

## Organizational Culture & Competitive Advantage in ICT Industry in Sri Lanka

T.S.S. Fernando<sup>1</sup> & G.A.T.R. Perera<sup>2</sup>

Department of Management Studies, Faculty of Management,  
University of Peradeniya<sup>1</sup>

Department of Management & Organization Studies, Faculty of  
Management & Finance, University of Colombo<sup>2</sup>

sampaths@pdn.ac.lk<sup>1</sup>, ravinda@mos.cmb.ac.lk<sup>2</sup>

Received: 26 January 2020

Accepted: 30 November 2020

### ABSTRACT

This study investigates the impact of organizational culture on competitive advantage considering the two categories of organizational cultures namely, adhocracy culture and market culture. A cross-sectional survey was utilized in this study using a self-administered questionnaire to collect the data. Using the sample of 167 middle and upper level managers from Information Communication Technology Industry (ICT) of Sri Lanka, a structural model is outlined and tested using structural equation modeling (SEM). The study results show that both adhocracy culture and market culture have significantly positive impact on competitive advantage with having more impact from adhocracy culture. The study provides several insights for managers to adopt appropriate cultural characteristics of adhocracy and market cultures to achieve competitive advantage.

**Keywords:** Organizational Culture, Adhocracy Culture, Market Culture, Competitive Advantage

## 1. Introduction

### 1.1 Background of the Study

Information Technology sector has the cut-throat competition and achieving competitive advantage is more difficult in such a high-technology industry (Kaur and Metha, 2017). Sri Lankan Information Communication Technology (ICT) industry also a rapidly growing industry and according to Sri Lankan ICT workforce survey (2013), the ICT sector has become a key driver of economic growth, providing a great deal of benefits to the people of the country such as creates job opportunities for youth and women, enhances universal access to information which fosters social inclusion and justice, helps the economy by increasing the efficiency of markets, connects communities to global value chains and raises the productivity of economic activities and stimulating innovations. Further, it plays a major role in converting Sri Lanka into a knowledge hub.

In addition, Sri Lankan IT/BPM industry made significant progress over the last five years in the country (Sri Lankan IT/BPM Industry Review, 2014). Further, this review reveals that “Export revenue grew from USD 213 million in 2007 to an estimated USD 720 million in 2013. Total employment grew from 33,700 in 2007 to an estimated 75,100 employees in 2013. The number of companies in the industry grew from 170 in 2007 to over 220 in 2013”.

According to Sri Lankan IT/BPM Industry Review (2014), “the vision of the ICT/BPM industry in 2022 is to reach to USD 5 billion in revenue, create 200,000 direct jobs and 1,000 startups by 2022.” With that vision it can be expected that future ICT sector in Sri Lanka will be very competitive. Moreover, as per the Sri Lankan IT/BPM industry review (2014), Sri Lanka’s competitive advantage in IT/BPM is built around agility, cost, a niche talent base, ethics, and cultural adoptability. It explains that cultural adaptability and agility are required to achieve competitive advantage.

Organizational culture is an important topic in business and it plays a meaningful role in organizations affecting employees roles and organizational operations through out a firm (Sadri and Lees, 2001). Further, culture is not only determinant of organizational success or

failure, it can be a significant source of competitive advantage. As cited by Polychroniou and Trivillas (2016), Barney (1986), Foss et al. (2013) mention that theorists' and practitioners' are interested into the topic of organizational culture literature since the organizational culture is related to performance.

Daft (2012) says that the internal environment within which managers work includes organizational culture, production technology, organization structure, and physical facilities. Further, he explains that the organizational culture surfaces as extremely important to competitive advantage and the internal culture must fit the needs of the external environment and company strategy. Schein (1985) suggests that culture may be represented as "successive skins of an onion". An organization, which is able to maintain a "strong" culture, is likely to enjoy introvert and extrovert firm performance such as higher level of person-organization fit, commitment, innovation, financial performance and competitive advantage (Destler, 2016).

## **1.2 Problem Statement**

Although the extent of impact is different, almost all the organizations are facing massive competition. Cut-throat competition is unavoidable in ICT industry in any country since ICT industry is growing and technological environment is changing rapidly. It is true for Sri Lanka too. In such scenario, achieving competitive advantage is very hard and firms using their resources and competences in order to develop new strategies to win the competition. As an internal force, organizational culture plays a major role in achieving competitive advantage. Further, organizational culture and its components such as values, assumptions, beliefs, and symbols have important effects on an organization's sustainable competitive advantage (Almuslamani and Daud, 2018). Therefore, this study investigates the "impact of organizational culture that has on competitive advantage in Information Communication Technology (ICT) Industry in Sri Lanka considering the two categories of cultures namely, adhocracy culture and market culture."

### 1.3 Research Question

- What is the impact of organizational cultures that has on competitive advantage in Information Communication Technology (ICT) Industry in Sri Lanka?

### 1.4 Research Objective

Derived from the research question, research objective is

- To investigate the impact of organizational culture that has on competitive advantage in Information Communication Technology (ICT) Industry in Sri Lanka

### 1.5 Research Hypothesis

Resource Based View (RBV) explains that organizations are able to achieve competitive advantage by using distinctive capabilities (unique resources and core competencies) they have. Firm resources include all assets, capabilities, organizational processes, firm attributes, information, knowledge and others (Daft, 2012). Moreover, he explains that corporate culture is one of the internal resources. Thus, as an internal resource, culture also can be a source of competitive advantage. Based on this theory this study can hypothesize:

*H1: Adhocracy culture has significant effect on the competitive advantage in the ICT industry in Sri Lanka.*

*H2: Market culture has significant effect on the competitive advantage in the ICT industry in Sri Lanka.*

### 1.6 Significance of the Study

This study has been undertaken based on the theory of RBV. As cited by Li and Liu (2014), Lin and Germain (2003) suggest that Western-generated theories may not be fully applicable to societies with vastly different socioeconomic conditions. Theoretical and empirical examination of the theory's applicability in Sri Lanka is valuable endeavor. Therefore, findings of this study provide important implications for ICT firms operating in other developing countries too. Although the research has been undertaken in other countries relevant to organizational culture and competitive advantage, there

was a dearth of research in Sri Lanka. Therefore, literature, conceptual framework and findings of this study help other researcher to undertake new research related to organizational culture for other important industries in Sri Lanka. This study will be more important for the managers who work for ICT firms in Sri Lanka. They will be able to develop appropriate organizational cultures for their organizations in order to achieve competitive advantage and make appropriate decisions based on the findings.

## **2. Literature Review**

### **2.1 Resource Based View**

Organizations pursue different strategies to achieve competitive advantage over competitors. Various scholars have discussed different views on how organizations are able to achieve competitive advantage. Those views help organizations to decide what kinds of resources, capabilities, and methods should be used to achieve competitive advantage. However, the researcher used the Resource Based View Theory (RBV) for this study, since, compare to other views; it explains clearly how an organization can achieve competitive advantage by using capabilities of an organization.

The RBV theory was mainly developed in the late 1980s and 90s, while later there were adjustments. As cited by Barney (1991), the RBV examines the link between a firm's internal characteristics and performance. As the basis for a competitive advantage, the RBV considers the application of a bundle of tangible and intangible resources (Penrose, 1959). As Johnson et al. (2008), the RBV argues that the competitive advantage and superior performance of an organization is explained by the distinctiveness of its capabilities. According to them, strategic capability is the resources and competences of an organization needed for to survive and prosper. Further, they explain resource can be two types, namely tangible and intangible. Ray et al. (2004) argue that intangible resources are more likely to be a source of sustained competitive advantage rather than tangible ones. Tangible resources are the physical assets of an organization such as plant, labor and finance and intangible resources

are non-physical assets such as information, reputation and knowledge.

The major problem that most organizations face is sustaining the competitive advantage. Researchers have proven that when firms have resources that are valuable, rare, inimitable, and non-substitutable (VRIN attributes), they can achieve sustainable competitive advantage (Barney, 1991). Johnson et al. (2008) say that organizations must have capabilities that are of value to its customers. Rarity of capabilities is also important to sustain competitive advantage for an organization and ease of transferability, sustainability and core rigidities make capabilities rare (Johnson et al., 2008). Inimitability of competencies strengthens the sustainable competitive advantage and if the capabilities are more substitutable, sustainable competitive advantage could not be achieved.

## **2.2 Organizational Culture**

The organizational culture is a complex phenomenon, which is categorized by many aspects (Ginevicius and Vaitkunaite, 2006). Deshpande and Webster (1989) defined organizational culture as the pattern of shared values and beliefs that help individuals understand organizational functioning and thus provide them with the norms for behavior in the organization. According to the Ginevicius and Vaitkunaite (2006), organizational culture is a pattern of shared basic assumptions, which are formed, when members of organization solve the problems of external adaptation and internal integration.

Schein (1985) explains culture has three levels namely artifacts, values and basic assumptions. Moreover, he define basic assumption are the taken for granted beliefs about reality and human nature. Values are social principles, philosophies, goals and standards considered to have intrinsic worth and artifacts are visible, tangible and distinct results of activity grounded in values and assumptions.

Organizational culture plays a vital role in understanding organizational dynamics and it distinguishes the members of one organization from other people (Demir et al., 2011). An organization, which is able to maintain a strong culture, is likely to enjoy introvert and extrovert firm performance such as higher level of person–

organization fit, commitment, innovation, financial performance and competitive advantage (Destler, 2016).

A multitude of organizational culture models can be found in literature (Maximini, 2015). They are Harrison's culture model, Deal and Kennedy's culture model, Schneider's culture model and Denison and Misra's model are some of them. This study uses Organizational Culture Assessment Instrument (OCAI) which is based on Competing Value Framework (CVF). According to Maximini (2015), this model is a statistically validated and widely used tool to diagnose the organizational culture compare to other models. Polychroniou and Trivellas (2018) highlight many researchers adopted and verified Competing Value Framework of culture.

According to Quinn and Kimberly (1984), the CVF approach to organizational culture which meets all the criteria as a devise for mapping organizations' culture and can be used to conduct comparative analysis. In addition, Howard (1998) highlighted some supportive evidence that CVF gives advantages to evaluate cultures since it specifies a descriptive content of organizational culture and identifies dimensions as well as it can be used to evaluate similarities and differences across cultures. Further, Quinn and Kimberly (1984) say that CVF discovers the deep structure of an organizational culture. This culture model places an organization in a continuum. One axis describes the continuum from organic (flexibility and spontaneity) to mechanistic (control, order, stability). Other one explains the continuum from internal maintenance (smoothing activities, integration) to external positioning (competition, differentiation) Based on that, they identify four types of cultures, such as clan, adhocracy, hierarchy and market (Cameron and Quinn, 2011).

As per Deshpande et al. (1993), above four cultures provide different degree of business performance in competitive markets. Further they emphasize that a market culture and an adhocracy culture provide better performance than a hierarchical and a clan culture. The market culture focuses on competitive advantage than market superiority whereas adhocracy culture emphasizes on innovation,

entrepreneurship and risk taking. Thus, both cultures focus external positioning while other two cultures namely, clan culture and hierarchical culture focus internal maintenance. Achieving competitive advantage requires focusing more on external positioning to adapt changes happening to internal environment before competitors. Therefore, researcher has used only adhocracy and market cultures for this study.

### **2.3 Market Culture**

According to Deshpande et al. (1993), market culture more emphasis on competitive advantage and market superiority. Market culture assumes that external environment is aggressive rather than benign, consumers are demanding, expecting high value and organizations are trying to increase the competitive position. Thus, managers should work for productivity, results and profits (Maximini, 2015). Further he says that this kind of culture should be a result-oriented culture and always drives towards the success which is measured through market share and penetration. As per Cameron and Quinn (1999), market culture is an organization that focuses on external positioning with a need for stability and control. Further, characteristics of such a culture are being a results-oriented organization, the major concern is getting the job done, people are competitive and goal oriented, the leaders are hard drivers, producers and competitors are tough and demanding, the glue that holds the organization together is an emphasis on winning ,reputation and success are common concerns, the long-term focus is on competitive actions and achievement of measurable goals and targets, success is defined in terms of market share and penetration, competitive pricing and market leadership are important, the organizational style is hard-driving and competitiveness (Cameron and Quinn,1999).

### **2.4 Adhocracy Culture**

Another culture that was introduced under competing value framework is adhocracy culture. This culture is categorized by flexibility and has external focus (Polychroniou and Trivellas, 2018). According to Cameron and Quinn (1999), adhocracy culture focuses on external positioning with a high degree of flexibility and

individuality. The major characteristics of such a culture are dynamic, entrepreneurial, and creative place to work, people stick their necks out and take risks, the leaders are considered to be innovators and risk takers. the glue that holds the organization together is commitment to experimentation and innovation, the emphasis is on being on the leading edge, the organization's long-term emphasis is on growth and acquiring new resources, success means gaining unique and new products or services, try to being a product or service and the organization encourages individual initiative and freedom (Cameron and Quinn, 1999).

## **2.5 Competitive Advantage**

As cited by Sigalas et al. (2013), Barney (1991), Eisenhardt and Martin (2000), and O'Shannassy (2008) explain that there are a great deal of literature on strategic management and sources and determinants of competitive advantage, amazingly available literature does not provide any clear definition of competitive advantage. Sigalas and Pekka (2013) also emphasized that there are multiple meanings of competitive advantage and there is no consensus among the authors on a single conceptually clear and unambiguous definition. Further, they highlight that apart from few definitions most of definitions that are available in the literature are fuzzy.

Peteraf and Barney (2003) explain that an enterprise has a competitive advantage if it is able to create more economic value than the marginal (breakeven) competitor in its product market. Further, they define economic value as the value created by an enterprise in the course of providing a good or service (that) is the difference between the perceived benefits gained by the purchasers of the good and the economic cost. According to Newbert (2008), competitive advantage is the degree to which a firm has exploited opportunities, neutralized threats and reduced costs. Barney (1991) highlighted that if a firm implements a value creating strategy which is not being implemented by any current or potential competitors, competitive advantage can be achieved. Ma (2000) has mentioned that competitive advantage is relational term. Porter (1985) explained that there are two basic types of competitive advantage namely cost

leadership and differentiation. Further, he emphasized that these two basic types of competitive advantage generate three different strategies: cost leadership, differentiation and focus. Focus strategy is two kinds: cost focus and differentiation focus which focus narrow market. Cost leadership is when a firm trying to become a low cost producer in the industry and differentiation is when a firm is trying to be unique than competitors in the industry by using some dimensions which the buyers expect when they purchase product (Porter, 1985). Therefore, with above discussion, it can be concluded that there should be a comparison when defining, expressing the term competitive advantage, and discussing about the dimensions and characteristics. That comparison should happen between focal firm and its competitors.

According to Li and Liu (2014), most researches employ public archive data to measure competitive advantage, among them Return on Assets (ROA) and Tobin's Q are popular proxies. He further mentions that firms may be not willing to provide their financial data. Li and Liu (2014) have measured the competitive advantage by questions, reflected by 7 financial indicators and non-financial indicators compared with the rivals in the industry namely higher profit growth rate, higher sales revenue growth rate, lower operating cost, better product and service quality, increasingly higher market share, more profitable old customers and more profitable new customers.

Kuar and Metha (2017) define competitive advantage as the ability to gain and maintain a higher market share by offering superior products and services while earning a greater sales revenue and higher profit growth rate vice versa competitors. Thus, they have used higher profit growth rate, higher market share, higher sales revenue growth rate, more profitable new customers, more profitable old customers and better product and service quality to define and measure the competitive advantage.

This study uses the definition of competitive advantage defined by Kuar and Metha (2017) and uses the items used by Li and Liu (2014), Kuar and Metha (2016), and Peters et al. (2016) for their studies

namely, higher profit growth rate, higher sales revenue growth rate, lower operating costs, better product and service quality, increasingly higher market share, more profitable old customers and more profitable new customers.

## **2.6 Relationship between Organizational Culture and Competitive Advantage**

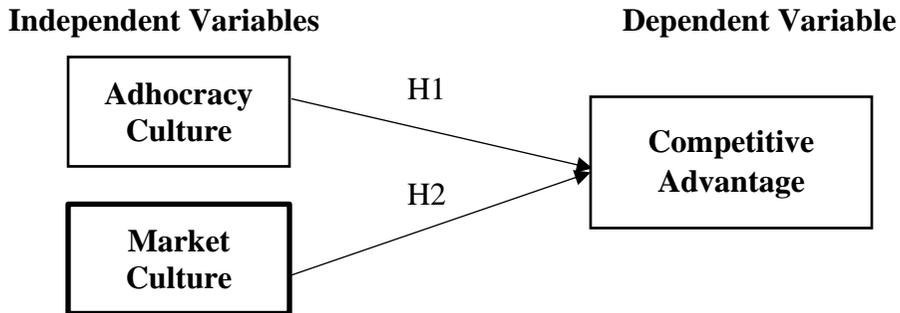
If a culture of a firm is valuable, rare and imperfectly imitable, that culture provides sustainable competitive advantage (Barney, 1986). Sadri and Lees (2006) also say that organizational culture has positive impact on competitive advantage and not only has that it becomes a prerequisite for success. Organizational culture is multidimensional phenomenon which influences enterprise success (Ginevicius and Vaitkunaite, 2006).

Dahlgaard and Dahlgaard (2010) highlight that right culture ensuring on customer care, creativity, innovation, organizational learning and team working should be established to produce organizational innovation and achieve sustainable competitive advantage at the organizational level. Polychroniou and Trivellas (2016) also say that culture balance not only facilitates a firm's superior performance but also strengthens the impact on introvert and extrovert performance outcomes, confirming its moderated effects especially on introvert firm performance. Moreover, Almuslamani and Daud (2018) also show that the adhocracy culture and the market culture have significant and positive effect on sustainable competitive advantage.

## **2.7 Conceptual Research Framework**

As discussed above, RBV mentions that competitive advantage of an organization comes from organizational resources and competencies (Barney, 1991). According to Daft (2012), firm resources include all assets, capabilities, organizational processes, firm attributes, information, knowledge and others. Further he explains that internal environment within which managers' work includes corporate culture, production technology, organization structure, and physical facilities. The current study uses the Organizational Culture Assessment Instrument (OCAI) which is based on Competing Value Framework (CVF) (Cameron and Quinn, 1999). Thus, following

conceptual research framework is developed based on the RBV and CVF and is shown figure 1. There are two independent variables (adhocracy culture and market culture) and one dependent variable (Competitive advantage) in the framework.



*Source: Developed by the Researcher*

**Figure 1: Conceptual Research Framework**

### 3. Methodology

As per the nature of the objectives, this study comes under the positivist paradigm. Since the researcher is working with observable social realities and the end result can be generalized to similar settings (Remenyi, 2002). In this study, the population of the study includes the total number of ICT firms in Sri Lanka. From this study, convenience sampling technique was employed to draw the sample from the population since the exact number of ICT firms in Sri Lanka is unknown. The unit of analysis was a firm and sample covered the ICT firms which are suppliers of ICT products and services (ICT companies), suppliers of IT-enabled services (ITeS; BPO companies) and ICT training organizations.

Based on the previous literature, data were collected from upper level managers and middle managers who have been working in the same firm within ICT industry for over one year to ensure the quality of data (Li and Liu, 2014) by using a questionnaire. Top level and middle level managers possess overall idea about the organization than other managers and employees who below them. Especially items related to competitive advantage are very important and information related to them is known by higher level managers. Therefore,

collecting data from top level managers and middle level managers ensure the quality and accuracy of data provided. The questionnaire comprises of 21 questions to measure the 3 constructs (adhocracy culture, market culture and competitive advantage). The survey questionnaire is divided into two parts. The part (A) includes questions formulated in order to obtain a general understanding of the participants, such as their levels of management and length of experience. The part (B) includes organizational culture related information (12 items) and competitive advantage related information (7 items). Table 1 shows the Operationalization of constructs. A 5-point Likert scale was employed to measure the items ranging from? Strongly Agree? on the positive side to Strongly Disagree? on the negative side.

**Table 1: Operationalization of Constructs**

Construct	Indicators	Source
Adhocracy Culture (AC)	The organization is a very dynamic and entrepreneurial place. People are willing to stick their necks out and take risks.	Organizational Culture Assessment Instrument (OCAI) Questionnaire
	The leadership in the organization is generally considered to exemplify entrepreneurship, innovating, or risk taking.	
	The management style in the organization is characterized by individual risk-taking, innovation, freedom, and uniqueness	
	The glue that holds the organization together is commitment to innovation and development. There is an emphasis on being on the cutting edge.	
	The organization emphasizes acquiring new resources and creating new challenges. Trying new things and prospecting for opportunities are valued.	
	The organization defines success on the basis of having the most unique or the	

	newest products. It is a product leader and innovator.	
Market Culture (MC)	The organization is very results oriented. A major concern is with getting the job done. People are very competitive and achievement oriented.	Organizational Culture Assessment Instrument (OCAI) Questionnaire
	The leadership in the organization is generally considered to exemplify an aggressive, results-oriented, no-nonsense focus.	
	The management style in the organization is characterized by hard-driving competitiveness, high demands, and achievement.	
	The glue that holds the organization together is the emphasis on achievement and goal accomplishment. Aggressiveness and winning are common themes.	
	The organization emphasizes competitive actions and achievement. Hitting stretch targets and winning in the marketplace are dominant.	
	The organization defines success on the basis of winning in the marketplace and outpacing the competition. Competitive market leadership is key.	
Competitive Advantage (CA)	Compared with our competitors, we have higher profit growth rate.	Li and Liu (2014)
	Compared with our competitors we have higher sales revenue growth rate	
	Compared with our competitors we have lower operating cost	
	Compared with our competitors we have better product and service quality.	
	Compared with our competitors we have increasingly higher market share	

	Compared with our competitors we have more profitable old customers.	
	Compared with our competitors we have more profitable new customers.	

*Source: Survey Data, 2019*

Both personal and online methods were used in administrating the survey. Accordingly, 50 questionnaires personally distributed by the researcher among the sample and 200 online questionnaires were sent to respondents via e-mails. Only 184 responses out of 250 were received. Then, the questionnaires were screened and incomplete questionnaires rejected. Accordingly, 167 questionnaires were forwarded for the data analysis. The data was analyzed using Structural Equation Modeling (SEM) with the aid of AMOS (Analysis of Moment Structures) 23.0.

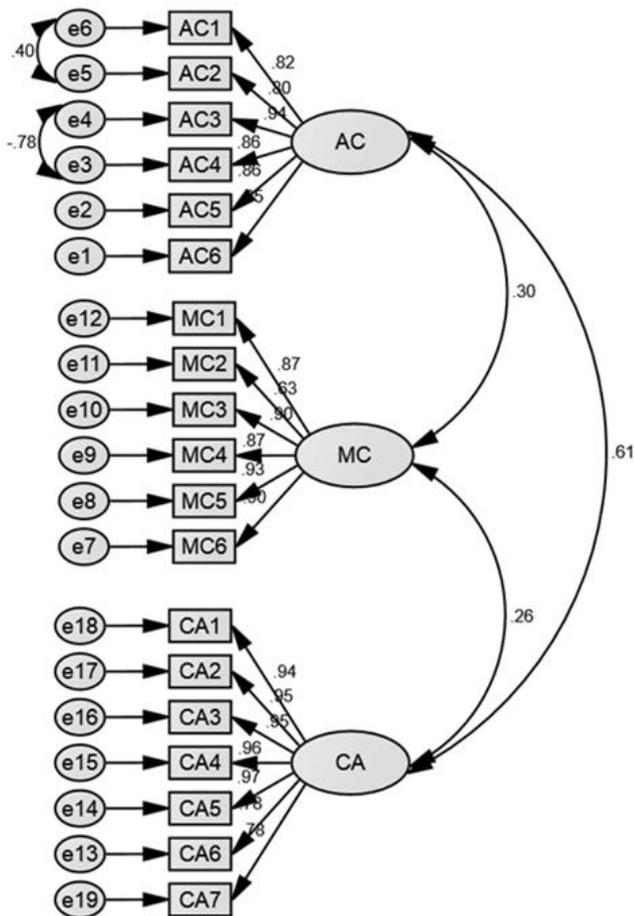
#### 4. Analysis and Results

A pre-test and a pilot test were conducted to identify potential problems in questionnaire and to correct them. The Cronbach's alpha coefficient of the pilot survey was greater than 0.7 for all constructs which is an acceptable value for a pilot test (Kline, 2011). Multivariate assumptions namely normality, linearity, homoscedasticity and multicollinearity were tested using SPSS 16 and the data was analyzed using Structural Equation Modeling (SEM) with the aid of AMOS (Analysis of Moment Structures) 23.0. The Kaiser-Meyer-Olkin (KMO) was used to measure the adequacy of the sample of the study. KMO results showed that the sample adequacy of all constructs is greater than 0.5 which indicates that the sample is adequate (Malhotra & Dash, 2011). After drawing final measurement model, Cronbach's Alpha values, Average Variance Extracted (AVE) values and Composite Reliability values (CR) were taken to satisfy the reliability and validity requirements. One structural model was drawn to analyze the data and each model was tested with the goodness of fit indices.

#### 4.1 The Measurement Model

The measurement model “specifies the indicators for each construct, and enables an assessment of construct validity” (Hair et al., 2010). Based on the conceptual model, there are 3 latent variables, namely, adhocracy culture (AC), market culture (MC) and competitive advantage (CA). As the initial measurement model portrayed a poor fit, the model was improving using modification indices. Thus, covariances were drawn between the error terms of several items for improvement purpose. Final measurement model was shown in Figure 2.

According to Hair et al. (2010), researchers should evaluate goodness of fit indices when assessing a fit of a measurement model. Further, he says that use of three to four indices provides adequate model fit and besides the  $\chi^2$  value, one absolute fit index ( $\chi^2/df/p$  value/GFI/RMSR/RMSEA), one incremental index (NFI/CFI/TLI/RNI) and one parsimony index (PRATIO/PCFI/PNFI) should be reported. Accordingly, fit indices of initial measurement model ( $\chi^2/df = 2.661$ , CFI = 0.913, GFI = 0.902, TLI = 0.896, RMSEA = 0.072), were found to fit the data reasonably well.



*Source: Survey Data, 2019*

### Figure 2: Final Measurement Model

The Confirmatory Factor Analysis (CFA) was used to further test convergent and discriminant validity of the constructs. As explained by Malhotra & Dash (2011), 0.5 or higher factor loading and 0.5 or greater Average Variance Extracted (AVE) assures satisfactory convergent validity. In addition, Composite Reliability (CR) must be 0.7 or higher. Generally, discriminant validity can be ensured if The AVE of all constructs should be higher than the square of the correlation estimates between that construct and all other constructs (Malhotra, 2008). Moreover, the correlation coefficients among the study constructs do not exceed 0.85 (Kline, 2011). Thus, all the constructs in the study represent different concepts. As all of above

requirements are fulfilled, the convergent and discriminant validities are satisfactory as shown in Table 2. Further, to ensure the reliability Cronbach's alpha values also (AC= 0.863, MC= 0.738 and CA= 0.864) were calculated for each construct and they are also satisfactory.

**Table 2: Convergent and discriminant validity**

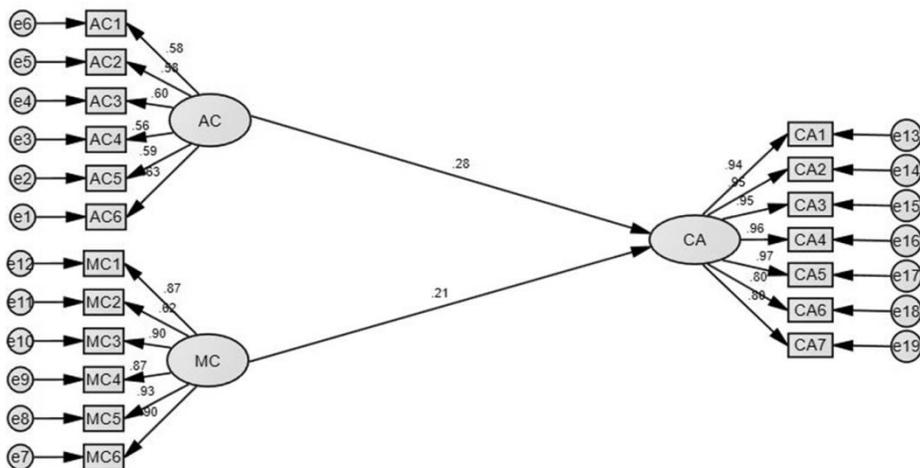
	<b>AVE</b>	<b>CR</b>	<b>AC</b>	<b>MC</b>	<b>CA</b>
<b>AC</b>	.785	.902	.785		
<b>MC</b>	.876	.929	.081	.876	
<b>CA</b>	.826	.960	.213	.069	.826

**Note:** Diagonal entries (in bold) are the square root of AVE for all constructs; sub-diagonal entries are the correlation coefficients estimates between for each construct

*Source: Survey Data, 2019*

#### 4.2 The Structural Model

Structural model was developed to test the direct relationship between two types of organizational culture [(adhocracy culture (AC) and market culture (MC)] and competitive advantage (CA). Figure 3 shows the output path diagram of the structural model and fit indices of structural model ( $\chi^2/df = 2.449$ , CFI = 0.916, GFI = 0.912,



*Source: Survey Data, 2019*

**Figure 3: Final Measurement Model**

TLI = 0.878, RMSEA = 0.069), also were found at satisfactory level. All hypotheses were tested at the 95% confidence level.

As depicted in Figure 3, hypothesis 1 investigates the relationship between adhocracy culture (AC) and competitive advantage (CA). It was hypothesized that there would be a relationship between AC and CA. The result demonstrates positive and significant paths from AC and CA ( $\beta = 0.28$ ,  $p = 0.000$ ). Thus, hypothesis 1 is supported. Hypothesis 2 tested the relationship between market culture (MC) and competitive advantage (CA). It was hypothesized that there would be a relationship between MC and CA. The result suggests that the relationship between MC and CA is positive and statistically insignificant ( $\beta = 0.21$ ,  $p = 0.000$ ). Thus, hypothesis 2 is also supported. Table 3 shows the standardized path coefficients, t-values, and the corresponding significance level.

**Table 3: Standardized Path Coefficients**

Path	Hypothesis	Standardized coefficient	p-value	Result
AC → CA	H1: Adhocracy culture has significant effect on the competitive advantage in the ICT industry in Sri Lanka.	0.28	0.000**	Accept
MC → CA	H2: Market culture has significant effect on the competitive advantage in the ICT industry in Sri Lanka.	0.21	0.000**	Accept

\*\* P < 0.05

*Source: Developed by the Researcher*

### 4.3 Discussion

Data was collected from the managers who belonged to upper level management level and middle level management level. Out of 167 of respondents, 46 (28%) respondents belonged to the upper level management while 121 (72%) belong to middle level management. In addition to that, data was collected about the length of experience of respondents of a firm in which they currently work. Out of 167 respondents, no any response received from respondents who have experience less than one year. Most of the respondents in the sample (57%) have 1- 3 years of working experience in the particular firm, while 31% of respondents have experience of 4-6 years and also sample represents 12% of those who have more than 6 year category. The aim was collecting those data was to enhance the quality of data (Kuar and Metha, 2017; Li and Liu, 2014). If respondents belong to middle or upper level, they are aware of the constructs that the researcher measured namely organizational culture and competitive advantage. They are very subjective and sensitive areas of a firm. Further, respondents should have at least 1 year experience to familiarize with the constructs in a particular firm. Thus, the researcher has collected the data about level of management and length of experience of respondents.

Research objective is to explore impact of organizational culture that has on competitive advantage in Information Communication Technology (ICT) industry in Sri Lanka considering the two categories of cultures namely, adhocracy culture and market culture. The empirical evidences indicate that both adhocracy culture and market culture have positive impact on competitive advantage in ICT industry in Sri Lanka. Finding is consistent with the previous studies. Almuslamani and Daud (2018) showed that the adhocracy culture and the market culture have significant and positive effect on sustainable competitive advantage. More importantly, adhocracy culture shows the more impact on competitive advantage than market culture in ICT industry in Sri Lanka. Previous studies also have emphasized the importance of creativity, innovation and

organizational learning which are some of characteristics of adhocracy culture to achieve sustainable competitive advantage. Dahlgard (2010) highlighted that right culture ensuring on customer care, creativity, innovation, organizational learning, team working should be established to produce organizational innovation and achieve sustainable competitive advantage at the organizational level. As mentioned at the outset, Sri Lankan ICT sector is growing rapidly and it focuses more exports. In order to cater for export market and compete in world market, ICT sector should take into consideration more innovations. That's why adhocracy culture is more important for organization in ICT industry.

Moreover, Obaji, Cross and Olaolou (2017) also found that there was a significant positive relationship between organizational Culture and organizational performance. As per Sengottuvel and Aktharsha (2016) organizational culture produces positive influence on organizational performance and further they highlighted that if IT firms are able to have Effective and healthy organizational culture, there will be enhancement in the organizational performance.

## **5. Conclusion**

This study aims to explore impact of organizational culture that has on competitive advantage in Information Communication Technology (ICT) industry in Sri Lanka considering the two categories of cultures namely, adhocracy culture and market culture. This research uses survey method to know the influence of adhocracy culture and market culture on competitive advantage. Based on the results of hypotheses testing and discussion as mentioned above, it can be concluded research results as, adhocracy culture significantly impact on competitive advantage in ICT industry in Sri Lanka and market culture also significantly impact on competitive advantage in ICT industry in Sri Lanka with adhocracy culture having the more impact.

This study makes important contributions to the literature in terms of providing a more fine grained understanding of organizational culture and competitive advantage. The conceptual model developed in this

study can be used for examine the relationship among above mentioned variables in different industries and countries. There was dearth of studies in the area of organizational culture in Sri Lankan context. Thus, this study contributes to fill the contextual gap also.

The findings of the current study reveal that organizational culture is a source of competitive advantage in ICT firms in Sri Lanka. Therefore, managers of ICT firms are able to adopt characteristics of adhocracy culture and market culture for their organization. Flexibility, external focus, commitment to experimentation and innovation, long-term emphasis, individual initiative and freedom can be adopted from adhocracy culture and external focus, result orientation, long-term focus, market leadership, hard-driving and competitiveness also can be adopted from market culture. In addition, managers are able to achieve more competitive advantage if they adapt the characteristics of adhocracy culture according to the findings.

Although the Sri Lankan IT/BPM industry contributes to the Sri Lankan economy, further extending that contribution is must as a developing nation. To compete with international market, considering agility, cost, a niche talent base, ethics, and cultural adoptability is vital as per Sri Lankan IT/BPM industry review (2014). Specially to incorporate agility and cultural adaptability to Sri Lankan ICT firms, characteristics of adhocracy culture and market culture play a bigger role.

This study has several limitations too and they create directions for future research. The proposed study has inherent limitations in measuring constructs such as organizational culture and competitive advantage which are essentially subjective constructs. This study is a cross sectional study. The variables that the researcher used can be studied deeply, if the researcher would have used longitudinal study since variables are changing overtime especially organizational culture. Further, this study is prone to common method bias because the same respondents answered the dependent variable that answered the independent variable.

## References

- Almuslamani, H.A. and Daud, S. (2018). Organizational Culture and Sustainable Competitive Advantage in Manufacturing Companies in Bahrain. *Applied Mathematics and Information Sciences*, Vol. 2 No 2, pp. 431-440.
- Barney, J. (1991). Firm Resources and Sustained Competitive Advantage. *Journal of Management*, Vol. 16, pp. 99-120.
- Barney, J. B. (1986). Organizational Culture: Can it Be a Source of Sustained Competitive Advantage?. *The Academy of Management Review*, Vol.11 No 3, pp. 656-665.
- Cameron, K. S. and Quinn, R. E. (1999). *Diagnosing and changing organizational culture: Based on the value competing framework*, United States of America: Addison-Wesley.
- Cameron, K. S. and Quinn, R. E. (2011). *Diagnosing and Changing Organizational Culture: Based on the Competing Values Framework*. 3<sup>rd</sup> edn. San Francisco: Jossey-Bass.
- Daft, L. D. (2012). *New Era of Management*. 10<sup>th</sup> edn. South-Western: Cengage Learning.
- Dahlgaard-Park, S. M. and Dahlgaard, J. J. (2010). Organizational learnability and innovability: a system for assessing, diagnosing and improving innovations. *International Journal of Quality and Service Science* , Vol. 2 No 2, pp. 153-174.
- Demir, C., Ayyildiz Unn, A. N. and Erturk, E. (2011). Diagnosing the organizational culture of a Turkish pharmaceutical company based on the competing values framework. *Journal of Business Economics and Management* , Vol.12 No 1, pp. 197-217.
- Deshpande, J. U., Farley, J. U., Webster , F. E. and Jr. (1993). Corporate Culture, Customer Orientation, and Innovativeness

- in Japanese Firms: A Quadrad Analysis. Vol. 57 No 1, pp.23-37.
- Deshpande, R., Webster, F. E. and Jr. (1989). Organizational culture and marketing: defining the research agenda. *Journal of Marketing* , Vol.53 No 1, pp.3-15.
- Destler, K. N. (2016). Creating a performance culture: incentives,culture and organizational change. *American Review of Public Administration* , Vol. 46 No 2, pp. 201-225.
- Foss, J. N., Lyngsie, J. and Zahra, A. S. (2013). The role of external knowledge sources and organizational design in the process of opportunity exploitation. *Strategic Management Journal*, Vol. 32, No. (12), pp. 1453-1471.
- Ginevicius, R. and Vaitkunaite, V. (2006). Analysis of organizational culture dimensions impacting performance. *Journal of Business Economics and Management*, Vol. 7 No 4, pp. 201-211.
- Hair, J. F., Black, W. C., Babin, B. J. and Anderson, R. E. (2010). *Maulivariate Data Analyis*. 7<sup>th</sup> edn. Pearson Prentice Hall.
- Howard, L. W. (1998). Validating the competing values model as a representation of organizational culture. *The International Journal of Organizational Analysis*, Vol. 6 No 3, pp. 231-250.
- Information and Communication Technology Agency in Sri Lanka. (2013). *National ICT Workforce Survey-2013*. Retrieved from [www.icta.lk: http://srilankaitbpm.com/wp-content/uploads/2015/10/ICT-Workforce-Survey-Report-2013.pdf](http://srilankaitbpm.com/wp-content/uploads/2015/10/ICT-Workforce-Survey-Report-2013.pdf).
- Johnson , G., Scholes, K. and Whittington, R. (2008). *Exploring corporate strategy*, 8<sup>th</sup> edn. Harlow: Pearson Education Limited.

- Kline, R. B. (2011). *Principles and practice of structural equation modeling*, 3<sup>rd</sup> edn. New York: The Guilford Press.
- Kuar, V. and Metha, V. (2016(a)). Knowledge-based dynamic capabilities A new perspective for achieving global competitiveness in IT sector. *Pacific Business Review International* , Vol. 1 No 3, pp. 96-106.
- Kaur, V. and Metha, V. (2017). Dynamic Capabilities for Competitive Advanatge Paradigm. *Paradigm*, Vol. 21, No 1, pp. 31-51.
- Li, J. and Liu, D. (2014). Dynamic capabilities, environmental dynamism, and competitive advanatge: Evidence from China. *Journal of Business Research* , Vol.1 No.7, pp. 1-7.
- Ma, H. (2000). Competitive advanatge and firm performamce. *Competitiveness Review: An International Business Journal Incorporating Journal of Global Competitiveness*, Vol. 10 No 2, pp. 15-32.
- Malhotra, N. K. and Dash, S. (2011). *Marketing Research an Applied Orientation*. Pearson Publishing.: London.
- Maximini, D. (2015). *The Scrum Culture, Management for Professionals*. Switzerland: Springer International Publishing.
- Newbert, S. L. (2008). Value, rareness, competitive advanatge, and performance: a conceptual level empirical investigation of the resource-based view of the firm. *Strategic Management Journal*, Vol. 29 No 7, pp.745-768.
- Obaji, N.O., Cross,D.O. and Olaolu D. (2017). Impact of rganisational culture and strategic management on organizational performance. *International Journal of Science Technology and Management*, Vol. 6 No 09, pp. 19-30.
- Penrose, E. T. (1952). Biological analogies in the theory of the firm” *American Economic Review*. Vol.42, pp. 804-819.

- Peteraf, M. A. and Barney, J. B. (2003). Unraveling the resource based tangle. *Managerial and Decision Economics* , Vol. 24 No 4, pp. 309-323.
- Peters, M. D., Wieder, B., Sutton, S. G. and Wakefield, J. (2016). Business intelligence systems use in performance measurement capabilities: Implications for enhanced competitive advantage. *International Journal of Accounting Information Systems*, Vol 21, pp.1-17.
- Polychroniou, P. and Trivellas, P. (2018). The impact of strong and balanced organizational cultures on firm performance: Assessing moderated effects. *International Journal of Quality and Service Sciences* , Vol. 10 No 1, pp. 16-35.
- Porter, M. E. (1985). *Competitive Advantage: Creating and sustaining superior performance*. New York: The Free Press.
- Quinn, R. E. and Kimberly, J. R. (1984). Paradox, planning, and perseverance: guidelines for managerial practices. *New futures: The Challenge of Managing Corporate Transitions*, pp.295-313.
- Ray, G., Barney, J. B. and Muhanna, W. A. (2004). Capabilities, business processes, and competitive advantage: choosing the dependent variable in empirical tests of the resource-based view. *Strategic Management Journal* , Vol. 25 No 1, pp.23-37.
- Remenyi, D. (2002). Research strategies—beyond the differences. *Electronic Journal of Business Research Methods*, Vol.1 No 1, pp. 38-41.
- Sadri, G. and Lees, B. (2001). Developing corporate culture as a competitive advantage. *Journal of Management Development*, Vol. 20 No 10, pp.853-859.

- Schein, E. H. (1985). *Organizational Culture and Leadership*. San Francisco: Jossey-Bass.
- Sigalas, C. and Pekka, E. V. (2013). Revisiting the concept of competitive advantage: problems and fallacies arising from its conceptualization. *Journal of Strategy and Management*, Vol. 6 No 1, pp. 61-80.
- Sengottuval, A. and Aktharsha, U.S. (2016). The Influence of Organizational Culture on Organizational Performance in Information Technology Sector. *IOSR Journal of Business and Management*, Vol.16 No 10, pp.56-64
- Signals, C., Economou, V. P., and Georgopoulos, N. B. (2013). Developing a measure of competitive advantage. *Journal of Strategy and Management*, Vol. 6 No 4, pp. 320-342.
- Sri Lankan Association of Software and Service Companies. (2014). *Sri Lankan IT/BPM Industry 2014 Review*. Retrieved from [www.slasscom.lk: //slasscom.lk/sites/default/files/Sri Lankan IT-BPM Industry Review 2014.pdf](http://www.slasscom.lk: //slasscom.lk/sites/default/files/Sri Lankan IT-BPM Industry Review 2014.pdf)