particular importance for our analysis. The *Focus* output demonstrated linkage between constructs, ‘Capital dependency—Knowledge dependency’ and ‘Short term focus—Long term gain’ at 81.9%, which is then connected with ‘Revenue focus—Reputation focus’ at 70.8% as exhibited in Figure 12.

Figure 11: PrinGrid Mode Output Of Group Perception At Mature OLC Stage



Element ‘Environment’ formed strong linkage with ‘Trade Associations’ and ‘Communities’ at 95.8% and 87.5% respectively. The links between ‘Suppliers’, ‘Trade Associations’ and ‘Communities’, ‘Non-Governmental Organizations’ (NGOs) at 83.3% developed a cluster of aforementioned stakeholders as exhibited in Figure 12. Also, ‘Customers’ and ‘Suppliers’, along-with ‘Financiers’ and ‘Government’, both paired with each other at 75% respectively. We take this to mean that stakeholder elements for mature stage ICT-sector firms form a cluster with eight of the nine stakeholders mentioned above – only excluding ‘Employees’ from it (as shown in Figure 12).

Figure 12: Focus Mode Output Of Group Perception At Mature OLC Stage



Our arbitrary cut-off value of 1.0 for mode construct loadings on different components for mature OLC group (Table 16 – represented by bold typeface) revealed that one construct, ‘Capital dependency—Knowledge dependency’ exclusively loaded on Component 1. However, construct ‘Short-term focus—Longer term gain’ loaded on both, Component 1 and Component 2. The remaining construct ‘Revenue focus—Reputation focus’ loaded on Component 2 exclusively. Next, elements, such as, ‘Employees’, and ‘Financiers’ were exclusively loaded on Component 1, whereby, ‘Customers’ only loaded on Component 2.

The mode construct dimensions represented by ICT-sector mature stage firms divulged that the perception of ‘value-creation’ for stakeholders corroborated monetary focus at one end, whereby knowledge and reputation anchored at the other. These two dimensions about the narrow economic view of the firms have been explained by their cumulative variance of 93.6%.

Table 16: Mode Constructs And Elements Of Group Perception At Mature OLC Stage

| Percentage Variance In Each Component For Mature Stage Firms | | | |
|--|-------|-------|--------------|
| 1 | 2 | 3 | |
| 56.82 | 36.74 | 6.43 | % |
| 56.82 | 93.57 | 100.0 | Cumulative % |

| Element (Stakeholder) Loadings On Each Component For Mature Stage Firms | | | | |
|---|--------------|-------------|-------|---------------------------------------|
| | 1 | 2 | 3 | |
| 1 | 1.24 | 0.53 | 0.42 | Employees |
| 2 | -0.51 | 1.19 | -0.38 | Customers |
| 3 | -1.52 | -0.22 | 0.20 | Financiers |
| 4 | 0.05 | 0.65 | 0.13 | Suppliers |
| 5 | 0.70 | -0.58 | -0.43 | Communities |
| 6 | 0.34 | -0.32 | -0.11 | Environment |
| 7 | -0.67 | -0.34 | 0.11 | Government |
| 8 | 0.14 | -0.81 | 0.07 | Non-Governmental Organizations (NGOs) |
| 9 | 0.23 | -0.11 | -0.01 | Trade Associations |

| Construct ('Value-Scenario') Loadings On Each Component For Mature Stage Firms | | | | |
|--|-------------|--------------|-------|---|
| | 1 | 2 | 3 | |
| 1 | 1.52 | 0.01 | 0.58 | Capital dependency—Knowledge dependency |
| 2 | 0.99 | -1.51 | -0.29 | Revenue focus—Reputation focus |
| 3 | 1.40 | 1.06 | -0.42 | Short term focus—Longer term gain |

5.4 Content Analysis Of Various OLC Stages

One of the sections in Phase-1 study protocol inquired into the respondents' (scholars and practitioners) perceptions about at-least three key differentiators among the ICT sector start-up, growth, small to medium-sized, mature, and decline OLC stage firms (see Appendix A; Section 4). We performed the content analysis technique to understand these differences in a meaningful form. Our analysis excluded the 'small to medium sized' and 'decline' ICT firm stages for the purpose of reducing complexity and time duration of our second phase study design.

The main purpose of including Section 4 in the Phase-1 exploratory study protocol was to operationalize the understanding of various OLC stages in the context of ICT sector. We used a deductive content analysis technique as we based the outcome categories on previous knowledge from the OLC literature and stakeholder theory. It enabled us to develop key differentiating categories among ICT sector start-up, growth, and mature firm stages for the purpose of testing the proposed theory and related hypotheses. On the contrary, an inductive content analysis helps research questions that allow concepts to be derived from the data (Elo & Kyngäs, 2007).

As the first step, we organized the complete textual data from Section 4 – Questions 17a, 17b, 17c, 17d, and 17e (Appendix A) into a document. The audio recordings of the interview sessions were also transcribed and rechecked to ensure the accuracy of the collected responses. As the second step, the unit of analysis was set to be the three discriminating characteristics of the ICT sector start-up, growth and mature OLC stage firms, as provided by each respondent.

On the basis of the OLC theory, we developed a categorization matrix and color-coded the data according to the categories (see Appendix C). This structured matrix was then reviewed to condense the total 54 (18 respondents; each providing three characteristics) elicited constructs in each of the OLC stages to main categories. For the purpose of our research study, it was essential to describe the exemplifications of the identified categories (see Appendix D).

5.4.1 Definitions Of ICT Sector Start-Up, Growth, And Mature OLC Stage Firms

The main intention behind conducting this step was to systematically come up with a simpler, understandable and discriminating description of the start-up, growth and mature OLC stage firms from the ICT sector. Henceforth, we deduced some of the major differences among these OLC stages as below:

5.4.1.1 ICT Sector Start-Up Stage Firms

It is perceived that organizations at the start-up stage:

- Raises limited funds or investments to run business operations with less than a million USD in capital
- Employs a small team of up to 20 people, which in certain instances reaches a maximum size of 100 employees
- Intend to flourish growth
- Adopts an informal organizational structure with multifaceted team roles
- Offers minimum viable products or services
- Generates low sales, few paying customers, and possesses limited technical skills
- Operates in newer markets and lacks defined processes

5.4.1.2 ICT Sector Growth Stage Firms

It is perceived that organizations at the growth stage:

- Raises enough funds to become independent to run business operations with 5 to 15 million USD in capital
- Employs a medium sized team of up to 100 people, which in certain instances reaches a maximum size of 2000 employees
- Intends to flourish growth at a rate of over 10% to 300% annually
- Adopts a formalized organizational structure with specific team roles
- Offers diversified lines of commercial products or services
- Generates adequate sales, and possesses increased paying customers
- Operates in high potential markets and promotes formalized processes

5.4.1.3 ICT Sector Mature Stage Firms

It is perceived that organizations at the mature stage:

- Produces stable but higher revenue flows to become self-sustaining in business operations
- Employs a large sized team of over 100 people, which in certain instances reaches a size of 10,000 employees
- Intends to flourish growth at a typical steady rate of 1% to 3% (or less than 10%) annually
- Adopts a bureaucratic organizational structure with outlined departmental roles
- Offers well established lines of products or services
- Generates high sales, and possesses large customer base
- Operates in publicly held markets and promotes highly formal, goal-driven processes

5.5 Discussion For Phase-1

Our initial exploratory study attempted to reflect the complexity of perceptions among ICT-sector organizations belonging to the start-up, growth and mature stage of development in creating ‘value’ for a diverse group of primary and secondary stakeholders. The central purpose of conducting this study may be related to grounding the meaning of ‘value-creation’ by ICT-sector firms for various organizational stakeholders. By using a systematic exploratory interview technique, named, repertory grid – we were able to systematically elicit constructs that could allow us to define the three tenets of stakeholder theory for a better informed successive empirical study. In literature, not many studies are focused on defining the concept of ‘value-creation’ in the ICT-sector firms. We imply that this study should be of interest as well in detailed learning about concepts in technology-based organizations and contribution to ‘method’ for understanding nascent concepts in general through a systematic technique.

The results varied from one development stage to another – for instance, at the start-up stage, constructs other than the narrowly economic perspective emerged dominantly. The primary stakeholders, such as, ‘Customers’, ‘Suppliers’, ‘Employees’, and ‘Financiers’, were perceived to have received ‘value’ from the firms because of their high influence, practical, and direct benefits-extending abilities. The secondary stakeholder group, including, ‘Communities’, ‘Government’, ‘Trade Associations’, ‘Environment’ and ‘Non-Governmental Organizations’ (NGOs) formed a cluster together based on how firms perceived them in terms of their low influential, academic, and indirect benefits-offering constructs. Perhaps, these trends suggest that start-up firms were not only driven by the purpose of making profits, and are not yet heavily invested in the ‘status quo’; hence, they express themselves further in broadly defined interest categories.

In case of growth stage firms, primary stakeholders, namely, ‘Financiers’, ‘Customers’, and ‘Suppliers’, were perceived to have derived ‘value’ from the firms because of their direct relationship, high turnover, people focus, legitimacy and profits as key attributes. However, ‘Employees’ were considered to have strongly differed from the other primary stakeholders on the account of preference for purpose over profits. On contrary, the secondary stakeholders, such as, ‘Environment’, and ‘Non-Governmental Organizations’ (NGOs) were perceived to have formed a tight cluster together displaying less legitimacy, lack of people focus, low turnover, indirect relationship, purpose focus and long-term implications as growth firms create ‘value’ for them. Other secondary stakeholders, ‘Communities’, and ‘Government’ show similar trends but significantly differed from ‘Environment’ and ‘Non-Governmental Organizations’ (NGOs) in terms of being the sources of legitimacy, and demonstrating people focus. Lastly, ‘Trade Associations’ remained neutral about the profit versus purpose focus, higher versus lower turnover, and shorter versus longer-term constructs. In summary, growth stage ICT-sector firms were perceived to have presented both, economically and non-economically driven paradigms for creating ‘value’ for a distinct set of stakeholders. From a set of

primary stakeholders, 'Financiers', 'Customers', and 'Suppliers' were perceived to have emerged on the economic dimension. Further, other than the 'Government', none of the remaining secondary stakeholders were considered to have an economic view about 'value-creation'.

The primary stakeholders belonging to the mature stage ICT-sector firms, such as, 'Financiers', 'Customers', were perceived to have received 'value' for their capital-dependent, and revenue-focused competences. Similarly, stakeholders like 'Suppliers' were perceived to have inclination toward revenue focus and longer-term gains. The 'Employees' contrasted with other primary stakeholders by their perceptual exhibition of knowledge-dependent abilities. However, in case of mature stage secondary stakeholders, 'Trade Associations', 'Environment', 'Communities' and 'Non-Governmental Organizations' (NGOs) form a cluster of 'value-creation' based on how mature firms perceived their importance for reputation. The remaining secondary stakeholder, 'Government' showed resemblance with a primary stakeholder (i.e. 'Financiers') in terms of the capital dependency and shorter-term focus on gains. In conclusion, ICT-firms at the mature stage of development were perceived to have exhibited non-economic view of 'value-creation' for all secondary stakeholders, except the 'Government', and established economic views for its primary stakeholders, such as, 'Financiers' and 'Customers' of the group.

We refrained from using the details of all five OLC (start-up, growth, small to medium-sized, mature, and decline) stages as described in Appendix C in this chapter – for it was beyond the scope of this research project. Our focus was on finding common and key differentiating factors of start-up, growth, and mature OLC stages only in the light of prior research (by Miller & Friesen, 1984; Kallunki & Silvola, 2008) to systematically guide us in advancing our research into the Phase-2. We removed the small to medium-sized and decline OLC stages for further analysis due to practical reasons and addressing the problem of survey longevity in Phase-2. The aforementioned definitions of start-up, growth and mature OLC stages are then used as 'conditions' in Phase-2 research design to

capture the difference among various dependent variables, gathered from the literature and RepGrid interview activity described earlier in this chapter (see Section 5.3). The details about the procedure used for Phase-2 study are discussed in Chapter 4 (see Section 4.4) with results mentioned in Chapter 6.

The outcomes from Phase-1 were seen as reflecting ‘vested-interest’ judgments from ICT business experts. This signifies narrow, bounded, exclusive, and ‘As It Is’ approach to stakeholder ‘value-creation’. We could benefit through extending in the direction of ‘normative-interest’ judgments, which may imply broad, unbounded, inclusive, multi-stakeholder, and ‘As It Ought To Be’ focus with the ‘vested-interest’ approach to gain a better understanding about various business-stakeholder engagement models. However, for Phase-2 of our research, we decided to further explore the domain of ‘vested-interest’ of ICT-sector practitioners to empirically examine the OLC and the main tenets of stakeholder theory.

We take the above discussion to mean that ICT-sector organizations at different OLC stages use a variety of constructs to define how they create ‘value’ for various organizational stakeholders. For instance, some ICT-sector experts may think that they create ‘value’ by focusing on revenues, while others focus more on firms’ reputation. Similarly, some may hold competitive focus as a way to create ‘value’, whereby, others may exercise cooperative focus. There may not be just one way to create ‘value’ and we do not claim that any one ‘value-scenario’ construct is superior to the other. The purpose of our research is to empirically draw a picture of how the ICT-sector firms respond to these ‘value’ scenarios.

Table 17 summarizes the most representative value-creating constructs, along with meanings that were elicited during Phase-1 of our research. A total of nine uni-polar constructs described the three tenets of stakeholder theory, including: focus on environmental concerns, focus on societal benefits,

focus on employees / human resources, longer-term focus, focus on firm reputation, multi-stakeholder focus, focus on firm revenues, focus on firm profits and cooperative focus. RepGrid interview sessions conducted in Phase-1 enabled us to generate 18 uni-polar value-creating constructs. For an informative Phase-2 study, we added six more constructs to the set from literature. It was believed to affectively capture the ‘value’ created by ICT-sector firms for various organizational stakeholders.

In Phase-2, out of these 24 constructs, only 19 were selected for the final survey study (see the survey instrument in Appendix E). The decision was taken after conducting pre-testing sessions of the survey instrument on a total of 12 respondents; comprising of six senior PhD students at the Department of Management Science at the University of Waterloo, and six industry representatives from the ICT-sector in the Waterloo, Ontario region. The feedback also enabled us to alter wordings in the instrument to effectively represent the desired questions.

Table 17: Summary Of ‘Value-creation’ Constructs For An Informative Phase-2 Study

| Uni-Polar Constructs | Variables Describing Constructs | Source | Representative Tenets of Stakeholder Theory |
|-----------------------------|--|-------------------|--|
| Academic | Focus on Theoretical Implications | RepGrid Interview | |
| Practical | Focus on Practical Implications | RepGrid Interview | |
| Low Influence | Focus on Theoretical Implications | RepGrid Interview | |
| High Influence | Focus on Practical Implications | RepGrid Interview | |
| Direct Benefit Of Growth | Focus on Firm Growth | RepGrid Interview | |
| Indirect Benefit of Growth | Focus on Environmental Concerns / Focus on Societal Benefits | RepGrid Interview | Jointness of Interest |
| Benefit Provider | Focus on Stakeholder Providing Us Value | RepGrid Interview | |
| Benefit Receiver | Focus on Stakeholder Receiving Value From Us | RepGrid Interview | |
| Effect on Low Turnover | Focus on Employees / Focus on Human Resources | RepGrid Interview | Jointness of Interest |
| Effect on High Turnover | Focus on Employees / Focus on Human Resources | RepGrid Interview | |
| People Oriented | Focus on Employees / Focus on Human Resources | RepGrid Interview | Jointness of Interest |
| Not People Oriented | Focus on Employees / Focus on Human Resources | RepGrid Interview | |
| Longer Term | Longer Term Focus | RepGrid Interview | Jointness of Interest |
| Shorter Term | Shorter Term Focus | RepGrid Interview | |
| Capital Dependency | Focus on Capital For Firm | RepGrid Interview | |
| Knowledge Dependency | Developing of New Skills / Applying of Existing Skills | RepGrid Interview | |
| Revenue Focus | Focus on Firm Revenues | RepGrid Interview | Narrowly Economic View Of The Firm |
| Reputation Focus | Focus on Firm Reputation | RepGrid Interview | Jointness of Interest |
| Cooperative Focus | Cooperative Focus | Literature | Cooperative Strategic Posture |
| Competitive Focus | Competitive Focus | Literature | |
| Multi-Stakeholder Focus | Multi-Stakeholder Focus | Literature | Jointness of Interest |
| Uni-Stakeholder Focus | Uni-Stakeholder Focus | Literature | |
| Profit Focus | Focus on Firm Profits | Literature | Narrowly Economic View Of The Firm |
| Purpose Focus | Focus on Firm Purpose | Literature | |

Chapter 6

Findings Of Phase-2: Survey Study Design

In our second phase of research exploration, we utilized value-creating constructs gathered from Phase-1, along with constructs from literature in a repeated measures survey study design. The purpose was to investigate empirically the perceived receptiveness of ICT-sector firms toward various business-stakeholder engagement models. In this chapter we present results gathered from the study conducted in Phase-2. These are distributed over six sections. First section provides descriptive characteristics of Phase-2 study participants (Section 6.1). Second section empirically addresses the issue of internal consistency of the measurement constructs (Section 6.2). Third section statistically assesses the measurement bias related with common method (Section 6.3). Fourth section presents the relationship between start-up, growth, and mature OLC stage conditions with a set of representative variables of the three tenets of stakeholder theory (Section 6.4). The representative dependent variables are theoretically classified as close approximates of the three main tenets of stakeholder theory that differentiates between various business-stakeholder engagement models. Fifth section focuses on the relationship between the ICT-sector participants' total working experience with the importance given to various stakeholders (Section 6.5). Sixth section summarizes the discussion of the overall Phase-2 results (Section 6.6).

6.1 Participants

Our study included a heterogeneous sample of 132 ICT-sector business practitioners, who specialized in mobile, software, hardware, Internet, media and social interaction technologies. Further inclusion criteria of participants in Phase-2 comprise of adults from the United States of America, operating in the North American or international markets. Table 18, provides descriptive demographic details of our sample group in Phase-2.

Table 18: Descriptive Characteristics Of Participants In Phase-2 Study

| | Start-Up OLC Stage Expertise | Growth OLC Stage Expertise | Mature OLC Stage Expertise |
|-------------------------------------|-------------------------------------|-------------------------------------|--------------------------------------|
| Recent ICT Role Experience (Years) | Mean 6.87; SD 4.75; Range 1 – 25 | Mean 7.18; SD 5.04; Range 2 – 34 | Mean 7.53; SD 4.32; Range 2 – 15 |
| Total ICT Sector Experience (Years) | Mean 7.87; SD 6.04; Range 1 – 35 | Mean 9.46; SD 6.56; Range 1 – 40 | Mean 10.60; SD 6.70; Range 1 – 25 |

| | Sample Size | No. Of Responses | Sample Size | No. Of Responses | Sample Size | No. Of Responses |
|--|-------------|------------------|-------------|------------------|-------------|------------------|
| Recent ICT Role | | | | | | |
| Practitioners | 39 (29.6%) | | 65 (49.2%) | | 28 (21.2%) | |
| Total | 132 (100%) | | 132 (100%) | | 132 (100%) | |
| <i>Entrepreneur</i> | 1 (2.6%) | | - | | - | |
| <i>Product Developer</i> | - | | 4 (6.2%) | | 1 (3.6%) | |
| <i>Software Developer</i> | 4 (10.3%) | | 9 (13.8%) | | 4 (14.3%) | |
| <i>Project Manager</i> | 4 (10.3%) | | 8 (12.3%) | | 4 (14.3%) | |
| <i>Researcher</i> | 3 (7.7%) | | - | | 1 (3.6%) | |
| <i>Business Manager</i> | 5 (12.8%) | | 5 (7.7%) | | 1 (3.6%) | |
| <i>Marketing Coordinator</i> | 1 (2.6%) | | 1 (1.5%) | | - | |
| <i>Consultant</i> | 2 (5.1%) | | 1 (1.5%) | | 1 (3.6%) | |
| <i>Technical / Policy Adviser</i> | 5 (12.8%) | | 4 (6.2%) | | 3 (10.7%) | |
| <i>Analyst</i> | 2 (5.1%) | | 4 (6.2%) | | - | |
| <i>Director</i> | 8 (20.5%) | | 16 (24.6%) | | 11 (39.3%) | |
| <i>Chief Executive Officer</i> | 4 (10.3%) | | 13 (20%) | | 2 (7.1%) | |
| ICT Sector Focus | | | | | | |
| <i>Mobile</i> | | 24 (61.5%) | | 37 (56.9%) | | 17 (60.7%) |
| <i>Software</i> | | 25 (64.1%) | | 48 (73.8%) | | 21 (75.0%) |
| <i>Hardware</i> | | 16 (41.0%) | | 34 (52.3%) | | 18 (64.3%) |
| <i>Internet</i> | | 28 (71.8%) | | 42 (64.6%) | | 16 (57.1%) |
| <i>Social Interaction</i> | | 17 (43.6%) | | 30 (46.2%) | | 13 (46.4%) |
| <i>Media</i> | | 14 (35.9%) | | 11 (16.9%) | | 9 (32.1%) |
| Gender | | | | | | |
| <i>Female</i> | 17 (43.6%) | | 16 (24.6%) | | 17 (60.7%) | |
| <i>Male</i> | 21 (53.8%) | | 49 (75.4%) | | 11 (39.3%) | |
| <i>Prefer No Answer</i> | 1 (2.6%) | | - | | - | |
| Highest Completed Education Level | | | | | | |
| <i>Less Than High School</i> | 1 (2.6%) | | - | | - | |
| <i>High School</i> | 3 (7.7%) | | 1 (1.5%) | | - | |
| <i>College Diploma</i> | 7 (17.9%) | | 12 (18.5%) | | 7 (25.0%) | |
| <i>Undergraduate Degree</i> | 7 (17.9%) | | 9 (13.8%) | | 9 (32.1%) | |
| <i>Master's Degree</i> | 15 (38.4%) | | 36 (55.4%) | | 9 (32.1%) | |
| <i>Doctoral Degree</i> | 4 (10.3%) | | 7 (10.8%) | | 3 (10.7%) | |
| <i>Other</i> | 2 (5.1%) | | - | | - | |
| Education & Training | | | | | | |
| <i>Engineering</i> | | 17 (43.6%) | | 28 (43.1%) | | 9 (32.1%) |
| <i>Life Sciences</i> | | 11 (28.2%) | | 14 (21.5%) | | 2 (7.1%) |
| <i>Computer Sciences</i> | | 26 (66.7%) | | 38 (58.5%) | | 20 (71.4%) |
| <i>Physical Sciences</i> | | 11 (28.2%) | | 10 (15.4%) | | 1 (3.6%) |
| <i>Arts/Humanities</i> | | 7 (17.9%) | | 8 (12.3%) | | 1 (3.6%) |
| <i>Social Sciences</i> | | 12 (30.8%) | | 8 (12.3%) | | 2 (7.1%) |
| <i>Mathematics</i> | | 14 (35.9%) | | 20 (30.8%) | | 2 (7.1%) |
| <i>Business</i> | | 13 (33.3%) | | 27 (41.5%) | | 8 (28.6%) |
| <i>Other</i> | | 2 (5.1%) | | 1 (1.5%) | | - |
| Age | | | | | | |
| <i>Under 20 years</i> | 1 (2.6%) | | - | | - | |
| <i>Between 20 and 25 years</i> | 5 (12.8%) | | 7 (10.8%) | | 6 (21.4%) | |
| <i>Between 26 and 35 years</i> | 21 (53.8%) | | 29 (44.6%) | | 10 (35.7%) | |
| <i>Between 36 and 45 years</i> | 9 (23.1%) | | 20 (30.8%) | | 9 (32.1%) | |
| <i>Between 46 and 55 years</i> | 1 (2.6%) | | 5 (7.7%) | | 3 (10.7) | |
| <i>Between 56 and 65 years</i> | 1 (2.6%) | | 3 (4.6%) | | - | |
| <i>Over 66 years</i> | 1 (2.6%) | | 1 (1.5%) | | - | |

A sample size of 132 respondents was analyzed to infer empirical results. In the survey questionnaire, respondents were asked to express their expertise regarding different OLC stages in the ICT-sector. A total of 39 respondents chose expertise in the start-up stage; 65 selected growth stage; and 28 picked mature OLC stage.

In theory, we generalized that highly experienced ICT-sector participants with specific OLC stage expertise (start-up $n = 39$; growth $n = 65$; mature $n = 28$) could also provide knowledgeable inputs for other OLC stages. To test this assumption, we decided to statistically examine any significant differences among respondents with specific OLC expertise in three OLC conditions (levels of independent variable). We conducted one-way repeated measures ANOVA with OLC conditions as within-subjects factor at three levels (start-up, growth, and mature) along with value-creating constructs as dependent measures. After defining these measures, self-reported OLC stage expertise were added as a between-subjects measure and tested for mean differences. The results shown in Table 19 verify that there are no statistically significant differences among participants with respect to various 'value-creation' constructs. A clearly non-significant alpha level ($p > 0.25$) is satisfied for a total of 16 out of 19 cases with no $p\text{-value} < 0.115$. We acknowledge that three dependent variables, 'Focus on Developing New Skills' ($p = 0.122$), 'Longer Term Focus' ($p = 0.150$), and 'Cooperative Focus' ($p = 0.115$) did not achieve the clearly non-significant alpha level in terms of OLC stage (Table 19).

As the sample size for each group of OLC expertise is unequal, we also tested it by randomly selecting an equal sample size of 28 respondents from the start-up and growth stage expertise groups¹⁹. The results again showed no difference among the self-reported OLC stage expertise. A clearly non-significant alpha level ($p > 0.25$) is satisfied for a total of 17 out of 19 cases with no p -

¹⁹ The sample size of mature stage expert group was 28, consequently, the other two groups, start-up and growth experts were randomly reduced to a sample size of 28 respondents respectively.

value < 0.055. We acknowledge that two dependent variables, ‘Cooperative Focus’ ($p = 0.055$), and ‘Longer Term Focus’ ($p = 0.233$) did not achieve the clearly non-significant alpha level in terms of OLC stages (see Appendix H for results). Therefore, it is safe to use a total sample of 132 respondents to test for mean differences among various ‘value’ creating constructs in start-up, growth, and mature OLC stage conditions.

Table 19: Test Of Between Subjects Self-Reported OLC Expertise In Phase-2

Tests of Between-Subjects Effects

Transformed Variable: Average

| Source | Measure | Type III Sum of Squares | df | Mean Square | F | Sig. |
|-----------------------------|-----------------------------------|-------------------------|----|-------------|-------|------|
| Self-Reported OLC Expertise | Focus on Firm Growth | 4.108 | 2 | 2.054 | 1.495 | .228 |
| | Focus on Employees / HR | .534 | 2 | .267 | .141 | .868 |
| | Focus on Firm Profits | .402 | 2 | .201 | .136 | .873 |
| | Focus on Firm Purpose | 2.919 | 2 | 1.460 | .994 | .373 |
| | Focus on Societal Benefits | 1.976 | 2 | .988 | .418 | .659 |
| | Focus on Capital for Firm | 2.055 | 2 | 1.028 | .691 | .503 |
| | Focus on Environmental Concerns | 4.381 | 2 | 2.191 | .671 | .513 |
| | Focus on Developing New Skills | 6.795 | 2 | 3.397 | 2.139 | .122 |
| | Focus on Applying Existing Skills | 3.858 | 2 | 1.929 | 1.295 | .278 |
| | Focus on Firm Revenues | 3.901 | 2 | 1.950 | 1.054 | .352 |
| | Focus on Firm Reputation | 1.860 | 2 | .930 | .544 | .582 |
| | Shorter Term Focus | .693 | 2 | .347 | .146 | .864 |
| | Longer Term Focus | 5.889 | 2 | 2.945 | 1.928 | .150 |
| | Focus on Theoretical Implications | 2.393 | 2 | 1.196 | .495 | .611 |
| | Focus on Practical Implications | .942 | 2 | .471 | .262 | .770 |
| | Multi-Stakeholder Focus | .178 | 2 | .089 | .045 | .956 |
| | Uni-Stakeholder Focus | 1.372 | 2 | .686 | .242 | .785 |
| | Competitive Focus | 3.398 | 2 | 1.699 | .900 | .409 |
| | Cooperative Focus | 9.441 | 2 | 4.721 | 2.199 | .115 |

6.2 Internal Consistency Of The Measurement Constructs

For the purpose of hypotheses testing and obtaining more reliable results, we used multiple items scale to measure ‘jointness of interest’ for start-up, growth, and mature OLC stage conditions.

Although, it is recommended to have a multiple item scale for correctly defining a construct (DeVellis, 2003), still we believed that single-item representation of ‘cooperative focus’ fully

captured the domain of ‘cooperative strategic posture’ construct. Similarly, based on the definition of ‘narrowly economic view of the firm’ construct, only two items²⁰, ‘focus on firm revenues’, and ‘focus on firm profits’ were used in calculating a composite score.

Table 20: Details Of Multiple Items Scale To Measure Jointness Of Interest

| Constructs | Scale Items | Cronbach’s Alpha ²¹ |
|--|--|--------------------------------|
| Start-up Stage – Jointness Of Interest | <ol style="list-style-type: none"> 1. Start-up – Focus on Societal Benefits 2. Start-up – Focus on Environmental Concerns 3. Start-up – Longer Term Focus 4. Start-up – Multi-Stakeholder Focus 5. Start-up – Focus on Employees / HR 6. Start-up – Focus on Firm Reputation | 0.826 |
| Growth Stage – Jointness Of Interest | <ol style="list-style-type: none"> 1. Growth – Focus on Societal Benefits 2. Growth – Focus on Environmental Concerns 3. Growth – Longer Term Focus 4. Growth – Multi-Stakeholder Focus 5. Growth – Focus on Employees / HR 6. Growth – Focus on Firm Reputation | 0.767 |
| Mature Stage – Jointness Of Interest | <ol style="list-style-type: none"> 1. Mature – Focus on Societal Benefits 2. Mature – Focus on Environmental Concerns 3. Mature – Longer Term Focus 4. Mature – Multi-Stakeholder Focus 5. Mature – Focus on Employees / HR 6. Mature – Focus on Firm Reputation | 0.724 |

²⁰ According to Herbert et al. (1998), Little et al. (1999), Emons et al. (2007), and Eisinga et al. (2013), having only two items to define a ‘construct’ has been recognized as problematic in terms of providing a meaningful internal validity measure. Based on the theoretical meaning of the construct, ‘narrowly economic view of the firms’, we believed that ‘focus on firm profits’ and ‘focus on firm revenues’ as composite measure could effectively provide a meaningful close approximation of the exploratory construct.

²¹ Cronbach’s alpha coefficient cut-off value above 0.6 is considered acceptable for exploratory research; however, the debate about the ‘true’ cut-off level is still unresolved in literature (Nunnally, 1978; Ponterotto & Ruckdeschel, 2007; Garson, 2009).

To test the internal consistency and reliability of the measurement scale, we performed scale reliability analysis using the 22nd version of SPSS for constructs in each condition. Table 20 presents the Cronbach's alpha²² levels (as coefficient of reliability) of 'jointness of interest' construct in the start-up, growth and mature OLC conditions²³. We can see that Cronbach's alpha is above 0.7 in all three conditions, which indicates a high level of internal construct consistency at all three levels of interventions (Nunnally & Bernstein, 1994; Gliem & Gliem, 2003).

6.3 Assessment Of Common Method Biases

In Chapter 4, we discussed a few practices to deal with common method biases that are often associated with the social sciences. According to Campbell and Fiske (1959), and Podsakoff et al. (2003), method biases create systematic errors in the measurement and weaken the validity of research results. There is a long list of potential causes of common method biases in research studies like ours – a few of them being more relevant to us than others²⁴. One major source of potential common method bias in the context of our Phase-2 study was the fact that the measurement of dependent and independent variables was conducted using the same medium of a self-reported online questionnaire (Podsakoff et al., 2003).

We conducted Harman's single-factor test to address the limitation of variance caused by common method. This test is commonly used in similar research projects to identify any serious limitations of research findings (Podsakoff et al., 2003, Noriega, 2013; Batouk, 2015). For this technique a list of variables used in the study are loaded into an exploratory factor analysis without rotating the solution (Aulakh & Gencturk, 2000; Podsakoff et al., 2003).

²² Cronbach's coefficient alpha is a widely used measure of multi-item scale reliability (DeVellis, 2003).

²³ For more details about multi-item scale reliability analysis, see Appendix I.

²⁴ See the summary of potential sources of common method biases by Podsakoff et al. (2003) for more details.

A total of 31 measurement variables from our study were loaded into the exploratory factor analysis (with principal component methods in extraction settings). We limited the extraction of number of factors to one with no rotations to the solution. As a result, we gathered eight factors with Eigenvalues greater than one. The first factor accounted for 31.01% of the total variance. It indicates that no single-factor fully explains the total variance – thus validating that our Phase-2 study design results are not seriously limited by common method bias²⁵.

6.4 Relationship Between OLC Stages And Business-Stakeholder Engagement Models

We used a one-way repeated measures analysis of variance (ANOVA) to empirically understand the relationships between the three OLC conditions (i.e. start-up, growth, and mature stages) and the three tenets of stakeholder theory. We acknowledge that methodically, the proposed hypotheses could also be tested using other analytic approaches, such as, structural equation modeling. Nonetheless, with this study's outlined design to examine the difference between OLC stage conditions, which have been repeatedly measured on the representative dependent variables of three tenets of stakeholder theory – a repeated measures ANOVA analytic method was preferred for hypotheses testing. In our data set, dependent variable, 'Cooperative Focus', provides a close representation of *Cooperative Strategic Posture* tenet of stakeholder theory. Similarly, dependent variables, 'Focus on Firm Profits', and 'Focus on Revenues' represent *Narrowly Economic View of Firms*. Variables, 'Focus on Societal Benefits', 'Focus on Environmental Concerns', 'Focus on Employees / Human Resources', 'Focus on Firm Reputation', 'Longer Term Focus', and 'Multi-Stakeholder Focus' characterizes the *Jointness of Interest*, as three differentiating factors between the CSR, CSV, and VAS models, respectively.

²⁵ For more analytical details on the factor analysis, see Appendix J.

To run a one-way repeated measures ANOVA, the following five assumptions needs to be satisfied²⁶: 1) the dependent variables used in the study should be continuous – all 19 dependents variables (‘value-scenarios’) in our study were considered as continuous variables²⁷; 2) there should be one within-subjects factor with three or more categorical levels – our start-up, growth, and mature OLC stage categorical conditions were classified as three levels of the within-subjects factor; 3) no significant outliers remain in any level of the within-subjects independent variable – a careful and detailed analysis was conducted to account for this assumption; 4) the data should be normally distributed – although one-way repeated measures ANOVA is considered to be robust against this assumption’s violation, and finally; 5) the data should have homogeneity of variance and covariance, known as the assumption of sphericity – Mauchly’s test of sphericity was conducted to apply corrections when this assumption was violated (Howell, 2012).

We used graphical method by creating boxplots of our data to check for significant outliers. This analysis returned a few ‘value-scenario’ dependent variables displaying extreme outliers (represented by asterisk ‘*’ sign beside them) at different OLC conditions (see Appendix F for details). A total of 9 dependent variables out of 19, describing ‘value-scenarios’ were identified with an issue of extreme outliers.

The data file was rechecked for potential measurement, sampling, and clerical errors. After ruling out these possibilities, we believed that the outlier data provide genuine perceptual parameters of an observation. Therefore, we decided to keep the outliers – instead of removing them, changing their weightage, or transforming the dependent variables (Hawkins, 1980; Ghosh & Vogt, 2012). We performed one-way repeated measures ANOVA on these nine dependent variables with and without

²⁶ For more details on one-way repeated measures ANOVA assumptions and understanding different type of variables, see Laerd Statistics at <https://statistics.laerd.com>

²⁷ Using parametric statistics on Likert scale studies are considered robust against the violations of normality, unequal variances, small sample or ordinal type Likert scales (Norman, 2010).

outliers. After comparing their results, we found no significant difference between the two groups²⁸ – which validates our decision to include the outliers in the data analyses.

We reviewed our data for normality using histograms and Q-Q plots (graphical), along-with Shapiro-Wilk and Kolmogorov-Smirnov test of normality (numerical) methods for each level of within-subjects factor. The graphical method shows our data being negatively skewed. All the 19 value-creating constructs (dependent variables) were not normally distributed at each OLC level, as assessed by Shapiro-Wilk's and Kolmogorov-Smirnov's test ($p < 0.001$)²⁹. One-way repeated measures ANOVA is considered to be robust against the violation of normality; therefore, we will continue with the analysis without suspecting results of being substantially affected by Type 1 error rate (Norman, 2010; Howell, 2012; Laerd Statistics, 2015).

We set our data according to the recommended repeated measures ANOVA conventions in SPSS software packages (Howell, 2012; Laerd Statistics, 2015). Repeated measures procedure was selected in the general linear model menu options. The three levels of 'OLC_ Stages' were defined as within-subjects factor name (independent variable) and 19 value-creating constructs as measure names (dependent variables) in SPSS to produce results (see Appendix K³⁰).

6.4.1 OLC Stages And Their Relationship With Firms' Cooperative Strategic Posture

This section provides results for the hypotheses, **H1a**, **H2a**, and **H3a** – that focuses on the likelihood of start-up and mature OLC stage firms demonstrating more cooperative strategic posture than the growth OLC stage firms with respect to various business-stakeholder engagement models. A one-way repeated measures ANOVA was conducted to determine whether there were statistically

²⁸ See Appendix F for more details about outlier analysis using one-way repeated measures ANOVA.

²⁹ See Appendix G for more details about determining the normal distribution of the data.

³⁰ The results mentioned in Appendix K provide separate results for 19 value-creating scenarios at three OLC levels. The post-hoc analysis shows no adjustment (LSD) for multiple comparisons.

significant differences in perceptions about ICT-sector firms at different OLC stages, creating ‘value’ through keeping a cooperative strategic posture (see Table 21 for statistical results).

Table 21: Statistical Results Of Relationship Between OLC Stages And ‘Cooperative Focus’

| Descriptive Statistics | | | |
|------------------------------|--------|----------------|-----|
| | Mean | Std. Deviation | N |
| [Start-up] Cooperative Focus | 5.7955 | 1.08943 | 132 |
| [Growth] Cooperative Focus | 5.5379 | 1.06581 | 132 |
| [Mature] Cooperative Focus | 5.8182 | 1.06877 | 132 |

Mauchly's Test of Sphericity^a

Measure: Cooperative Focus

| Within Subjects Effect | Mauchly's W | Approx. Chi-Square | df | Sig. | Epsilon ^b | | |
|------------------------|-------------|--------------------|----|------|----------------------|-------------|-------------|
| | | | | | Greenhouse-Geisser | Huynh-Feldt | Lower-bound |
| OLC Stages | .973 | 3.550 | 2 | .170 | .974 | .988 | .500 |

Tests the null hypothesis that the error covariance matrix of the orthonormalized transformed dependent variables is proportional to an identity matrix.

a. Design: Intercept

Within Subjects Design: OLC_Stages

b. May be used to adjust the degrees of freedom for the averaged tests of significance. Corrected tests are displayed in the Tests of Within-Subjects Effects table.

Tests of Within-Subjects Effects

Measure: Cooperative Focus

| Source | | Type III Sum of Squares | df | Mean Square | F | Sig. | Partial Eta Squared | Observed Power |
|--------------------|--------------------|-------------------------|---------|-------------|-------|------|---------------------|----------------|
| OLC Stages | Sphericity Assumed | 6.399 | 2 | 3.199 | 5.002 | .007 | .037 | .811 |
| | Greenhouse-Geisser | 6.399 | 1.948 | 3.286 | 5.002 | .008 | .037 | .803 |
| | Huynh-Feldt | 6.399 | 1.977 | 3.237 | 5.002 | .008 | .037 | .807 |
| | Lower-bound | 6.399 | 1.000 | 6.399 | 5.002 | .027 | .037 | .603 |
| Error (OLC Stages) | Sphericity Assumed | 167.601 | 262 | .640 | | | | |
| | Greenhouse-Geisser | 167.601 | 255.128 | .657 | | | | |
| | Huynh-Feldt | 167.601 | 258.925 | .647 | | | | |
| | Lower-bound | 167.601 | 131.000 | 1.279 | | | | |

Pairwise Comparisons

Measure: Cooperative Focus

| (I) OLC Stages | (J) OLC Stages | Mean Difference (I-J) | Std. Error | Sig. ^b | 95% Confidence Interval for Difference ^b | |
|----------------|----------------|-----------------------|------------|-------------------|---|-------------|
| | | | | | Lower Bound | Upper Bound |
| Start-up [1] | Growth [2] | .258* | .094 | .020 | .031 | .484 |
| | Mature [3] | -.023 | .106 | 1.000 | -.280 | .235 |
| 2 | 1 | -.258* | .094 | .020 | -.484 | -.031 |
| | 3 | -.280* | .095 | .011 | -.511 | -.049 |
| 3 | 1 | .023 | .106 | 1.000 | -.235 | .280 |
| | 2 | .280* | .095 | .011 | .049 | .511 |

Based on estimated marginal means

*. The mean difference is significant at the 0.05 level

b. Adjustment for multiple comparisons: Bonferroni.

There were no significant outliers and the data were not normally distributed, as assessed by boxplot and Shapiro-Wilk's test ($p < .0005$), respectively. The assumption of sphericity was not violated, as assessed by Mauchly's test of sphericity, $\chi^2(2) = 3.550, p = .170$. The OLC stages elicited statistically significant changes in perceiving cooperative focus of ICT-sector firms, $F(2, 262) = 5.002, p = .007$, partial $\eta^2 = 0.037$, with cooperative focus increasing from growth OLC stage ($M = 5.54, SD = 1.07$) to start-up OLC stage ($M = 5.80, SD = 1.09$) to mature OLC stage ($M = 5.82, SD = 1.07$). Post hoc analysis with Bonferroni adjustment revealed that perceived cooperative focus of firms statistically significantly decreased from start-up stage to growth OLC condition ($M = 0.258$, 95% CI [0.03, 0.48], $p = 0.020$), and from mature stage to growth OLC condition ($M = 0.280$, 95% CI [0.05, 0.51], $p = 0.011$), but not from mature condition to start-up OLC stage ($M = 0.022$, 95% CI [-0.24, 0.28], $p = 1.000$).

Consequently, the empirical evidence supports hypothesis **H1a**, stating – that with respect to VAS, start-up firms are perceived to be more likely to demonstrate cooperative strategic posture than are the growth firms. The results also support hypothesis **H2a**, stating – that with respect to CSR, growth firms are perceived to be less likely to demonstrate cooperative strategic posture than are the start-up and mature firms. Lastly, evidence supports hypothesis **H3a**, stating – that with respect to CSV,

mature firms are perceived to be more likely to demonstrate cooperative strategic posture than are the growth firms.

6.4.2 OLC Stages And Their Relationship With Narrowly Economic View Of Firms

This section provides results for the hypotheses, **H1b**, **H2b**, and **H3b** – that focuses on the likeliness of start-up OLC stage firms demonstrating rejection of a narrowly economic view through focusing on firm profits and revenues than the growth and mature OLC stage firms with respect to various business-stakeholder engagement models. A one-way repeated measures ANOVA was conducted to determine whether there were statistically significant differences in perceptions about ICT-sector firms at different OLC stages, creating ‘value’ through rejecting a narrowly economic view (see Table 22 for statistical results).

Table 22: Statistical Results Of Relationship Between OLC Stages And Narrowly Economic View Of Firms

| | Mean | Std. Deviation | N |
|-----------------------------------|--------|----------------|-----|
| [Start-up] Narrowly Economic View | 5.7348 | .95797 | 132 |
| [Growth] Narrowly Economic View | 6.0038 | .66107 | 132 |
| [Mature] Narrowly Economic View | 5.9470 | .95361 | 132 |

Mauchly's Test of Sphericity^a

Measure: Narrowly Economic View Of Firms

| Within Subjects Effect | Mauchly's W | Approx. Chi-Square | df | Sig. | Epsilon ^b | | |
|------------------------|-------------|--------------------|----|------|----------------------|-------------|-------------|
| | | | | | Greenhouse-Geisser | Huynh-Feldt | Lower-bound |
| OLC Stages | .956 | 5.846 | 2 | .054 | .958 | .972 | .500 |

Tests the null hypothesis that the error covariance matrix of the orthonormalized transformed dependent variables is proportional to an identity matrix.

a. Design: Intercept

Within Subjects Design: OLC Stages

b. May be used to adjust the degrees of freedom for the averaged tests of significance. Corrected tests are displayed in the Tests of Within-Subjects Effects table.

Tests of Within-Subjects Effects

Measure: Narrowly Economic View Of Firms

| Source | | Type III Sum of Squares | df | Mean Square | F | Sig. | Partial Eta Squared | Observed Power |
|--------------------|--------------------|-------------------------|---------|-------------|-------|------|---------------------|----------------|
| OLC Stages | Sphericity Assumed | 5.304 | 2 | 2.652 | 5.813 | .003 | .042 | .868 |
| | Greenhouse-Geisser | 5.304 | 1.916 | 2.769 | 5.813 | .004 | .042 | .857 |
| | Huynh-Feldt | 5.304 | 1.944 | 2.729 | 5.813 | .004 | .042 | .861 |
| | Lower-bound | 5.304 | 1.000 | 5.304 | 5.813 | .017 | .042 | .668 |
| Error (OLC Stages) | Sphericity Assumed | 119.529 | 262 | .456 | | | | |
| | Greenhouse-Geisser | 119.529 | 250.963 | .476 | | | | |
| | Huynh-Feldt | 119.529 | 254.603 | .469 | | | | |
| | Lower-bound | 119.529 | 131.000 | .912 | | | | |

Pairwise Comparisons

Measure: Narrowly Economic View Of Firms

| (I) OLC Stages | (J) OLC Stages | Mean Difference (I-J) | Std. Error | Sig. ^b | 95% Confidence Interval for Difference ^b | |
|----------------|----------------|-----------------------|------------|-------------------|---|-------------|
| | | | | | Lower Bound | Upper Bound |
| Start-up [1] | Growth [2] | -.269* | .090 | .010 | -.488 | -.050 |
| | Mature [3] | -.212* | .083 | .037 | -.415 | -.010 |
| 2 | 1 | .269* | .090 | .010 | .050 | .488 |
| | 3 | .057 | .075 | 1.000 | -.125 | .239 |
| 3 | 1 | .212* | .083 | .037 | .010 | .415 |
| | 2 | -.057 | .075 | 1.000 | -.239 | .125 |

Based on estimated marginal means

*. The mean difference is significant at the 0.05 level

b. Adjustment for multiple comparisons: Bonferroni.

There were no significant outliers and the data were not normally distributed, as assessed by boxplot and Shapiro-Wilk's test ($p < .0005$), respectively. The assumption of sphericity was not violated, as assessed by Mauchly's test of sphericity, $\chi^2(2) = 5.846$, $p = 0.054$. The OLC stages elicited statistically significant changes in perceiving a narrowly economic view of ICT-sector firms, $F(2, 262) = 5.813$, $p = 0.003$, partial $\eta^2 = 0.042$, with narrowly economic focus increasing from start-up OLC stage ($M = 5.73$, $SD = 0.96$) to mature OLC stage ($M = 5.95$, $SD = 0.95$) to growth OLC stage ($M = 6.00$, $SD = 0.66$). Post hoc analysis with Bonferroni adjustment revealed that perceived narrowly economic focus of firms statistically significantly decreased from growth stage to start-up OLC condition ($M = 0.27$, 95% CI [0.05, 0.49], $p = 0.010$), and from mature stage to start-up OLC condition ($M = 0.212$, 95% CI [0.01, 0.42], $p = 0.037$), but not from growth condition to mature OLC stage ($M = 0.057$, 95% CI [-0.13, 0.24], $p = 1.000$).

Consequently, the empirical evidence supports hypothesis **H1b**, stating – that with respect to VAS, start-up firms are perceived to be less likely to demonstrate a narrowly economic view of the firm than are the growth and mature firms. The results also supports hypothesis **H2b**, stating – that with respect to CSR, growth firms are perceived to be more likely to demonstrate a narrowly economic view of the firm than are the start-up firms. Lastly, it supports hypothesis **H3b**, stating – that with respect to CSV, mature firms are perceived to be more likely to demonstrate a narrowly economic view of the firm than are the start-up firms.

6.4.3 OLC Stages And Their Relationship With Firms’ Jointness Of Interest

This section provides results for the hypotheses, **H1c**, **H2c**, and **H3c** – that emphasizes on the likeliness of start-up and mature OLC stage firms demonstrating jointness of interest through extending more societal benefits, concentrating on environmental concerns, focusing on employees / human resources, focusing on firm reputation and, keeping longer term, as well as multi-stakeholder focus than the growth OLC stage firms with respect to various business-stakeholder engagement models. A one-way repeated measures ANOVA was conducted to determine whether there were statistically significant differences in perceptions about ICT-sector firms at different OLC stages, creating ‘value’ through jointness of interest (see Table 23 for statistical results).

Table 23: Statistical Results Of Relationship Between OLC Stages And Firms’ Jointness Of Interest

| Descriptive Statistics | | | |
|----------------------------------|--------|----------------|-----|
| | Mean | Std. Deviation | N |
| [Start-up] Jointness of Interest | 5.5606 | .90617 | 132 |
| [Growth] Jointness of Interest | 5.7210 | .73691 | 132 |
| [Mature] Jointness of Interest | 5.8081 | .64615 | 132 |

Mauchly's Test of Sphericity^a

Measure: Jointness Of Interest

| Within Subjects Effect | Mauchly's W | Approx. Chi-Square | df | Sig. | Epsilon ^b | | |
|------------------------|-------------|--------------------|----|------|----------------------|-------------|-------------|
| | | | | | Greenhouse-Geisser | Huynh-Feldt | Lower-bound |
| OLC Stages | .937 | 8.441 | 2 | .015 | .941 | .954 | .500 |

Tests the null hypothesis that the error covariance matrix of the orthonormalized transformed dependent variables is proportional to an identity matrix.

a. Design: Intercept

Within Subjects Design: OLC_Stages

b. May be used to adjust the degrees of freedom for the averaged tests of significance. Corrected tests are displayed in the Tests of Within-Subjects Effects table.

Tests of Within-Subjects Effects

Measure: Jointness of Interest

| Source | Type III Sum of Squares | df | Mean Square | F | Sig. | Partial Eta Squared | Observed Power | |
|--------------------|-------------------------|--------|-------------|-------|--------|---------------------|----------------|------|
| OLC Stages | Sphericity Assumed | 4.160 | 2 | 2.080 | 10.049 | .000 | .071 | .985 |
| | Greenhouse-Geisser | 4.160 | 1.882 | 2.211 | 10.049 | .000 | .071 | .980 |
| | Huynh-Feldt | 4.160 | 1.908 | 2.180 | 10.049 | .000 | .071 | .981 |
| | Lower-bound | 4.160 | 1.000 | 4.160 | 10.049 | .002 | .071 | .882 |
| Error (OLC Stages) | Sphericity Assumed | 54.229 | 262 | .207 | | | | |
| | Greenhouse-Geisser | 54.229 | 246.503 | .220 | | | | |
| | Huynh-Feldt | 54.229 | 249.976 | .217 | | | | |
| | Lower-bound | 54.229 | 131.000 | .414 | | | | |

Pairwise Comparisons

Measure: Jointness of Interest

| (I) OLC Stages | (J) OLC Stages | Mean Difference (I-J) | Std. Error | Sig. ^b | 95% Confidence Interval for Difference ^b | |
|----------------|----------------|-----------------------|------------|-------------------|---|-------------|
| | | | | | Lower Bound | Upper Bound |
| Start-up [1] | Growth [2] | -.160* | .053 | .009 | -.290 | -.031 |
| | Mature [3] | -.247* | .063 | .000 | -.399 | -.096 |
| 2 | 1 | .160* | .053 | .009 | .031 | .290 |
| | 3 | -.087 | .051 | .279 | -.212 | .038 |
| 3 | 1 | .247* | .063 | .000 | .096 | .399 |
| | 2 | -.087 | .051 | .279 | -.038 | .212 |

Based on estimated marginal means

*. The mean difference is significant at the 0.05 level

b. Adjustment for multiple comparisons: Bonferroni.

There were no significant outliers and the data were not normally distributed, as assessed by boxplot and Shapiro-Wilk's test ($p < .0005$), respectively. The assumption of sphericity was violated, as assessed by Mauchly's test of sphericity, $\chi^2(2) = 8.441$, $p = 0.015$. Therefore, a Greenhouse-Geisser correction was applied ($\epsilon = 0.941$). The OLC stages elicited statistically significant changes in

perceiving jointness of interest of ICT-sector firms, $F(1.882, 246.503) = 10.05, p < 0.001$, partial $\eta^2 = 0.071$, with firms' focus on jointness of interest increasing from start-up OLC stage ($M = 5.56, SD = 0.91$) to growth OLC stage ($M = 5.72, SD = 0.74$) to mature OLC stage ($M = 5.81, SD = 0.65$). Post hoc analysis with Bonferroni adjustment revealed that perceived jointness of interest of firms statistically significantly decreased from growth stage to start-up OLC condition ($M = 0.16, 95\% \text{ CI } [0.03, 0.29], p = 0.009$), and from mature stage to start-up OLC condition ($M = 0.247, 95\% \text{ CI } [0.10, 0.40], p < 0.001$), but not from mature condition to growth OLC stage ($M = 0.087, 95\% \text{ CI } [-0.04, 0.21], p = 0.279$).

Consequently, the empirical evidence rejects hypothesis **H1c**, stating – that with respect to VAS, start-up firms are perceived to be more likely to demonstrate jointness of interest than are the growth firms. The results also reject hypothesis **H2c**, stating – that with respect to CSR, growth firms are perceived to be less likely to demonstrate jointness of interest than are the start-up and mature firms. Lastly, it rejects hypothesis **H3c**, stating – that with respect to CSV, mature firms are perceived to be more likely to demonstrate jointness of interest than are the growth firms.

In the particular case of 'jointness of interest', our results exhibited statistically significant differences among OLC stages but were in opposite direction to our proposed hypotheses. We consider that as a meaningful finding with a potential to guide our future research direction. It may be because the start-up stage firms are perceived to have not considered as many organizational stakeholders as legitimate, especially when compared with the growth and mature stage firms in the ICT-sector. We may take this to mean that start-up stage firms are primarily concerned about their survival and as a result they do not focus so much on the human resources, longer-term goals, environmental concerns, societal benefits, and reputation. However, this speculative rationale should be taken with caution and a critical test in follow-on research must be performed to confirm these propositions.

6.5 Relationship Between ICT-Sector Occupational Experience And Organizational Stakeholders

We used a one-way analysis of variance (ANOVA) to empirically understand the relationships between total years of working experience in the ICT-sector and the organizational stakeholder importance. In our data set, dependent variables, ‘Employees’, ‘Customers’, ‘Financiers’, ‘Suppliers’, ‘Communities’, ‘Environment’, ‘Government’, ‘Non-Governmental Organizations’ (NGOs), ‘Trade Associations’, represent various organizational stakeholders. Three levels of ICT-sector occupational experience (1 – 5 years, 6 – 10 years, and 11 years and above) were characterized as an independent variable.

Similar to a one-way repeated measure ANOVA method, simple one-way ANOVA needs to satisfy six basic assumptions: 1) the dependent variables used in the study should be continuous – all 9 dependents variables (organizational stakeholders) in our study were considered as continuous variables; 2) there should be one independent variable with two or more categorical levels – our categorical groups of ‘1 – 5’, ‘6 – 10’ and ‘11 years and above’ of ICT-sector experience were classified as three levels of independent variable; 3) There should be no relationship between observations in different conditions – our study participants provided independent observations in three groups; 4) no significant outliers should influence the data – careful examination of outliers allowed us to remove significant outliers from the data set for improved results³¹; 5) the data should be approximately normally distributed – although one-way ANOVA is considered to be robust against this assumption’s violation if the group sample sizes are equal or nearly equal³² – participants in our study were classified into three groups nearly equal groups: 1 – 5 years ($n = 44$), 6 – 10 years

³¹ A detailed analysis of outliers is given in Appendix M. We show how extreme outliers influenced the results; and therefore they were removed from the data set.

³² For more detail see the section on ‘one-way ANOVA’ assumptions in Laerd Statistics (2015) and their recommended reference of Lix et al, (1996).

($n = 43$), and 11 years and above ($n = 38$); 6) the data should have homogeneity of variance – to assess this assumption, Levene’s test of homogeneity of variance was conducted and Welch’s ANOVA was used instead of main ANOVA results in case of any violations (Wilcox, 2012).

In order to examine significant data outliers, we used graphical method by creating boxplots. This analysis returned a total of 5 extreme outliers in the data set (see Appendix M for details). After ruling out the possibilities of potential measurement and clerical errors in the data, we tested the results with, and without extreme outliers for significant changes. The comparison of results showed significant difference in one of the dependent variable (Financiers) result³³ – therefore, we decided to remove these extreme outliers for an improved data analyses.

We reviewed our data for normality using histograms and Q-Q plots (graphical), along-with Shapiro-Wilk test of normality (numerical) methods for each level of within-subjects factor. The graphical method shows our data being negatively skewed. All the 9 organizational stakeholders (dependent variables) were not normally distributed at three levels of occupational working experience, as assessed by Shapiro-Wilk’s test ($p < 0.001$)³⁴. Similar to a one-way repeated measures ANOVA procedure, a one-way ANOVA is also considered to be robust against the violation of normality; therefore, we decided to continue with further analyses without suspecting results of being substantially affected by Type 1 error rate (Laerd Statistics, 2015). Table 24 provides statistical details of results gathered from running a one-way ANOVA procedure.

³³ See Appendix M for more details about outlier analysis using one-way ANOVA.

³⁴ See Appendix L for more details about numerically determining the normal distribution of the data.

Table 24: Statistical Results Of Relationship Between Occupational Experience And Stakeholders

Test of Homogeneity of Variances

| | Levene Statistic | df1 | df2 | Sig. |
|---------------------------------------|------------------|-----|-----|------|
| Employees | .417 | 2 | 123 | .660 |
| Customers | 3.370 | 2 | 124 | .038 |
| Financiers | .931 | 2 | 122 | .397 |
| Suppliers | 4.225 | 2 | 124 | .017 |
| Communities | 1.450 | 2 | 123 | .238 |
| Environment | 5.643 | 2 | 123 | .005 |
| Government | 8.825 | 2 | 123 | .000 |
| Non-Governmental Organizations (NGOs) | 3.601 | 2 | 122 | .030 |
| Trade Associations | 1.162 | 2 | 123 | .316 |

ANOVA

| | | Sum of Squares | df | Mean Square | F | Sig. |
|--------------------|----------------|----------------|-----|-------------|-------|------|
| Communities | Between Groups | 12.133 | 2 | 6.066 | 4.262 | .016 |
| | Within Groups | 175.081 | 123 | 1.423 | | |
| | Total | 187.214 | 125 | | | |
| Trade Associations | Between Groups | 19.834 | 2 | 9.917 | 5.191 | .007 |
| | Within Groups | 234.968 | 123 | 1.910 | | |
| | Total | 254.802 | 125 | | | |

Robust Tests of Equality of Means

| | | Statistic ^a | df1 | df2 | Sig. |
|---------------------------------------|-------|------------------------|-----|--------|------|
| Employees | Welch | .611 | 2 | 80.315 | .545 |
| Customers | Welch | 1.696 | 2 | 81.349 | .190 |
| Financiers | Welch | 2.344 | 2 | 78.046 | .103 |
| Suppliers | Welch | .678 | 2 | 75.338 | .511 |
| Communities | Welch | 3.429 | 2 | 78.311 | .037 |
| Environment | Welch | 5.503 | 2 | 76.125 | .006 |
| Government | Welch | 3.721 | 2 | 75.815 | .029 |
| Non-Governmental Organizations (NGOs) | Welch | 6.633 | 2 | 75.933 | .002 |
| Trade Associations | Welch | 4.476 | 2 | 79.342 | .014 |

a. Asymptotically F distributed.

Multiple Comparisons

| Dependent Variable | | (I) Total ICT Experience | (J) Total ICT Experience | Mean Difference (I-J) | Std. Error | Sig. | 95% Confidence Interval | |
|--------------------|--------------|--------------------------|--------------------------|-----------------------|------------|------|-------------------------|-------------|
| | | | | | | | Lower Bound | Upper Bound |
| Communities | Tukey HSD | 1 to 5 years | 6 to 10 years | .09091 | .25436 | .932 | -.5126 | .6944 |
| | | | 11 years and above | .71651* | .26421 | .021 | .0897 | 1.3433 |
| | | 6 to 10 years | 1 to 5 years | -.09091 | .25436 | .932 | -.6944 | .5126 |
| | | | 11 years and above | .62560 | .26421 | .051 | -.0012 | 1.2524 |
| Environment | Games-Howell | 1 to 5 years | 6 to 10 years | -.09091 | .24566 | .927 | -.6770 | .4952 |
| | | | 11 years and above | .98565* | .34269 | .015 | .1635 | 1.8078 |
| | | 6 to 10 years | 1 to 5 years | .09091 | .24566 | .927 | -.4952 | .6770 |
| | | | 11 years and above | 1.07656* | .33084 | .005 | .2811 | 1.8720 |
| Government | Games-Howell | 1 to 5 years | 6 to 10 years | .13636 | .26332 | .863 | -.4919 | .7646 |
| | | | 11 years and above | .97847* | .36008 | .023 | .1123 | 1.8446 |
| | | 6 to 10 years | 1 to 5 years | -.13636 | .26332 | .863 | -.7646 | .4919 |
| | | | 11 years and above | .84211 | .37364 | .070 | -.0546 | 1.7388 |
| NGOs | Games-Howell | 1 to 5 years | 6 to 10 years | .33562 | .26846 | .428 | -.3056 | .9768 |
| | | | 11 years and above | 1.17344* | .32095 | .002 | .4025 | 1.9444 |
| | | 6 to 10 years | 1 to 5 years | -.33562 | .26846 | .428 | -.9768 | .3056 |
| | | | 11 years and above | .83782* | .34840 | .049 | .0040 | 1.6717 |
| Trade Associations | Tukey HSD | 1 to 5 years | 6 to 10 years | .02273 | .29467 | .997 | -.6764 | .7218 |
| | | | 11 years and above | .87560* | .30608 | .014 | .1494 | 1.6018 |
| | | 6 to 10 years | 1 to 5 years | -.02273 | .29467 | .997 | -.7218 | .6764 |
| | | | 11 years and above | .85287* | .30608 | .017 | .1267 | 1.5790 |
| Suppliers | Tukey HSD | 1 to 5 years | 6 to 10 years | -.87560* | .30608 | .014 | -1.6018 | -.1494 |
| | | | 11 years and above | -.85287* | .30608 | .017 | -1.5790 | -.1267 |

*. The mean difference is significant at the 0.05 level.

A one-way ANOVA procedure was conducted to determine if the importance given to organizational stakeholders was different for groups with varying years of occupational experiences³⁵. There were no significant outliers and the data were not normally distributed, as assessed by boxplots and Shapiro-Wilk's test ($p < .001$), respectively. For stakeholders, employees, financiers, communities, and trade associations there was homogeneity of variances, as assessed by Levene's test of homogeneity of variances ($p > 0.05$). However, this assumption was violated for customers, suppliers, environment, government, and non-governmental organizations ($p < 0.05$). The differences

³⁵ See Section M.2 in Appendix M for more detailed output of the analysis.

between the occupational experience groups was not statistically significant for employees $F(2, 123) = 0.528, p = 0.591$; customers, Welch's $F(2, 81.35) = 1.696, p = 0.190$; financiers $F(2, 122) = 2.788, p = 0.065$; and suppliers, Welch's $F(2, 75.34) = 0.678, p = 0.511$.

Perceived stakeholder importance of communities was statistically significantly different between different categories of occupational experiences, $F(2, 123) = 4.262, p = 0.016$. Perceived importance increased for communities from the 11 years and above ($M = 5.08, SD = 1.42$), to 6 – 10 years ($M = 5.70, SD = 1.70$), to 1 – 5 years ($M = 5.80, SD = 1.09$) occupational experience groups. Tukey-HSD post hoc analysis revealed that the mean increase from 11 years and above to 1 – 5 years was statistically significant ($p = 0.021$), as well as the increase from 11 years and above to 6 – 10 years was significantly significant ($p = 0.051$).

Perceived stakeholder importance of environment was statistically significantly different between different categories of occupational experiences, Welch's $F(2, 76.16) = 5.503, p = 0.006$. Perceived importance increased for environment from the 11 years and above ($M = 4.61, SD = 1.78$), to 1 – 5 years ($M = 5.59, SD = 1.23$), to 6 – 10 years ($M = 5.68, SD = 1.07$) occupational experience groups. Games-Howell post hoc analysis revealed that the mean increase from 11 years and above to 1 – 5 years was statistically significant ($p = 0.015$), as well as the increase from 11 years and above to 6 – 10 years was significantly significant ($p = 0.005$).

Perceived stakeholder importance of government was statistically significantly different between different categories of occupational experiences, Welch's $F(2, 75.82) = 3.721, p = 0.029$. Perceived importance increased for government from the 11 years and above ($M = 4.66, SD = 1.95$), to 6 – 10 years ($M = 5.50, SD = 1.32$), to 1 – 5 years ($M = 5.64, SD = 1.14$) occupational experience groups. Games-Howell post hoc analysis revealed that the mean increase from 11 years and above to 1 – 5 years was statistically significant ($p = 0.023$).

Perceived stakeholder importance of non-governmental organizations (NGOs) was statistically significantly different between different categories of occupational experiences, Welch's $F(2,75.93) = 6.633, p = 0.002$. Perceived importance increased for NGOs from the 11 years and above ($M = 4.39, SD = 1.70$), to 6 – 10 years ($M = 5.23, SD = 1.39$), to 1 – 5 years ($M = 5.57, SD = 1.09$) occupational experience groups. Games-Howell post hoc analysis revealed that the mean increase from 11 years and above to 1 – 5 years was statistically significant ($p = 0.002$), as well as the increase from 11 years and above to 6 – 10 years was significantly significant ($p = 0.049$).

Perceived stakeholder importance of trade association was statistically significantly different between various categories of occupational experiences, $F(2, 123) = 5.191, p = 0.007$. Perceived importance increased for trade associations from the 11 years and above ($M = 5.58, SD = 1.55$), to 6 – 10 years ($M = 5.43, SD = 1.26$), to 1 – 5 years ($M = 5.45, SD = 1.38$) occupational experience groups. Tukey-HSD post hoc analysis revealed that the mean increase from 11 years and above to 1 – 5 years was statistically significant ($p = 0.014$), as well as the increase from 11 years and above to 6 – 10 years was significantly significant ($p = 0.017$).

6.6 Discussion For Phase-2

The major emphasis of this chapter was to understand the perceived relationships between various OLC stages and business-stakeholder engagement model through the three tenets of stakeholder theory. The empirical results enabled us to establish that ICT-sector start-up stage firms are perceived to be demonstrating a more cooperative strategic posture than the growth stage firms. We also found that start-up stage firms perceived to be focusing lesser on narrowly economic view than the firms at the growth and mature OLC stages. However, contrary to our prediction, start-up stage firms believed to be exhibiting lesser degree of jointness of interest as compared to the growth and mature OLC stages. These findings allowed us to state that the ICT-sector start-up stage firms are perceived to be

partially receptive toward the VAS ('creating value for all stakeholders') business-stakeholder engagement model.

The evidence also suggests that growth stage firms from the ICT-sector are perceived to be lesser cooperative than the start-up and mature stage firms. We also found that growth stage firms are perceived to be focusing more on narrowly economic view than the firms at the start-up OLC stage. However, contrary to our prediction, growth stage firms perceived to be exhibiting more jointness of interest as compared to the start-up stage firms. These findings allowed us to state that the ICT-sector growth stage firms are perceived to be partially receptive toward the CSR ('corporate social responsibility') business-stakeholder engagement model.

Lastly, the evidence implies that mature stage firms from the ICT-sector are perceived to be more cooperative than the growth stage firms. We further found that mature stage firms are perceived to be focusing more on narrowly economic view than the start-up stage firms. However, contrary to our prediction, mature stage firms are perceived to be exhibiting more jointness of interest than the start-up stage firms. We predicted that both, start-up and mature stage firms should not be significantly different in terms of their focus on the notion of jointness of interest. These findings allowed us to state that the ICT-sector mature stage firms are perceived to be partially receptive toward the CSV ('creating shared value') business-stakeholder engagement model.

Table 25 summarizes the results of hypotheses tested in the Phase-2 study.

Table 25: Summary Of Hypotheses Test Results In Phase-2 Study

| Hypotheses | | Results | |
|----------------------|---|-----------|----------------------------|
| Hypothesis 1a | With respect to VAS, ‘Start-up’ firms are perceived to be more likely to demonstrate cooperative strategic posture than are the ‘Growth’ firms. | Supported | |
| Hypothesis 1b | With respect to VAS, ‘Start-up’ firms are perceived to be less likely to demonstrate a narrowly economic view of the firm than are the ‘Growth’ and ‘Mature’ firms. | Supported | |
| Hypothesis 1c | With respect to VAS, ‘Start-up’ firms are perceived to be more likely to demonstrate jointness of interest than are the ‘Growth’ firms. | Rejected | |
| Proposition 1 | Start-Up stage ICT firms are perceived to be more receptive toward VAS model | | Partially Supported |
| Hypothesis 2a | With respect to CSR, ‘Growth’ firms are perceived to be less likely to demonstrate cooperative strategic posture than are the ‘Start-up’ and ‘Mature’ firms. | Supported | |
| Hypothesis 2b | With respect to CSR, ‘Growth’ firms are perceived to be more likely to demonstrate a narrowly economic view of the firm than are the ‘Start-up’ firms. | Supported | |
| Hypothesis 2c | With respect to CSR, ‘Growth’ firms are perceived to be less likely to demonstrate jointness of interest than are the ‘Start-up’ and ‘Mature’ firms. | Rejected | |
| Proposition 2 | Growth stage ICT Firms are perceived to be more receptive toward CSR model | | Partially Supported |
| Hypothesis 3a | With respect to CSV, ‘Mature’ firms are perceived to be more likely to demonstrate cooperative strategic posture than are the ‘Growth’ firms. | Supported | |
| Hypothesis 3b | With respect to CSV, ‘Mature’ firms are perceived to be more likely to demonstrate a narrowly economic view of the firm than are the ‘Start-up’ firms. | Supported | |
| Hypothesis 3c | With respect to CSV, ‘Mature’ firms are perceived to be more likely to demonstrate jointness of interest than are the ‘Growth’ firms. | Rejected | |
| Proposition 3 | Mature stage ICT Firms are perceived to be more receptive toward CSV model | | Partially Supported |

Although, the main highlight of our research was to underpin the receptiveness of ICT-sector firms from various OLC stages toward different business-stakeholder engagement models, we also attempted to expand our understanding about the relationship between years of occupational experience and importance given to a mix of internal and external organizational stakeholders. The results showed us an interesting trend. For instance, we observed that representatives of the ICT-sector, under 10 years of experience exhibited more importance to external stakeholders, such as, communities, environment, government, non-governmental organizations, and trade associations – in comparison to ICT-sector representatives above 10 years of working experience.

Chapter 7

Conclusion, Limitations And Future Research

7.1 Conclusion

Business dynamics have radically evolved under the catalytic effects of technological innovation and communications around the globe. Most businesses seek to capture ‘value’ through resolution of socio-economic issues and positive impacts. However, there are likes of Enron (2001), WorldCom (2002), AOL (2002), Xerox (2000), MicroStrategy (2000), who are sometimes seen as promulgating the societal impacts of fraudulent business practices and unethical ‘shareholders’ centric policies (Cohen et al., 2013). Several academic scholars and practitioners have tried to address these complex business issues from the viewpoints of business ethics, corporate social responsibility, environment-business relationship, and trade sustainability, among others (Carroll, 1999; Sharma, 2000; Jenkins, 2005; Prahalad & Hart, 2002; Freeman et al., 2010; Porter & Kramer, 2011). The focus for some of these scholars seems to have shifted toward promoting multi-stakeholder perspective, instead of concentrating on a single or uni-stakeholder view of the firm for creating ‘value’. But without a clear understanding and distinction between these various models, it remains difficult to assess longer-term business sustainability and prosperity. We also seek to advance the work of Argandona (2011) which theoretically explored the meaning of the term ‘value’ in the context of stakeholder management. Argandona (2011) presented a view of stakeholders in his study; however, we examine firms at different organizational life cycle (OLC) stages, describing how they actually perceive creating ‘value’ for their stakeholders. In an attempt to advance theoretical model building of our study, we use stakeholder theory as a framework to further measure how ‘value’ is perceived to be created or captured by organizations for their stakeholders.

The main purpose of conducting this research was to explore the nascent concept of OLC stage firms creating idiosyncratic ‘value’ for organizational stakeholders. Our efforts were driven to underpin this notion in a systematic and scientific manner. We explored the ICT-sector firms at three: start-up, growth, and mature OLC stages. In literature we searched for the key differentiations between various types of business-stakeholder engagement models to hypothesize our OLC stage trends. These business-stakeholder engagement models were identified as ‘corporate social responsibility’ (CSR), ‘creating shared value’ (CSV) and ‘creating value for all stakeholders’ (VAS) (Freeman et al., 2010). Using three tenets of stakeholder theory (Strand & Freeman, 2013) we explored whether start-up, growth and mature OLC stages were more receptive toward the VAS, CSR, and VAS models, respectively. The findings from the study established at least a partial perceptual receptiveness relationship among the OLC stages and the business-stakeholder engagement models in the order aforementioned.

Our study contributes to the literature on stakeholder theory, ICT-sector organizational life cycle framework, and methods for measuring organizational decision makers’ perceptions about stakeholder engagement. We noticed that the empirical evidence from our research – to enhance the understanding of ICT-sector firms at various OLC stages – strengthens Donaldson and Preston (1995), Jones and Wicks (1999), and Jawahar and McLaughlin’s (2001) notions about the descriptive aspect of stakeholder theory. We take this to mean that the descriptive aspect of stakeholder theory approach allow us to explore business organizations effectively. These findings could provide us with a direction for further exploring claims of stakeholder theory – providing divergent narratives for understanding organizations in stakeholder terms (Jones, 1995; Freeman, 1999). For instance, instrumental claims like, multi-stakeholder perspective promoting long lasting business sustainability and prosperity, as compared with models like residual-CSR, could be further explored using our

exploratory ‘value-creation’ framework. We discuss about how to apply and test these claims in the ‘Future Research’ section.

Recently, a review report was published to assess the impacts of ‘Social Value Act of United Kingdom (2013)’. It was aimed at promoting broader social, economic and environmental benefits by publically commissioned personnel in the procurement of supplies and services. The report highlighted the potential and shortcomings associated with the Act in its two years tenure. The most prominent challenges uncovered by the report were the lack of defining, measuring and quantifying the idea of ‘social value’ (Social Value Act Review Report, 2015). We believe that our methods of inquiry in this study may be helpful in addressing some of the outlined challenges. The overall phenomena of promoting innovation and autonomy, even at a governmental level (in case of the Social Value Act of UK) may be indicating that the conventional models of business-stakeholder engagement have not delivered up to their potential. Similar legislation may influence firms in the direction of thinking and justifying larger economic, societal and environmental impacts as a pre-requisite to business development. However, this should not be limited to only publically funded procurement processes – as in the case of the Social Value Act of UK.

According to Porter and Van der Linde (1995), businesses should innovate to offset the costs associated with environmental regulations to increase industrial competitive edge. By drawing a recent example from a non-ICT industry in a similar environmental and innovative context – the founder of Keurig K-Cups was quoted in an interview as saying: “I feel bad sometimes that I ever did it” – as his product threatens the environment due to the non-recyclable material used in the coffee pods (Hamblin, 2015). This pollution attracted a severe consumer criticism and reaction.

We think some useful and practical implications follow from our work as well. For instance, assuming our findings replicate, a society that seeks to encourage technology companies to broaden

their range of stakeholders for innovation (e.g., to include communities, environment) might direct instrumental change toward ‘start-up’ firms as appreciative of VAS — even if these new firms require some time to develop perspectives of ‘jointness of interest’ as they strive to become ‘growth’ and ‘mature’ firms. We may also take this to mean that typically start-up stage ICT-sector firms consider fewer stakeholders as legitimate as compared to the growth and mature stage organizations. There remains an opportunity to mentor start-up stage firms – such that they foster multi-stakeholder view right from the venture inception. We believe that this ‘descriptive’ view of the stakeholder theory provided a stronger exploratory framework to extend our understanding about how ICT-sector firms create ‘value’ for their stakeholders. Some follow-on studies will likely be better directed based on our study’s finding – which further advances the exploration about the ‘instrumental’ claims of the stakeholder theory.

The evidence from our experiment-based exploratory study also showed an interesting trend. The next generation executives, with less than 10 years of occupational experience (as compared to executives with over 10 years of the industry experience) in the ICT-sector are perceived to be exhibiting more importance to external / secondary business stakeholders – these including communities, environment, government, non-governmental organizations (NGOs), and trade associations. We take this to mean that there may be signs of a transition happening toward adapting a multi-stakeholder view of the firms, at least as are evident in the ICT industry. Such trends increase the importance of investigating instrumental claims about the stakeholder theory in future research.

7.2 Research Limitations

Like any other research study, our Phase-1 and Phase-2 studies also contained certain limitations. For instance, in Phase-1 of our study, we mainly focused on three: start-up, growth, and mature OLC stages, instead of exploring a greater variety of organizational development stages. We specifically

avoided including the decline stage in our study – due to practical and ethical considerations. Time constraints also played a deciding factor for limiting the scope of our study to only three OLC stages. Another limitation for Phase-1 study could be related to sample selections and sample size. A small convenience sample of 18 participants was selected for this study. However, it is not uncommon in studies using the systematic technique of repertory grid (RepGrid), working with a smaller group of individual experts. We used the rigor of the RepGrid technique analysis to develop a better-informed Phase-2 study to further exploring our research topic.

In the Phase-2 study, a potential limitation could be the self-reporting aspect of collecting the data, instead of using other secondary sources. Our primary focus of conducting this research was to understand the notion of ‘value-creation’ by organizations at different OLC stages. It was believed that top executives of organizations have the ability to correctly reflect upon the inquired notion. Therefore, reliance on collecting self-reported data was considered an adequate method. Another limitation could be in terms of this study’s generalizability – we designed it as a perception-based study. Also, the demographic characteristics of the participants make it less generalizable for a broader ICT-sector domain and other industries.

7.3 Future Research

With the methodological adjustments to the current study – of using the differences claimed among the start-up, growth and mature OLC stages, future empirical studies could involve the actual behavioral observation of key tenets of stakeholder theory, such as, ‘jointness of interest’, ‘cooperative strategic posture’, and ‘narrow economic view of the firms’ (Strand & Freeman, 2013) – instead of observing perceptions only. We may achieve these objectives by conducting longitudinal studies or developing industrial case studies to empirically support or reject the instrumental claims of the stakeholder theory.

The outcomes from Phase-1 were perceived as reflecting ‘vested-interest’ judgments from ICT business experts. This suggests narrow, bounded, exclusive, and ‘As It Is’ tactic to understanding stakeholder ‘value-creation’. However, we could also extend our research in the direction of ‘normative-interest’ judgments to gain further benefit. This approach may imply broad, unbounded, inclusive, multi-stakeholder, and ‘As It Ought To Be’ focus with the ‘vested-interest’ to gain understanding about various business-stakeholder engagement models better. We could perhaps design a between-subjects survey study to test both, ‘vested-interest’ versus ‘normative-judgment’ constructs from a more generalized population using online crowdsourcing participant recruitment services.

Further studying the concept of ‘value-creation’ at the global level could potentially gauge a broader perspective about firms at different developmental stages in creating ‘value’ for primary and secondary stakeholders. It may play a role in reducing gaps between under-developed, developing, and developed economies of the world by promoting sustainable business models through ‘value-creation’ that is beyond pursuing the narrowly established goals.

We look to the public-policy sector to encourage ‘value-creation’ for all the stakeholders – which could mean possibly directing businesses away from traditional CP, CSR, or CSV practices and toward a multi-stakeholder sustainable VAS model. We might also create increased awareness about legislation like the ‘Social Value Act of United Kingdom’ and try to replicate such initiatives to benefit both developed economies (e.g., Canada), as well as underdeveloped / developing economies (e.g., Pakistan), and to support resolution of some societal issues through businesses that justify creation of broader social, economic and environmental values. However, we do acknowledge that if such legislation is not executed well or without a clear direction, it may lead firms to ‘green wash’ their initiatives to gain social legitimacy.

Appendix A

Phase-1 Interview Protocol



Management Science
Department -
Faculty of Engineering

University of Waterloo
200 University Avenue
West
Waterloo, Ontario, Canada
N2L 3G1

1-519 888-4567 ext.
33998
mushah@uwaterloo.ca

Dear _____,

This letter is an invitation to participate in a research study. As a full-time PhD student in the Department of Management Science, Faculty of Engineering at the University of Waterloo, I am currently conducting research under the supervision of Professor Paul D. Guild toward an understanding of how firms create value.

Study Overview

Our study investigates the application of various business models among ICT firms at different development stages.

Your Involvement

If you agree to participate in this study, I will conduct a face-to-face interview with you. As part of the interview I would like to obtain your input on some essential elements for understanding firms creating value for their stakeholders. This activity involves me showing you some attributes about various stakeholders as identified from management literature. It will allow us to elicit personal constructs from practitioners like you. In the interview I will ask you a series of questions about how you perceive value-creation for your own stakeholders. I would ask that any opinions expressed be your own.

The interview session would last about forty-five minutes to one hour and would be arranged at a time convenient to your schedule. To ensure the effective capture of your input, I would ask your permission to audio-record the interview. Only I, the student researcher, to aid with my analyses of the input you provide and to ensure I did not miss anything you said, will review these recordings. I will erase the recordings after two years of completion of the project.

Participation in the interview session is entirely anonymous and voluntary and there are no known or anticipated risks to participation in this study. Of course, involvement in the interview will have no impact on your relationship with your performance, or your position within the organization. You may decline to answer any of the questions you do not wish to

answer. Further, you may decide to withdraw from this study at any time, without any negative consequences, simply by letting me know your decision. All information you provide will be considered confidential unless otherwise agreed to, and the data collected will be kept in a secure location and confidentially disposed of in two years time.

Your name or your position will not appear in any thesis or publications resulting from this study unless you provide express consent to be identified and have reviewed the thesis text and approved the use of the quote. If you would like a summary of results, please let me know now by providing me with your email address. When the study is completed, I will send a copy of it to you. This study is expected to be completed by December 2015.

Remuneration

As a token of our appreciation, all participants will receive a \$25 gift card for Amazon.

The amount received is taxable. It is your responsibility to report this amount for income tax purposes.

Contact Information

If you have any questions regarding this study, or would like additional information about participation, please contact me at 1-519-888-4567 ext. 33998 or by email mushah@uwaterloo.ca. You can also contact my supervisor Professor Paul D. Guild by telephone at 1-519-888-4567 ext. 84808 or by email at guild@uwaterloo.ca.

I assure you that this study has been reviewed and received ethics clearance through the Office of Research Ethics at the University of Waterloo. However, the final decision to participate is yours. If you have any comments or concerns resulting from your participation in this study, please contact Dr. Maureen Nummelin of this office at 1-519-888-4567 ext. 36005 or by email at maureen.nummelin@uwaterloo.ca.

Thank you in advance for your interest and assistance with this research.

Yours very truly,

Muhammad Umair Shah
PhD Candidate
Department of Management Sciences
University of Waterloo

CONSENT FORM

By signing this consent form, you are not waiving your legal rights or releasing the investigator(s) or involved institution(s) from their legal and professional responsibilities.

I have read the information presented in the information letter about a study being conducted by Muhammad Umair Shah (1-519-888-4567 ext. 33998 or by email at *mushah@uwaterloo.ca*) of the Management Science Department, Faculty of Engineering at the University of Waterloo, under the supervision of Professor Paul Guild (1-519-888-4567 ext. 84802 or by email at *guild@uwaterloo.ca*). I have had an opportunity to ask any questions related to this study, to receive satisfactory answers to my questions, and any additional details I wanted.

I am aware that I have the option of allowing my interview to be audio recorded to ensure an accurate recording of my responses.

I am also aware that excerpts from the interview may be included in the thesis and/or publications to come from the research, with the understanding that quotations will be either anonymous or attributed to me only with my review and approval.

I was informed that I may withdraw my consent at any time without penalty by advising the researcher.

This project has been reviewed by, and received ethics clearance through, the Office of Research Ethics at the University of Waterloo. I was informed that if I have any comments or concerns resulting from my participation in this study, I may contact the Director, Office of Research Ethics at 519-888-4567 ext. 36005.

There are a few points mentioned below, please respond by **encircling** any one option from the given two options:

- With full knowledge of all foregoing, I agree, of my own free will, to participate in this study **(Yes / No)**
- I agree to have the interview and the conversations can be audio-recorded to aid with the analyses and report writing **(Yes / No)**
- I agree to the use of anonymous quotations in any thesis or publication that comes of this research **(Yes / No)**
- I agree to the use of direct quotations attributed to me only with my review and approval **(Yes / No)**

Participant Name & Signature: _____

TOWARD AN UNDERSTANDING OF FIRMS 'CREATING VALUE'

An Organizational Life Cycle and Stakeholder Theory Perspective on Business-Stakeholder Engagement Models

1. PURPOSE

The purpose of this study is to understand the application of various business models among ICT firms at different developmental stages.

All information provided through this interview process is completely anonymous. There will be no attribution of any opinions shared. You may stop the interview at any time.

2. INSTRUCTIONS

This interview protocol follows a systematic approach for scientific purposes. Your adherence to it will be highly appreciated.

The interview protocol is a mix of some open-ended and closed-ended questions and the session will last about forty-five minutes to one hour.

Thank you and we hope that you enjoy it!

3. DEMOGRAPHIC INFORMATION

Q1 a. Which of the following options best describes your recent role within the ICT sector?

(Please mark one of these options)

- | | |
|---|---|
| <input type="checkbox"/> Entrepreneur | <input type="checkbox"/> Consultant |
| <input type="checkbox"/> Product developer | <input type="checkbox"/> Technician / Technical adviser |
| <input type="checkbox"/> Software developer | <input type="checkbox"/> Financial adviser |
| <input type="checkbox"/> Project manager | <input type="checkbox"/> Policy adviser / Policy maker |
| <input type="checkbox"/> Academic researcher | <input type="checkbox"/> User |
| <input type="checkbox"/> Industrial researcher | <input type="checkbox"/> Analyst |
| <input type="checkbox"/> Business manager | <input type="checkbox"/> Other (Please specify) |
| <input type="checkbox"/> Market developer / Marketing coordinator | _____ |

Q1 b. For how many years have you worked in the role indicated above?

_____ Years.

Q2. What is (are) the ICT technology (ies) with which you are mainly focused on today?

- | | |
|-----------------------------------|---|
| <input type="checkbox"/> Mobile | <input type="checkbox"/> Social interaction |
| <input type="checkbox"/> Software | <input type="checkbox"/> Media |
| <input type="checkbox"/> Hardware | <input type="checkbox"/> Other (Please specify) |
| <input type="checkbox"/> Internet | _____ |

Q3. What is your current job title?

(Please mark one of these options)

- | | |
|---|---|
| <input type="checkbox"/> Technician / Technical adviser | <input type="checkbox"/> Analyst |
| <input type="checkbox"/> Product developer | <input type="checkbox"/> Consultant |
| <input type="checkbox"/> Software developer | <input type="checkbox"/> Manager |
| <input type="checkbox"/> Project manager | <input type="checkbox"/> Director |
| <input type="checkbox"/> Business owner | <input type="checkbox"/> CEO |
| <input type="checkbox"/> Business investor | <input type="checkbox"/> Other (Please specify) |
| <input type="checkbox"/> Researcher | _____ |
| <input type="checkbox"/> Professor | |

Q4. How many years of total experience do you have in the ICT industry?

_____ Years.

Q5. What is your highest educational degree?

(Please mark one of these options)

- | | |
|---|---|
| <input type="checkbox"/> Less than high school | <input type="checkbox"/> Doctorate degree or equivalent graduate degree |
| <input type="checkbox"/> High school | <input type="checkbox"/> Prefer not to answer |
| <input type="checkbox"/> College diploma | <input type="checkbox"/> Other (Please specify) |
| <input type="checkbox"/> Undergraduate degree | _____ |
| <input type="checkbox"/> MBA or equivalent degree | |
| <input type="checkbox"/> Masters degree or equivalent graduate degree | |

Q6. Please indicate the answer that best describes your age.

- I am under 20 years of age
- I am between 20 and 25 years of age
- I am between 26 and 35 years of age
- I am between 36 and 45 years of age
- I am between 46 and 55 years of age
- I am between 56 and 65 years of age
- I am over 66 years of age
- I prefer not to answer

Q7. What is your education and training background?

- | | |
|--|---|
| <input type="checkbox"/> Life sciences | <input type="checkbox"/> Mathematics |
| <input type="checkbox"/> Computer sciences | <input type="checkbox"/> Business |
| <input type="checkbox"/> Physical sciences | <input type="checkbox"/> Prefer not to answer |
| <input type="checkbox"/> Arts / Humanities | <input type="checkbox"/> Other (Please specify) |
| <input type="checkbox"/> Engineering | _____ |
| <input type="checkbox"/> Social sciences | |

Q8. Which of the following terms best describe the organizations for which you work within the ICT industry?

- | | |
|---|--|
| <input type="checkbox"/> Business organization | <input type="checkbox"/> Governmental organization |
| <input type="checkbox"/> University / College | <input type="checkbox"/> Other (Please specify) |
| <input type="checkbox"/> Nonprofit organization | _____ |

Q9. In which of the following jurisdictions your organization operates?

- | | |
|---|---|
| <input type="checkbox"/> Asia | <input type="checkbox"/> Africa |
| <input type="checkbox"/> Europe | <input type="checkbox"/> Middle East |
| <input type="checkbox"/> North America (Canada) | <input type="checkbox"/> Oceania-Australia |
| <input type="checkbox"/> North America (USA) | <input type="checkbox"/> Central America |
| <input type="checkbox"/> North America (Mexico) | <input type="checkbox"/> Other (Please specify) |
| <input type="checkbox"/> South America | _____ |

Q10. In what year was your company founded? _____

Q11. What are your annual net sales in Canadian dollars? _____

Q12 a. How many full-time employees does your company have? _____

Q12 b. How many part-time employees does your company have? _____

Q13. How much is your annual net sales growth expressed as a percentage? _____

Q14. How would your firm be categorized?

- Mainly as a service provider
- Mainly as a manufacturing enterprise
- Other (please specify) _____

Q15. We specialize in:

(Please mark one of these options)

- Only 1 product or service
- Between 2 and 5 products or services
- Between 6 and 10 products or service
- Between 11 and 15 products or services
- Between 16 and 20 products or services
- Over 20 products or services

Q16. On a continuum of *standardized* products or services versus *customized* products or services, in terms of the level of your product(s) or service(s) orientation, please indicate where your firm is located?

| | | | | | | | | | | |
|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|---------------------------------------|
| Standardized Products or Services | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | Customized Products or Services |
| | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | |

4. UNDERSTANDING OF ORGANIZATIONAL LIFE CYCLE STAGES

Q17 a. In your view, please identify three important differentiating factors that could define a *start-up* stage firm?

1. _____
2. _____
3. _____

Q17 b. In your view, please identify three important differentiating factors that could define a *growth* stage firm?

1. _____
2. _____
3. _____

Q17 c. In your view, please identify three important differentiating factors that could define a *small to medium-sized* enterprise?

1. _____
2. _____
3. _____

Q17 d. In your view, please identify three important differentiating factors that could define a *mature* stage firm?

1. _____
2. _____
3. _____

Q17 e. In your view, please identify three important differentiating factors that could define a *decline* stage firm?

1. _____
2. _____
3. _____

Q18. Which of the following options best describe your expertise in relation to business enterprises?

(Please mark one of these options)

- Specialized knowledge of **start-up** stage business enterprise as a **scholar** (*in theory*)
- Specialized knowledge of **start-up** stage business enterprise as a **practitioner** (*in practice*)
- Specialized knowledge of **growth** stage business enterprise as a **scholar** (*in theory*)
- Specialized knowledge of **growth** stage business enterprise as a **practitioner** (*in practice*)
- Specialized knowledge of **mature** stage business enterprise as a **scholar** (*in theory*)
- Specialized knowledge of **mature** stage business enterprise as a **practitioner** (*in practice*)

Q19. In your opinion, at what stage do you consider your organization to be at?

- Start-up
- Small to medium sized
- Growth
- Maturity
- Decline

5. REPERTORY GRID INTERVIEW

What ways two of the stakeholders are alike and in what way the third stakeholder is different from the other two in terms of your firm creating value for them.

A triad is chosen at random from the following list of nine elements:

- 1) Financiers
- 2) Suppliers
- 3) Customers
- 4) Employees
- 5) Environment
- 6) Communities
- 7) Non-Governmental Organizations (NGOs)
- 8) Governments
- 9) Trade Associations

6. UNDERSTANDING OF BUSINESS-STAKEHOLDER ENGAGEMENT MODELS

Q20 a. What is your most frequent way of thinking about the explanation of *start-up stage* organizations in terms of *stakeholder engagement*? Do you think that they usually have a uni-stakeholder focus OR that they have a multi-stakeholder perspective?

| | | | | | | | | | | |
|-----------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-------------------------------|
| Uni-Stakeholder Perspective | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | Multi-Stakeholder Perspective |
| | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | |

Q20 b. What is your most frequent way of thinking about the explanation of *growth stage* organizations in terms of *stakeholder engagement*? Do you think that they usually have a uni-stakeholder focus OR that they have a multi-stakeholder perspective?

| | | | | | | | | | | |
|-----------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-------------------------------|
| Uni-Stakeholder Perspective | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | Multi-Stakeholder Perspective |
| | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | |

Q20 c. What is your most frequent way of thinking about the explanation of *mature stage* organizations in terms of *stakeholder engagement*? Do you think that they usually have a uni-stakeholder focus OR that they have a multi-stakeholder perspective?

| | | | | | | | | | | |
|-----------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-------------------------------|
| Uni-Stakeholder Perspective | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | Multi-Stakeholder Perspective |
| | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | |

Q21 a. What is your most frequent way of thinking about the explanation of *start-up stage* organizations in terms of their *dominant aim*? Do you think that they have a _____.

Competitive focus to earn profit only

| | | | | | | | | | | |
|------------|---|---|---|---|---|---|---|---|---|--------------|
| Not At All | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | A Great Deal |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |

Cooperative focus to create profitable win-win

| | | | | | | | | | | |
|------------|---|---|---|---|---|---|---|---|---|--------------|
| Not At All | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | A Great Deal |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |

Collaborative focus including profit

| | | | | | | | | | | |
|------------|---|---|---|---|---|---|---|---|---|--------------|
| Not At All | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | A Great Deal |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |

Other (please specify) _____

| | | | | | | | | | | |
|------------|---|---|---|---|---|---|---|---|---|--------------|
| Not At All | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | A Great Deal |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |

Q21 b. What is your most frequent way of thinking about the explanation of *growth stage* organizations in terms of their *dominant aim*? Do you think that they have a _____.

Competitive focus to earn profit only

| | | | | | | | | | | |
|------------|---|---|---|---|---|---|---|---|---|--------------|
| Not At All | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | A Great Deal |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |

Cooperative focus to create profitable win-win

| | | | | | | | | | | |
|------------|---|---|---|---|---|---|---|---|---|--------------|
| Not At All | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | A Great Deal |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |

Collaborative focus including profit

| | | | | | | | | | | |
|------------|---|---|---|---|---|---|---|---|---|--------------|
| Not At All | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | A Great Deal |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |

Other (please specify) _____

| | | | | | | | | | | |
|------------|---|---|---|---|---|---|---|---|---|--------------|
| Not At All | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | A Great Deal |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |

Q21 c. What is your most frequent way of thinking about the explanation of *mature stage* organizations in terms of their *dominant aim*? Do you think that they have a _____.

Competitive focus to earn profit only

| | | | | | | | | | | |
|------------|---|---|---|---|---|---|---|---|---|--------------|
| Not At All | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | A Great Deal |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |

Cooperative focus to create profitable win-win

| | | | | | | | | | | |
|------------|---|---|---|---|---|---|---|---|---|--------------|
| Not At All | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | A Great Deal |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |

Collaborative focus including profit

| | | | | | | | | | | |
|------------|---|---|---|---|---|---|---|---|---|--------------|
| Not At All | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | A Great Deal |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |

Other (please specify) _____

| | | | | | | | | | | |
|------------|---|---|---|---|---|---|---|---|---|--------------|
| Not At All | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | A Great Deal |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |

Q22 a. What is your most frequent way of thinking about the explanation of *start-up stage* organizations in terms of their *economic focus*? Do you think that it is their _____.

Primary concern, with little or no distraction

| | | | | | | | | | | |
|------------|---|---|---|---|---|---|---|---|---|--------------|
| Not At All | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | A Great Deal |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |

Shared concern between partners

| | | | | | | | | | | |
|------------|---|---|---|---|---|---|---|---|---|--------------|
| Not At All | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | A Great Deal |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |

One concern among several

| | | | | | | | | | | |
|------------|---|---|---|---|---|---|---|---|---|--------------|
| Not At All | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | A Great Deal |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |

Other (please specify) _____

| | | | | | | | | | | |
|------------|---|---|---|---|---|---|---|---|---|--------------|
| Not At All | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | A Great Deal |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |

Q22 b. What is your most frequent way of thinking about the explanation of *growth stage* organizations in terms of their *economic focus*? Do you think that it is their _____.

Primary concern, with little or no distraction

| | | | | | | | | | | |
|------------|---|---|---|---|---|---|---|---|---|--------------|
| Not At All | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | A Great Deal |
| | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | |

Shared concern between partners

| | | | | | | | | | | |
|------------|---|---|---|---|---|---|---|---|---|--------------|
| Not At All | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | A Great Deal |
| | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | |

One concern among several

| | | | | | | | | | | |
|------------|---|---|---|---|---|---|---|---|---|--------------|
| Not At All | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | A Great Deal |
| | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | |

Other (please specify) _____

| | | | | | | | | | | |
|------------|---|---|---|---|---|---|---|---|---|--------------|
| Not At All | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | A Great Deal |
| | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | |

Q22 c. What is your most frequent way of thinking about the explanation of *mature stage* organizations in terms of their *economic focus*? Do you think that it is their _____.

Primary concern, with little or no distraction

| | | | | | | | | | | |
|------------|---|---|---|---|---|---|---|---|---|--------------|
| Not At All | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | A Great Deal |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |

Shared concern between partners

| | | | | | | | | | | |
|------------|---|---|---|---|---|---|---|---|---|--------------|
| Not At All | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | A Great Deal |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |

One concern among several

| | | | | | | | | | | |
|------------|---|---|---|---|---|---|---|---|---|--------------|
| Not At All | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | A Great Deal |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |

Other (please specify) _____

| | | | | | | | | | | |
|------------|---|---|---|---|---|---|---|---|---|--------------|
| Not At All | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | A Great Deal |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |

Q23. When thinking about *business-stakeholder engagement models*, how could each of these be described as *newer* versus *older paradigms*?

- Corporate Social Responsibility (CSR)

| Older Paradigm | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | Newer Paradigm | Don't Know |
|----------------|---|---|---|---|---|---|---|---|---|----------------|------------|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 |

- Creating Shared Value (CSV)

| Older Paradigm | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | Newer Paradigm | Don't Know |
|----------------|---|---|---|---|---|---|---|---|---|----------------|------------|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 |

- Creating Value For All Stakeholders (VAS)

| Older Paradigm | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | Newer Paradigm | Don't Know |
|----------------|---|---|---|---|---|---|---|---|---|----------------|------------|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 |

Q24. In terms of the importance of stakeholders to an organization most familiar to you, please rank order the following (1 = most important and 9 = least important)

| | |
|--------------------|-------|
| Communities | _____ |
| Financiers | _____ |
| Employees | _____ |
| Suppliers | _____ |
| Customers | _____ |
| Environment | _____ |
| NGOs | _____ |
| Government | _____ |
| Trade Associations | _____ |

This example organization is a _____ firm

- Start-up
- Small to medium sized
- Growth
- Mature
- Declining

*Thank
you*



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33998
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Dear Participant,

I would like to thank you for your participation in this study. As a reminder, the purpose of this study is to investigate the application of various business models among ICT firms at different development stages.

The data collected through interviews will contribute to a better understanding of firms at different development stages creating 'value' for their stakeholders.

Please remember that any data pertaining to you as an individual participant will be kept confidential. Once all the data are collected and analyzed for this project, I plan on sharing this information with the research community through seminars, conferences, presentations, and journal articles. If you are interested in receiving more information regarding the results of this study, or if you have any questions or concerns, please contact me at either the phone number or email address listed at the bottom of the page. If you would like a summary of the results, please let me know now by providing me with your email address. When the study is completed, I will send it to you. The study is expected to be completed by December 2015.

I have also shared my faculty supervisor's name and contact information as an alternative person to contact if there are questions about the study results or final paper at the bottom of the page.

This project has been reviewed and received ethics clearance through a University of Waterloo Research Ethics Committee. However, the final decision about participation is yours. Participants who have concerns or questions about their involvement in the project may contact the Chief Ethics Officer, Office of Research Ethics at 519-888-4567, Ext. 36005 or maureen.nummelin@uwaterloo.ca

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As a token of appreciation, I have received a C\$25 Amazon gift certificate through email. The amount received is taxable. It is your responsibility to report this amount for income tax purposes.

Name of the participant

Signature of the participant

Date

Witness name

Witness signature

Date

Appendix B

Cue Cards Of Elements And Definitions Of Stakeholders And OLC Stages

EMPLOYEES

CUSTOMERS

COMMUNITIES

SUPPLIERS

FINANCIERS

**NON-GOVERNMENTAL
ORGANIZATIONS
(NGOs)**

TRADE
ASSOCIATIONS

GOVERNMENT

ENVIRONMENT

What is meant by Start-Up, Growth and Mature stage organizations?

According to the literature there are multiple stages an organization has to go through as it develops. This phenomenon is known as ‘Organizational Life Cycle’.

The various stages, such as start-up, growth and mature consist of different sets of organizational activities and structures.

What is a Stakeholder?

“Business can be understood as a set of relationships among groups which have a stake in the activities that make up the business.

Any group or individual who can affect or is affected by the achievement of the organization objectives.” – Freeman et al. (2010)

Appendix C

Elicited Differentiating Constructs Among Various OLC Stages

| <u>Start-Up Stage Constructs</u> | <u>Main Categories</u> | <u>Total Constructs Per Category</u> | |
|----------------------------------|--|--------------------------------------|--|
| 1 | Revenue (deficit/borrowing money) | Capital | Revenue (deficit/borrowing money); Dependent on investment for continued operation; Funding stage; Limited funding and revenue; Low assets / Capital (less than 1 million USD); Haven't found recurring annual revenue; No revenue; Revenue (less than \$100K); Outside funding; 25% to 50% revenue / user base annually; |
| 2 | Dependent on investment for continued operation | | |
| 3 | Funding stage | | |
| 4 | Limited funding and revenue | | |
| 5 | Low assets / Capital (less than 1 million USD) | | |
| 6 | Haven't found recurring annual revenue | | |
| 7 | No revenue | | |
| 8 | Revenue (less than \$100K) | | |
| 9 | Outside funding | | |
| 10 | 25% to 50% revenue / user base annually | | |
| 11 | Trying to get seed capital | Capital | Trying to get seed capital |
| 12 | None to few customers | Customers | None to few customers; Small but growing customer base |
| 13 | Small but growing customer base | Customers | |
| 14 | High growth rate | Growth | High growth rate; Intends to grow; Growth rate / Aggregate sales |
| 15 | Intends to grow | Growth | |
| 16 | Growth rate / Aggregate sales | Growth | |
| 17 | Speed to market | Markets | Speed to market; Haven't fully defined market (have just a general sense of it); Billion dollar market size; New to market; Focused market |
| 18 | Haven't fully defined market (have just a general sense of it) | Markets | |
| 19 | Billion dollar market size | Markets | |
| 20 | New to market | Markets | |
| 21 | Focused market | Markets | |

| | | | |
|----|--|--------------------------|--|
| 22 | Small size / Employees (under 100) | Number of Employees | Small size / Employees (under 100); Size (less than 20); Number of employees (12); Small size / Employees (1 - 100); Small team (3 to 5); 1 to 4 founders; Less than 5 employees / Small management team; Team size (less than 10); Number of employees (under 25 for start-up); Fluidity / Employees between 1 and 50 (at max); 10 or less people; Blurred accountabilities (everybody doing everything) / Employees 10 to 15 |
| 23 | Size (less than 20) | Number of Employees | |
| 24 | Number of employees (12) | Number of Employees | |
| 25 | Small size / Employees (1 - 100) | Number of Employees | |
| 26 | Small team (3 to 5) | Number of Employees | |
| 27 | 1 to 4 founders | Number of Employees | |
| 28 | Less than 5 employees / Small management team | Number of Employees | |
| 29 | Team size (less than 10) | Number of Employees | |
| 30 | Number of employees (under 25 for start-up) | Number of Employees | |
| 31 | Fluidity / Employees between 1 and 50 (at max) | Number of Employees | |
| 32 | 10 or less people | Number of Employees | |
| 33 | Blurred accountabilities (everybody doing everything) / Employees 10 to 15 | Number of Employees | |
| 34 | Flat hierarchy | Organizational Structure | Flat hierarchy; Privately owned; Roles in organization are fluid or poorly defined (people often do more than one type of task, and tasks change); Informal organization structure / culture; Response time is adaptable / flexible; Almost every job is multifaceted (multiple roles) |
| 35 | Privately owned | Organizational Structure | |
| 36 | Roles in organization are fluid or poorly defined (people often do more than one type of task, and tasks change) | Organizational Structure | |
| 37 | Informal organization structure / culture | Organizational Structure | |
| 38 | Response time is adaptable / flexible | Organizational Structure | |
| 39 | Almost every job is multifaceted (multiple roles) | Organizational Structure | |
| 40 | Lack of process | Processes | Lack of process; Small media |
| 41 | Small media presence | Processes | |

| | | | |
|----|---|-------------------|---|
| | | | presence |
| 42 | Non commercialized product | Products/Services | Non commercialized product; Uncertainty of target markets / Beta testing; Product development / Customers (paying); Product is not mature (hasn't reached the market); Product(s) offered are subject to substantial change (pivoting); Minimum viable product (MVP); Products/Services (less than 3) |
| 43 | Uncertainty of target markets / Beta testing | Products/Services | |
| 44 | Product development / Customers (paying) | Products/Services | |
| 45 | Product is not mature (hasn't reached the market) | Products/Services | |
| 46 | Product(s) offered are subject to substantial change (pivoting) | Products/Services | |
| 47 | Minimum viable product (MVP) | Products/Services | |
| 48 | Products/Services (less than 3) | Products/Services | |
| 49 | Low sales | Sales | Low sales; Less than \$500K sales |
| 50 | Less than \$500K sales | Sales | |
| 51 | Technical knowledge (lower) | Skills | Technical knowledge (lower); Entrepreneur driven; One technology; Technology focus |
| 52 | Entrepreneur driven | Skills | |
| 53 | One technology | Skills | |
| 54 | Technology focus | Skills | |

| | <u>Growth Stage Constructs</u> | <u>Main Categories</u> | <u>Total Constructs Per Category</u> |
|----|--|------------------------|--|
| 1 | Revenue (enough money coming in) | Capital | Revenue (enough money coming in); Not necessary dependent on investment for continued operation (revenues ~ expenses); Increasing revenue; Revenue consistency (20% or greater); Profit potential; Find recurring revenue (annual); Increasing in revenue; Capitalization / Product that is delivered; Revenue (\$100 - 250K); Relevant financial models (not substantiated) maximum operating capacity versus expected returns; Investment into company; Positive valuation; Increasing in revenue; Capitalization / Product that is delivered; Revenue (\$100 - 250K); Relevant financial models (not substantiated) maximum operating capacity versus expected returns; Investment into company; Positive valuation; Capital outsourcing; Series A (already raised) venture capital (5 to 10 M dollars or 10 to 15 M dollars) |
| 2 | Not necessary dependent on investment for continued operation (revenues ~ expenses) | Capital | |
| 3 | Increasing revenue | Capital | |
| 4 | Revenue consistency (20% or greater) | Capital | |
| 5 | Profit potential | Capital | |
| 6 | Find recurring revenue (annual) | Capital | |
| 7 | Increasing in revenue | Capital | |
| 8 | Capitalization / Product that is delivered | Capital | |
| 9 | Revenue (\$100 - 250K) | Capital | |
| 10 | Relevant financial models (not substantiated) maximum operating capacity versus expected returns | Capital | |
| 11 | Investment into company | Capital | |
| 12 | Positive valuation | Capital | |
| 13 | Capital outsourcing | Capital | |
| 14 | Series A (already raised) venture capital (5 to 10 M dollars or 10 to 15 M dollars) | Capital | |
| 15 | Increasing customer base | Customers | Increasing customer base; User base size is growing; Paying customers |
| 16 | User base size is growing | Customers | |
| 17 | Paying customers | Customers | |
| 18 | Sales growth - Inflection point | Growth | Sales growth - |

| | | | |
|----|---|--------------------------|--|
| 19 | High growth rate | Growth | Inflection point; High growth rate; Investment required to sustain substantial growth / 300% to 2000% annual growth potential; Nearly 50% growth or maybe more; 20 % revenue growth Y/Y; 25% monthly to 100% growth annually; Growth rate is greater than 10% |
| 20 | Investment required to sustain substantial growth / 300% to 2000% annual growth potential | Growth | |
| 21 | Nearly 50% growth or maybe more | Growth | |
| 22 | 20 % revenue growth Y/Y | Growth | |
| 23 | 25% monthly to 100% growth annually | Growth | |
| 24 | Growth rate is greater than 10% | Growth | |
| 25 | Market defined / Adequate funding | Markets | Market defined / Adequate funding; Billion dollar market size |
| 26 | Billion dollar market size | Markets | |
| 27 | Medium sized company / Employees (over 100) | Number of Employees | Medium sized company / Employees (over 100); Scale of customers and employees (30 employees); 5 to 20 employees; Size (20 - 50 employees); More employees (2000); Established team (5 to 10); Employee count is 100; Increased hiring; 30 to 100 employees; Bigger management team; Increasing number of employees |
| 28 | Scale of customers and employees (30 employees) | Number of Employees | |
| 29 | 5 to 20 employees | Number of Employees | |
| 30 | Size (20 - 50 employees) | Number of Employees | |
| 31 | More employees (2000) | Number of Employees | |
| 32 | Established team (5 to 10) | Number of Employees | |
| 33 | Employee count is 100 | Number of Employees | |
| 34 | Increased hiring | Number of Employees | |
| 35 | 30 to 100 employees | Number of Employees | |
| 36 | Bigger management team | Number of Employees | |
| 37 | Increasing number of employees | Number of Employees | |
| 38 | Devolution of management, hierarchy, but few levels (less than 5) | Organizational Structure | Devolution of management, hierarchy, but few levels (less than 5); Less flexible; Formalization of corporate structure - people have |
| 39 | Less flexible | Organizational Structure | |
| 40 | Formalization of corporate structure - people have | Organizational | |

| | | | |
|----|--|-------------------|--|
| | more specific job descriptions | Structure | Formalization of corporate structure - people have more specific job descriptions |
| 41 | Service fee is higher | Processes | Service fee is higher; Scramble / to get organized / process / increased marketing & awareness (with target market); Maturity in systems / processes; Formalized hiring (2 or more). Process formalized. Defined description |
| 42 | Scramble / to get organized / process / increased marketing & awareness (with target market) | Processes | |
| 43 | Maturity in systems / processes | Processes | |
| 44 | Formalized hiring (2 or more). Process formalized. Defined description | Processes | |
| 45 | Expanded scope of work (Multiple products) | Products/Services | Expanded scope of work (Multiple products); Product fully commercialized; Diverse product line; Products/Services (3 - 5); Level of product development / stability; Scaling up production |
| 46 | Product fully commercialized | Products/Services | |
| 47 | Diverse product line | Products/Services | |
| 48 | Products/Services (3 - 5) | Products/Services | |
| 49 | Level of product development / stability | Products/Services | |
| 50 | Scaling up production | Products/Services | |
| 51 | Sales increasing | Sales | Sales increasing; \$500K to \$3 million sales; Certain amount of sales and revenue - achieved (users) traction |
| 52 | \$500K to \$3 million sales | Sales | |
| 53 | Certain amount of sales and revenue - achieved (users) traction | Sales | |
| 54 | Technology focus | Skills | Technology focus |

| | <u>Mature Stage Constructs</u> | <u>Main Categories</u> | <u>Total Constructs Per Category</u> |
|----|--|------------------------|--|
| 1 | No longer increasing annual revenue | Capital | No longer increasing annual revenue; Stable revenue stream; Higher than average revenue; Revenue (over \$1M); Profitable / less risk averse; Self sustaining in terms of revenue |
| 2 | Stable revenue stream | Capital | |
| 3 | Higher than average revenue | Capital | |
| 4 | Revenue (over \$1M) | Capital | |
| 5 | Profitable / less risk averse | Capital | |
| 6 | Self sustaining in terms of revenue | Capital | |
| 7 | Actively focused to avoid customer churn/turnover | Customers | Actively focused to avoid customer churn/turnover; Large customer base |
| 8 | Large customer base | Customers | |
| 9 | Consistent profitability (with a guesstimate of 5% to 30% annual growth) | Growth | Consistent profitability (with a guesstimate of 5% to 30% annual growth); Looking for new opportunities / revenue growth 1 to 3 %; Revenue growth is low (less than 10% growth); Smaller growth rate / large aggregate sales; Low growth rate; Stable year over year growth; No significant increase in revenue (~10% growth); Limited growth opportunities in primary markets (e.g. Microsoft entered games with XBox); Growth through acquisition; Growth through acquisition; "Easy marketing \$" / Budget / Awareness is high / 10% to 15% annual revenue growth; No significant increase in revenue (~10% growth); Limited growth opportunities in primary markets (e.g. Microsoft entered games with XBox); Growth through acquisition; Growth through |
| 10 | Looking for new opportunities / revenue growth 1 to 3 % | Growth | |
| 11 | Revenue growth is low (less than 10% growth) | Growth | |
| 12 | Smaller growth rate / large aggregate sales | Growth | |
| 13 | Low growth rate | Growth | |
| 14 | Stable year over year growth | Growth | |
| 15 | No significant increase in revenue (~10% growth) | Growth | |
| 16 | Limited growth opportunities in primary markets (e.g. Microsoft entered games with XBox) | Growth | |
| 17 | Growth through acquisition | Growth | |
| 18 | Growth through acquisition | Growth | |
| 19 | "Easy marketing \$" / Budget / Awareness is high / 10% to 15% annual revenue growth | Growth | |
| 20 | Growth rate 5 to 8 % | Growth | |

| | | | |
|----|--|--------------------------|--|
| | | | acquisition; "Easy marketing \$" / Budget / Awareness is high / 10% to 15% annual revenue growth; Growth rate 5 to 8 % |
| 21 | Market leader | Markets | Market leader; Floated publicly; From IPO to private equity; Publicly held (IP); Diverse in several market - more products; Expand into new markets, expand product line |
| 22 | Floated publicly | Markets | |
| 23 | From IPO to private equity | Markets | |
| 24 | Publicly held (IP) | Markets | |
| 25 | Diverse in several market - more products | Markets | |
| 26 | Expand into new markets, expand product line | Markets | |
| 27 | No significant increase (gradual increase in number of employees) | Number of Employees | No significant increase (gradual increase in number of employees); Size (over 100 employees); 20 employees; Team (500 plus); Hierarchy (upper management) / Top down approach / around 100 to 500 employees; Not actively hiring new employees; Number of employees (250 plus); Large employee numbers; Employees in 1000s; More number of employees; 10,000 employees |
| 28 | Size (over 100 employees) | Number of Employees | |
| 29 | 20 employees | Number of Employees | |
| 30 | Team (500 plus) | Number of Employees | |
| 31 | Hierarchy (upper management) / Top down approach / around 100 to 500 employees | Number of Employees | |
| 32 | Not actively hiring new employees | Number of Employees | |
| 33 | Number of employees (250 plus) | Number of Employees | |
| 34 | Large employee numbers | Number of Employees | |
| 35 | Employees in 1000s | Number of Employees | |
| 36 | More number of employees | Number of Employees | |
| 37 | 10,000 employees | Number of Employees | |
| 38 | "Bureaucracy" (high process / red tape) | Organizational Structure | "Bureaucracy" (high process / red tape); |
| 39 | Bureaucracy | Organizational | |

| | | | |
|----|---|--------------------------|---|
| | | Structure | Bureaucracy; |
| 40 | Thick walls | Organizational Structure | Thick walls; Group think / |
| 41 | Group think / Bureaucratic / Defined roadmap / Less impulse | Organizational Structure | Bureaucratic / Defined roadmap / Less impulse; |
| 42 | Departmentalized | Organizational Structure | Departmentalized; |
| 43 | Large enough to sustain all functions / Departments | Organizational Structure | Large enough to sustain all functions / Departments; |
| 44 | Static organizational structure (treat employees as interchangeable parts) | Organizational Structure | Static organizational structure (treat employees as interchangeable parts) |
| 45 | Solutions "less customizable" (standard) | Processes | Solutions "less customizable" (standard); |
| 46 | Mechanistic systems and processes (highly formal structures) | Processes | Mechanistic systems and processes (highly formal structures); |
| 47 | Weak signal's analysis (networks) | Processes | Weak signal's analysis (networks); |
| 48 | Goal driven | Processes | Goal driven |
| 49 | Mature products | Products/Services | Mature products; |
| 50 | No longer innovating a product or service | Products/Services | No longer innovating a product or service; |
| 51 | Products/Services (10) | Products/Services | Products/Services (10); |
| 52 | Product recognition / reputation - stable | Products/Services | Product recognition / reputation - stable |
| 53 | High sales | Sales | High sales |
| 54 | Leaders innovation (creating the market, defining innovation, be like the beaver) | Skills | Leaders innovation (creating the market, defining innovation, be like the beaver) |

| | <u>Decline Stage</u> | <u>Main Categories</u> | <u>Total Constructs Per Category</u> |
|----|---|------------------------|--|
| 1 | Revenues are decreasing | Capital | Revenues are decreasing; Loss of revenue (declining revenue for your products); Annual revenues are declining; Decreasing revenue; Revenue decline; Falling share price (if publicly listed); Revenue decline; 25% decrease in revenues; Valuation (decline valuation than previous one); Debt |
| 2 | Loss of revenue (declining revenue for your products) | Capital | |
| 3 | Annual revenues are declining | Capital | |
| 4 | Decreasing revenue | Capital | |
| 5 | Revenue decline | Capital | |
| 6 | Falling share price (if publicly listed) | Capital | |
| 7 | Revenue decline | Capital | |
| 8 | 25% decrease in revenues | Capital | |
| 9 | Valuation (decline valuation than previous one) | Capital | |
| 10 | Debt | Capital | |
| 11 | Customer support (declining) | Customers | Customer support (declining); Active users; Customer base dropping; Maintaining existing customers verses attracting significant new business |
| 12 | Active users | Customers | |
| 13 | Customer base dropping | Customers | |
| 14 | Maintaining existing customers verses attracting significant new business | Customers | |
| 15 | Year to year decrease in size | Growth | Year to year decrease in size; Growth rate decline / stagnant; Less traction than projected; Negative growth rate |
| 16 | Growth rate decline / stagnant | Growth | |
| 17 | Less traction than projected | Growth | |
| 18 | Negative growth rate | Growth | |
| 19 | Sun set market | Markets | Sun set market; Markets share is decreasing; Loss of market share for the product line; Shrinking primary market; Commoditized pricing |
| 20 | Markets share is decreasing | Markets | |
| 21 | Loss of market share for the product line | Markets | |
| 22 | Shrinking primary market | Markets | |
| 23 | Commoditized pricing (saturated) | Markets | |
| 24 | Inability to break into new markets | Markets | |
| 25 | Increasing competition | Markets | |

| | | | |
|----|---|--------------------------|--|
| | | | (saturated); Inability to break into new markets; Increasing competition |
| 26 | Large team (500 plus) that decreasing | Number of Employees | Large team (500 plus) that decreasing; PR management in crisis / Negative economic impact / 100 to 250 employees; Laying off (downsizing) employees; Job cuts; Lay offs and no cost efficiencies; Stable employee numbers (or negative); Negative hiring; Attrition; Attrition (employees); Attrition rate is higher |
| 27 | PR management in crisis / Negative economic impact / 100 to 250 employees | Number of Employees | |
| 28 | Laying off (downsizing) employees | Number of Employees | |
| 29 | Job cuts | Number of Employees | |
| 30 | Lay offs and no cost efficiencies | Number of Employees | |
| 31 | Stable employee numbers (or negative) | Number of Employees | |
| 32 | Negative hiring | Number of Employees | |
| 33 | Attrition | Number of Employees | |
| 34 | Attrition (employees) | Number of Employees | |
| 35 | Attrition rate is higher | Number of Employees | |
| 36 | Roles in organization become very rigid | Organizational Structure | Roles in organization become very rigid; Management heavy / Slow decisioning process; Politics / bureaucratic (more time justifying than doing) |
| 37 | Management heavy / Slow decisioning process | Organizational Structure | |
| 38 | Politics / bureaucratic (more time justifying than doing) | Organizational Structure | |
| 39 | Morale is low (everyone is upset / gossip) | Processes | Morale is low (everyone is upset / gossip); Unwilling to listen, losing touch and humility; Incremental versus disruptive innovation, loss of creativity; Right for disruption; Actively involved |
| 40 | Unwilling to listen, losing touch and humility | Processes | |
| 41 | Incremental versus disruptive innovation, loss of creativity | Processes | |
| 42 | Right for disruption | Processes | |
| 43 | Actively involved in an exit strategy | Processes | |

| | | | in an exit strategy |
|----|--|-------------------|---|
| 44 | Stale / Expired product set | Products/Services | Stale / Expired product set; Product no longer "cutting edge" (Market disappearing or being replaced); Products / Services becoming irrelevant; Year to year decrease in products/services; Products / Services becoming irrelevant; Year to year decrease in products/services; Reduce the scope of their product line (Losing customers, lack growth) |
| 45 | Product no longer "cutting edge" (Market disappearing or being replaced) | Products/Services | |
| 46 | Products / Services becoming irrelevant | Products/Services | |
| 47 | Year to year decrease in products/services | Products/Services | |
| 48 | Reduce the scope of their product line (Losing customers, lack growth) | Products/Services | |
| 49 | Falling sales / revenue | Sales | Falling sales / revenue; Sales decreasing; Year to year decrease in sales; Declining aggregate sales |
| 50 | Sales decreasing | Sales | |
| 51 | Year to year decrease in sales | Sales | |
| 52 | Declining aggregate sales | Sales | |
| 53 | Technologically falling behind | Skills | Technologically falling behind; Technology is irrelevant |
| 54 | Technology is irrelevant | Skills | |

Appendix D

Categorical Differentiating Constructs Among Various OLC Stages

| | Start-Up Stage | Growth Stage | Mature Stage | Decline Stage |
|----------------------------|---|--|--|--|
| Capital | Revenue (deficit/borrowing money); Dependent on investment for continued operation; Funding stage; Limited funding and revenue; Low assets / Capital (less than 1 million USD); Haven't found recurring annual revenue; No revenue; Revenue (less than \$100K); Outside funding; 25% to 50% revenue / user base annually; Trying seed capital | Revenue (enough money coming in); Not necessary dependent on investment for continued operation (revenues ~ expenses); Increasing revenue; Revenue consistency (20% or greater); Profit potential; Find recurring revenue (annual); Increasing in revenue; Capitalization / Product that is delivered; Revenue (\$100 - 250K); Relevant financial models (not substantiated) maximum operating capacity versus expected returns; Investment into company; Positive valuation; Capital outsourcing; Series A (already raised) venture capital (5 to 10 M dollars or 10 to 15 M dollars) | No longer increasing annual revenue; Stable revenue stream; Higher than average revenue; Revenue (over \$1M); Profitable / less risk averse; Self sustaining in terms of revenue | Revenues are decreasing; Loss of revenue (declining revenue for your products); Annual revenues are declining; Decreasing revenue; Revenue decline; Falling share price (if publicly listed); Revenue decline; 25% decrease in revenues; Valuation (decline valuation than previous one); Debt |
| Number of Employees | Small size / Employees (under 100); Size (less than 20); Number of employees (12); Small size / Employees (1 - 100); Small team (3 to 5); 1 to 4 founders; Less than 5 employees / Small management team; Team size (less than 10); Number of employees | Medium sized company / Employees (over 100); Scale of customers and employees (30 employees); 5 to 20 employees; Size (20 - 50 employees); More employees (2000); Established team (5 to 10); Employee count is 100; Increased hiring; 30 | No significant increase (gradual increase in number of employees); Size (over 100 employees); 20 employees; Team (500 plus); Hierarchy (upper management) / Top down approach / | Large team (500 plus) that decreasing; PR management in crisis / Negative economic impact / 100 to 250 employees; Laying off (downsizing) employees; Job cuts; Lay offs and no cost efficiencies; Stable employee numbers (or |

| | | | | |
|----------------------------|---|--|--|--|
| | (under 25 for start-up); Fluidity / Employees between 1 and 50 (at max); 10 or less people; Blurred accountabilities (everybody doing everything) / Employees 10 to 15 | to 100 employees; Bigger management team; Increasing number of employees | around 100 to 500 employees; Not actively hiring new employees; Number of employees (250 plus); Large employee numbers; Employees in 1000s; More number of employees; 10,000 employees | negative); Negative hiring; Attrition; Attrition (employees); Attrition rate is higher |
| Products / Services | Non commercialized product; Uncertainty of target markets / Beta testing; Product development / Customers (paying); Product is not mature (hasn't reached the market); Product(s) offered are subject to substantial change (pivoting); Minimum viable product (MVP); Products/Services (less than 3) | Expanded scope of work (Multiple products); Product fully commercialized; Diverse product line; Products/Services (3 - 5); Level of product development / stability; Scaling up production | Mature products; No longer innovating a product or service; Products/Services (10); Product recognition / reputation - stable | Stale / Expired product set; Product no longer "cutting edge" (Market disappearing or being replaced); Products / Services becoming irrelevant; Year to year decrease in products/services; Reduce the scope of their product line (Losing customers, lack growth) |
| Growth | High growth rate; Intends to grow; Growth rate / Aggregate sales | Sales growth - Inflection point; High growth rate; Investment required to sustain substantial growth / 300% to 2000% annual growth potential; Nearly 50% growth or maybe more; 20 % revenue growth Y/Y; 25% monthly to 100% growth annually; Growth rate is greater than 10% | Consistent profitability (with a guesstimate of 5% to 30% annual growth); Looking for new opportunities / revenue growth 1 to 3 %; Revenue growth is low (less than 10% growth); Smaller growth rate / large aggregate sales; Low growth | Year to year decrease in size; Growth rate decline / stagnant; Less traction than projected; Negative growth rate |

| | | | | |
|---------------------------------|---|--|--|---|
| | | | <p>rate; Stable year over year growth; No significant increase in revenue (~10% growth); Limited growth opportunities in primary markets (e.g. Microsoft entered games with XBox); Growth through acquisition; Growth through acquisition; "Easy marketing \$" / Budget / Awareness is high / 10% to 15% annual revenue growth; Growth rate 5 to 8 %</p> | |
| Organizational Structure | <p>Flat hierarchy; Privately owned; Roles in organization are fluid or poorly defined (people often do more than one type of task, and tasks change); Informal organization structure / culture; Response time is adaptable / flexible; Almost every job is multifaceted (multiple roles)</p> | <p>Devolution of management, hierarchy, but few levels (less than 5); Less flexible; Formalization of corporate structure - people have more specific job descriptions</p> | <p>"Bureaucracy" (high process / red tape); Bureaucracy; Thick walls; Group think / Bureaucratic / Defined roadmap / Less impulse; Departmentalized; Large enough to sustain all functions / Departments; Static organizational structure (treat employees as interchangeable parts)</p> | <p>Roles in organization become very rigid; Management heavy / Slow decisioning process; Politics / bureaucratic (more time justifying than doing</p> |
| Processes | <p>Lack of process; Small media presence</p> | <p>Service fee is higher; Scramble / to get organized / process / increased marketing & awareness (with target market); Maturity in systems / processes;</p> | <p>Solutions "less customizable" (standard); Mechanistic systems and processes (highly formal structures); Weak</p> | <p>Morale is low (everyone is upset / gossip); Unwilling to listen, losing touch and humility; Incremental versus disruptive innovation, loss of</p> |

| | | | | |
|------------------|--|--|--|---|
| | | Formalized hiring (2 or more). Process formalized. Defined description | signal's analysis (networks); Goal driven | creativity; Right for disruption; Actively involved in an exit strategy |
| Customers | None to few customers; Small but growing customer base | Increasing customer base; User base size is growing; Paying customers | Actively focused to avoid customer churn/turnover; Large customer base | Customer support (declining); Active users; Customer base dropping; Maintaining existing customers vs attracting significant new business |
| Markets | Speed to market; Haven't fully defined market (have just a general sense of it); Billion dollar market size; New to market; Focused market | Market defined / Adequate funding; Billion dollar market size | Market leader; Floated publicly; From IPO to private equity; Publicly held (IP); Diverse in several market - more products; Expand into new markets, expand product line | Sun set market; Markets share is decreasing; Loss of market share for the product line; Shrinking primary market; Commoditized pricing (saturated); Inability to break into new markets; Increasing competition |
| Skills | Technical knowledge (lower); Entrepreneur driven; One technology; Technology focus | Technology focus | Leaders innovation (creating the market, defining innovation, be like the beaver) | Technologically falling behind; Technology is irrelevant |
| Sales | Low sales; Less than \$500K sales | Sales increasing; \$500K to \$3 million sales; Certain amount of sales and revenue - achieved (users) traction | High sales | Falling sales / revenue; Sales decreasing; Year to year decrease in sales; Declining aggregate sales |

Appendix E

Repeated Measures Survey Design

UNIVERSITY OF
WATERLOO

How Information And Communications Technology (ICT) Firms Create 'Value'

INFORMATION LETTER

Dear Participant,

This is an invitation to participate in a research study. As a full-time PhD student in the Department of Management Science, Faculty of Engineering at the University of Waterloo, I am currently conducting research under the supervision of Professor Paul D. Guild toward an understanding of how ICT firms create value for their stakeholders.

Study Overview

The aim of this study is to gather estimates for different value creation attributes of ICT firms belonging to various development stages.

Your Involvement

If you agree to participate in this study, you will be asked to take part in an online survey. The survey includes questions about how ICT firms create value for their stakeholders at different organizational development stages. I would ask that any opinions expressed be your own. All of the data will be summarized and no individual will be identified from the summarized results.

This survey uses SurveyMonkey(TM) whose computer servers are located in the USA. Consequently, USA authorities under provisions of the Patriot Act may access this survey data.

This survey will take about **15 to 20 minutes**.

All information you provide is confidential and will be disposed of in two years time. The data, with no personal identifiers, collected from this study will be maintained on a password-protected computer.

The survey website temporarily collects your computer IP address to avoid duplicate responses but will not collect information that could identify you (such as machine identifiers).

Your name or position will not appear in any thesis or publications resulting from this study.

Online Study Participation

If you wish to participate, please visit the study website by clicking **NEXT** below.

Contact Information

If you have any questions regarding this study, or would like additional information about participation, please contact me at 1-519-888-4567 ext. 33998 or by email mushah@uwaterloo.ca. You can also contact supervisor Professor Paul D. Guild by telephone at 1-519-888-4567 ext. 84808 or by email at guild@uwaterloo.ca.

This project has been reviewed and received ethics clearance through a University of Waterloo Research Ethics Committee. However, the final decision about participation is yours. Participants who have concerns or questions about their involvement in the project may contact the Chief Ethics Officer, Office of Research Ethics at 519-888-4567, Ext. 36005 or maureen.nummelin@uwaterloo.ca.

Thank you in advance for your interest and assistance with this research.

Umair Shah

Next

CONSENT FORM

By completing this consent form, you are not waiving your legal rights or releasing the investigator(s) or involved institution(s) from their legal and professional responsibilities.

With full knowledge of all foregoing, I agree, of my own free will, to participate in this study

Yes

No

Prev

Next

ELIGIBILITY CRITERIA

Are you physically located in the region of United States of America or Canada?

Yes

No

Prev

Next

ELIGIBILITY CRITERIA

Are you affiliated, either full-time or part-time, with a for-profit business organization?

- Yes
- No

Prev

Next

How Information And Communications Technology (ICT) Firms Create 'Value'

ELIGIBILITY CRITERIA

Are you affiliated with an Information and Communications Technology (ICT) sector organization?

NOTE: ICT sector firms include, mobile, software, hardware, Internet, social interaction, and media related technology domains.

Yes

No

Prev

Next

ELIGIBILITY CRITERIA

The firm you are affiliated with operates in the region of United States of America or Canada?

Yes

No

Prev

Next

How Information And Communications Technology (ICT) Firms Create 'Value'

DEMOGRAPHIC INFORMATION

What are the ICT domains with which you are mainly focused on today? (Please check all of the relevant categories)

- | | |
|---|---|
| <input type="checkbox"/> Mobile | <input type="checkbox"/> Internet |
| <input type="checkbox"/> Software | <input type="checkbox"/> Social Interaction |
| <input type="checkbox"/> Hardware | <input type="checkbox"/> Media |
| <input type="checkbox"/> Other (please specify) | |

Which of the following options best describes your current role within the ICT sector? (Please check the one most relevant category)

- | | |
|--|---|
| <input type="radio"/> Analyst | <input type="radio"/> Software developer |
| <input type="radio"/> Business manager | <input type="radio"/> Director |
| <input type="radio"/> Market developer / Marketing coordinator | <input type="radio"/> Consultant |
| <input type="radio"/> Project manager | <input type="radio"/> Policy adviser / Policy maker |
| <input type="radio"/> Entrepreneur | <input type="radio"/> Product developer |
| <input type="radio"/> Industrial researcher | <input type="radio"/> Academic researcher |
| <input type="radio"/> Technician / Technical adviser | <input type="radio"/> CEO |
| <input type="radio"/> Other (please specify) | |

For how many years have you worked in the role indicated above?

Number of Years

How many years of total experience do you have in the ICT industry?

Number of Years

What is your highest educational level achieved? (Please check the one most relevant category)

- | | |
|--|---|
| <input type="radio"/> Less than high school | <input type="radio"/> MBA or equivalent degree |
| <input type="radio"/> High school | <input type="radio"/> Masters degree or equivalent graduate degree |
| <input type="radio"/> College diploma | <input type="radio"/> Doctoral degree or equivalent graduate degree |
| <input type="radio"/> Undergraduate degree | <input type="radio"/> Not Applicable |
| <input type="radio"/> Other (please specify) | |

Prev Next

How Information And Communications Technology (ICT) Firms Create 'Value'

DEMOGRAPHIC INFORMATION

What is your education and training background? *(Please check all of the relevant categories)*

- | | |
|---|--|
| <input type="checkbox"/> Engineering | <input type="checkbox"/> Social sciences |
| <input type="checkbox"/> Life sciences | <input type="checkbox"/> Mathematics |
| <input type="checkbox"/> Computer sciences | <input type="checkbox"/> Business |
| <input type="checkbox"/> Physical sciences | <input type="checkbox"/> Not Applicable |
| <input type="checkbox"/> Arts / Humanities | |
| <input type="checkbox"/> Other (please specify) | |

Please indicate the answer that best describes your age. *(Please check the one most relevant category)*

- | | |
|---|---|
| <input type="radio"/> I am under 20 years of age | <input type="radio"/> I am between 46 and 55 years of age |
| <input type="radio"/> I am between 20 and 25 years of age | <input type="radio"/> I am between 56 and 65 years of age |
| <input type="radio"/> I am between 26 and 35 years of age | <input type="radio"/> I am over 66 years of age |
| <input type="radio"/> I am between 36 and 45 years of age | <input type="radio"/> I prefer not to answer |

What is your gender?

- Female
 Male
 I prefer not to answer

Which of the following descriptors characterizes the organizations for which you work within the ICT industry? *(Please check the one most relevant category)*

- | | |
|---|--|
| <input type="radio"/> Non-Profit organization | <input type="radio"/> University / College |
| <input type="radio"/> For-profit organization | <input type="radio"/> Not Applicable |
| <input type="radio"/> Governmental organization | |
| <input type="radio"/> Other (please specify) | |

In which of the following jurisdictions does your organization operate? *(Please check all of the relevant categories)*

- | | |
|---|--|
| <input type="checkbox"/> Asia | <input type="checkbox"/> South America |
| <input type="checkbox"/> Europe | <input type="checkbox"/> Africa |
| <input type="checkbox"/> North America (Canada) | <input type="checkbox"/> Middle East |
| <input type="checkbox"/> North America (USA) | <input type="checkbox"/> Oceania-Australia |
| <input type="checkbox"/> North America (Mexico) | <input type="checkbox"/> Central America |
| <input type="checkbox"/> Other (please specify) | |

Prev Next

DEMOGRAPHIC INFORMATION

In what year was your company founded?

What are your company's annual net sales in dollars?

What is the approximate number of full-time employees in your company?

What is the approximate number of part-time employees in your company?

How much is your company's annual net sales growth expressed as a percentage? *(If you do not know the percentatge please answer not sure)*

Prev

Next

DEMOGRAPHIC INFORMATION

Which of the following categorizations best describe your company? (Please check the one most relevant category)

- Mainly a service provider
- Mainly a manufacturing enterprise
- Other (please specify)

How many products or services does your company offer? (Please check the one most relevant category)

- Only 1 product or service
- Between 2 and 5 products or services
- Between 6 and 10 products or services
- Between 11 and 15 products or services
- Between 16 and 20 products or services
- Over 20 products or services

On a scale of standardized products or services versus customized products or services, please indicate where your firm is located in terms of the level of product(s) or service(s) orientation?

| Standardized Products or Services | 2 | 3 | 4 | 5 | 6 | Customized Products or Services | Not Applicable |
|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|---------------------------------------|-----------------------|
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Prev

Next

How Information And Communications Technology (ICT) Firms Create 'Value'

DEFINITIONS OF ORGANIZATIONAL LIFE CYCLE (OLC) STAGES

NOTE: Please read the following definitions of the organizational life cycle stages and then answer the question below.

Start-Up Stage Firms

It is perceived that ICT organizations at this stage:

- Raise limited funds or investments to run business operations with less than a million dollars capital
- Employ a small team of up to 20 people, which in certain instances reaches a maximum size of 100 employees
- Intend to flourish with growth
- Adopt an informal organizational structure with multifaceted team roles
- Offer minimum viable products or services
- Generate low sales, have few paying customers, and possess limited technical skills
- Operate in newer markets and lack defined processes

Growth Stage Firms

It is perceived that ICT organizations at this stage:

- Raise enough funds to become independent to run business operations with 5 to 15 million dollar capital
- Employ a medium sized team of up to 100 people, which in certain instances reach a maximum size of 2000 employees
- Intend to flourish with growth at a rate of over 10% to 300% annually
- Adopt a formalized organizational structure with specific team roles
- Offer diversified lines of commercial products or services
- Generate adequate sales, and possess increased paying customers
- Operate in high potential markets and promote formalized processes

Mature Stage Firms

It is perceived that ICT organizations at this stage:

- Produce stable but higher revenue flows to become self-sustaining in businesses operations
- Employ large sized teams of over 100 people, which in certain instances reach a size of 10,000 employees
- Intend to flourish with growth at a typical steady rate of less than 10% annually
- Adopt a bureaucratic organizational structure with outlined departmental roles
- Offer well established lines of products or services
- Generate high sales, and possess large customer base
- Often operate in publicly held markets and promote highly formal, goal driven processes

Which of the following descriptors best characterize your expertise in relation to ICT business enterprises?

- Specialized knowledge of **start-up** stage business enterprise
- Specialized knowledge of **growth** stage business enterprise
- Specialized knowledge of **mature** stage business enterprise
- Not Applicable

Prev

Next

How Information And Communications Technology (ICT) Firms Create 'Value'

DEFINITION OF BUSINESS STAKEHOLDERS

NOTE: Please read the following definition of business stakeholders and then answer the question below.

Business Stakeholders

Generally speaking, managers and entrepreneurs consider the interests of "those groups and individuals who can affect (or be affected by) their activities" as their legitimate stakeholders (Freeman, 1984; Donaldson & Preston, 1995).

The list of business stakeholders include:

- Employees
- Customers
- Financiers
- Suppliers
- Communities
- Environment
- Government
- Non-Governmental Organizations (NGOs)
- Trade Associations

In terms of the importance of stakeholders to your organization, please rate the following:

| | Least Important | 2 | 3 | 4 | 5 | 6 | Most Important | Not Applicable |
|---------------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Government | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Employees | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Environment | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Trade Associations | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Non-Governmental Organizations (NGOs) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Communities | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Financiers | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Customers | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Suppliers | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Prev

Next

How Information And Communications Technology (ICT) Firms Create 'Value'

UNDERSTANDING OF START-UP STAGE FIRMS

NOTE: Please read the following characteristics of start-up stage firms and then answer the questions below.

Start-Up Stage Firms

It is perceived that ICT organizations at this stage:

- Raise limited funds or investments to run business operations with less than a million dollars capital
- Employ a small team of up to 20 people, which in certain instances reaches a maximum size of 100 employees
- Intend to flourish with growth
- Adopt an informal organizational structure with multifaceted team roles
- Offer minimum viable products or services
- Generate low sales, have few paying customers, and possess limited technical skills
- Operate in newer markets and lack defined processes

What are your judgements about typical start-up stage firms in terms of their following characteristics?

| | Not At All | 2 | 3 | 4 | 5 | 6 | A Great Deal | Not Applicable |
|--------------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Shorter Term Focus | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Uni-Stakeholder Focus | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Focus on Practical Implications | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Competitive Focus | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Focus on Capital for Firm | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Focus on Firm Reputation | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Focus on Theoretical Implications | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Focus on Employees / Human Resources | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Cooperative Focus | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Focus on Firm Purpose | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Focus on Developing New Skills | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Multi-Stakeholder Focus | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Focus on Firm Growth | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Focus on Societal Benefits | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Longer Term Focus | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Focus on Firm Revenues | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Focus on Applying Existing Skills | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Focus on Environmental Concerns | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Focus on Firm Profits | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Prev

Next

How Information And Communications Technology (ICT) Firms Create 'Value'

UNDERSTANDING OF GROWTH STAGE FIRMS

NOTE: Please read the following characteristics of growth stage firms and then answer the questions below.

Growth Stage Firms

It is perceived that ICT organizations at this stage:

- Raise enough funds to become independent to run business operations with 5 to 15 million dollar capital
- Employ a medium sized team of up to 100 people, which in certain instances reach a maximum size of 2000 employees
- Intend to flourish with growth at a rate of over 10% to 300% annually
- Adopt a formalized organizational structure with specific team roles
- Offer diversified lines of commercial products or services
- Generate adequate sales, and possess increased paying customers
- Operate in high potential markets and promote formalized processes

What are your judgements about typical growth stage firms in terms of their following characteristics?

| | Not At All | 2 | 3 | 4 | 5 | 6 | A Great Deal | Not Applicable |
|--------------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Focus on Firm Profits | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Focus on Firm Revenues | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Focus on Employees / Human Resources | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Focus on Firm Growth | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Focus on Applying Existing Skills | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Focus on Theoretical Implications | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Focus on Capital for Firm | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Longer Term Focus | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Focus on Environmental Concerns | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Cooperative Focus | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Competitive Focus | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Focus on Practical Implications | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Shorter Term Focus | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Focus on Societal Benefits | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Focus on Developing New Skills | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Uni-Stakeholder Focus | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Focus on Firm Purpose | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Focus on Firm Reputation | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Multi-Stakeholder Focus | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Prev Next

How Information And Communications Technology (ICT) Firms Create 'Value'

UNDERSTANDING OF MATURE STAGE FIRMS

NOTE: Please read the following characteristics of mature stage firms and then answer the questions below.

Mature Stage Firms

It is perceived that ICT organizations at this stage:

- Produce stable but higher revenue flows to become self-sustaining in businesses operations
- Employ large sized teams of over 100 people, which in certain instances reach a size of 10,000 employees
- Intend to flourish with growth at a typical steady rate of less than 10% annually
- Adopt a bureaucratic organizational structure with outlined departmental roles
- Offer well established lines of products or services
- Generate high sales, and possess large customer base
- Often operate in publicly held markets and promote highly formal, goal driven processes

What are your judgements about typical mature stage firms in terms of their following characteristics?

| | Not At All | 2 | 3 | 4 | 5 | 6 | A Great Deal | Not Applicable |
|--------------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Focus on Capital for Firm | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Uni-Stakeholder Focus | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Focus on Firm Revenues | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Focus on Societal Benefits | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Focus on Firm Profits | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Multi-Stakeholder Focus | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Competitive Focus | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Focus on Applying Existing Skills | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Focus on Developing New Skills | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Focus on Practical Implications | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Focus on Theoretical Implications | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Focus on Employees / Human Resources | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Focus on Firm Growth | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Shorter Term Focus | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Cooperative Focus | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Longer Term Focus | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Focus on Firm Purpose | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Focus on Environmental Concerns | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Focus on Firm Reputation | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Prev

Next

When thinking about business-stakeholder engagement models, how could each of these be described as newer versus older paradigms?

| | Older Paradigm | 2 | 3 | 4 | 5 | 6 | Newer Paradigm | Don't Know |
|-------------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Creating Value For All Stakeholders | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Creating Shared Value | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Corporate Social Responsibility | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

*Thank
you*

Prev Next

FEEDBACK LETTER

Dear Participant,

I would like to thank you for your participation in this study. As a reminder, the purpose of this study is to investigate the application of various business models among ICT firms at different development stages.

The data collected through surveys will contribute to a better understanding of firms at different development stages creating 'value' for their stakeholders.

Please remember that any data pertaining to you as an individual participant will be kept confidential. Once all the data are collected and analyzed for this project, I plan on sharing this information with the research community through seminars, conferences, presentations, and journal articles. If you are interested in receiving more information regarding the results of this study, or if you have any questions or concerns, please contact me at either the phone number or email address listed at the bottom of the page.

I have also shared my faculty supervisor's name and contact information as an alternative person to contact if there are questions about the study results at the bottom of the page.

This project has been reviewed and received ethics clearance through a University of Waterloo Research Ethics Committee. However, the final decision about participation is yours.

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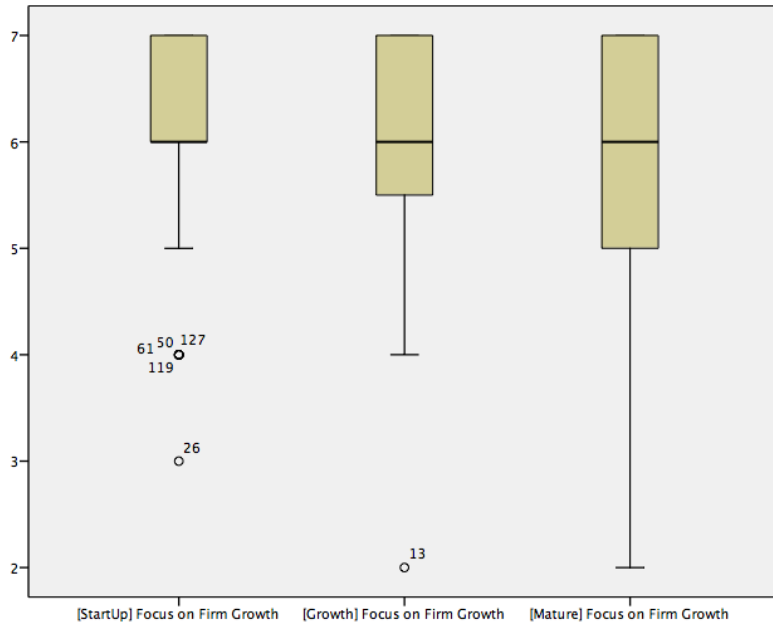
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Done

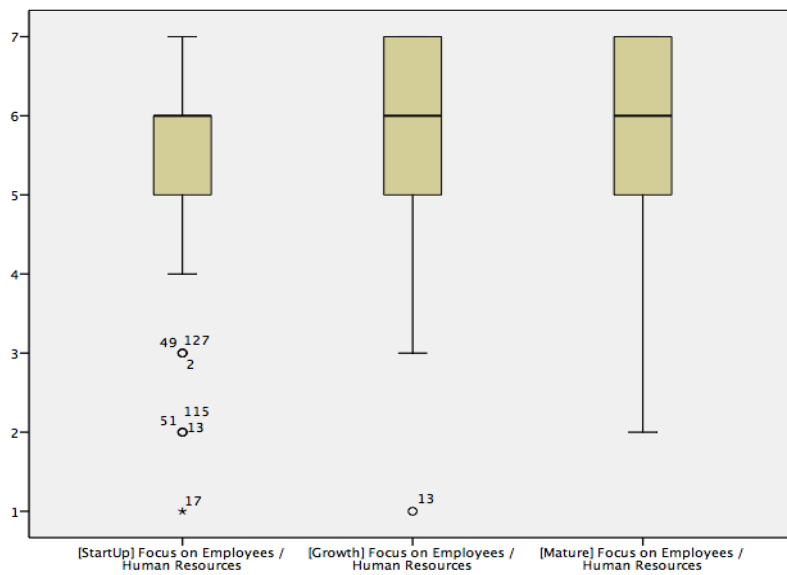
Appendix F

Determining Value-Creating Constructs Data Outliers

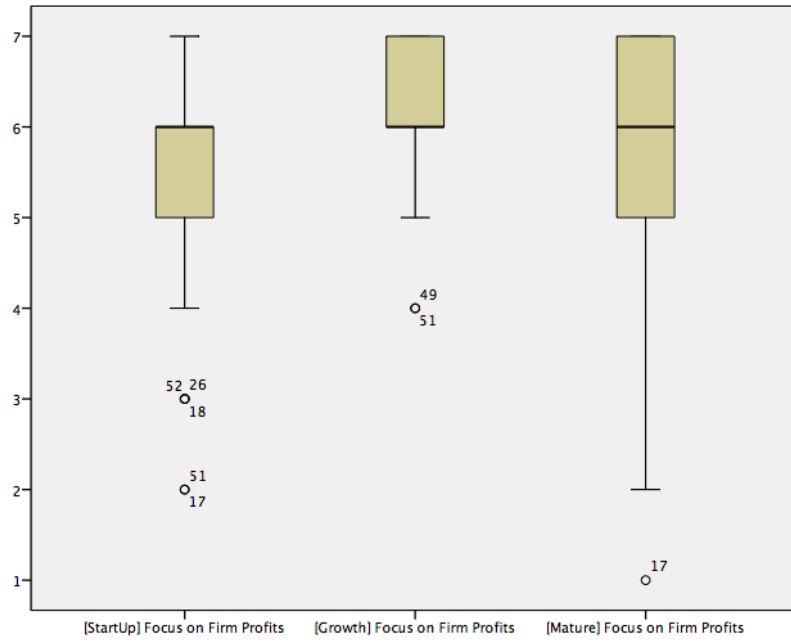
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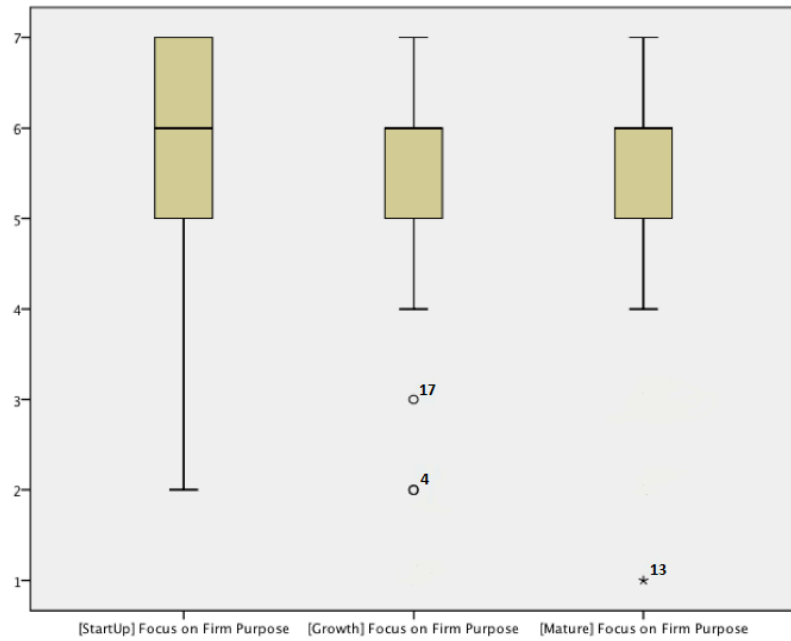
Focus on Employees / Human Resources



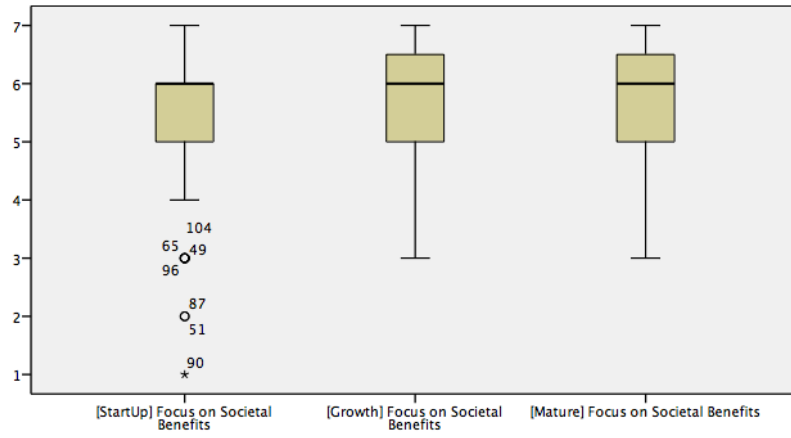
Focus on Firm Profits



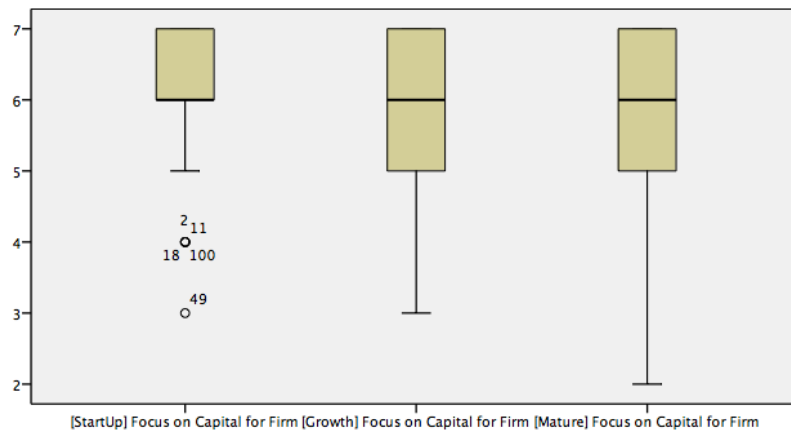
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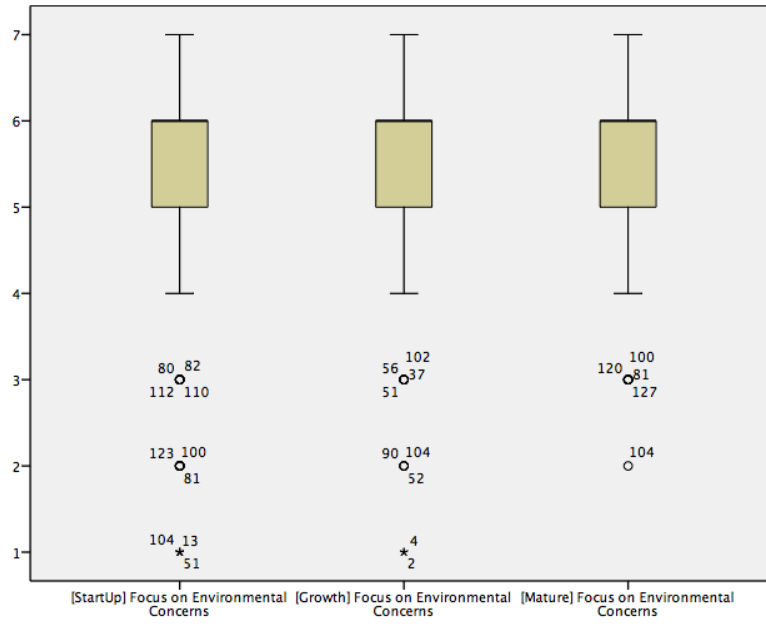
Focus on Societal Benefits



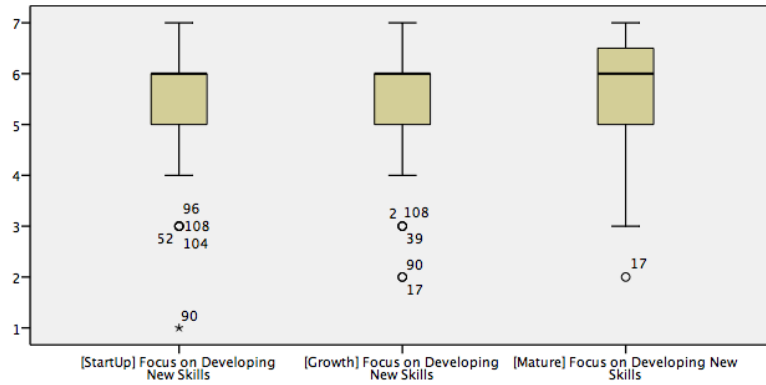
Focus on Capital for Firm



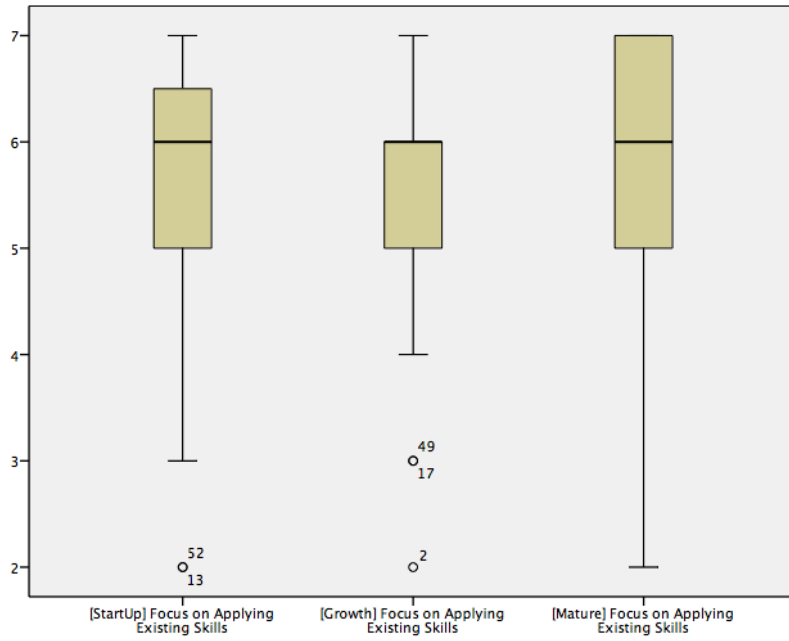
Focus on Environmental Concerns



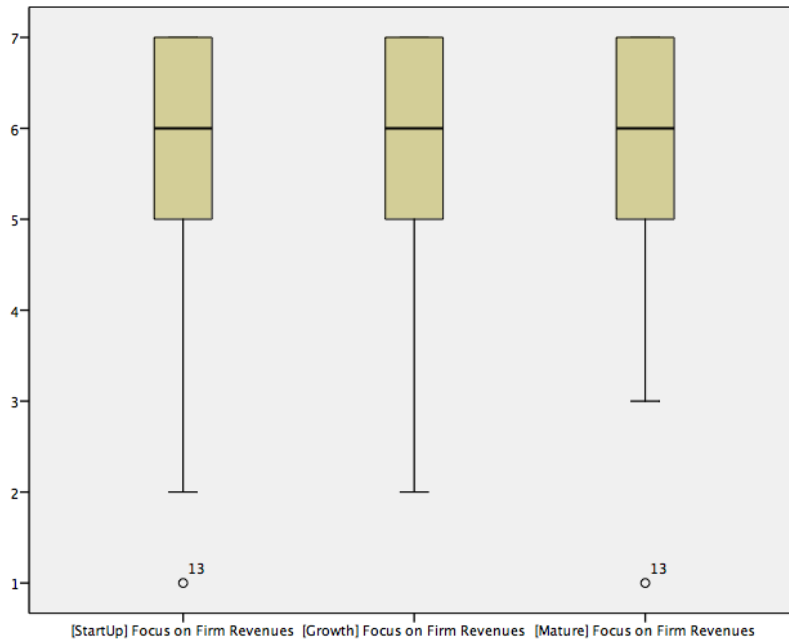
Focus on Developing New Skills



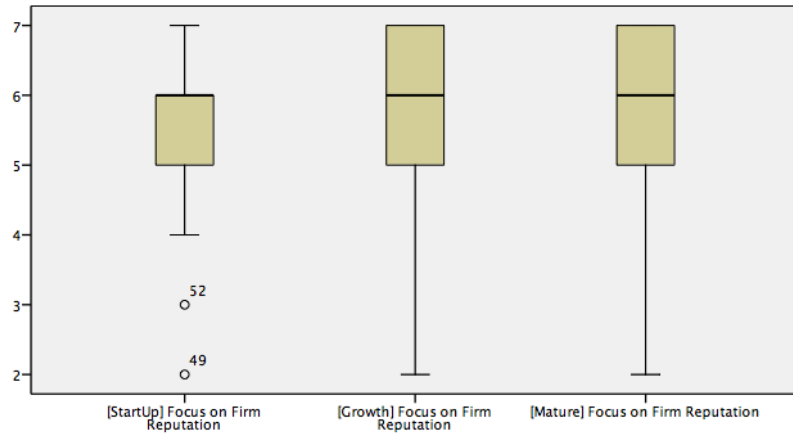
Focus on Applying Existing Skills



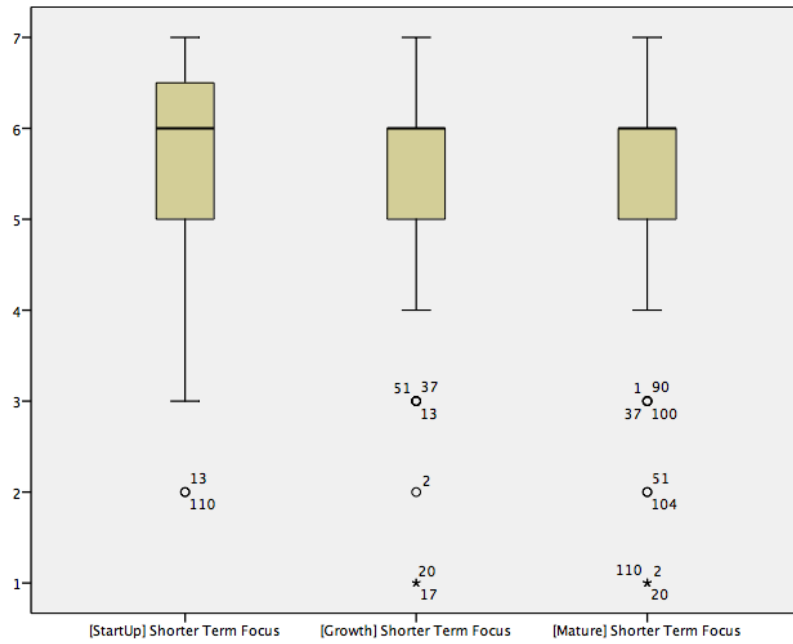
Focus on Firm Revenues



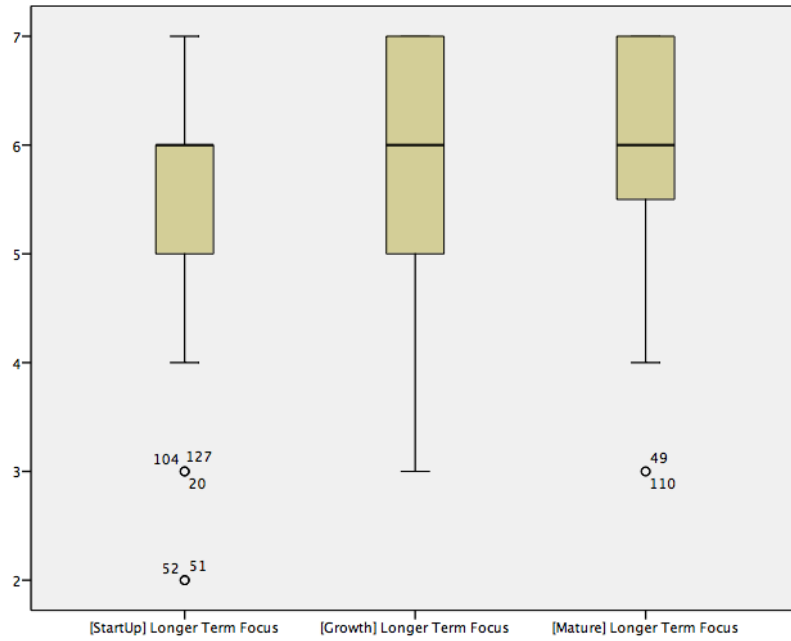
Focus on Firm Reputation



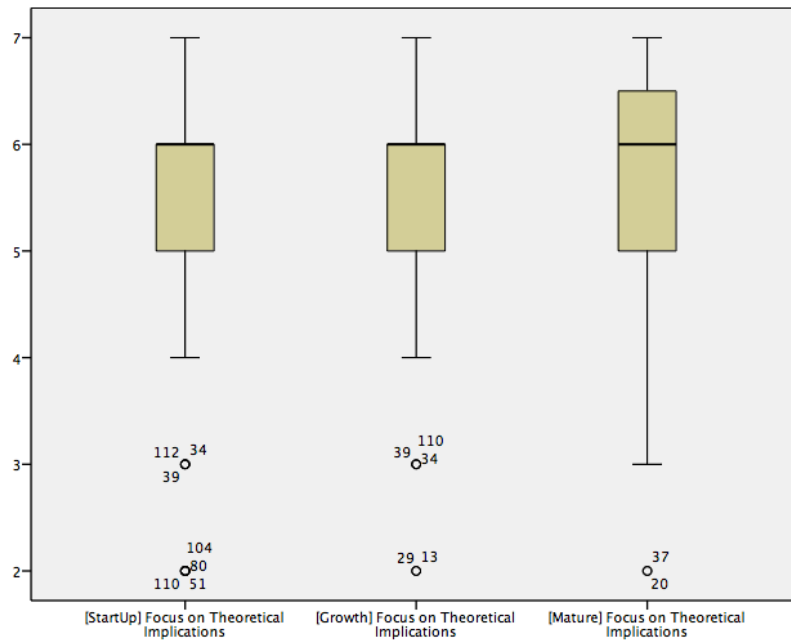
Shorter Term Focus



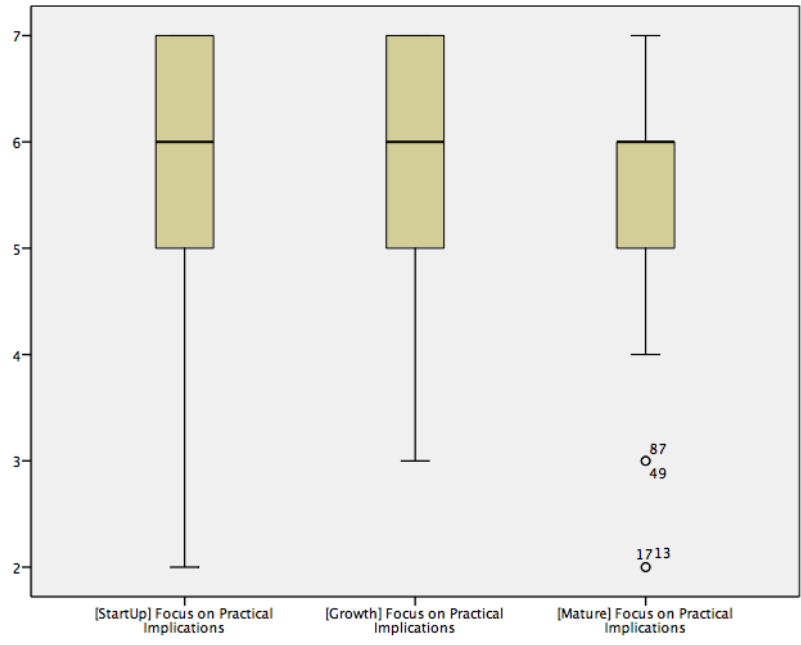
Longer Term Focus



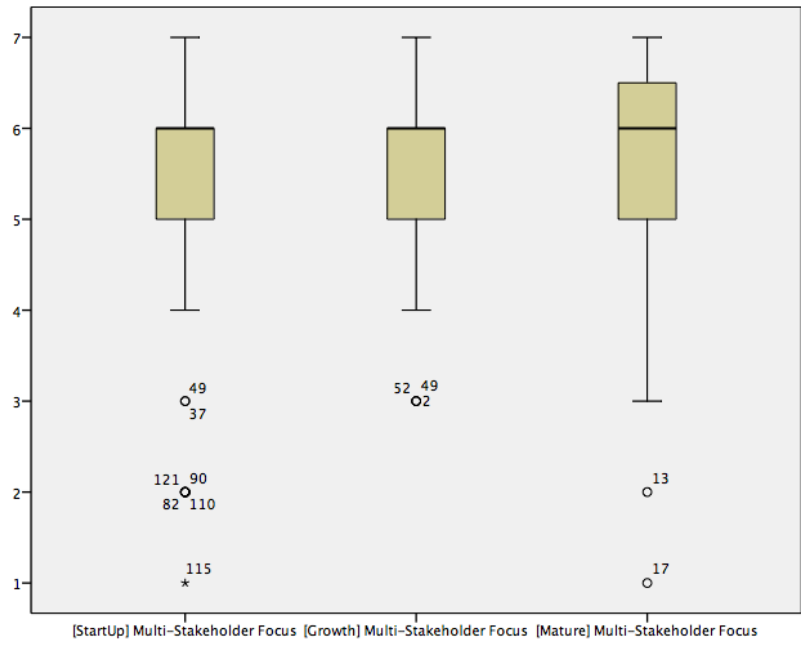
Focus on Theoretical Implications



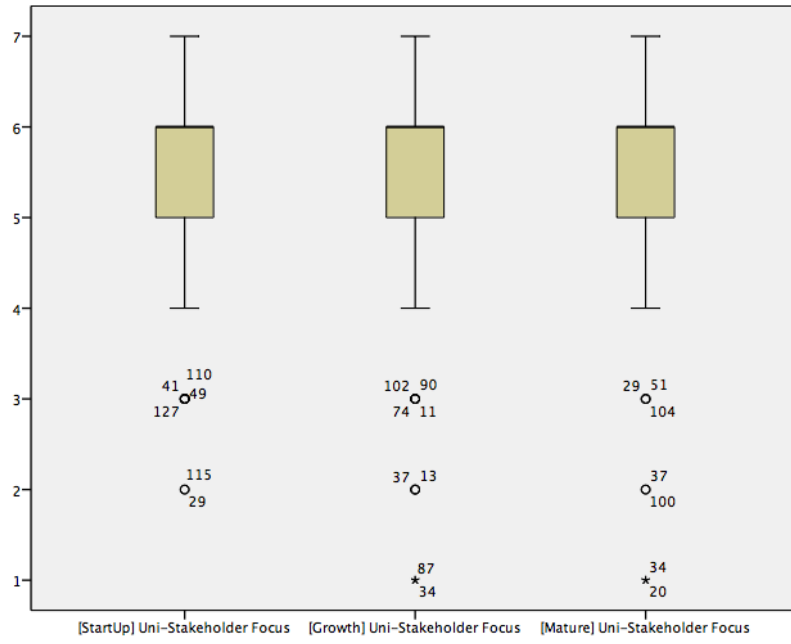
Focus on Practical Implications



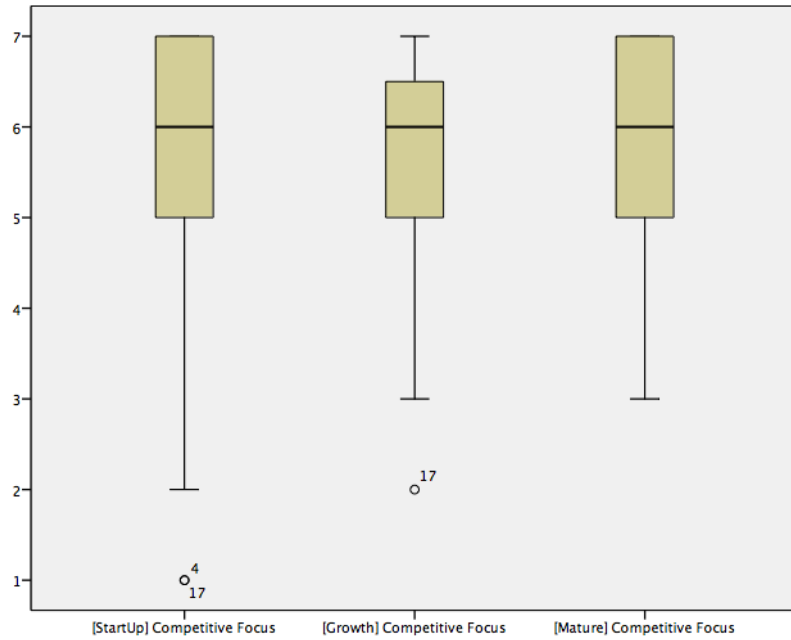
Multi-Stakeholder Focus



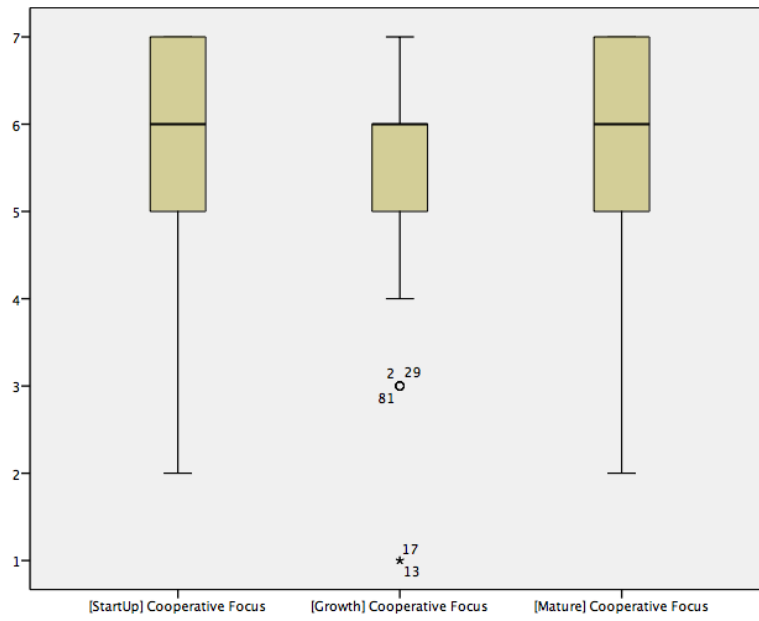
Uni-Stakeholder Focus



Competitive Focus



Cooperative Focus



Extreme Outliers

We graphically checked the box-plots for any extreme outliers for value-creating construct data points. These data points are identified by ‘asterisk’ (*) beside them in the graphs mentioned above.

Comparison Of Results – Before And After Transformation Of The Data Set By Removing The Extreme Outliers

Focus of Employees / Human Resources (Before)

Tests of Within-Subjects Effects

Measure: Employees / HR

| Source | | Type III Sum of Squares | df | Mean Square | F | Sig. | Partial Eta Squared | Observed Power |
|--------------------|--------------------|-------------------------|---------|-------------|-------|------|---------------------|----------------|
| OLC Stages | Sphericity Assumed | 3.879 | 2 | 1.939 | 2.373 | .095 | .018 | .477 |
| | Greenhouse-Geisser | 3.879 | 1.915 | 2.025 | 2.373 | .098 | .018 | .466 |
| | Huynh-Feldt | 3.879 | 1.943 | 1.996 | 2.373 | .097 | .018 | .470 |
| | Lower-bound | 3.879 | 1.000 | 3.879 | 2.373 | .126 | .018 | .334 |
| Error (OLC Stages) | Sphericity Assumed | 214.121 | 262 | .817 | | | | |
| | Greenhouse-Geisser | 214.121 | 250.929 | .853 | | | | |
| | Huynh-Feldt | 214.121 | 254.567 | .841 | | | | |
| | Lower-bound | 214.121 | 131.000 | 1.635 | | | | |

Focus of Employees / Human Resources (After)

Tests of Within-Subjects Effects

Measure: Employees / HR

| Source | | Type III Sum of Squares | df | Mean Square | F | Sig. | Partial Eta Squared | Observed Power |
|--------------------|--------------------|-------------------------|---------|-------------|-------|------|---------------------|----------------|
| OLC Stages | Sphericity Assumed | 3.562 | 2 | 1.781 | 2.366 | .096 | .018 | .476 |
| | Greenhouse-Geisser | 3.562 | 1.915 | 1.860 | 2.366 | .098 | .018 | .465 |
| | Huynh-Feldt | 3.562 | 1.943 | 1.833 | 2.366 | .098 | .018 | .469 |
| | Lower-bound | 3.562 | 1.000 | 3.562 | 2.366 | .126 | .018 | .333 |
| Error (OLC Stages) | Sphericity Assumed | 195.771 | 260 | .753 | | | | |
| | Greenhouse-Geisser | 195.771 | 248.951 | .786 | | | | |
| | Huynh-Feldt | 195.771 | 252.587 | .775 | | | | |
| | Lower-bound | 195.771 | 130.000 | 1.506 | | | | |

Focus on Firm Purpose (Before)³⁶

Tests of Within-Subjects Effects

Measure: Firm Purpose

| Source | | Type III Sum of Squares | df | Mean Square | F | Sig. | Partial Eta Squared | Observed Power |
|--------------------|--------------------|-------------------------|---------|-------------|-------|------|---------------------|----------------|
| OLC Stages | Sphericity Assumed | 1.854 | 2 | .927 | 1.213 | .299 | .009 | .264 |
| | Greenhouse-Geisser | 1.854 | 1.909 | .971 | 1.213 | .298 | .009 | .258 |
| | Huynh-Feldt | 1.854 | 1.936 | .957 | 1.213 | .298 | .009 | .260 |
| | Lower-bound | 1.854 | 1.000 | 1.854 | 1.213 | .273 | .009 | .194 |
| Error (OLC Stages) | Sphericity Assumed | 200.146 | 262 | .764 | | | | |
| | Greenhouse-Geisser | 200.146 | 250.062 | .800 | | | | |
| | Huynh-Feldt | 200.146 | 253.668 | .789 | | | | |
| | Lower-bound | 200.146 | 131.000 | 1.528 | | | | |

Focus on Firm Purpose (After)³⁷

Tests of Within-Subjects Effects

Measure: Firm Purpose

| Source | | Type III Sum of Squares | df | Mean Square | F | Sig. | Partial Eta Squared | Observed Power |
|--------------------|--------------------|-------------------------|---------|-------------|-------|------|---------------------|----------------|
| OLC Stages | Sphericity Assumed | 2.885 | 2 | 1.443 | 2.056 | .130 | .016 | .421 |
| | Greenhouse-Geisser | 2.885 | 1.865 | 1.547 | 2.056 | .134 | .016 | .406 |
| | Huynh-Feldt | 2.885 | 1.891 | 1.526 | 2.056 | .133 | .016 | .409 |
| | Lower-bound | 2.885 | 1.000 | 2.885 | 2.056 | .154 | .016 | .296 |
| Error (OLC Stages) | Sphericity Assumed | 182.448 | 260 | .702 | | | | |
| | Greenhouse-Geisser | 182.448 | 242.440 | .753 | | | | |
| | Huynh-Feldt | 182.448 | 245.831 | .742 | | | | |
| | Lower-bound | 182.448 | 130.000 | 1.403 | | | | |

³⁶ A clearly non-significant alpha level ($p > 0.25$) is satisfied for OLC stages on dependent variable, 'Focus on Firm Purpose' before removing the outliers.

³⁷ We acknowledge that 'Focus on Firm Purpose' did not achieve clearly non-significant alpha level ($p < 0.25$) in terms of OLC stages after removing the outliers.

Focus on Societal Benefits (Before)

Tests of Within-Subjects Effects

Measure: Societal Benefits

| Source | | Type III Sum of Squares | df | Mean Square | F | Sig. | Partial Eta Squared | Observed Power |
|--------------------|--------------------|-------------------------|---------|-------------|-------|------|---------------------|----------------|
| OLC Stages | Sphericity Assumed | 4.884 | 2 | 2.442 | 3.559 | .030 | .026 | .658 |
| | Greenhouse-Geisser | 4.884 | 1.994 | 2.449 | 3.559 | .030 | .026 | .657 |
| | Huynh-Feldt | 4.884 | 2.000 | 2.442 | 3.559 | .030 | .026 | .658 |
| | Lower-bound | 4.884 | 1.000 | 4.884 | 3.559 | .061 | .026 | .465 |
| Error (OLC Stages) | Sphericity Assumed | 179.783 | 262 | .686 | | | | |
| | Greenhouse-Geisser | 179.783 | 261.233 | .688 | | | | |
| | Huynh-Feldt | 179.783 | 262.000 | .686 | | | | |
| | Lower-bound | 179.783 | 131.000 | 1.372 | | | | |

Focus on Societal Benefits (After)

Tests of Within-Subjects Effects

Measure: Societal Benefits

| Source | | Type III Sum of Squares | df | Mean Square | F | Sig. | Partial Eta Squared | Observed Power |
|--------------------|--------------------|-------------------------|---------|-------------|-------|------|---------------------|----------------|
| OLC Stages | Sphericity Assumed | 4.321 | 2 | 2.160 | 3.161 | .044 | .024 | .603 |
| | Greenhouse-Geisser | 4.321 | 1.996 | 2.165 | 3.161 | .044 | .024 | .602 |
| | Huynh-Feldt | 4.321 | 2.000 | 2.160 | 3.161 | .044 | .024 | .603 |
| | Lower-bound | 4.321 | 1.000 | 4.321 | 3.161 | .078 | .024 | .423 |
| Error (OLC Stages) | Sphericity Assumed | 177.679 | 260 | .683 | | | | |
| | Greenhouse-Geisser | 177.679 | 259.494 | .685 | | | | |
| | Huynh-Feldt | 177.679 | 260.000 | .683 | | | | |
| | Lower-bound | 177.679 | 130.000 | 1.367 | | | | |

Focus on Environmental Concerns (Before)³⁸

Tests of Within-Subjects Effects

Measure: Environmental Concerns

| Source | | Type III Sum of Squares | df | Mean Square | F | Sig. | Partial Eta Squared | Observed Power |
|--------------------|--------------------|-------------------------|---------|-------------|-------|------|---------------------|----------------|
| OLC Stages | Sphericity Assumed | 4.005 | 2 | 2.003 | 1.938 | .146 | .015 | .400 |
| | Greenhouse-Geisser | 4.005 | 1.909 | 2.098 | 1.938 | .148 | .015 | .390 |
| | Huynh-Feldt | 4.005 | 1.937 | 2.068 | 1.938 | .147 | .015 | .393 |
| | Lower-bound | 4.005 | 1.000 | 4.005 | 1.938 | .166 | .015 | .282 |
| Error (OLC Stages) | Sphericity Assumed | 270.662 | 262 | 1.033 | | | | |
| | Greenhouse-Geisser | 270.662 | 250.105 | 1.082 | | | | |
| | Huynh-Feldt | 270.662 | 253.711 | 1.067 | | | | |
| | Lower-bound | 270.662 | 131.000 | 2.066 | | | | |

Focus on Environmental Concerns (After)³⁹

Tests of Within-Subjects Effects

Measure: Environmental Concerns

| Source | | Type III Sum of Squares | df | Mean Square | F | Sig. | Partial Eta Squared | Observed Power |
|--------------------|--------------------|-------------------------|---------|-------------|------|------|---------------------|----------------|
| OLC Stages | Sphericity Assumed | 1.486 | 2 | .743 | .892 | .411 | .007 | .203 |
| | Greenhouse-Geisser | 1.486 | 1.887 | .787 | .892 | .406 | .007 | .198 |
| | Huynh-Feldt | 1.486 | 1.915 | .776 | .892 | .407 | .007 | .199 |
| | Lower-bound | 1.486 | 1.000 | 1.486 | .892 | .347 | .007 | .155 |
| Error (OLC Stages) | Sphericity Assumed | 209.848 | 252 | .833 | | | | |
| | Greenhouse-Geisser | 209.848 | 237.825 | .882 | | | | |
| | Huynh-Feldt | 209.848 | 241.327 | .870 | | | | |
| | Lower-bound | 209.848 | 126.000 | 1.665 | | | | |

³⁸ A clearly non-significant alpha level ($p > 0.25$) is not achieved for OLC stages on dependent variable, 'Focus on Environmental Concerns' before removing the outliers.

³⁹ We acknowledge that 'Focus on Environmental Concerns' satisfy the clearly non-significant alpha level ($p > 0.25$) in terms of OLC stages after removing the outliers.

Developing New Skills (Before)

Tests of Within-Subjects Effects

Measure: Developing New Skills

| Source | | Type III Sum of Squares | df | Mean Square | F | Sig. | Partial Eta Squared | Observed Power |
|--------------------|--------------------|-------------------------|---------|-------------|------|------|---------------------|----------------|
| OLC Stages | Sphericity Assumed | .641 | 2 | .321 | .465 | .629 | .004 | .126 |
| | Greenhouse-Geisser | .641 | 1.841 | .348 | .465 | .613 | .004 | .122 |
| | Huynh-Feldt | .641 | 1.866 | .344 | .465 | .615 | .004 | .123 |
| | Lower-bound | .641 | 1.000 | .641 | .465 | .496 | .004 | .104 |
| Error (OLC Stages) | Sphericity Assumed | 180.692 | 262 | .690 | | | | |
| | Greenhouse-Geisser | 180.692 | 241.179 | .749 | | | | |
| | Huynh-Feldt | 180.692 | 244.455 | .739 | | | | |
| | Lower-bound | 180.692 | 131.000 | 1.379 | | | | |

Developing New Skills (After)

Tests of Within-Subjects Effects

Measure: Developing New Skills

| Source | | Type III Sum of Squares | df | Mean Square | F | Sig. | Partial Eta Squared | Observed Power |
|--------------------|--------------------|-------------------------|---------|-------------|------|------|---------------------|----------------|
| OLC Stages | Sphericity Assumed | .427 | 2 | .214 | .323 | .725 | .002 | .101 |
| | Greenhouse-Geisser | .427 | 1.871 | .228 | .323 | .710 | .002 | .100 |
| | Huynh-Feldt | .427 | 1.898 | .225 | .323 | .713 | .002 | .100 |
| | Lower-bound | .427 | 1.000 | .427 | .323 | .571 | .002 | .087 |
| Error (OLC Stages) | Sphericity Assumed | 172.239 | 260 | .662 | | | | |
| | Greenhouse-Geisser | 172.239 | 243.279 | .708 | | | | |
| | Huynh-Feldt | 172.239 | 246.702 | .698 | | | | |
| | Lower-bound | 172.239 | 130.000 | 1.325 | | | | |

Shorter Term Focus (Before)

Tests of Within-Subjects Effects

Measure: Shorter Term

| Source | | Type III Sum of Squares | df | Mean Square | F | Sig. | Partial Eta Squared | Observed Power |
|--------------------|--------------------|-------------------------|---------|-------------|-------|------|---------------------|----------------|
| OLC Stages | Sphericity Assumed | 2.202 | 2 | 1.101 | 1.170 | .312 | .009 | .256 |
| | Greenhouse-Geisser | 2.202 | 1.897 | 1.161 | 1.170 | .310 | .009 | .249 |
| | Huynh-Feldt | 2.202 | 1.925 | 1.144 | 1.170 | .311 | .009 | .251 |
| | Lower-bound | 2.202 | 1.000 | 2.202 | 1.170 | .281 | .009 | .189 |
| Error (OLC Stages) | Sphericity Assumed | 246.465 | 262 | .941 | | | | |
| | Greenhouse-Geisser | 246.465 | 248.563 | .992 | | | | |
| | Huynh-Feldt | 246.465 | 252.112 | .978 | | | | |
| | Lower-bound | 246.465 | 131.000 | 1.881 | | | | |

Shorter Term Focus (After)

Tests of Within-Subjects Effects

Measure: Shorter Term

| Source | | Type III Sum of Squares | df | Mean Square | F | Sig. | Partial Eta Squared | Observed Power |
|--------------------|--------------------|-------------------------|---------|-------------|------|------|---------------------|----------------|
| OLC Stages | Sphericity Assumed | 1.193 | 2 | .596 | .791 | .454 | .006 | .184 |
| | Greenhouse-Geisser | 1.193 | 1.892 | .630 | .791 | .448 | .006 | .180 |
| | Huynh-Feldt | 1.193 | 1.919 | .621 | .791 | .450 | .006 | .181 |
| | Lower-bound | 1.193 | 1.000 | 1.193 | .791 | .375 | .006 | .143 |
| Error (OLC Stages) | Sphericity Assumed | 191.474 | 254 | .754 | | | | |
| | Greenhouse-Geisser | 191.474 | 240.253 | .797 | | | | |
| | Huynh-Feldt | 191.474 | 243.776 | .785 | | | | |
| | Lower-bound | 191.474 | 127.000 | 1.508 | | | | |

Multi-Stakeholder Focus (Before)⁴⁰

Tests of Within-Subjects Effects

Measure: Multi-Stakeholder

| Source | | Type III Sum of Squares | df | Mean Square | F | Sig. | Partial Eta Squared | Observed Power |
|--------------------|--------------------|-------------------------|---------|-------------|-------|------|---------------------|----------------|
| OLC Stages | Sphericity Assumed | 3.551 | 2 | 1.775 | 1.842 | .160 | .014 | .382 |
| | Greenhouse-Geisser | 3.551 | 1.938 | 1.832 | 1.842 | .162 | .014 | .376 |
| | Huynh-Feldt | 3.551 | 1.967 | 1.805 | 1.842 | .161 | .014 | .379 |
| | Lower-bound | 3.551 | 1.000 | 3.551 | 1.842 | .177 | .014 | .271 |
| Error (OLC Stages) | Sphericity Assumed | 252.449 | 262 | .964 | | | | |
| | Greenhouse-Geisser | 252.449 | 253.869 | .994 | | | | |
| | Huynh-Feldt | 252.449 | 257.618 | .980 | | | | |
| | Lower-bound | 252.449 | 131.000 | 1.927 | | | | |

Multi-Stakeholder Focus (After)⁴¹

Tests of Within-Subjects Effects

Measure: Multi-Stakeholder

| Source | | Type III Sum of Squares | df | Mean Square | F | Sig. | Partial Eta Squared | Observed Power |
|--------------------|--------------------|-------------------------|---------|-------------|-------|------|---------------------|----------------|
| OLC Stages | Sphericity Assumed | 2.580 | 2 | 1.290 | 1.382 | .253 | .011 | .296 |
| | Greenhouse-Geisser | 2.580 | 1.957 | 1.318 | 1.382 | .253 | .011 | .293 |
| | Huynh-Feldt | 2.580 | 1.987 | 1.299 | 1.382 | .253 | .011 | .295 |
| | Lower-bound | 2.580 | 1.000 | 2.580 | 1.382 | .242 | .011 | .215 |
| Error (OLC Stages) | Sphericity Assumed | 242.753 | 260 | .934 | | | | |
| | Greenhouse-Geisser | 242.753 | 254.423 | .954 | | | | |
| | Huynh-Feldt | 242.753 | 258.269 | .940 | | | | |
| | Lower-bound | 242.753 | 130.000 | 1.867 | | | | |

⁴⁰ A clearly non-significant alpha level ($p > 0.25$) is not achieved for OLC stages on dependent variable, 'Multi-Stakeholder Focus' before removing the outliers.

⁴¹ We acknowledge that 'Multi-Stakeholder Focus' satisfy the clearly non-significant alpha level ($p > 0.25$) in terms of OLC stages after removing the outliers.

Uni-Stakeholder Focus (Before)

Tests of Within-Subjects Effects

Measure: Uni-Stakeholder

| Source | | Type III Sum of Squares | df | Mean Square | F | Sig. | Partial Eta Squared | Observed Power |
|--------------------|--------------------|-------------------------|---------|-------------|------|------|---------------------|----------------|
| OLC Stages | Sphericity Assumed | .409 | 2 | .205 | .246 | .782 | .002 | .089 |
| | Greenhouse-Geisser | .409 | 1.952 | .210 | .246 | .776 | .002 | .088 |
| | Huynh-Feldt | .409 | 1.981 | .207 | .246 | .780 | .002 | .088 |
| | Lower-bound | .409 | 1.000 | .409 | .246 | .621 | .002 | .078 |
| Error (OLC Stages) | Sphericity Assumed | 217.591 | 262 | .830 | | | | |
| | Greenhouse-Geisser | 217.591 | 255.648 | .851 | | | | |
| | Huynh-Feldt | 217.591 | 259.465 | .839 | | | | |
| | Lower-bound | 217.591 | 131.000 | 1.661 | | | | |

Uni-Stakeholder Focus (After)

Tests of Within-Subjects Effects

Measure: Uni-Stakeholder

| Source | | Type III Sum of Squares | df | Mean Square | F | Sig. | Partial Eta Squared | Observed Power |
|--------------------|--------------------|-------------------------|---------|-------------|------|-------|---------------------|----------------|
| OLC Stages | Sphericity Assumed | .000 | 2 | .000 | .000 | 1.000 | .000 | .050 |
| | Greenhouse-Geisser | .000 | 1.966 | .000 | .000 | 1.000 | .000 | .050 |
| | Huynh-Feldt | .000 | 1.997 | .000 | .000 | 1.000 | .000 | .050 |
| | Lower-bound | .000 | 1.000 | .000 | .000 | 1.000 | .000 | .050 |
| Error (OLC Stages) | Sphericity Assumed | 190.667 | 256 | .745 | | | | |
| | Greenhouse-Geisser | 190.667 | 251.704 | .758 | | | | |
| | Huynh-Feldt | 190.667 | 255.597 | .746 | | | | |
| | Lower-bound | 190.667 | 128.000 | 1.490 | | | | |

Cooperative Focus (Before)

Tests of Within-Subjects Effects

Measure: Cooperative Focus

| Source | | Type III Sum of Squares | df | Mean Square | F | Sig. | Partial Eta Squared | Observed Power |
|--------------------|--------------------|-------------------------|---------|-------------|-------|------|---------------------|----------------|
| OLC Stages | Sphericity Assumed | 6.399 | 2 | 3.199 | 5.002 | .007 | .037 | .811 |
| | Greenhouse-Geisser | 6.399 | 1.948 | 3.286 | 5.002 | .008 | .037 | .803 |
| | Huynh-Feldt | 6.399 | 1.977 | 3.237 | 5.002 | .008 | .037 | .807 |
| | Lower-bound | 6.399 | 1.000 | 6.399 | 5.002 | .027 | .037 | .603 |
| Error (OLC Stages) | Sphericity Assumed | 167.601 | 262 | .640 | | | | |
| | Greenhouse-Geisser | 167.601 | 255.128 | .657 | | | | |
| | Huynh-Feldt | 167.601 | 258.925 | .647 | | | | |
| | Lower-bound | 167.601 | 131.000 | 1.279 | | | | |

Cooperative Focus (After)

Tests of Within-Subjects Effects

Measure: Cooperative Focus

| Source | | Type III Sum of Squares | df | Mean Square | F | Sig. | Partial Eta Squared | Observed Power |
|--------------------|--------------------|-------------------------|---------|-------------|-------|------|---------------------|----------------|
| OLC Stages | Sphericity Assumed | 4.615 | 2 | 2.308 | 4.003 | .019 | .030 | .713 |
| | Greenhouse-Geisser | 4.615 | 1.912 | 2.414 | 4.003 | .021 | .030 | .698 |
| | Huynh-Feldt | 4.615 | 1.940 | 2.379 | 4.003 | .020 | .030 | .703 |
| | Lower-bound | 4.615 | 1.000 | 4.615 | 4.003 | .048 | .030 | .510 |
| Error (OLC Stages) | Sphericity Assumed | 148.718 | 258 | .576 | | | | |
| | Greenhouse-Geisser | 148.718 | 246.639 | .603 | | | | |
| | Huynh-Feldt | 148.718 | 250.260 | .594 | | | | |
| | Lower-bound | 148.718 | 129.000 | 1.153 | | | | |

Appendix G

Determining Value-Creating Constructs Data Normality

| Tests of Normality | | | | | | | |
|--------------------------------------|---------------------------------|------|------|--------------|------|------|------|
| Conditions | Kolmogorov-Smirnov ^a | | | Shapiro-Wilk | | | |
| | Statistic | df | Sig. | Statistic | df | Sig. | |
| Focus on Firm Growth | Start-up | .242 | 132 | .000 | .835 | 132 | .000 |
| | Growth | .256 | 132 | .000 | .834 | 132 | .000 |
| | Mature | .208 | 132 | .000 | .838 | 132 | .000 |
| Focus on Employees / Human Resources | Start-up | .271 | 132 | .000 | .827 | 132 | .000 |
| | Growth | .231 | 132 | .000 | .852 | 132 | .000 |
| | Mature | .228 | 132 | .000 | .855 | 132 | .000 |
| Focus on Firm Profits | Start-up | .260 | 132 | .000 | .861 | 132 | .000 |
| | Growth | .253 | 132 | .000 | .832 | 132 | .000 |
| | Mature | .255 | 132 | .000 | .807 | 132 | .000 |
| Focus on Firm Purpose | Start-up | .258 | 132 | .000 | .811 | 132 | .000 |
| | Growth | .253 | 132 | .000 | .865 | 132 | .000 |
| | Mature | .306 | 132 | .000 | .789 | 132 | .000 |
| Focus on Societal Benefits | Start-up | .194 | 132 | .000 | .881 | 132 | .000 |
| | Growth | .241 | 132 | .000 | .875 | 132 | .000 |
| | Mature | .229 | 132 | .000 | .876 | 132 | .000 |
| Focus on Capital for Firm | Start-up | .254 | 132 | .000 | .839 | 132 | .000 |
| | Growth | .260 | 132 | .000 | .842 | 132 | .000 |
| | Mature | .272 | 132 | .000 | .830 | 132 | .000 |
| Focus on Environmental Concerns | Start-up | .257 | 132 | .000 | .850 | 132 | .000 |
| | Growth | .248 | 132 | .000 | .873 | 132 | .000 |
| | Mature | .222 | 132 | .000 | .885 | 132 | .000 |
| Focus on Developing New Skills | Start-up | .277 | 132 | .000 | .823 | 132 | .000 |
| | Growth | .268 | 132 | .000 | .835 | 132 | .000 |
| | Mature | .277 | 132 | .000 | .847 | 132 | .000 |
| Focus on Applying Existing Skills | Start-up | .294 | 132 | .000 | .821 | 132 | .000 |
| | Growth | .247 | 132 | .000 | .851 | 132 | .000 |
| | Mature | .259 | 132 | .000 | .822 | 132 | .000 |
| Focus on Firm Revenues | Start-up | .282 | 132 | .000 | .812 | 132 | .000 |
| | Growth | .226 | 132 | .000 | .827 | 132 | .000 |
| | Mature | .263 | 132 | .000 | .813 | 132 | .000 |
| Focus on Firm Reputation | Start-up | .241 | 132 | .000 | .869 | 132 | .000 |
| | Growth | .235 | 132 | .000 | .851 | 132 | .000 |
| | Mature | .256 | 132 | .000 | .820 | 132 | .000 |
| Shorter Term Focus | Start-up | .246 | 132 | .000 | .854 | 132 | .000 |
| | Growth | .269 | 132 | .000 | .826 | 132 | .000 |
| | Mature | .274 | 132 | .000 | .824 | 132 | .000 |
| Longer Term Focus | Start-up | .216 | 132 | .000 | .866 | 132 | .000 |
| | Growth | .265 | 132 | .000 | .854 | 132 | .000 |
| | Mature | .250 | 132 | .000 | .840 | 132 | .000 |
| Focus on Theoretical Implications | Start-up | .285 | 132 | .000 | .822 | 132 | .000 |
| | Growth | .221 | 132 | .000 | .888 | 132 | .000 |
| | Mature | .224 | 132 | .000 | .879 | 132 | .000 |
| Focus on Practical Implications | Start-up | .261 | 132 | .000 | .827 | 132 | .000 |
| | Growth | .218 | 132 | .000 | .864 | 132 | .000 |
| | Mature | .243 | 132 | .000 | .845 | 132 | .000 |
| Multi-Stakeholder Focus | Start-up | .283 | 132 | .000 | .819 | 132 | .000 |
| | Growth | .235 | 132 | .000 | .875 | 132 | .000 |
| | Mature | .215 | 132 | .000 | .847 | 132 | .000 |
| Uni-Stakeholder Focus | Start-up | .234 | 132 | .000 | .881 | 132 | .000 |
| | Growth | .257 | 132 | .000 | .856 | 132 | .000 |
| | Mature | .227 | 132 | .000 | .820 | 132 | .000 |
| Competitive Focus | Start-up | .266 | 132 | .000 | .814 | 132 | .000 |
| | Growth | .274 | 132 | .000 | .856 | 132 | .000 |
| | Mature | .245 | 132 | .000 | .860 | 132 | .000 |
| Cooperative Focus | Start-up | .249 | 132 | .000 | .851 | 132 | .000 |
| | Growth | .236 | 132 | .000 | .828 | 132 | .000 |
| | Mature | .242 | 132 | .000 | .837 | 132 | .000 |

a. Lilliefors Significance Correction

Appendix H

Comparison With Equal Sample Sizes In Each Self Reported OLC Group

Tests of Between-Subjects Effects

Transformed Variable: Average

| Source | Measure | Type III Sum of Squares | df | Mean Square | F | Sig. |
|--------------------------|-----------------------------------|-------------------------|----|-------------|-------|------|
| Self Reported OLC Stages | Focus on Firm Growth | 4.222 | 2 | 2.111 | 1.390 | .255 |
| | Focus on Employees / HR | .151 | 2 | .075 | .035 | .965 |
| | Focus on Firm Profits | .579 | 2 | .290 | .187 | .830 |
| | Focus on Firm Purpose | 2.198 | 2 | 1.099 | .763 | .470 |
| | Focus on Societal Benefits | .627 | 2 | .313 | .124 | .884 |
| | Focus on Capital for Firm | .500 | 2 | .250 | .175 | .840 |
| | Focus on Environmental Concerns | 2.000 | 2 | 1.000 | .360 | .699 |
| | Focus on Developing New Skills | 5.167 | 2 | 2.583 | 1.393 | .254 |
| | Focus on Applying Existing Skills | 2.167 | 2 | 1.083 | .870 | .423 |
| | Focus on Firm Revenues | 1.167 | 2 | .583 | .256 | .774 |
| | Focus on Firm Reputation | 1.437 | 2 | .718 | .435 | .649 |
| | Shorter Term Focus | 2.310 | 2 | 1.155 | .467 | .629 |
| | Longer Term Focus | 4.389 | 2 | 2.194 | 1.483 | .233 |
| | Focus on Theoretical Implications | 4.817 | 2 | 2.409 | .926 | .400 |
| | Focus on Practical Implications | .889 | 2 | .444 | .237 | .790 |
| | Multi-Stakeholder Focus | .500 | 2 | .250 | .124 | .883 |
| | Uni-Stakeholder Focus | 2.722 | 2 | 1.361 | .460 | .633 |
| | Competitive Focus | 3.167 | 2 | 1.583 | .749 | .476 |
| | Cooperative Focus | 12.929 | 2 | 6.464 | 3.014 | .055 |

Appendix I

Scale Reliability Analysis

I.1: Reliability Analyses For Start-Up Stage 'Jointness of Interest' Construct

Case Processing Summary

| | | N | % |
|-------|-----------------------|-----|-------|
| Cases | Valid | 132 | 100.0 |
| | Excluded ^a | 0 | .0 |
| | Total | 132 | 100.0 |

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

| Cronbach's Alpha | Cronbach's Alpha Based on Standardized Items | N of Items |
|------------------|--|------------|
| .826 | .826 | 6 |

Item Statistics

| | Mean | Std. Deviation | N |
|---|--------|----------------|-----|
| [Start-up] Focus on Societal Benefits | 5.4848 | 1.21997 | 132 |
| [Start-up] Focus on Environmental Concerns | 5.3030 | 1.54791 | 132 |
| [Start-up] Longer Term Focus | 5.6439 | 1.11979 | 132 |
| [Start-up] Multi-Stakeholder Focus | 5.5227 | 1.34486 | 132 |
| [Start-up] Focus on Employees / Human Resources | 5.6288 | 1.14188 | 132 |
| [Start-up] Focus on Firm Reputation | 5.7803 | .97538 | 132 |

Inter-Item Correlation Matrix

| | [Start-up] Focus on Societal Benefits | [Start-up] Focus on Environmental Concerns | [Start-up] Longer Term Focus | [Start-up] Multi-Stakeholder Focus | [Start-up] Focus on Employees / Human Resources | [Start-up] Focus on Firm Reputation |
|---|---------------------------------------|--|------------------------------|------------------------------------|---|-------------------------------------|
| [Start-up] Focus on Societal Benefits | 1.000 | .585 | .524 | .398 | .388 | .411 |
| [Start-up] Focus on Environmental Concerns | .585 | 1.000 | .499 | .587 | .539 | .419 |
| [Start-up] Longer Term Focus | .524 | .499 | 1.000 | .378 | .379 | .354 |
| [Start-up] Multi-Stakeholder Focus | .398 | .587 | .378 | 1.000 | .470 | .280 |
| [Start-up] Focus on Employees / Human Resources | .388 | .539 | .379 | .470 | 1.000 | .427 |
| [Start-up] Focus on Firm Reputation | .411 | .419 | .354 | .280 | .427 | 1.000 |

Item-Total Statistics

| | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Total Correlation | Squared Multiple Correlation | Cronbach's Alpha if Item Deleted |
|---|----------------------------|--------------------------------|----------------------------------|------------------------------|----------------------------------|
| [Start-up] Focus on Societal Benefits | 27.8788 | 21.069 | .625 | .433 | .792 |
| [Start-up] Focus on Environmental Concerns | 28.0606 | 17.615 | .735 | .553 | .767 |
| [Start-up] Longer Term Focus | 27.7197 | 22.264 | .572 | .351 | .804 |
| [Start-up] Multi-Stakeholder Focus | 27.8409 | 20.684 | .578 | .385 | .803 |
| [Start-up] Focus on Employees / Human Resources | 27.7348 | 21.906 | .594 | .377 | .799 |
| [Start-up] Focus on Firm Reputation | 27.5833 | 23.909 | .493 | .272 | .819 |

Scale Statistics

| Mean | Variance | Std. Deviation | N of Items |
|---------|----------|----------------|------------|
| 33.3636 | 29.561 | 5.43704 | 6 |

I.2: Reliability Analyses For Growth Stage 'Jointness of Interest' Construct

Case Processing Summary

| | | N | % |
|-------|-----------------------|-----|-------|
| Cases | Valid | 132 | 100.0 |
| | Excluded ^a | 0 | .0 |
| | Total | 132 | 100.0 |

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

| Cronbach's Alpha | Cronbach's Alpha Based on Standardized Items | N of Items |
|------------------|--|------------|
| .767 | .764 | 6 |

Item Statistics

| | Mean | Std. Deviation | N |
|---|--------|----------------|-----|
| [Growth] Focus on Employees / Human Resources | 5.7500 | 1.13497 | 132 |
| [Growth] Focus on Societal Benefits | 5.6894 | 1.09218 | 132 |
| [Growth] Focus on Environmental Concerns | 5.3864 | 1.31142 | 132 |
| [Growth] Focus on Firm Reputation | 5.8788 | 1.04867 | 132 |
| [Growth] Longer Term Focus | 5.8939 | .93497 | 132 |
| [Growth] Multi-Stakeholder Focus | 5.7273 | .94175 | 132 |

Inter-Item Correlation Matrix

| | [Growth] Focus on Employees / Human Resources | [Growth] Focus on Societal Benefits | [Growth] Focus on Environmental Concerns | [Growth] Focus on Firm Reputation | [Growth] Longer Term Focus | [Growth] Multi-Stakeholder Focus |
|---|---|-------------------------------------|--|-----------------------------------|----------------------------|----------------------------------|
| [Growth] Focus on Employees / Human Resources | 1.000 | .516 | .486 | .192 | .349 | .336 |
| [Growth] Focus on Societal Benefits | .516 | 1.000 | .559 | .353 | .311 | .318 |
| [Growth] Focus on Environmental Concerns | .486 | .559 | 1.000 | .317 | .339 | .339 |
| [Growth] Focus on Firm Reputation | .192 | .353 | .317 | 1.000 | .197 | .337 |
| [Growth] Longer Term Focus | .349 | .311 | .339 | .197 | 1.000 | .314 |
| [Growth] Multi-Stakeholder Focus | .336 | .318 | .339 | .337 | .314 | 1.000 |

Item-Total Statistics

| | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Total Correlation | Squared Multiple Correlation | Cronbach's Alpha if Item Deleted |
|---|----------------------------|--------------------------------|----------------------------------|------------------------------|----------------------------------|
| [Growth] Focus on Employees / Human Resources | 28.5758 | 13.620 | .554 | .361 | .720 |
| [Growth] Focus on Societal Benefits | 28.6364 | 13.378 | .623 | .424 | .702 |
| [Growth] Focus on Environmental Concerns | 28.9394 | 12.241 | .609 | .400 | .705 |
| [Growth] Focus on Firm Reputation | 28.4470 | 15.257 | .390 | .196 | .762 |
| [Growth] Longer Term Focus | 28.4318 | 15.530 | .427 | .193 | .752 |
| [Growth] Multi-Stakeholder Focus | 28.5985 | 15.235 | .466 | .232 | .743 |

Scale Statistics

| Mean | Variance | Std. Deviation | N of Items |
|---------|----------|----------------|------------|
| 34.3258 | 19.550 | 4.42149 | 6 |

I.3: Reliability Analyses For Mature Stage 'Jointness of Interest' Construct

Case Processing Summary

| | | N | % |
|-------|-----------------------|-----|-------|
| Cases | Valid | 132 | 100.0 |
| | Excluded ^a | 0 | .0 |
| | Total | 132 | 100.0 |

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

| Cronbach's Alpha | Cronbach's Alpha Based on Standardized Items | N of Items |
|------------------|--|------------|
| .724 | .726 | 6 |

Item Statistics

| | Mean | Std. Deviation | N |
|---|--------|----------------|-----|
| [Mature] Focus on Employees / Human Resources | 5.8712 | .95234 | 132 |
| [Mature] Focus on Societal Benefits | 5.7424 | 1.01606 | 132 |
| [Mature] Focus on Environmental Concerns | 5.5455 | 1.09380 | 132 |
| [Mature] Focus on Firm Reputation | 5.9697 | .91584 | 132 |
| [Mature] Longer Term Focus | 6.0000 | .89953 | 132 |
| [Mature] Multi-Stakeholder Focus | 5.7197 | 1.08645 | 132 |

Inter-Item Correlation Matrix

| | [Mature] Focus on Employees / Human Resources | [Mature] Focus on Societal Benefits | [Mature] Focus on Environmental Concerns | [Mature] Focus on Firm Reputation | [Mature] Longer Term Focus | [Mature] Multi-Stakeholder Focus |
|---|---|-------------------------------------|--|-----------------------------------|----------------------------|----------------------------------|
| [Mature] Focus on Employees / Human Resources | 1.000 | .242 | .390 | .424 | .258 | .216 |
| [Mature] Focus on Societal Benefits | .242 | 1.000 | .450 | .246 | .084 | .321 |
| [Mature] Focus on Environmental Concerns | .390 | .450 | 1.000 | .321 | .217 | .290 |
| [Mature] Focus on Firm Reputation | .424 | .246 | .321 | 1.000 | .482 | .314 |
| [Mature] Longer Term Focus | .258 | .084 | .217 | .482 | 1.000 | .336 |
| [Mature] Multi-Stakeholder Focus | .216 | .321 | .290 | .314 | .336 | 1.000 |

Item-Total Statistics

| | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Total Correlation | Squared Multiple Correlation | Cronbach's Alpha if Item Deleted |
|---|----------------------------|--------------------------------|----------------------------------|------------------------------|----------------------------------|
| [Mature] Focus on Employees / Human Resources | 28.9773 | 11.213 | .456 | .256 | .686 |
| [Mature] Focus on Societal Benefits | 29.1061 | 11.210 | .410 | .259 | .700 |
| [Mature] Focus on Environmental Concerns | 29.3030 | 10.259 | .510 | .310 | .669 |
| [Mature] Focus on Firm Reputation | 28.8788 | 10.932 | .538 | .358 | .664 |
| [Mature] Longer Term Focus | 28.8485 | 11.748 | .401 | .284 | .702 |
| [Mature] Multi-Stakeholder Focus | 29.1288 | 10.724 | .439 | .218 | .692 |

Scale Statistics

| Mean | Variance | Std. Deviation | N of Items |
|---------|----------|----------------|------------|
| 34.8485 | 15.030 | 3.87689 | 6 |

Appendix J

Factor Analysis For Common Method Bias

We conducted factor analysis of only the construct items used in our study. The descriptive section questions were not included in the analyses.

| Communalities | | |
|---------------------------------------|---------|------------|
| | Initial | Extraction |
| Focus on Firm Growth | 1.000 | .239 |
| Focus on Employees / Human Resources | 1.000 | .411 |
| Focus on Firm Profits | 1.000 | .314 |
| Focus on Firm Purpose | 1.000 | .467 |
| Focus on Societal Benefits | 1.000 | .506 |
| Focus on Capital for Firm | 1.000 | .206 |
| Focus on Environmental Concerns | 1.000 | .582 |
| Focus on Developing New Skills | 1.000 | .174 |
| Focus on Applying Existing Skills | 1.000 | .237 |
| Focus on Firm Revenues | 1.000 | .240 |
| Focus on Firm Reputation | 1.000 | .354 |
| Shorter Term Focus | 1.000 | .168 |
| Longer Term Focus | 1.000 | .303 |
| Focus on Theoretical Implications | 1.000 | .459 |
| Focus on Practical Implications | 1.000 | .247 |
| Multi-Stakeholder Focus | 1.000 | .460 |
| Uni-Stakeholder Focus | 1.000 | .401 |
| Competitive Focus | 1.000 | .245 |
| Cooperative Focus | 1.000 | .429 |
| Employees | 1.000 | .155 |
| Customers | 1.000 | .091 |
| Financiers | 1.000 | .235 |
| Suppliers | 1.000 | .305 |
| Communities | 1.000 | .450 |
| Environment | 1.000 | .302 |
| Government | 1.000 | .392 |
| Non-Governmental Organizations (NGOs) | 1.000 | .383 |
| Trade Associations | 1.000 | .365 |
| Corporate Social Responsibility | 1.000 | .113 |
| Creating Shared Value | 1.000 | .157 |
| Creating Value For All Stakeholders | 1.000 | .224 |

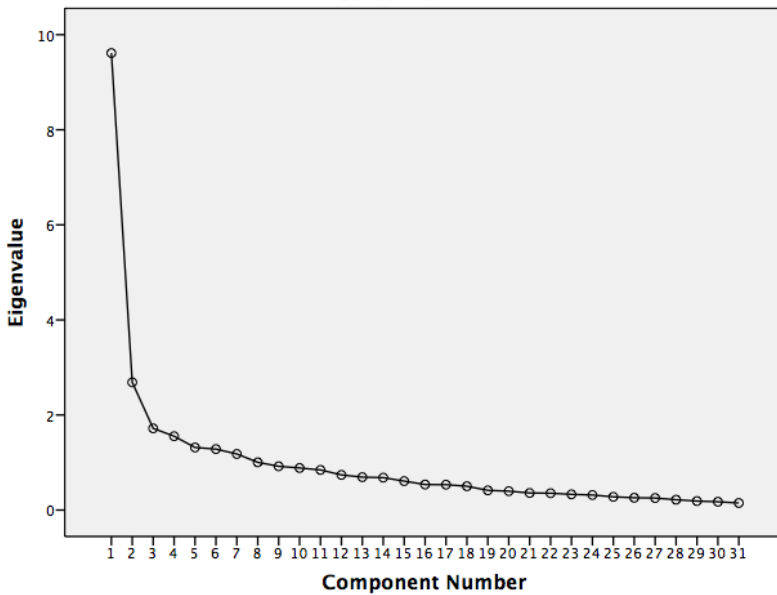
Extraction Method: Principal Component Analysis.

Total Variance Explained

| Component | Initial Eigenvalues | | | Extraction Sums of Squared Loadings | | |
|-----------|---------------------|---------------|--------------|-------------------------------------|---------------|--------------|
| | Total | % of Variance | Cumulative % | Total | % of Variance | Cumulative % |
| 1 | 9.614 | 31.012 | 31.012 | 9.614 | 31.012 | 31.012 |
| 2 | 2.687 | 8.668 | 39.680 | | | |
| 3 | 1.719 | 5.544 | 45.224 | | | |
| 4 | 1.554 | 5.013 | 50.237 | | | |
| 5 | 1.317 | 4.247 | 54.484 | | | |
| 6 | 1.283 | 4.138 | 58.622 | | | |
| 7 | 1.180 | 3.807 | 62.429 | | | |
| 8 | 1.004 | 3.240 | 65.670 | | | |
| 9 | .921 | 2.970 | 68.640 | | | |
| 10 | .885 | 2.856 | 71.496 | | | |
| 11 | .844 | 2.724 | 74.220 | | | |
| 12 | .740 | 2.387 | 76.606 | | | |
| 13 | .692 | 2.234 | 78.840 | | | |
| 14 | .682 | 2.200 | 81.040 | | | |
| 15 | .609 | 1.965 | 83.006 | | | |
| 16 | .537 | 1.732 | 84.737 | | | |
| 17 | .534 | 1.724 | 86.461 | | | |
| 18 | .502 | 1.618 | 88.079 | | | |
| 19 | .415 | 1.338 | 89.417 | | | |
| 20 | .398 | 1.284 | 90.701 | | | |
| 21 | .359 | 1.159 | 91.859 | | | |
| 22 | .355 | 1.144 | 93.003 | | | |
| 23 | .331 | 1.067 | 94.070 | | | |
| 24 | .317 | 1.021 | 95.092 | | | |
| 25 | .278 | .898 | 95.990 | | | |
| 26 | .259 | .836 | 96.826 | | | |
| 27 | .253 | .817 | 97.643 | | | |
| 28 | .218 | .703 | 98.346 | | | |
| 29 | .190 | .612 | 98.957 | | | |
| 30 | .174 | .563 | 99.520 | | | |
| 31 | .149 | .480 | 100.000 | | | |

Extraction Method: Principal Component Analysis.

Scree Plot



Appendix K

One-Way Repeated Measures ANOVA – SPSS Output

| Descriptive Statistics | | | |
|---|--------|----------------|-----|
| | Mean | Std. Deviation | N |
| [Start-up] Focus on Firm Growth | 6.0530 | .90220 | 132 |
| [Growth] Focus on Firm Growth | 5.9848 | .93274 | 132 |
| [Mature] Focus on Firm Growth | 5.8788 | .98872 | 132 |
| [Start-up] Focus on Employees / Human Resources | 5.6288 | 1.14188 | 132 |
| [Growth] Focus on Employees / Human Resources | 5.7500 | 1.13497 | 132 |
| [Mature] Focus on Employees / Human Resources | 5.8712 | .95234 | 132 |
| [Start-up] Focus on Firm Profits | 5.7045 | 1.07532 | 132 |
| [Growth] Focus on Firm Profits | 6.0227 | .74614 | 132 |
| [Mature] Focus on Firm Profits | 5.9470 | 1.04344 | 132 |
| [Start-up] Focus on Firm Purpose | 5.8258 | 1.14249 | 132 |
| [Growth] Focus on Firm Purpose | 5.7576 | .94199 | 132 |
| [Mature] Focus on Firm Purpose | 5.9242 | .89631 | 132 |
| [Start-up] Focus on Societal Benefits | 5.4848 | 1.21997 | 132 |
| [Growth] Focus on Societal Benefits | 5.6894 | 1.09218 | 132 |
| [Mature] Focus on Societal Benefits | 5.7424 | 1.01606 | 132 |
| [Start-up] Focus on Capital for Firm | 6.0227 | .83315 | 132 |
| [Growth] Focus on Capital for Firm | 5.8864 | .93815 | 132 |
| [Mature] Focus on Capital for Firm | 5.8333 | 1.09939 | 132 |
| [Start-up] Focus on Environmental Concerns | 5.3030 | 1.54791 | 132 |
| [Growth] Focus on Environmental Concerns | 5.3864 | 1.31142 | 132 |
| [Mature] Focus on Environmental Concerns | 5.5455 | 1.09380 | 132 |
| [Start-up] Focus on Developing New Skills | 5.7955 | 1.01695 | 132 |
| [Growth] Focus on Developing New Skills | 5.7424 | 1.00092 | 132 |
| [Mature] Focus on Developing New Skills | 5.8409 | .97940 | 132 |
| [Start-up] Focus on Applying Existing Skills | 5.8485 | 1.01504 | 132 |
| [Growth] Focus on Applying Existing Skills | 5.8258 | .94502 | 132 |
| [Mature] Focus on Applying Existing Skills | 5.9015 | 1.00274 | 132 |
| [Start-up] Focus on Firm Revenues | 5.7652 | 1.20343 | 132 |
| [Growth] Focus on Firm Revenues | 5.9848 | .90785 | 132 |
| [Mature] Focus on Firm Revenues | 5.9470 | 1.04344 | 132 |
| [Start-up] Focus on Firm Reputation | 5.7803 | .97538 | 132 |
| [Growth] Focus on Firm Reputation | 5.8788 | 1.04867 | 132 |
| [Mature] Focus on Firm Reputation | 5.9697 | .91584 | 132 |
| [Start-up] Shorter Term Focus | 5.7727 | 1.03813 | 132 |
| [Growth] Shorter Term Focus | 5.6667 | 1.19584 | 132 |
| [Mature] Shorter Term Focus | 5.5909 | 1.30738 | 132 |
| [Start-up] Longer Term Focus | 5.6439 | 1.11979 | 132 |
| [Growth] Longer Term Focus | 5.8939 | .93497 | 132 |
| [Mature] Longer Term Focus | 6.0000 | .89953 | 132 |
| [Start-up] Focus on Theoretical Implications | 5.5379 | 1.20688 | 132 |
| [Growth] Focus on Theoretical Implications | 5.5985 | 1.13823 | 132 |
| [Mature] Focus on Theoretical Implications | 5.6667 | 1.10975 | 132 |
| [Start-up] Focus on Practical Implications | 5.8712 | 1.04411 | 132 |
| [Growth] Focus on Practical Implications | 5.8712 | 1.00689 | 132 |
| [Mature] Focus on Practical Implications | 5.7500 | .99138 | 132 |
| [Start-up] Multi-Stakeholder Focus | 5.5227 | 1.34486 | 132 |
| [Growth] Multi-Stakeholder Focus | 5.7273 | .94175 | 132 |
| [Mature] Multi-Stakeholder Focus | 5.7197 | 1.08645 | 132 |
| [Start-up] Uni-Stakeholder Focus | 5.5833 | 1.20458 | 132 |
| [Growth] Uni-Stakeholder Focus | 5.5152 | 1.31628 | 132 |
| [Mature] Uni-Stakeholder Focus | 5.5152 | 1.12897 | 132 |
| [Start-up] Competitive Focus | 5.7121 | 1.24502 | 132 |
| [Growth] Competitive Focus | 5.8030 | 1.01470 | 132 |
| [Mature] Competitive Focus | 5.8636 | .97113 | 132 |
| [Start-up] Cooperative Focus | 5.7955 | 1.08943 | 132 |
| [Growth] Cooperative Focus | 5.5379 | 1.06581 | 132 |
| [Mature] Cooperative Focus | 5.8182 | 1.06877 | 132 |

Mauchly's Test of Sphericity^a

| Within Subjects Effect | Measure | Mauchly's W | Approx. Chi-Square | df | Sig. | Epsilon ^b | | |
|------------------------|--------------------------|-------------|--------------------|----|------|----------------------|-------------|-------------|
| | | | | | | Greenhouse-Geisser | Huynh-Feldt | Lower-bound |
| OLC_Stages | Firm_Growth | .979 | 2.779 | 2 | .249 | .979 | .994 | .500 |
| | Employees_HR | .956 | 5.866 | 2 | .053 | .958 | .972 | .500 |
| | Firm_Profits | .970 | 4.023 | 2 | .134 | .970 | .985 | .500 |
| | Firm_Purpose | .952 | 6.359 | 2 | .042 | .954 | .968 | .500 |
| | Societal_Benefits | .997 | .382 | 2 | .826 | .997 | 1.000 | .500 |
| | Capital_for_Firm | .949 | 6.752 | 2 | .034 | .952 | .965 | .500 |
| | Environmental_Concerns | .952 | 6.335 | 2 | .042 | .955 | .968 | .500 |
| | Developing_New_Skills | .914 | 11.737 | 2 | .003 | .921 | .933 | .500 |
| | Applying_Existing_Skills | .997 | .374 | 2 | .829 | .997 | 1.000 | .500 |
| | Firm_Revenues | .911 | 12.078 | 2 | .002 | .919 | .931 | .500 |
| | Firm_Reputation | .979 | 2.753 | 2 | .252 | .979 | .994 | .500 |
| | Shorter_Term_Focus | .946 | 7.225 | 2 | .027 | .949 | .962 | .500 |
| | Longer_Term_Focus | .909 | 12.414 | 2 | .002 | .917 | .929 | .500 |
| | Theoretical_Implications | .995 | .704 | 2 | .703 | .995 | 1.000 | .500 |
| | Practical_Implications | .996 | .580 | 2 | .748 | .996 | 1.000 | .500 |
| | Multi_Stkholder_Focus | .968 | 4.232 | 2 | .121 | .969 | .983 | .500 |
| | Uni_Stakeholder_Focus | .975 | 3.271 | 2 | .195 | .976 | .990 | .500 |
| | Competitive_Focus | .987 | 1.659 | 2 | .436 | .987 | 1.000 | .500 |
| | Cooperative_Focus | .973 | 3.550 | 2 | .170 | .974 | .988 | .500 |

Tests the null hypothesis that the error covariance matrix of the orthonormalized transformed dependent variables is proportional to an identity matrix.

a. Design: Intercept

Within Subjects Design: OLC_Stages

b. May be used to adjust the degrees of freedom for the averaged tests of significance. Corrected tests are displayed in the Tests of Within-Subjects Effects table.

Univariate Tests

| Source | Measure | | Type III Sum of Squares | df | Mean Square | F | Sig. | Partial Eta Squared | Observed Power ^a |
|-------------------|-------------------|--------------------|-------------------------|-------|-------------|-------|------|---------------------|-----------------------------|
| OLC Stages | Firm Growth | Sphericity Assumed | 2.035 | 2 | 1.018 | 1.594 | .205 | .012 | .336 |
| | | Greenhouse-Geisser | 2.035 | 1.959 | 1.039 | 1.594 | .206 | .012 | .332 |
| | | Huynh-Feldt | 2.035 | 1.988 | 1.024 | 1.594 | .205 | .012 | .335 |
| | | Lower-bound | 2.035 | 1.000 | 2.035 | 1.594 | .209 | .012 | .241 |
| Employees / HR | Employees / HR | Sphericity Assumed | 3.879 | 2 | 1.939 | 2.373 | .095 | .018 | .477 |
| | | Greenhouse-Geisser | 3.879 | 1.915 | 2.025 | 2.373 | .098 | .018 | .466 |
| | | Huynh-Feldt | 3.879 | 1.943 | 1.996 | 2.373 | .097 | .018 | .470 |
| | | Lower-bound | 3.879 | 1.000 | 3.879 | 2.373 | .126 | .018 | .334 |
| Firm Profit | Firm Profit | Sphericity Assumed | 7.293 | 2 | 3.646 | 5.427 | .005 | .040 | .843 |
| | | Greenhouse-Geisser | 7.293 | 1.941 | 3.758 | 5.427 | .005 | .040 | .835 |
| | | Huynh-Feldt | 7.293 | 1.970 | 3.703 | 5.427 | .005 | .040 | .839 |
| | | Lower-bound | 7.293 | 1.000 | 7.293 | 5.427 | .021 | .040 | .638 |
| Firm Purpose | Firm Purpose | Sphericity Assumed | 1.854 | 2 | .927 | 1.213 | .299 | .009 | .264 |
| | | Greenhouse-Geisser | 1.854 | 1.909 | .971 | 1.213 | .298 | .009 | .258 |
| | | Huynh-Feldt | 1.854 | 1.936 | .957 | 1.213 | .298 | .009 | .260 |
| | | Lower-bound | 1.854 | 1.000 | 1.854 | 1.213 | .273 | .009 | .194 |
| Societal Benefits | Societal Benefits | Sphericity Assumed | 4.884 | 2 | 2.442 | 3.559 | .030 | .026 | .658 |
| | | Greenhouse-Geisser | 4.884 | 1.994 | 2.449 | 3.559 | .030 | .026 | .657 |
| | | Huynh-Feldt | 4.884 | 2.000 | 2.442 | 3.559 | .030 | .026 | .658 |
| | | Lower-bound | 4.884 | 1.000 | 4.884 | 3.559 | .061 | .026 | .465 |

(Continued)

| | | | | | | | | |
|--------------------------|--------------------|-------|-------|-------|-------|------|------|------|
| Capital For Firm | Sphericity Assumed | 2.520 | 2 | 1.260 | 1.933 | .147 | .015 | .399 |
| | Greenhouse-Geisser | 2.520 | 1.904 | 1.324 | 1.933 | .149 | .015 | .389 |
| | Huynh-Feldt | 2.520 | 1.931 | 1.305 | 1.933 | .148 | .015 | .392 |
| | Lower-bound | 2.520 | 1.000 | 2.520 | 1.933 | .167 | .015 | .281 |
| Environmental Concerns | Sphericity Assumed | 4.005 | 2 | 2.003 | 1.938 | .146 | .015 | .400 |
| | Greenhouse-Geisser | 4.005 | 1.909 | 2.098 | 1.938 | .148 | .015 | .390 |
| | Huynh-Feldt | 4.005 | 1.937 | 2.068 | 1.938 | .147 | .015 | .393 |
| | Lower-bound | 4.005 | 1.000 | 4.005 | 1.938 | .166 | .015 | .282 |
| Developing New Skills | Sphericity Assumed | .641 | 2 | .321 | .465 | .629 | .004 | .126 |
| | Greenhouse-Geisser | .641 | 1.841 | .348 | .465 | .613 | .004 | .122 |
| | Huynh-Feldt | .641 | 1.866 | .344 | .465 | .615 | .004 | .123 |
| | Lower-bound | .641 | 1.000 | .641 | .465 | .496 | .004 | .104 |
| Applying Existing Skills | Sphericity Assumed | .399 | 2 | .199 | .279 | .757 | .002 | .094 |
| | Greenhouse-Geisser | .399 | 1.994 | .200 | .279 | .756 | .002 | .094 |
| | Huynh-Feldt | .399 | 2.000 | .199 | .279 | .757 | .002 | .094 |
| | Lower-bound | .399 | 1.000 | .399 | .279 | .599 | .002 | .082 |
| Firm Revenues | Sphericity Assumed | 3.641 | 2 | 1.821 | 2.413 | .092 | .018 | .484 |
| | Greenhouse-Geisser | 3.641 | 1.837 | 1.982 | 2.413 | .096 | .018 | .463 |
| | Huynh-Feldt | 3.641 | 1.862 | 1.956 | 2.413 | .096 | .018 | .466 |
| | Lower-bound | 3.641 | 1.000 | 3.641 | 2.413 | .123 | .018 | .338 |
| Firm Reputation | Sphericity Assumed | 2.369 | 2 | 1.184 | 1.985 | .139 | .015 | .409 |
| | Greenhouse-Geisser | 2.369 | 1.959 | 1.209 | 1.985 | .140 | .015 | .404 |
| | Huynh-Feldt | 2.369 | 1.988 | 1.191 | 1.985 | .140 | .015 | .407 |
| | Lower-bound | 2.369 | 1.000 | 2.369 | 1.985 | .161 | .015 | .288 |
| Shorter Term | Sphericity Assumed | 2.202 | 2 | 1.101 | 1.170 | .312 | .009 | .256 |
| | Greenhouse-Geisser | 2.202 | 1.897 | 1.161 | 1.170 | .310 | .009 | .249 |
| | Huynh-Feldt | 2.202 | 1.925 | 1.144 | 1.170 | .311 | .009 | .251 |
| | Lower-bound | 2.202 | 1.000 | 2.202 | 1.170 | .281 | .009 | .189 |
| Longer Term | Sphericity Assumed | 8.823 | 2 | 4.412 | 6.356 | .002 | .046 | .898 |
| | Greenhouse-Geisser | 8.823 | 1.833 | 4.813 | 6.356 | .003 | .046 | .877 |
| | Huynh-Feldt | 8.823 | 1.858 | 4.749 | 6.356 | .003 | .046 | .881 |
| | Lower-bound | 8.823 | 1.000 | 8.823 | 6.356 | .013 | .046 | .706 |
| Theoretical Implications | Sphericity Assumed | 1.096 | 2 | .548 | .692 | .502 | .005 | .166 |
| | Greenhouse-Geisser | 1.096 | 1.989 | .551 | .692 | .501 | .005 | .166 |
| | Huynh-Feldt | 1.096 | 2.000 | .548 | .692 | .502 | .005 | .166 |
| | Lower-bound | 1.096 | 1.000 | 1.096 | .692 | .407 | .005 | .131 |
| Practical Implications | Sphericity Assumed | 1.293 | 2 | .646 | .988 | .374 | .007 | .221 |
| | Greenhouse-Geisser | 1.293 | 1.991 | .649 | .988 | .373 | .007 | .221 |
| | Huynh-Feldt | 1.293 | 2.000 | .646 | .988 | .374 | .007 | .221 |
| | Lower-bound | 1.293 | 1.000 | 1.293 | .988 | .322 | .007 | .167 |
| Multi-Stakeholder | Sphericity Assumed | 3.551 | 2 | 1.775 | 1.842 | .160 | .014 | .382 |
| | Greenhouse-Geisser | 3.551 | 1.938 | 1.832 | 1.842 | .162 | .014 | .376 |
| | Huynh-Feldt | 3.551 | 1.967 | 1.805 | 1.842 | .161 | .014 | .379 |
| | Lower-bound | 3.551 | 1.000 | 3.551 | 1.842 | .177 | .014 | .271 |
| Uni-Stakeholder | Sphericity Assumed | .409 | 2 | .205 | .246 | .782 | .002 | .089 |
| | Greenhouse-Geisser | .409 | 1.952 | .210 | .246 | .776 | .002 | .088 |
| | Huynh-Feldt | .409 | 1.981 | .207 | .246 | .780 | .002 | .088 |
| | Lower-bound | .409 | 1.000 | .409 | .246 | .621 | .002 | .078 |
| Competitive | Sphericity Assumed | 1.535 | 2 | .768 | .938 | .393 | .007 | .212 |
| | Greenhouse-Geisser | 1.535 | 1.975 | .777 | .938 | .392 | .007 | .210 |
| | Huynh-Feldt | 1.535 | 2.000 | .768 | .938 | .393 | .007 | .212 |
| | Lower-bound | 1.535 | 1.000 | 1.535 | .938 | .335 | .007 | .161 |
| Cooperative | Sphericity Assumed | 6.399 | 2 | 3.199 | 5.002 | .007 | .037 | .811 |
| | Greenhouse-Geisser | 6.399 | 1.948 | 3.286 | 5.002 | .008 | .037 | .803 |
| | Huynh-Feldt | 6.399 | 1.977 | 3.237 | 5.002 | .008 | .037 | .807 |
| | Lower-bound | 6.399 | 1.000 | 6.399 | 5.002 | .027 | .037 | .603 |

(Continued)

| | | | | | | | | | |
|--------------------------|-------------|--------------------|---------|---------|-------|--|--|--|--|
| Error (OLC Stages) | Firm Growth | Sphericity Assumed | 167.298 | 262 | .639 | | | | |
| | | Greenhouse-Geisser | 167.298 | 256.574 | .652 | | | | |
| | | Huynh-Feldt | 167.298 | 260.426 | .642 | | | | |
| | | Lower-bound | 167.298 | 131.000 | 1.277 | | | | |
| Employees / HR | | Sphericity Assumed | 214.121 | 262 | .817 | | | | |
| | | Greenhouse-Geisser | 214.121 | 250.929 | .853 | | | | |
| | | Huynh-Feldt | 214.121 | 254.567 | .841 | | | | |
| | | Lower-bound | 214.121 | 131.000 | 1.635 | | | | |
| Firm Profit | | Sphericity Assumed | 176.040 | 262 | .672 | | | | |
| | | Greenhouse-Geisser | 176.040 | 254.252 | .692 | | | | |
| | | Huynh-Feldt | 176.040 | 258.015 | .682 | | | | |
| | | Lower-bound | 176.040 | 131.000 | 1.344 | | | | |
| Firm Purpose | | Sphericity Assumed | 200.146 | 262 | .764 | | | | |
| | | Greenhouse-Geisser | 200.146 | 250.062 | .800 | | | | |
| | | Huynh-Feldt | 200.146 | 253.668 | .789 | | | | |
| | | Lower-bound | 200.146 | 131.000 | 1.528 | | | | |
| Societal Benefits | | Sphericity Assumed | 179.783 | 262 | .686 | | | | |
| | | Greenhouse-Geisser | 179.783 | 261.233 | .688 | | | | |
| | | Huynh-Feldt | 179.783 | 262.000 | .686 | | | | |
| | | Lower-bound | 179.783 | 131.000 | 1.372 | | | | |
| Capital For Firm | | Sphericity Assumed | 170.813 | 262 | .652 | | | | |
| | | Greenhouse-Geisser | 170.813 | 249.378 | .685 | | | | |
| | | Huynh-Feldt | 170.813 | 252.957 | .675 | | | | |
| | | Lower-bound | 170.813 | 131.000 | 1.304 | | | | |
| Environmental Concerns | | Sphericity Assumed | 270.662 | 262 | 1.033 | | | | |
| | | Greenhouse-Geisser | 270.662 | 250.105 | 1.082 | | | | |
| | | Huynh-Feldt | 270.662 | 253.711 | 1.067 | | | | |
| | | Lower-bound | 270.662 | 131.000 | 2.066 | | | | |
| Developing New Skills | | Sphericity Assumed | 180.692 | 262 | .690 | | | | |
| | | Greenhouse-Geisser | 180.692 | 241.179 | .749 | | | | |
| | | Huynh-Feldt | 180.692 | 244.455 | .739 | | | | |
| | | Lower-bound | 180.692 | 131.000 | 1.379 | | | | |
| Applying Existing Skills | | Sphericity Assumed | 187.601 | 262 | .716 | | | | |
| | | Greenhouse-Geisser | 187.601 | 261.249 | .718 | | | | |
| | | Huynh-Feldt | 187.601 | 262.000 | .716 | | | | |
| | | Lower-bound | 187.601 | 131.000 | 1.432 | | | | |
| Firm Revenues | | Sphericity Assumed | 197.692 | 262 | .755 | | | | |
| | | Greenhouse-Geisser | 197.692 | 240.650 | .821 | | | | |
| | | Huynh-Feldt | 197.692 | 243.907 | .811 | | | | |
| | | Lower-bound | 197.692 | 131.000 | 1.509 | | | | |
| Firm Reputation | | Sphericity Assumed | 156.298 | 262 | .597 | | | | |
| | | Greenhouse-Geisser | 156.298 | 256.622 | .609 | | | | |
| | | Huynh-Feldt | 156.298 | 260.476 | .600 | | | | |
| | | Lower-bound | 156.298 | 131.000 | 1.193 | | | | |
| Shorter Term | | Sphericity Assumed | 246.465 | 262 | .941 | | | | |
| | | Greenhouse-Geisser | 246.465 | 248.563 | .992 | | | | |
| | | Huynh-Feldt | 246.465 | 252.112 | .978 | | | | |
| | | Lower-bound | 246.465 | 131.000 | 1.881 | | | | |
| Longer Term | | Sphericity Assumed | 181.843 | 262 | .694 | | | | |
| | | Greenhouse-Geisser | 181.843 | 240.130 | .757 | | | | |
| | | Huynh-Feldt | 181.843 | 243.368 | .747 | | | | |
| | | Lower-bound | 181.843 | 131.000 | 1.388 | | | | |
| Theoretical Implications | | Sphericity Assumed | 207.571 | 262 | .792 | | | | |
| | | Greenhouse-Geisser | 207.571 | 260.592 | .797 | | | | |
| | | Huynh-Feldt | 207.571 | 262.000 | .792 | | | | |
| | | Lower-bound | 207.571 | 131.000 | 1.585 | | | | |

(Continued)

| | | | | | | | | |
|------------------------|--------------------|---------|---------|-------|--|--|--|--|
| Practical Implications | Sphericity Assumed | 171.374 | 262 | .654 | | | | |
| | Greenhouse-Geisser | 171.374 | 260.839 | .657 | | | | |
| | Huynh-Feldt | 171.374 | 262.000 | .654 | | | | |
| | Lower-bound | 171.374 | 131.000 | 1.308 | | | | |
| Multi-Stakeholder | Sphericity Assumed | 252.449 | 262 | .964 | | | | |
| | Greenhouse-Geisser | 252.449 | 253.869 | .994 | | | | |
| | Huynh-Feldt | 252.449 | 257.618 | .980 | | | | |
| | Lower-bound | 252.449 | 131.000 | 1.927 | | | | |
| Uni-Stakeholder | Sphericity Assumed | 217.591 | 262 | .830 | | | | |
| | Greenhouse-Geisser | 217.591 | 255.648 | .851 | | | | |
| | Huynh-Feldt | 217.591 | 259.465 | .839 | | | | |
| | Lower-bound | 217.591 | 131.000 | 1.661 | | | | |
| Competitive | Sphericity Assumed | 214.465 | 262 | .819 | | | | |
| | Greenhouse-Geisser | 214.465 | 258.719 | .829 | | | | |
| | Huynh-Feldt | 214.465 | 262.000 | .819 | | | | |
| | Lower-bound | 214.465 | 131.000 | 1.637 | | | | |
| Cooperative | Sphericity Assumed | 167.601 | 262 | .640 | | | | |
| | Greenhouse-Geisser | 167.601 | 255.128 | .657 | | | | |
| | Huynh-Feldt | 167.601 | 258.925 | .647 | | | | |
| | Lower-bound | 167.601 | 131.000 | 1.279 | | | | |

Pairwise Comparisons

| Measure | (I) OLC Stages | (J) OLC Stages | Mean Difference (I-J) | Std. Error | Sig. ^b | 95% Confidence Interval for Difference ^b | |
|-------------------|----------------|----------------|-----------------------|------------|-------------------|---|-------------|
| | | | | | | Lower Bound | Upper Bound |
| Firm Growth | Start-up (1) | Growth (2) | .068 | .102 | .506 | -.134 | .270 |
| | | Mature (3) | .174 | .091 | .058 | -.006 | .354 |
| | 2 | 1 | -.068 | .102 | .506 | -.270 | .134 |
| | | 3 | .106 | .102 | .298 | -.095 | .307 |
| | 3 | 1 | -.174 | .091 | .058 | -.354 | .006 |
| | | 2 | -.106 | .102 | .298 | -.307 | .095 |
| Employees / HR | 1 | 2 | -.121 | .111 | .276 | -.340 | .098 |
| | | 3 | -.242* | .101 | .018 | -.442 | -.043 |
| | 2 | 1 | .121 | .111 | .276 | -.098 | .340 |
| | | 3 | -.121 | .121 | .319 | -.361 | .119 |
| | 3 | 1 | .242* | .101 | .018 | .043 | .442 |
| | | 2 | .121 | .121 | .319 | -.119 | .361 |
| Firm Profits | 1 | 2 | -.318* | .109 | .004 | -.534 | -.102 |
| | | 3 | -.242* | .096 | .012 | -.432 | -.053 |
| | 2 | 1 | .318* | .109 | .004 | .102 | .534 |
| | | 3 | .076 | .097 | .437 | -.116 | .268 |
| | 3 | 1 | .242* | .096 | .012 | .053 | .432 |
| | | 2 | -.076 | .097 | .437 | -.268 | .116 |
| Firm Purpose | 1 | 2 | .068 | .109 | .532 | -.147 | .283 |
| | | 3 | -.098 | .117 | .400 | -.329 | .132 |
| | 2 | 1 | -.068 | .109 | .532 | -.283 | .147 |
| | | 3 | -.167 | .096 | .086 | -.357 | .024 |
| | 3 | 1 | .098 | .117 | .400 | -.132 | .329 |
| | | 2 | .167 | .096 | .086 | -.024 | .357 |
| Societal Benefits | 1 | 2 | -.205* | .102 | .048 | -.407 | -.002 |
| | | 3 | -.258* | .104 | .015 | -.463 | -.052 |
| | 2 | 1 | .205* | .102 | .048 | .002 | .407 |
| | | 3 | -.053 | .099 | .594 | -.250 | .143 |
| | 3 | 1 | .258* | .104 | .015 | .052 | .463 |
| | | 2 | .053 | .099 | .594 | -.143 | .250 |

(Continued)

| | | | | | | | |
|--------------------------|---|---|--------|------|-------|-------|-------|
| Capital For Firm | 1 | 2 | .136 | .096 | .158 | -.054 | .326 |
| | | 3 | .189 | .110 | .087 | -.028 | .406 |
| | 2 | 1 | -.136 | .096 | .158 | -.326 | .054 |
| | | 3 | .053 | .091 | .563 | -.128 | .234 |
| | 3 | 1 | -.189 | .110 | .087 | -.406 | .028 |
| | | 2 | -.053 | .091 | .563 | -.234 | .128 |
| Environmental Concerns | 1 | 2 | -.083 | .123 | .498 | -.326 | .159 |
| | | 3 | -.242 | .137 | .080 | -.514 | .029 |
| | 2 | 1 | .083 | .123 | .498 | -.159 | .326 |
| | | 3 | -.159 | .114 | .166 | -.385 | .067 |
| | 3 | 1 | .242 | .137 | .080 | -.029 | .514 |
| | | 2 | .159 | .114 | .166 | -.067 | .385 |
| Developing New Skills | 1 | 2 | .053 | .086 | .540 | -.118 | .224 |
| | | 3 | -.045 | .112 | .685 | -.266 | .176 |
| | 2 | 1 | -.053 | .086 | .540 | -.224 | .118 |
| | | 3 | -.098 | .107 | .359 | -.310 | .113 |
| | 3 | 1 | .045 | .112 | .685 | -.176 | .266 |
| | | 2 | .098 | .107 | .359 | -.113 | .310 |
| Applying Existing Skills | 1 | 2 | .023 | .104 | .827 | -.183 | .228 |
| | | 3 | -.053 | .107 | .620 | -.264 | .158 |
| | 2 | 1 | -.023 | .104 | .827 | -.228 | .183 |
| | | 3 | -.076 | .102 | .458 | -.277 | .126 |
| | 3 | 1 | .053 | .107 | .620 | -.158 | .264 |
| | | 2 | .076 | .102 | .458 | -.126 | .277 |
| Firm Revenues | 1 | 2 | -.220 | .114 | .057 | -.446 | .007 |
| | | 3 | -.182 | .115 | .115 | -.409 | .045 |
| | 2 | 1 | .220 | .114 | .057 | -.007 | .446 |
| | | 3 | .038 | .090 | .673 | -.139 | .215 |
| | 3 | 1 | .182 | .115 | .115 | -.045 | .409 |
| | | 2 | -.038 | .090 | .673 | -.215 | .139 |
| Firm Reputation | 1 | 2 | -.098 | .092 | .285 | -.280 | .083 |
| | | 3 | -.189* | .091 | .040 | -.370 | -.009 |
| | 2 | 1 | .098 | .092 | .285 | -.083 | .280 |
| | | 3 | -.091 | .102 | .373 | -.292 | .110 |
| | 3 | 1 | .189* | .091 | .040 | .009 | .370 |
| | | 2 | .091 | .102 | .373 | -.110 | .292 |
| Shorter Term Focus | 1 | 2 | .106 | .111 | .343 | -.114 | .326 |
| | | 3 | .182 | .133 | .172 | -.080 | .444 |
| | 2 | 1 | -.106 | .111 | .343 | -.326 | .114 |
| | | 3 | .076 | .113 | .504 | -.148 | .300 |
| | 3 | 1 | -.182 | .133 | .172 | -.444 | .080 |
| | | 2 | -.076 | .113 | .504 | -.300 | .148 |
| Longer Term Focus | 1 | 2 | -.250* | .096 | .011 | -.441 | -.059 |
| | | 3 | -.356* | .117 | .003 | -.587 | -.125 |
| | 2 | 1 | .250* | .096 | .011 | .059 | .441 |
| | | 3 | -.106 | .093 | .255 | -.289 | .077 |
| | 3 | 1 | .356* | .117 | .003 | .125 | .587 |
| | | 2 | .106 | .093 | .255 | -.077 | .289 |
| Theoretical Implications | 1 | 2 | -.061 | .110 | .581 | -.277 | .156 |
| | | 3 | -.129 | .113 | .256 | -.352 | .095 |
| | 2 | 1 | .061 | .110 | .581 | -.156 | .277 |
| | | 3 | -.068 | .106 | .521 | -.278 | .142 |
| | 3 | 1 | .129 | .113 | .256 | -.095 | .352 |
| | | 2 | .068 | .106 | .521 | -.142 | .278 |
| Practical Implications | 1 | 2 | .000 | .096 | 1.000 | -.190 | .190 |
| | | 3 | .121 | .101 | .232 | -.078 | .321 |
| | 2 | 1 | .000 | .096 | 1.000 | -.190 | .190 |
| | | 3 | .121 | .101 | .234 | -.080 | .322 |
| | 3 | 1 | -.121 | .101 | .232 | -.321 | .078 |
| | | 2 | -.121 | .101 | .234 | -.322 | .080 |

(Continued)

| | | | | | | | |
|-------------------------|---|---|--------|------|-------|-------|-------|
| Multi-Stakeholder Focus | 1 | 2 | -.205 | .123 | .100 | -.449 | .040 |
| | | 3 | -.197 | .128 | .127 | -.451 | .057 |
| | 2 | 1 | .205 | .123 | .100 | -.040 | .449 |
| | | 3 | .008 | .110 | .945 | -.210 | .225 |
| | 3 | 1 | .197 | .128 | .127 | -.057 | .451 |
| | | 2 | -.008 | .110 | .945 | -.225 | .210 |
| Uni-Stakeholder Focus | 1 | 2 | .068 | .115 | .554 | -.159 | .296 |
| | | 3 | .068 | .118 | .564 | -.165 | .301 |
| | 2 | 1 | -.068 | .115 | .554 | -.296 | .159 |
| | | 3 | .000 | .103 | 1.000 | -.204 | .204 |
| | 3 | 1 | -.068 | .118 | .564 | -.301 | .165 |
| | | 2 | .000 | .103 | 1.000 | -.204 | .204 |
| Competitive Focus | 1 | 2 | -.091 | .117 | .439 | -.322 | .141 |
| | | 3 | -.152 | .110 | .172 | -.370 | .067 |
| | 2 | 1 | .091 | .117 | .439 | -.141 | .322 |
| | | 3 | -.061 | .106 | .570 | -.271 | .150 |
| | 3 | 1 | .152 | .110 | .172 | -.067 | .370 |
| | | 2 | .061 | .106 | .570 | -.150 | .271 |
| Cooperative Focus | 1 | 2 | .258* | .094 | .007 | .073 | .443 |
| | | 3 | -.023 | .106 | .831 | -.233 | .187 |
| | 2 | 1 | -.258* | .094 | .007 | -.443 | -.073 |
| | | 3 | -.280* | .095 | .004 | -.469 | -.092 |
| | 3 | 1 | .023 | .106 | .831 | -.187 | .233 |
| | | 2 | .280* | .095 | .004 | .092 | .469 |

Based on estimated marginal means

*. The mean difference is significant at the 0.05 level

b. Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).

Appendix L

Determining Occupational Experience Data Normality

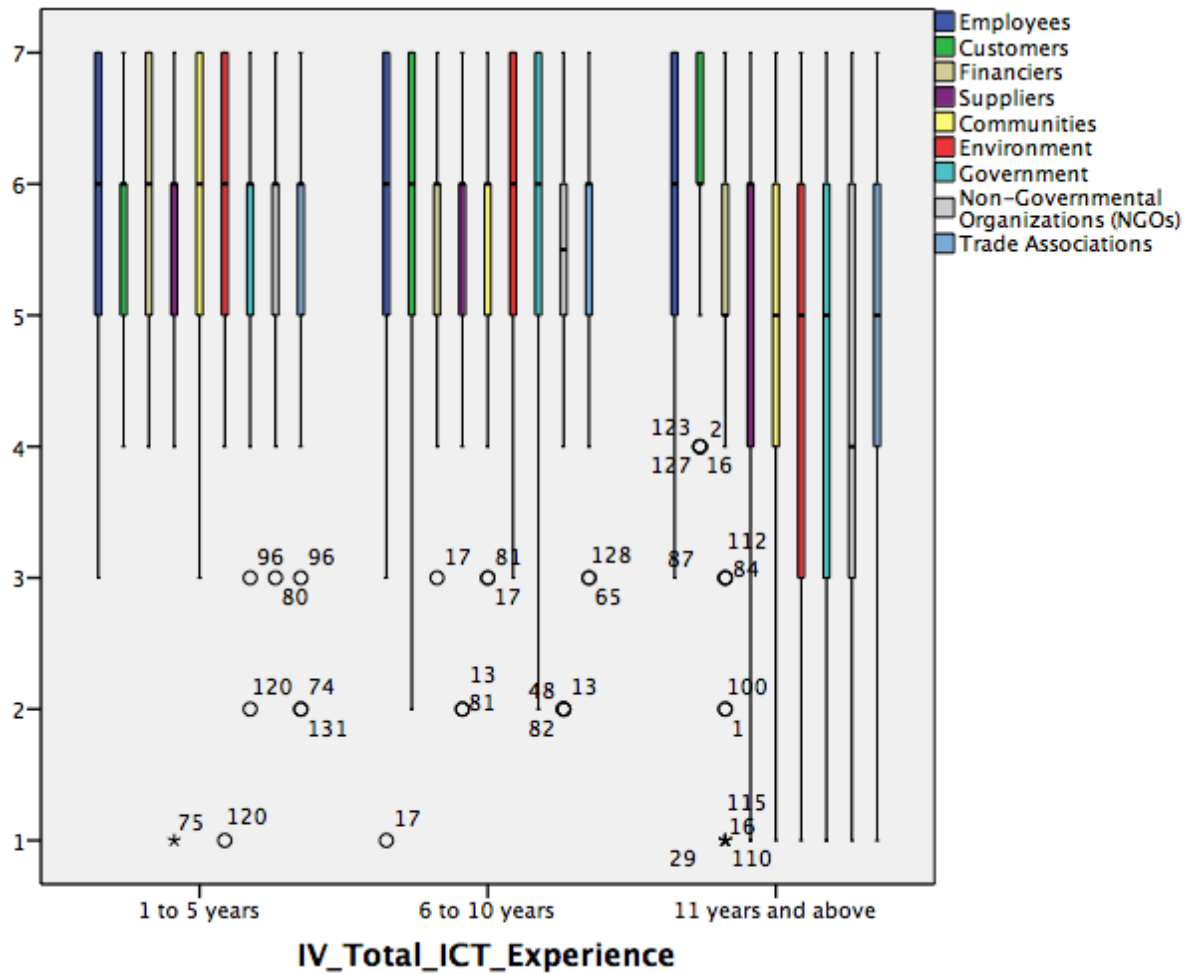
| | | Tests of Normality | | | | | |
|---------------------------------------|--------------------|---------------------------------|----|------|--------------|----|------|
| Total ICT Experience | | Kolmogorov-Smirnov ^a | | | Shapiro-Wilk | | |
| | | Statistic | df | Sig. | Statistic | df | Sig. |
| Employees | 1 to 5 years | .208 | 45 | .000 | .860 | 45 | .000 |
| | 6 to 10 years | .212 | 42 | .000 | .790 | 42 | .000 |
| | 11 years and above | .178 | 41 | .002 | .884 | 41 | .001 |
| Customers | 1 to 5 years | .202 | 45 | .000 | .875 | 45 | .000 |
| | 6 to 10 years | .223 | 42 | .000 | .826 | 42 | .000 |
| | 11 years and above | .254 | 41 | .000 | .793 | 41 | .000 |
| Financiers | 1 to 5 years | .211 | 45 | .000 | .852 | 45 | .000 |
| | 6 to 10 years | .229 | 42 | .000 | .886 | 42 | .001 |
| | 11 years and above | .278 | 41 | .000 | .838 | 41 | .000 |
| Suppliers | 1 to 5 years | .255 | 45 | .000 | .835 | 45 | .000 |
| | 6 to 10 years | .301 | 42 | .000 | .797 | 42 | .000 |
| | 11 years and above | .226 | 41 | .000 | .869 | 41 | .000 |
| Communities | 1 to 5 years | .203 | 45 | .000 | .875 | 45 | .000 |
| | 6 to 10 years | .322 | 42 | .000 | .830 | 42 | .000 |
| | 11 years and above | .177 | 41 | .002 | .902 | 41 | .002 |
| Environment | 1 to 5 years | .184 | 45 | .001 | .847 | 45 | .000 |
| | 6 to 10 years | .207 | 42 | .000 | .881 | 42 | .000 |
| | 11 years and above | .262 | 41 | .000 | .901 | 41 | .002 |
| Government | 1 to 5 years | .201 | 45 | .000 | .872 | 45 | .000 |
| | 6 to 10 years | .220 | 42 | .000 | .861 | 42 | .000 |
| | 11 years and above | .202 | 41 | .000 | .881 | 41 | .000 |
| Non-Governmental Organizations (NGOs) | 1 to 5 years | .193 | 45 | .000 | .899 | 45 | .001 |
| | 6 to 10 years | .211 | 42 | .000 | .860 | 42 | .000 |
| | 11 years and above | .151 | 41 | .020 | .919 | 41 | .007 |
| Trade Associations | 1 to 5 years | .196 | 45 | .000 | .890 | 45 | .000 |
| | 6 to 10 years | .223 | 42 | .000 | .886 | 42 | .001 |
| | 11 years and above | .156 | 41 | .013 | .939 | 41 | .028 |

a. Lilliefors Significance Correction

Appendix M

One-Way ANOVA Results Of Occupation Experience Data

M.1: Boxplot Graphical Representation Of Data Before Removing Significant Outliers



Respondents identified as 16, 29, 75, 110 and 115 in the boxplot graph above are then removed to check how they may affect the results.

Descriptives

| | N | Mean | Std. Deviation | Std. Error | 95% Confidence Interval for Mean | | Minimum | Maximum | |
|---------------------------------------|--------------------|------|----------------|------------|----------------------------------|-------------|---------|---------|------|
| | | | | | Lower Bound | Upper Bound | | | |
| Employees | 1 to 5 years | 46 | 5.8261 | 1.10160 | .16242 | 5.4990 | 6.1532 | 3.00 | 7.00 |
| | 6 to 10 years | 44 | 5.7727 | 1.42834 | .21533 | 5.3385 | 6.2070 | 1.00 | 7.00 |
| | 11 years and above | 41 | 5.6341 | 1.13481 | .17723 | 5.2760 | 5.9923 | 3.00 | 7.00 |
| | Total | 131 | 5.7481 | 1.22376 | .10692 | 5.5366 | 5.9596 | 1.00 | 7.00 |
| Customers | 1 to 5 years | 46 | 5.7391 | .92939 | .13703 | 5.4631 | 6.0151 | 4.00 | 7.00 |
| | 6 to 10 years | 44 | 5.8864 | 1.27982 | .19294 | 5.4973 | 6.2755 | 2.00 | 7.00 |
| | 11 years and above | 42 | 6.1190 | .94230 | .14540 | 5.8254 | 6.4127 | 4.00 | 7.00 |
| | Total | 132 | 5.9091 | 1.06617 | .09280 | 5.7255 | 6.0927 | 2.00 | 7.00 |
| Financiers | 1 to 5 years | 45 | 5.8889 | 1.00504 | .14982 | 5.5869 | 6.1908 | 4.00 | 7.00 |
| | 6 to 10 years | 43 | 5.7209 | 1.00772 | .15368 | 5.4108 | 6.0311 | 3.00 | 7.00 |
| | 11 years and above | 42 | 4.9048 | 1.79171 | .27647 | 4.3464 | 5.4631 | 1.00 | 7.00 |
| | Total | 130 | 5.5154 | 1.37099 | .12024 | 5.2775 | 5.7533 | 1.00 | 7.00 |
| Suppliers | 1 to 5 years | 46 | 5.5870 | 1.16573 | .17188 | 5.2408 | 5.9331 | 1.00 | 7.00 |
| | 6 to 10 years | 44 | 5.6364 | 1.29563 | .19532 | 5.2425 | 6.0303 | 2.00 | 7.00 |
| | 11 years and above | 42 | 5.0714 | 1.78603 | .27559 | 4.5149 | 5.6280 | 1.00 | 7.00 |
| | Total | 132 | 5.4394 | 1.44231 | .12554 | 5.1911 | 5.6877 | 1.00 | 7.00 |
| Communities | 1 to 5 years | 45 | 5.7778 | 1.08479 | .16171 | 5.4519 | 6.1037 | 3.00 | 7.00 |
| | 6 to 10 years | 44 | 5.7045 | 1.06922 | .16119 | 5.3795 | 6.0296 | 3.00 | 7.00 |
| | 11 years and above | 42 | 5.0000 | 1.53018 | .23611 | 4.5232 | 5.4768 | 1.00 | 7.00 |
| | Total | 131 | 5.5038 | 1.27927 | .11177 | 5.2827 | 5.7249 | 1.00 | 7.00 |
| Environment | 1 to 5 years | 45 | 5.5778 | 1.21522 | .18115 | 5.2127 | 5.9429 | 1.00 | 7.00 |
| | 6 to 10 years | 44 | 5.6818 | 1.07342 | .16182 | 5.3555 | 6.0082 | 3.00 | 7.00 |
| | 11 years and above | 42 | 4.5000 | 1.75652 | .27104 | 3.9526 | 5.0474 | 1.00 | 7.00 |
| | Total | 131 | 5.2672 | 1.46142 | .12769 | 5.0146 | 5.5198 | 1.00 | 7.00 |
| Government | 1 to 5 years | 45 | 5.6444 | 1.13128 | .16864 | 5.3046 | 5.9843 | 2.00 | 7.00 |
| | 6 to 10 years | 44 | 5.5000 | 1.32068 | .19910 | 5.0985 | 5.9015 | 2.00 | 7.00 |
| | 11 years and above | 42 | 4.5238 | 1.99069 | .30717 | 3.9035 | 5.1442 | 1.00 | 7.00 |
| | Total | 131 | 5.2366 | 1.58275 | .13829 | 4.9631 | 5.5102 | 1.00 | 7.00 |
| Non-Governmental Organizations (NGOs) | 1 to 5 years | 45 | 5.5556 | 1.07778 | .16067 | 5.2318 | 5.8794 | 3.00 | 7.00 |
| | 6 to 10 years | 43 | 5.2326 | 1.39450 | .21266 | 4.8034 | 5.6617 | 2.00 | 7.00 |
| | 11 years and above | 42 | 4.3095 | 1.78733 | .27579 | 3.7526 | 4.8665 | 1.00 | 7.00 |
| | Total | 130 | 5.0462 | 1.52428 | .13369 | 4.7816 | 5.3107 | 1.00 | 7.00 |
| Trade Associations | 1 to 5 years | 45 | 5.4444 | 1.32383 | .19734 | 5.0467 | 5.8422 | 2.00 | 7.00 |
| | 6 to 10 years | 44 | 5.4318 | 1.26487 | .19069 | 5.0473 | 5.8164 | 2.00 | 7.00 |
| | 11 years and above | 42 | 4.4048 | 1.62390 | .25057 | 3.8987 | 4.9108 | 1.00 | 7.00 |
| | Total | 131 | 5.1069 | 1.47935 | .12925 | 4.8512 | 5.3626 | 1.00 | 7.00 |

ANOVA

| | | Sum of Squares | df | Mean Square | F | Sig. |
|---------------------------------------|----------------|----------------|-----|-------------|-------|------|
| Employees | Between Groups | .839 | 2 | .419 | .277 | .759 |
| | Within Groups | 193.848 | 128 | 1.514 | | |
| | Total | 194.687 | 130 | | | |
| Customers | Between Groups | 3.203 | 2 | 1.601 | 1.418 | .246 |
| | Within Groups | 145.706 | 129 | 1.130 | | |
| | Total | 148.909 | 131 | | | |
| Financiers | Between Groups | 23.755 | 2 | 11.877 | 6.897 | .001 |
| | Within Groups | 218.715 | 127 | 1.722 | | |
| | Total | 242.469 | 129 | | | |
| Suppliers | Between Groups | 8.395 | 2 | 4.198 | 2.050 | .133 |
| | Within Groups | 264.120 | 129 | 2.047 | | |
| | Total | 272.515 | 131 | | | |
| Communities | Between Groups | 15.811 | 2 | 7.906 | 5.138 | .007 |
| | Within Groups | 196.937 | 128 | 1.539 | | |
| | Total | 212.748 | 130 | | | |
| Environment | Between Groups | 36.626 | 2 | 18.313 | 9.725 | .000 |
| | Within Groups | 241.023 | 128 | 1.883 | | |
| | Total | 277.649 | 130 | | | |
| Government | Between Groups | 31.877 | 2 | 15.938 | 6.944 | .001 |
| | Within Groups | 293.787 | 128 | 2.295 | | |
| | Total | 325.664 | 130 | | | |
| Non-Governmental Organizations (NGOs) | Between Groups | 35.961 | 2 | 17.981 | 8.658 | .000 |
| | Within Groups | 263.762 | 127 | 2.077 | | |
| | Total | 299.723 | 129 | | | |
| Trade Associations | Between Groups | 30.478 | 2 | 15.239 | 7.679 | .001 |
| | Within Groups | 254.026 | 128 | 1.985 | | |
| | Total | 284.504 | 130 | | | |

Robust Tests of Equality of Means

| | | Statistic ^a | df1 | df2 | Sig. |
|---------------------------------------|-------|------------------------|-----|--------|------|
| Employees | Welch | .326 | 2 | 83.924 | .723 |
| Customers | Welch | 1.804 | 2 | 84.241 | .171 |
| Financiers | Welch | 4.894 | 2 | 80.027 | .010 |
| Suppliers | Welch | 1.563 | 2 | 82.252 | .216 |
| Communities | Welch | 4.011 | 2 | 82.592 | .022 |
| Environment | Welch | 7.357 | 2 | 81.615 | .001 |
| Government | Welch | 5.178 | 2 | 80.556 | .008 |
| Non-Governmental Organizations (NGOs) | Welch | 7.558 | 2 | 79.937 | .001 |
| Trade Associations | Welch | 6.491 | 2 | 83.731 | .002 |

a. Asymptotically F distributed.

Multiple Comparisons

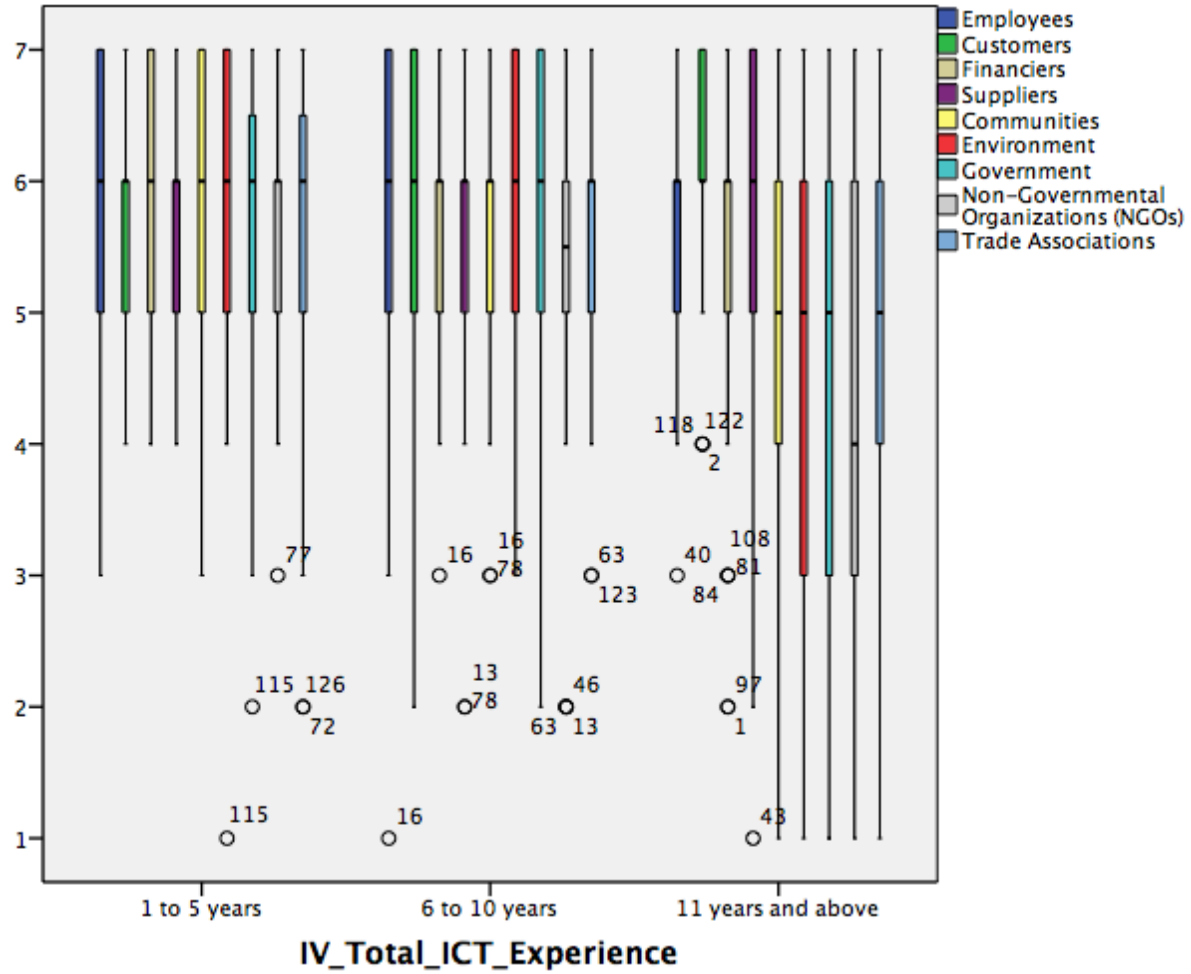
| Dependent Variable | | (I) Total ICT Experience | (J) Total ICT Experience | Mean Difference (I-J) | Std. Error | Sig. | 95% Confidence Interval | |
|--------------------|--------------|--------------------------|--------------------------|-----------------------|------------|------|-------------------------|-------------|
| | | | | | | | Lower Bound | Upper Bound |
| | | | | | | | Employees | Tukey HSD |
| | | | 11 years and above | .19194 | .26431 | .748 | -.4348 | .8187 |
| | | 6 to 10 years | 1 to 5 years | -.05336 | .25950 | .977 | -.6687 | .5620 |
| | | | 11 years and above | .13858 | .26713 | .862 | -.4949 | .7720 |
| | | 11 years and above | 1 to 5 years | -.19194 | .26431 | .748 | -.8187 | .4348 |
| | | | 6 to 10 years | -.13858 | .26713 | .862 | -.7720 | .4949 |
| | Games-Howell | 1 to 5 years | 6 to 10 years | .05336 | .26972 | .979 | -.5906 | .6974 |
| | | | 11 years and above | .19194 | .24040 | .705 | -.3817 | .7656 |
| | | 6 to 10 years | 1 to 5 years | -.05336 | .26972 | .979 | -.6974 | .5906 |
| | | | 11 years and above | .13858 | .27889 | .873 | -.5273 | .8044 |
| | | 11 years and above | 1 to 5 years | -.19194 | .24040 | .705 | -.7656 | .3817 |
| | | | 6 to 10 years | -.13858 | .27889 | .873 | -.8044 | .5273 |
| Customers | Tukey HSD | 1 to 5 years | 6 to 10 years | -.14723 | .22411 | .789 | -.6786 | .3841 |
| | | | 11 years and above | -.37992 | .22682 | .219 | -.9177 | .1579 |
| | | 6 to 10 years | 1 to 5 years | .14723 | .22411 | .789 | -.3841 | .6786 |
| | | | 11 years and above | -.23268 | .22927 | .569 | -.7763 | .3109 |
| | | 11 years and above | 1 to 5 years | .37992 | .22682 | .219 | -.1579 | .9177 |
| | | | 6 to 10 years | .23268 | .22927 | .569 | -.3109 | .7763 |
| | Games-Howell | 1 to 5 years | 6 to 10 years | -.14723 | .23665 | .808 | -.7126 | .4181 |
| | | | 11 years and above | -.37992 | .19980 | .144 | -.8565 | .0967 |
| | | 6 to 10 years | 1 to 5 years | .14723 | .23665 | .808 | -.4181 | .7126 |
| | | | 11 years and above | -.23268 | .24159 | .602 | -.8098 | .3444 |
| | | 11 years and above | 1 to 5 years | .37992 | .19980 | .144 | -.0967 | .8565 |
| | | | 6 to 10 years | .23268 | .24159 | .602 | -.3444 | .8098 |
| Financiers | Tukey HSD | 1 to 5 years | 6 to 10 years | .16796 | .27986 | .820 | -.4957 | .8316 |
| | | | 11 years and above | .98413 [*] | .28156 | .002 | .3164 | 1.6518 |
| | | 6 to 10 years | 1 to 5 years | -.16796 | .27986 | .820 | -.8316 | .4957 |
| | | | 11 years and above | .81617 [*] | .28470 | .013 | .1410 | 1.4913 |
| | | 11 years and above | 1 to 5 years | -.98413 [*] | .28156 | .002 | -1.6518 | -.3164 |
| | | | 6 to 10 years | -.81617 [*] | .28470 | .013 | -1.4913 | -.1410 |
| | Games-Howell | 1 to 5 years | 6 to 10 years | .16796 | .21462 | .715 | -.3439 | .6798 |
| | | | 11 years and above | .98413 [*] | .31445 | .007 | .2295 | 1.7388 |
| | | 6 to 10 years | 1 to 5 years | -.16796 | .21462 | .715 | -.6798 | .3439 |
| | | | 11 years and above | .81617 [*] | .31631 | .032 | .0573 | 1.5750 |
| | | 11 years and above | 1 to 5 years | -.98413 [*] | .31445 | .007 | -1.7388 | -.2295 |
| | | | 6 to 10 years | -.81617 [*] | .31631 | .032 | -1.5750 | -.0573 |
| Suppliers | Tukey HSD | 1 to 5 years | 6 to 10 years | -.04941 | .30173 | .985 | -.7648 | .6660 |
| | | | 11 years and above | .51553 | .30538 | .214 | -.2086 | 1.2396 |
| | | 6 to 10 years | 1 to 5 years | .04941 | .30173 | .985 | -.6660 | .7648 |
| | | | 11 years and above | .56494 | .30868 | .164 | -.1670 | 1.2968 |
| | | 11 years and above | 1 to 5 years | -.51553 | .30538 | .214 | -1.2396 | .2086 |
| | | | 6 to 10 years | -.56494 | .30868 | .164 | -1.2968 | .1670 |
| | Games-Howell | 1 to 5 years | 6 to 10 years | -.04941 | .26018 | .980 | -.6699 | .5711 |
| | | | 11 years and above | .51553 | .32480 | .258 | -.2623 | 1.2934 |
| | | 6 to 10 years | 1 to 5 years | .04941 | .26018 | .980 | -.5711 | .6699 |
| | | | 11 years and above | .56494 | .33779 | .223 | -.2428 | 1.3727 |
| | | 11 years and above | 1 to 5 years | -.51553 | .32480 | .258 | -1.2934 | .2623 |
| | | | 6 to 10 years | -.56494 | .33779 | .223 | -1.3727 | .2428 |

(Continued)

| | | | | | | | | |
|---------------------------------------|--------------------|--------------------|--------------------|-----------|--------|---------|---------|--------|
| Communities | Tukey HSD | 1 to 5 years | 6 to 10 years | .07323 | .26298 | .958 | -.5504 | .6968 |
| | | | 11 years and above | .77778* | .26613 | .011 | .1467 | 1.4088 |
| | | 6 to 10 years | 1 to 5 years | -.07323 | .26298 | .958 | -.6968 | .5504 |
| | Games-Howell | 6 to 10 years | 11 years and above | .70455* | .26758 | .026 | .0700 | 1.3391 |
| | | | 1 to 5 years | -.77778* | .26613 | .011 | -1.4088 | -.1467 |
| | | 11 years and above | 6 to 10 years | -.70455* | .26758 | .026 | -1.3391 | -.0700 |
| | Games-Howell | 1 to 5 years | 6 to 10 years | .07323 | .22833 | .945 | -.4712 | .6177 |
| | | | 11 years and above | .77778* | .28618 | .022 | .0932 | 1.4624 |
| | | 6 to 10 years | 1 to 5 years | -.07323 | .22833 | .945 | -.6177 | .4712 |
| Games-Howell | 6 to 10 years | 11 years and above | .70455* | .28589 | .042 | .0206 | 1.3885 | |
| | | 1 to 5 years | -.77778* | .28618 | .022 | -1.4624 | -.0932 | |
| | 11 years and above | 6 to 10 years | -.70455* | .28589 | .042 | -1.3885 | -.0206 | |
| Environment | Tukey HSD | 1 to 5 years | 6 to 10 years | -.10404 | .29093 | .932 | -.7939 | .5858 |
| | | | 11 years and above | 1.07778* | .29441 | .001 | .3796 | 1.7759 |
| | | 6 to 10 years | 1 to 5 years | .10404 | .29093 | .932 | -.5858 | .7939 |
| | Games-Howell | 6 to 10 years | 11 years and above | 1.18182* | .29602 | .000 | .4799 | 1.8838 |
| | | | 1 to 5 years | -1.07778* | .29441 | .001 | -1.7759 | -.3796 |
| | | 11 years and above | 6 to 10 years | -1.18182* | .29602 | .000 | -1.8838 | -.4799 |
| | Games-Howell | 1 to 5 years | 6 to 10 years | -.10404 | .24291 | .904 | -.6833 | .4753 |
| | | | 11 years and above | 1.07778* | .32600 | .004 | .2977 | 1.8579 |
| | | 6 to 10 years | 1 to 5 years | .10404 | .24291 | .904 | -.4753 | .6833 |
| Games-Howell | 6 to 10 years | 11 years and above | 1.18182* | .31567 | .001 | .4253 | 1.9384 | |
| | | 1 to 5 years | -1.07778* | .32600 | .004 | -1.8579 | -.2977 | |
| | 11 years and above | 6 to 10 years | -1.18182* | .31567 | .001 | -1.9384 | -.4253 | |
| Government | Tukey HSD | 1 to 5 years | 6 to 10 years | .14444 | .32120 | .895 | -.6172 | .9061 |
| | | | 11 years and above | 1.12063* | .32504 | .002 | .3499 | 1.8914 |
| | | 6 to 10 years | 1 to 5 years | -.14444 | .32120 | .895 | -.9061 | .6172 |
| | Games-Howell | 6 to 10 years | 11 years and above | .97619* | .32682 | .009 | .2012 | 1.7512 |
| | | | 1 to 5 years | -1.12063* | .32504 | .002 | -1.8914 | -.3499 |
| | | 11 years and above | 6 to 10 years | -.97619* | .32682 | .009 | -1.7512 | -.2012 |
| | Games-Howell | 1 to 5 years | 6 to 10 years | .14444 | .26092 | .845 | -.4781 | .7669 |
| | | | 11 years and above | 1.12063* | .35042 | .006 | .2798 | 1.9614 |
| | | 6 to 10 years | 1 to 5 years | -.14444 | .26092 | .845 | -.7669 | .4781 |
| Games-Howell | 6 to 10 years | 11 years and above | .97619* | .36605 | .025 | .0999 | 1.8525 | |
| | | 1 to 5 years | -1.12063* | .35042 | .006 | -1.9614 | -.2798 | |
| | 11 years and above | 6 to 10 years | -.97619* | .36605 | .025 | -1.8525 | -.0999 | |
| Non-Governmental Organizations (NGOs) | Tukey HSD | 1 to 5 years | 6 to 10 years | .32300 | .30733 | .546 | -.4058 | 1.0518 |
| | | | 11 years and above | 1.24603* | .30920 | .000 | .5128 | 1.9793 |
| | | 6 to 10 years | 1 to 5 years | -.32300 | .30733 | .546 | -1.0518 | .4058 |
| | Games-Howell | 6 to 10 years | 11 years and above | .92303* | .31265 | .010 | .1816 | 1.6645 |
| | | | 1 to 5 years | -1.24603* | .30920 | .000 | -1.9793 | -.5128 |
| | | 11 years and above | 6 to 10 years | -.92303* | .31265 | .010 | -1.6645 | -.1816 |
| | Games-Howell | 1 to 5 years | 6 to 10 years | .32300 | .26653 | .450 | -.3136 | .9596 |
| | | | 11 years and above | 1.24603* | .31918 | .001 | .4809 | 2.0112 |
| | | 6 to 10 years | 1 to 5 years | -.32300 | .26653 | .450 | -.9596 | .3136 |
| Games-Howell | 6 to 10 years | 11 years and above | .92303* | .34826 | .026 | .0908 | 1.7552 | |
| | | 1 to 5 years | -1.24603* | .31918 | .001 | -2.0112 | -.4809 | |
| | 11 years and above | 6 to 10 years | -.92303* | .34826 | .026 | -1.7552 | -.0908 | |
| Trade Associations | Tukey HSD | 1 to 5 years | 6 to 10 years | .01263 | .29867 | .999 | -.6956 | .7209 |
| | | | 11 years and above | 1.03968* | .30225 | .002 | .3230 | 1.7564 |
| | | 6 to 10 years | 1 to 5 years | -.01263 | .29867 | .999 | -.7209 | .6956 |
| | Games-Howell | 6 to 10 years | 11 years and above | 1.02706* | .30390 | .003 | .3064 | 1.7477 |
| | | | 1 to 5 years | -1.03968* | .30225 | .002 | -1.7564 | -.3230 |
| | | 11 years and above | 6 to 10 years | -1.02706* | .30390 | .003 | -1.7477 | -.3064 |
| | Games-Howell | 1 to 5 years | 6 to 10 years | .01263 | .27442 | .999 | -.6417 | .6670 |
| | | | 11 years and above | 1.03968* | .31895 | .005 | .2778 | 1.8015 |
| | | 6 to 10 years | 1 to 5 years | -.01263 | .27442 | .999 | -.6670 | .6417 |
| Games-Howell | 6 to 10 years | 11 years and above | 1.02706* | .31488 | .005 | .2746 | 1.7795 | |
| | | 1 to 5 years | -1.03968* | .31895 | .005 | -1.8015 | -.2778 | |
| | 11 years and above | 6 to 10 years | -1.02706* | .31488 | .005 | -1.7795 | -.2746 | |

*. The mean difference is significant at the 0.05 level.

M.2: Boxplot Graphical Representation Of Data After Removing Significant Outliers



After removing the outliers identified in Section M.1 (Appendix M), an updated boxplot graph shows no further extreme outliers as shown above.

Descriptives

| | | N | Mean | Std. Deviation | Std. Error | 95% Confidence Interval for Mean | | Minimum | Maximum |
|---------------------------------------|--------------------|-----|--------|----------------|------------|----------------------------------|-------------|---------|---------|
| | | | | | | Lower Bound | Upper Bound | | |
| Employees | 1 to 5 years | 45 | 5.8000 | 1.09959 | .16392 | 5.4696 | 6.1304 | 3.00 | 7.00 |
| | 6 to 10 years | 44 | 5.7727 | 1.42834 | .21533 | 5.3385 | 6.2070 | 1.00 | 7.00 |
| | 11 years and above | 37 | 5.5405 | 1.12038 | .18419 | 5.1670 | 5.9141 | 3.00 | 7.00 |
| | Total | 126 | 5.7143 | 1.22544 | .10917 | 5.4982 | 5.9303 | 1.00 | 7.00 |
| Customers | 1 to 5 years | 45 | 5.7333 | .93905 | .13999 | 5.4512 | 6.0155 | 4.00 | 7.00 |
| | 6 to 10 years | 44 | 5.8864 | 1.27982 | .19294 | 5.4973 | 6.2755 | 2.00 | 7.00 |
| | 11 years and above | 38 | 6.1053 | .89411 | .14504 | 5.8114 | 6.3991 | 4.00 | 7.00 |
| | Total | 127 | 5.8976 | 1.06036 | .09409 | 5.7114 | 6.0838 | 2.00 | 7.00 |
| Financiers | 1 to 5 years | 44 | 5.8864 | 1.01651 | .15325 | 5.5773 | 6.1954 | 4.00 | 7.00 |
| | 6 to 10 years | 43 | 5.7209 | 1.00772 | .15368 | 5.4108 | 6.0311 | 3.00 | 7.00 |
| | 11 years and above | 38 | 5.3158 | 1.31735 | .21370 | 4.8828 | 5.7488 | 2.00 | 7.00 |
| | Total | 125 | 5.6560 | 1.12954 | .10103 | 5.4560 | 5.8560 | 2.00 | 7.00 |
| Suppliers | 1 to 5 years | 45 | 5.6889 | .94922 | .14150 | 5.4037 | 5.9741 | 4.00 | 7.00 |
| | 6 to 10 years | 44 | 5.6364 | 1.29563 | .19532 | 5.2425 | 6.0303 | 2.00 | 7.00 |
| | 11 years and above | 38 | 5.3421 | 1.61540 | .26205 | 4.8111 | 5.8731 | 1.00 | 7.00 |
| | Total | 127 | 5.5669 | 1.29462 | .11488 | 5.3396 | 5.7943 | 1.00 | 7.00 |
| Communities | 1 to 5 years | 44 | 5.7955 | 1.09075 | .16444 | 5.4638 | 6.1271 | 3.00 | 7.00 |
| | 6 to 10 years | 44 | 5.7045 | 1.06922 | .16119 | 5.3795 | 6.0296 | 3.00 | 7.00 |
| | 11 years and above | 38 | 5.0789 | 1.42149 | .23060 | 4.6117 | 5.5462 | 1.00 | 7.00 |
| | Total | 126 | 5.5476 | 1.22381 | .10903 | 5.3318 | 5.7634 | 1.00 | 7.00 |
| Environment | 1 to 5 years | 44 | 5.5909 | 1.22604 | .18483 | 5.2182 | 5.9637 | 1.00 | 7.00 |
| | 6 to 10 years | 44 | 5.6818 | 1.07342 | .16182 | 5.3555 | 6.0082 | 3.00 | 7.00 |
| | 11 years and above | 38 | 4.6053 | 1.77885 | .28857 | 4.0206 | 5.1900 | 1.00 | 7.00 |
| | Total | 126 | 5.3254 | 1.44127 | .12840 | 5.0713 | 5.5795 | 1.00 | 7.00 |
| Government | 1 to 5 years | 44 | 5.6364 | 1.14305 | .17232 | 5.2888 | 5.9839 | 2.00 | 7.00 |
| | 6 to 10 years | 44 | 5.5000 | 1.32068 | .19910 | 5.0985 | 5.9015 | 2.00 | 7.00 |
| | 11 years and above | 38 | 4.6579 | 1.94903 | .31617 | 4.0173 | 5.2985 | 1.00 | 7.00 |
| | Total | 126 | 5.2937 | 1.53398 | .13666 | 5.0232 | 5.5641 | 1.00 | 7.00 |
| Non-Governmental Organizations (NGOs) | 1 to 5 years | 44 | 5.5682 | 1.08687 | .16385 | 5.2377 | 5.8986 | 3.00 | 7.00 |
| | 6 to 10 years | 43 | 5.2326 | 1.39450 | .21266 | 4.8034 | 5.6617 | 2.00 | 7.00 |
| | 11 years and above | 38 | 4.3947 | 1.70118 | .27597 | 3.8356 | 4.9539 | 1.00 | 7.00 |
| | Total | 125 | 5.0960 | 1.47246 | .13170 | 4.8353 | 5.3567 | 1.00 | 7.00 |
| Trade Associations | 1 to 5 years | 44 | 5.4545 | 1.33738 | .20162 | 5.0479 | 5.8611 | 2.00 | 7.00 |
| | 6 to 10 years | 44 | 5.4318 | 1.26487 | .19069 | 5.0473 | 5.8164 | 2.00 | 7.00 |
| | 11 years and above | 38 | 4.5789 | 1.55323 | .25197 | 4.0684 | 5.0895 | 1.00 | 7.00 |
| | Total | 126 | 5.1825 | 1.42773 | .12719 | 4.9308 | 5.4343 | 1.00 | 7.00 |

ANOVA

| | | Sum of Squares | df | Mean Square | F | Sig. |
|---------------------------------------|----------------|----------------|-----|-------------|-------|------|
| Employees | Between Groups | 1.598 | 2 | .799 | .528 | .591 |
| | Within Groups | 186.116 | 123 | 1.513 | | |
| | Total | 187.714 | 125 | | | |
| Customers | Between Groups | 2.859 | 2 | 1.429 | 1.277 | .283 |
| | Within Groups | 138.811 | 124 | 1.119 | | |
| | Total | 141.669 | 126 | | | |
| Financiers | Between Groups | 6.914 | 2 | 3.457 | 2.788 | .065 |
| | Within Groups | 151.294 | 122 | 1.240 | | |
| | Total | 158.208 | 124 | | | |
| Suppliers | Between Groups | 2.802 | 2 | 1.401 | .834 | .437 |
| | Within Groups | 208.379 | 124 | 1.680 | | |
| | Total | 211.181 | 126 | | | |
| Communities | Between Groups | 12.133 | 2 | 6.066 | 4.262 | .016 |
| | Within Groups | 175.081 | 123 | 1.423 | | |
| | Total | 187.214 | 125 | | | |
| Environment | Between Groups | 28.398 | 2 | 14.199 | 7.552 | .001 |
| | Within Groups | 231.261 | 123 | 1.880 | | |
| | Total | 259.659 | 125 | | | |
| Government | Between Groups | 22.400 | 2 | 11.200 | 5.070 | .008 |
| | Within Groups | 271.734 | 123 | 2.209 | | |
| | Total | 294.135 | 125 | | | |
| Non-Governmental Organizations (NGOs) | Between Groups | 29.299 | 2 | 14.650 | 7.461 | .001 |
| | Within Groups | 239.549 | 122 | 1.964 | | |
| | Total | 268.848 | 124 | | | |
| Trade Associations | Between Groups | 19.834 | 2 | 9.917 | 5.191 | .007 |
| | Within Groups | 234.968 | 123 | 1.910 | | |
| | Total | 254.802 | 125 | | | |

Multiple Comparisons

| Dependent Variable | | (I) Total ICT Experience | (J) Total ICT Experience | Mean Difference (I-J) | Std. Error | Sig. | 95% Confidence Interval | |
|--------------------|--------------|--------------------------|--------------------------|-----------------------|------------|------|-------------------------|-------------|
| | | | | | | | Lower Bound | Upper Bound |
| | | | | | | | Employees | Tukey HSD |
| | | | 11 years and above | .25946 | .27299 | .610 | -.3882 | .9071 |
| | | 6 to 10 years | 1 to 5 years | -.02727 | .26080 | .994 | -.6460 | .5914 |
| | | | 11 years and above | .23219 | .27438 | .675 | -.4188 | .8831 |
| | | 11 years and above | 1 to 5 years | -.25946 | .27299 | .610 | -.9071 | .3882 |
| | | | 6 to 10 years | -.23219 | .27438 | .675 | -.8831 | .4188 |
| | Games-Howell | 1 to 5 years | 6 to 10 years | .02727 | .27062 | .994 | -.6189 | .6734 |
| | | | 11 years and above | .25946 | .24657 | .546 | -.3299 | .8488 |
| | | 6 to 10 years | 1 to 5 years | -.02727 | .27062 | .994 | -.6734 | .6189 |
| | | | 11 years and above | .23219 | .28336 | .692 | -.4447 | .9091 |
| | | 11 years and above | 1 to 5 years | -.25946 | .24657 | .546 | -.8488 | .3299 |
| | | | 6 to 10 years | -.23219 | .28336 | .692 | -.9091 | .4447 |
| Customers | Tukey HSD | 1 to 5 years | 6 to 10 years | -.15303 | .22432 | .774 | -.6852 | .3791 |
| | | | 11 years and above | -.37193 | .23310 | .251 | -.9249 | .1810 |
| | | 6 to 10 years | 1 to 5 years | .15303 | .22432 | .774 | -.3791 | .6852 |
| | | | 11 years and above | -.21890 | .23431 | .620 | -.7747 | .3369 |
| | | 11 years and above | 1 to 5 years | .37193 | .23310 | .251 | -.1810 | .9249 |
| | | | 6 to 10 years | .21890 | .23431 | .620 | -.3369 | .7747 |
| | Games-Howell | 1 to 5 years | 6 to 10 years | -.15303 | .23837 | .797 | -.7225 | .4164 |
| | | | 11 years and above | -.37193 | .20158 | .162 | -.8533 | .1095 |
| | | 6 to 10 years | 1 to 5 years | .15303 | .23837 | .797 | -.4164 | .7225 |
| | | | 11 years and above | -.21890 | .24138 | .638 | -.7958 | .3580 |
| | | 11 years and above | 1 to 5 years | .37193 | .20158 | .162 | -.1095 | .8533 |
| | | | 6 to 10 years | .21890 | .24138 | .638 | -.3580 | .7958 |
| Financiers | Tukey HSD | 1 to 5 years | 6 to 10 years | .16543 | .23880 | .768 | -.4012 | .7320 |
| | | | 11 years and above | .57057 | .24661 | .058 | -.0146 | 1.1557 |
| | | 6 to 10 years | 1 to 5 years | -.16543 | .23880 | .768 | -.7320 | .4012 |
| | | | 11 years and above | .40514 | .24794 | .235 | -.1831 | .9934 |
| | | 11 years and above | 1 to 5 years | -.57057 | .24661 | .058 | -1.1557 | .0146 |
| | | | 6 to 10 years | -.40514 | .24794 | .235 | -.9934 | .1831 |
| | Games-Howell | 1 to 5 years | 6 to 10 years | .16543 | .21703 | .727 | -.3523 | .6831 |
| | | | 11 years and above | .57057 | .26297 | .084 | -.0593 | 1.2004 |
| | | 6 to 10 years | 1 to 5 years | -.16543 | .21703 | .727 | -.6831 | .3523 |
| | | | 11 years and above | .40514 | .26322 | .279 | -.2254 | 1.0357 |
| | | 11 years and above | 1 to 5 years | -.57057 | .26297 | .084 | -1.2004 | .0593 |
| | | | 6 to 10 years | -.40514 | .26322 | .279 | -1.0357 | .2254 |
| Suppliers | Tukey HSD | 1 to 5 years | 6 to 10 years | .05253 | .27484 | .980 | -.5994 | .7045 |
| | | | 11 years and above | .34678 | .28560 | .447 | -.3307 | 1.0243 |
| | | 6 to 10 years | 1 to 5 years | -.05253 | .27484 | .980 | -.7045 | .5994 |
| | | | 11 years and above | .29426 | .28708 | .563 | -.3868 | .9753 |
| | | 11 years and above | 1 to 5 years | -.34678 | .28560 | .447 | -1.0243 | .3307 |
| | | | 6 to 10 years | -.29426 | .28708 | .563 | -.9753 | .3868 |
| | Games-Howell | 1 to 5 years | 6 to 10 years | .05253 | .24119 | .974 | -.5236 | .6287 |
| | | | 11 years and above | .34678 | .29782 | .479 | -.3697 | 1.0633 |
| | | 6 to 10 years | 1 to 5 years | -.05253 | .24119 | .974 | -.6287 | .5236 |
| | | | 11 years and above | .29426 | .32684 | .642 | -.4882 | 1.0767 |
| | | 11 years and above | 1 to 5 years | -.34678 | .29782 | .479 | -1.0633 | .3697 |
| | | | 6 to 10 years | -.29426 | .32684 | .642 | -1.0767 | .4882 |

(Continued)

| | | | | | | | | |
|--|--------------------|--------------------|--------------------|-----------|---------|---------|---------|--------|
| Communities | Tukey HSD | 1 to 5 years | 6 to 10 years | .09091 | .25436 | .932 | -.5126 | .6944 |
| | | | 11 years and above | .71651* | .26421 | .021 | -.0897 | 1.3433 |
| | | 6 to 10 years | 1 to 5 years | -.09091 | .25436 | .932 | -.6944 | .5126 |
| | | 11 years and above | .62560 | .26421 | .051 | -.0012 | 1.2524 | |
| | | 11 years and above | 1 to 5 years | -.71651* | .26421 | .021 | -1.3433 | -.0897 |
| | | 6 to 10 years | -.62560 | .26421 | .051 | -1.2524 | .0012 | |
| | Games- Howell | 1 to 5 years | 6 to 10 years | .09091 | .23027 | .918 | -.4583 | .6401 |
| | | | 11 years and above | .71651* | .28322 | .036 | .0381 | 1.3949 |
| | | 6 to 10 years | 1 to 5 years | -.09091 | .23027 | .918 | -.6401 | .4583 |
| | | 11 years and above | .62560 | .28135 | .074 | -.0485 | 1.2997 | |
| | 11 years and above | 1 to 5 years | -.71651* | .28322 | .036 | -1.3949 | -.0381 | |
| | | 6 to 10 years | -.62560 | .28135 | .074 | -1.2997 | .0485 | |
| Environment | Tukey HSD | 1 to 5 years | 6 to 10 years | -.09091 | .29234 | .948 | -.7845 | .6026 |
| | | | 11 years and above | .98565* | .30366 | .004 | .2652 | 1.7061 |
| | | 6 to 10 years | 1 to 5 years | .09091 | .29234 | .948 | -.6026 | .7845 |
| | | 11 years and above | 1.07656* | .30366 | .002 | .3561 | 1.7970 | |
| | | 11 years and above | 1 to 5 years | -.98565* | .30366 | .004 | -1.7061 | -.2652 |
| | | 6 to 10 years | -1.07656* | .30366 | .002 | -1.7970 | -.3561 | |
| | Games- Howell | 1 to 5 years | 6 to 10 years | -.09091 | .24566 | .927 | -.6770 | .4952 |
| | | | 11 years and above | .98565* | .34269 | .015 | .1635 | 1.8078 |
| | | 6 to 10 years | 1 to 5 years | .09091 | .24566 | .927 | -.4952 | .6770 |
| | | 11 years and above | 1.07656* | .33084 | .005 | .2811 | 1.8720 | |
| | 11 years and above | 1 to 5 years | -.98565* | .34269 | .015 | -1.8078 | -.1635 | |
| | 6 to 10 years | -1.07656* | .33084 | .005 | -1.8720 | -.2811 | | |
| Government | Tukey HSD | 1 to 5 years | 6 to 10 years | .13636 | .31689 | .903 | -.6154 | .8882 |
| | | | 11 years and above | .97847* | .32916 | .010 | .1976 | 1.7594 |
| | | 6 to 10 years | 1 to 5 years | -.13636 | .31689 | .903 | -.8882 | .6154 |
| | | 11 years and above | .84211* | .32916 | .031 | .0612 | 1.6230 | |
| | | 11 years and above | 1 to 5 years | -.97847* | .32916 | .010 | -1.7594 | -.1976 |
| | | 6 to 10 years | -.84211* | .32916 | .031 | -1.6230 | -.0612 | |
| | Games- Howell | 1 to 5 years | 6 to 10 years | .13636 | .26332 | .863 | -.4919 | .7646 |
| | | | 11 years and above | .97847* | .36008 | .023 | .1123 | 1.8446 |
| | | 6 to 10 years | 1 to 5 years | -.13636 | .26332 | .863 | -.7646 | .4919 |
| | | 11 years and above | .84211 | .37364 | .070 | -.0546 | 1.7388 | |
| | 11 years and above | 1 to 5 years | -.97847* | .36008 | .023 | -1.8446 | -.1123 | |
| | 6 to 10 years | -.84211 | .37364 | .070 | -1.7388 | .0546 | | |
| Non-Governmental Organizations (NGOs) | Tukey HSD | 1 to 5 years | 6 to 10 years | .33562 | .30048 | .505 | -.3773 | 1.0486 |
| | | | 11 years and above | 1.17344* | .31032 | .001 | .4372 | 1.9097 |
| | | 6 to 10 years | 1 to 5 years | -.33562 | .30048 | .505 | -1.0486 | .3773 |
| | | 11 years and above | .83782* | .31198 | .022 | .0976 | 1.5781 | |
| | | 11 years and above | 1 to 5 years | -1.17344* | .31032 | .001 | -1.9097 | -.4372 |
| | | 6 to 10 years | -.83782* | .31198 | .022 | -1.5781 | -.0976 | |
| | Games- Howell | 1 to 5 years | 6 to 10 years | .33562 | .26846 | .428 | -.3056 | .9768 |
| | | | 11 years and above | 1.17344* | .32095 | .002 | .4025 | 1.9444 |
| | | 6 to 10 years | 1 to 5 years | -.33562 | .26846 | .428 | -.9768 | .3056 |
| | | 11 years and above | .83782* | .34840 | .049 | .0040 | 1.6717 | |
| | 11 years and above | 1 to 5 years | -1.17344* | .32095 | .002 | -1.9444 | -.4025 | |
| | 6 to 10 years | -.83782* | .34840 | .049 | -1.6717 | -.0040 | | |

(Continued)

| | | | | | | | | |
|--------------------|--------------------|--------------------|--------------------|----------|--------|---------|---------|--------|
| Trade Associations | Tukey HSD | 1 to 5 years | 6 to 10 years | .02273 | .29467 | .997 | -.6764 | .7218 |
| | | | 11 years and above | .87560* | .30608 | .014 | .1494 | 1.6018 |
| | | 6 to 10 years | 1 to 5 years | -.02273 | .29467 | .997 | -.7218 | .6764 |
| | | | 11 years and above | .85287* | .30608 | .017 | .1267 | 1.5790 |
| | | 11 years and above | 1 to 5 years | -.87560* | .30608 | .014 | -1.6018 | -.1494 |
| | | 6 to 10 years | 6 to 10 years | -.85287* | .30608 | .017 | -1.5790 | -.1267 |
| | Games- Howell | 1 to 5 years | 6 to 10 years | .02273 | .27751 | .996 | -.6392 | .6846 |
| | | | 11 years and above | .87560* | .32270 | .022 | .1037 | 1.6475 |
| 6 to 10 years | | 1 to 5 years | -.02273 | .27751 | .996 | -.6846 | .6392 | |
| | | 11 years and above | .85287* | .31599 | .023 | .0965 | 1.6092 | |
| | 11 years and above | 1 to 5 years | -.87560* | .32270 | .022 | -1.6475 | -.1037 | |
| | 6 to 10 years | 6 to 10 years | -.85287* | .31599 | .023 | -1.6092 | -.0965 | |

*. The mean difference is significant at the 0.05 level.

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