DYNAMIC CAPABILITY & FIRM PERFORMANCE: A CASE STUDY OF SMEs OF PAKISTAN

By

MUHAMMAD AHSAN MUKHTAR

NATIONAL UNIVERSITY OF MODERN LANGUAGES ISLAMABAD

AUGUST, 2020

DYNAMIC CAPABILITY & FIRM PERFORMANCE: A CASE STUDY OF SME'S OF PAKISTAN

By

Muhammad Ahsan Mukhtar

MS (Management), Muhammad Ali Jinnah University Islamabad, 2013

A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF

THE REQUIREMENT FOR THE DEGREE OF

DOCTOR OF PHILOSOPHY

In Management Sciences

To

FACULTY OF MANAGEMENT SCIENCES

NATIONAL UNIVERSITY OF MODERN LANGUAGES,

ISLAMABAD

November, 2019

NATIONAL UNIVERSITY OF MODERN LANGUAGES

FACULTY OF MANAGEMENT SCIENCES

THESIS/DISSERTATION AND DEFENSE APPROVAL FORM

The undersigned certify that they have read the following thesis, examined the defense, are satisfied with the overall exam performance, and recommend the thesis to the Faculty of Management Sciences for acceptance:

Thesis/ Dissertation Title: DYNAMIC CAPABILITY & FIRM PERFORMANCE: A CASE STUDY OF SME's OF PAKISTAN

Submitted By: Muhammad Ahsan Mukhtar **Registration #:** 463-PhD/MS/F13
Name of Student

Doctor of Philosophy
Degree name in Full

Management Sciences
Name of Discipline

Prof Dr. Naveed Akhtar _____
Name of Research Supervisor Signature of Research Supervisor

Dr. Faid Gul _____
Name of HOD (FMS) Signature of HOD (FMS)

Prof Dr. Naveed Akhtar _____
Name of Dean (FMS) Signature of Dean (FMS)

Major. Gen ®. Muhammad Jaffar HI(M) _____
Name of Rector Signature of Rector

_____
Date

CANDIDATE DECLARATION FORM

I, Muhammad Ahsan Mukhtar

Son of Ch. Muhammad Mukhtar

Registration # 463-PhD/MS/F13

Discipline PhD in Management Sciences

Candidate of PhD Management Sciences at the National University of Modern Languages do hereby declare that the thesis entitled Dynamic Capability & Firm Performance: A Case Study of SME's of Pakistan submitted by me in partial fulfillment of Ph.D. degree, is my original work, and has not been submitted or published earlier. I also solemnly declare that it shall not, in future, be submitted by me for obtaining any other degree from this or any other university or institution.

I also understand that if evidence of plagiarism is found in my thesis/dissertation at any stage, even after the award of a degree, the work may be cancelled and the degree revoked.

_____ _____

Date

Signature of Candidate

Muhammad Ahsan Mukhtar

Name of Candidate

ABSTRACT

This dissertation is aimed to understand how dynamic capabilities are playing a significant role overcome or dealing with the uncertainties of market and business environment. One of the most challenging tasks these days for Small and Medium-Sized Enterprises is to sustain in the business world while improving its efficiency and performances. SMEs in the Pakistani business market is playing a crucial role in terms of developing the economy of the entire world which is why it is necessary to investigate the role of dynamic capabilities and its factors upon the financial and non-financial performance of SMEs. There are different theories, such as organizational learning theory, which have highlighted the need and importance linked with dynamic capabilities in the SMEs. The purpose of this study is to analyze the relationship between dynamic capabilities and competitive performance of the firms; particularly in Pakistan. Therefore, the scope of this research is also limited to the perspective of Pakistan only. Furthermore, the focus was given on SMEs; the scope is limited to SMEs and cannot be generalized for big organizations. For this reason, the author has chosen the approach of quantitative methods wherein 516 participants were involved in the process of conducting a survey questionnaire.to test the hypothesis SEM and preacher and hayes has been used. The results have stated that organizational performance can significantly enhance even in an uncertain business environment if a firm develops dynamic capabilities based on its factors that are learning orientation, organizational culture, and corporate entrepreneurship. Further results show that dynamic capability is having a significant positive relationship with a learning orientation, organizational culture and firm performance. Whereas, dynamic capability having a negative relationship with corporate entrepreneurship. Results also show the mediating effect of organizational culture and learning orientation. The proposed mediating role corporate entrepreneurship between dynamic capability and firm performance was not found in the study. The findings illustrated that Dynamic capability positively and significantly linked with firm performance. It also found that learning orientation, organizational culture, and corporate entrepreneurship also mediated between dynamic capability and firm performance. Environment dynamism also moderates the

relationship between dynamic capability and firm performance. Limitations and managerial implications ate also provided that it can open channels for future research areas that are not covered in the study. The recommendation suggests that SMEs in Pakistan must focus on building dynamic capabilities in order to keep the business market of Pakistan sustainable globally.

Keywords: *Dynamic Capability, Firm Performance, Learning Orientation, Organizational Culture, Corporate Entrepreneurship & Environment Dynamism*

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

ACKNOWLEDGEMENT

All the praises and trillions of humble thanks to Allah Almighty (the most beneficial and merciful) Who gave me the mind, ability and courage to perform such a creative work. I owe gratitude to many people. There is long list of people who share the credit though: it would be difficult for me to mention all of them here: however, I would eagerly like to mention some of them. I wish to pay humble gratitude to my parents and siblings for their love, care, prayers and moral support. I am very thankful to my supervisor Prof. Dr. Naveed Akhtar who has been kind to extend his valuable guidance and suggestions from very start of this research work. Without his guidance and continuous supervision, it would not have been possible for me to complete this work. I also pay humble gratitude to my teacher and my brothers whose moral and financial support enabled me completing this degree.

In the end I am very thankful to everybody who directly or indirectly helped me in the completion of my research work.

MUHAMMAD AHSAN MUKHTAR

DEDICATION

To my Mother & Father.

CHAPTER 01
INTRODUCTION

1.1. Background of the Study

According to the definition of the firm's capability, the information-based procedures because of which the resources of the organization are being deployed to realize the set objectives (Rockart & Dutt, 2015). These capabilities are the foundation of the performance of a company in the marketplace (Grant, 2016). There are several branches in which the firm's capability is divided, such as marketing capability. It has also been mentioned in certain research studies that if these capabilities of the firm fail to change according to the global environment changes, then the effectiveness of these capabilities is also certain to become useless for the firm. It calls for the dynamic capabilities of the firm when the external environment of the firm changes. Under the dynamic capabilities of the firm, it can easily put together and rearrange the resources of the organization to comply according to the modification in the environment of the business (Li & Liu, 2014). The reason behind the effectiveness of dynamic capabilities not only lies in its ability to be reactive to marketplace changes only, but it is also proactive, which contributes to building new assets that could be helpful in the future (Alonso-Almeida, Bremser, & Llach, 2015). Several capabilities come under the umbrella of dynamic capabilities such as innovation capability or market capability that have also mentioned earlier as well. Thus, it would not be wrong to state that the dynamic capabilities of the firm made up of several factors that combine to form the dynamic capability of the firm.

The role of dynamic capabilities has been observing from the last decade in bringing value creation and competitive advantage in the organization. The role of Dynamic capabilities in enhancing the firm's performance has attracted many scholars (Lin & Wu, 2014; Hermano & Martin-Cruz, 2016; Villar, Alegre & Pla-Barber, 2014). Studies have reached the point where more empirical work is needed to complement the relation of dynamic capabilities and firm performance. In past studies, the empirical investigation is limited and mainly based on the case studies, which has left multiple questions that need to be solved in the right manner. In particular, one question is still there - How Dynamic capabilities are linked with firm performance? Teece, (2016); Li & Liu, (2014); Cavusgil & Knight, (2015) have studied the dynamic capabilities and its impact on firms competitive advantage which has given the clarity that firms are

required to adopt dynamic capabilities besides the normal capabilities to maintain as well as gain the competitive advantage in the business market where it functions. However, it is not the only advantage for the firms which is linked with having dynamic capabilities; some of the researchers have indicated that strong competitive advantage leads the firm to perform better and advance (Peters et al., 2016; Albrecht et al., 2015; Tseng & Lee, 2014). Therefore, it is of utmost importance to research the link that exists between dynamic capabilities and firm performances. Most of the business that exists currently in the world belongs to the small and medium-sized enterprises which are why SMEs of any developed or developing country play an important role in the development of economy, employment opportunities, innovative environment, social integration. The example of OCED is relevant, which states that the business structure of the world is 95% formed by small and medium-sized enterprises. Keeping the importance of SMEs and their situation into consideration, it is valuable to focus on the problems and challenges of SMEs. The smallness of the firms can hinder their development and growth, especially in developing counties. Some of the problems or challenges include their priorities and government's concerns, limited resources such as human resources, time resources, financial resources, and managerial resources. There is one more limitation of resource, which is common in SMEs, namely capabilities resource and associated with the smallness of the firms (Sok, O'Cass & Miles, 2016). Considering this, the development of capabilities in the firm is one of the major challenges regarding strategic management researchers and managers of the enterprises. Researchers have suggested that to develop the capabilities of the firms; there are two options available on a general basis. The first option implies that firms can achieve capability development by the beginning of capability with emphasis on the internal resources of the firm. The second option is by focusing on the external factors of a firm, e.g., the relation of organization with other firms. Thus, it can be concluded here that SMEs can develop their capabilities by either developing them in-house or from the external factors (inter-organizational relation). Here it is to note that the capability development term in the study can be used interchangeably with the capability enhancement, development capability, or capability improvement.

The approach of dynamic capabilities is the extension of the resource-based view that explains about the sustainability of the competitive advantage of an organization. It also depends on the ability of an organization for the renewal of different resources when the external environment changes (Abro, Memon, & Arshdi,

2011). The ability to recognize and learn more about the different opportunities is very important for bringing innovation. Different SMEs having the agility and the adaptability has played an effective role in bringing the innovations in the continuously changing environment (Rehman, & Saeed, 2015). The capabilities that are important for the competitiveness and the better performance of an organization will be encompassing the ability to consider different opportunities and enhance the performance through the utilization of different resources (Hafeez, Shariff, & Lazim, 2012). Dynamic capabilities provide ma competitive advantage to the people. An organization can very easily get the sustainable competitive advantage when they get the dynamic capabilities for bringing the functional competences (Pervan, Curak, & PavicKramaric, 2017). Dynamic capabilities are not considered fully during the investigations of the different types of capabilities. According to Teeceet.al., (1997), cited by Lin & Wu (2014). Dynamic capabilities divided into three different parts, including dynamic learning, dynamic integration, and dynamic configurations of the abilities. The dynamic capabilities have an indirect effect on the different outcomes of an organization. Additionally, the indirect relation of the dynamic capabilities and the performance is also prevailing. Since this world has become the place to compete globally, the value of the sustainable competitive advantage is gaining a lot of significance (Bustinza et al., 2015). Moreover, it is necessary for marketing management as strategic management of the firm (Baker, 2014). The research is to present several different builds concerning the dynamic capabilities of the firm. Furthermore, this study also enlightens the significance of dynamic capabilities to accomplish the desired achievement of the firm based on the literature review and empirical analysis. Studies that emphasize on the development of the country directly or indirectly hold major importance in the context of the study.

In the global world of business, the necessity of a firm's dynamic capability takes place in the framework of changes in the economy. Many scholars have concluded that dynamic changes in the capability of the firm are the potential to reflect constructive consequences on the performances of the firm (Wilden & Gudergan, 2015). The measure of the firm towards going into the associations also counts in the dynamic capability of the firm. There may be many reasons associated with the decision of alliances, which include an assortment of resources that may use to balance each other or to equally divide the costs and risks for the expensive projects or uncertain projects. With the help of this measure, the necessary supplies, capaabilties, and knowledge may

also gain. When the accessible assets of the firm integrated with the dynamic capabilities of the firm, there are higher chances of revenue generation. The incorporation route is precise to a firm, giving significance to its consumers, also, to plan in a way that can neither be changed nor duplicated. Marketing ability and task capability go about as interceding instruments that spread the optimistic impacts of dynamic ability to the performance of new item growth, particularly and performance of a firm by and large. The connection between marketing ability, task capability, and performance of the firm is more grounded if firms have the satisfactory, unique, and adaptable capability.

Dynamic capabilities can observe to be decidedly identified with the advancement in goods since product development is an extremely critical viewpoint in the global competitive market where continually the economy and, additionally, the innovation is changing at an irregular pace (Nieves & Haller, 2014). With this evolving situation, dynamic abilities inside associations empower the authoritative administration to take up measures that encourage in imaginativeness that is compulsory in the market. Additional centers on the propelled utilization of innovation and also the changing sparing condition. Product development has likewise turned out to be fundamentally inferable from the changing requests of the clients. Dynamic abilities upgrade the comprehension of such changes that, in the long run, help a firm embraced creative measures (Wang, Senaratne, & Rafiq, 2015). The advancement of this suggestion can be along these lines said to affect the execution of an association significantly. In this way: Dynamic capabilities are decidedly identified with goods development and innovation. With the above discussion, dynamic capabilities identified via the progress and improvement of products. The performance of a firm is additionally exceedingly identified with dynamic abilities. As it is acquired through contemplates, firms may go into co-operations that have a positive impact on the accomplishment of the firm’s objectives (Wang, Senarate & Rafiq, 2015). Likewise, marketing capabilities have more exceptional support in the change of a company's procedures as they are specifically identified with the achievements of the organization in connection to the consumer's requests and desires and satisfying them to the most extreme level, consequently expanding the incomes and inclinations for the organization. Performance of a firm is to a huge degree subject to the dynamic capabilities of the firm since the fruitful execution of a firm includes a few issues as to amend basic leadership, reasonable determination, and designation of assets, factors

that are viably taken care of by unique abilities (Teece, 2014). In this manner, this recommendation is likewise creating in the cutting edge business world and can be believed to have massive constructive outcomes. In this way, the dynamic capabilities are emphatically identified with the performance of the companies. It has been noticed that SMEs could grow faster than big organizations when they adopt the dynamic capabilities in order to cope up with the rapidly changing environment of the business.

1.2. Research Gap

Dynamic capabilities studies have emphasized how firms determine, integrate, build and reconfigure internal and external resources to adapt to rapidly changing business environment (Teece et al., 1997). Dynamic capabilities are described as routines to learn routines, resource integration consists of product development routines and strategic decision making, resource reconfiguration, and resource gain and release which include knowledge creation, alliance and acquisition routines (Eisenhardt and Martin, 2000). Lee et al. (2002), Zahra et al. (2006), Salunke et al. (2011) and Weerawardena et al. (2015) have proved that dynamic capabilities sustain competitive advantage, which in turn improves the performance of a new venture. However, our understanding of how a new venture builds and shapes dynamic capabilities is limited. While there is agreement that dynamic capabilities facilitate a firm's performance; there remains a lack of clarity around the concept and complexity surrounding the way in which they evolve (Eriksson, et al 2014). Ferreira et. al (2020) and Eikelenboom et. al (2020) used creativity and innovation capability as mediator to understand the relations between dynamic capability and firm performance, they suggested that more organizational factors, entrepreneurial and market variables can be included as mediator and moderator to clarify this relationship. According to Hernández et. al (2020) study on dynamic capability and firm performance should be conducted in various high and low crisis environment, so the results of studies can be compared with each other. Giniuniene & Jurksiene, (2015) studied the relationship between dynamic capability and firm performance, suggested that entrepreneurial orientation and organizational cultural can be used as mediator to better understand the phenomena between dynamic capability and firm performance. This, in particular, has created difficulties in identifying valid measurement tools to appraise their creation and deployment leading to the extant literature to rely upon qualitative, often longitudinal, case studies to analyses the phenomena (Wang and Ahmed, 2007, Barreto, 2010, Eriksson, et al 2014). This research employs a quantitative research approach to explore the influences of

dynamic capabilities had on the and performance of SMEs. This study will comprehensively examine the relationship between dynamic capability and firm performance. While previous researches have investigated the dynamic capability concept in relation to its antecedent factors, the characteristics integral to their implementation, potential outcomes and influences upon competitive advantage and performance of firms (Zott, 2003, Song et al., 2005, Wang et al., 2015). Examines the moderating role of environmental dynamism in dynamic capability and firm performance relationship, and also examine the mediating role of learning orientation, organizational culture and entrepreneurial orientation. Study helps in improving the performance of the firms in the constantly changing environment of the business market. Yet none of the studies has considered the research, particularly in the context of Pakistan, and our study is conducted in order to bridge this gap and offer an understanding of this relationship within the context of SMEs in Pakistan.

1.3. Objectives of the Study

The investigation has chiefly endeavoured as an expansion to past examinations made on powerful abilities and their need in reputable firms for achievements of objectives. Studies have mirrored that creativity can adjust the techniques of small and medium-size firms in their creation, improvement, presentation, and commercialization of inventive items. Dynamic abilities make associations able to do such imaginativeness by arranging out appropriate apportions and finding their effects on the achievement of the firm's objectives (Chen & Miller, 2015). This research tries to explore the relationship of dynamic capabilities with the performance of firm empirically. More specifically, this research aims to address the question of whether dynamic capabilities possess any positive impact on the performance of the firm or not? This study will be considering the overall performance of the different SMEs of Pakistan through the lens of the dynamic capabilities to find out the answers to research questions.

An organizational performance holds huge importance in terms of determining the success or failure of a company. The organizational performance will enable a company to identify its major areas of problems and improvise accordingly. Research on firm performance is extremely important as it will not only help in identifying the financial and non-financial factors leading to success. The main purpose of conducting this research is to test the relationship among dynamic capability and its impact on the organizational performance in environment dynamism in Pakistan with the mediating role of learning orientation, entrepreneurial orientation, and organization culture.

Although research has been conducted in this field of context, there is still a need to conduct more research specifically in Pakistan due to three reasons. Firstly, organizational capability plays an important role in firm performance, but it doesn't mean that all capabilities are performing well in the organization. In the SME sector of Pakistan, no study has been conducted to identify this relationship. Secondly, an organization comprises of internal and external stakeholders who have an interest in the affairs of the company. There has been little research done on the non-financial measures of organizational performance in Pakistan. The existing research on the non-financial factors incorporates the measures from the external stakeholders, such as the market's perspectives. Thirdly, Pakistan being a developing country needs to conduct more studies on their SME's sector. The contributions of these sectors, such as textile, sports, fan, leather, and agriculture, have been adding a lot in our economy. This study will not only benefit the organizational members, but instead, all the internal and external stakeholders of an organization as the important elements affecting the performance of the organization will be highlighted. It will enable the managers to identify an employee's behavior towards his job and provide possible solutions to improve their performance. The study aims to critically and comprehensively analyze the relations between dynamic capabilities and performance of SMEs, particularly in the constantly changing business environment. The research objectives for the concerned dissertation are defined as:

- To identify the relationship between dynamic capability and firm performance.
- To identify the mediating role of learning orientation, organizational culture, and entrepreneurial orientation between dynamic capabilities and firm performance.
- To identify the moderating role of environmental dynamism between dynamic capability and firm performance.

1.4. Research Questions

1. What is the impact of dynamic capabilities on firm performance?
2. How Learning Orientation, organizational culture, and entrepreneurial orientation mediate the relationship between dynamic capability and firm performance?
3. To what extent, environment dynamism moderates the relationship between dynamic capability and firm performance?

1.5. Significances of the Study

Small and medium enterprises of Pakistan exert a strong influence on the economy, particularly in the existing environment of competitive global markets (Khalique et al., 2015). The SMEs contribute 30 per cent of GDP with value addition to the manufacturing industry of around 35 per cent and generating 25 per cent of manufacturing sector export earnings ($2.5 billion) (Rohra & Junejo, 2009). Considerable evidence indicates that organizational culture, entrepreneurial orientation, and Learning Orientation contribute to organizational performance innovation, effectiveness, and survival. These factors are critical for organizations' survival and competitiveness. The main contribution of this research is to answer and explore a highly ignored link between dynamic capabilities on organizational performance. This study is helpful for SMEs to know about the most preferred dynamic capability for the purpose of improving organizational performance to compete successfully in the marketplace, this study will help managers to either help to adopt organizational culture or entrepreneurial orientation for the purpose of improving organizational performance. It also helps further improve their internal and external knowledge of the organization, which will ultimately contribute to organizational performance. Another important contribution of this research is that, yet to date, not a single study was conducted regarding dynamic capabilities on organizational performance in the SMEs sector of Pakistan. The importance of this study lies in finding the result of this thesis that will answer its research questions. With the help of answers, the firms in Pakistan can employ various capabilities of firms by visualizing their impacts and effectiveness.

The concept of entrepreneurial orientation is considered as the incorporation of actions for seeking advantage and opportunities for the providence of innovative, worthy, and distinctive concepts of business. This research study is built upon the firm's resource-based view, and more precisely, it elucidates the accumulation and development of the firm's dynamic capabilities, which contributes towards strategies of growth and innovation. Since there is a lot of competition in the market along with the significant turbulence, the firms that are established are also required to increase their capabilities of entrepreneurship and drive towards the concepts of business innovation and business growth. The significance of this dissertation lies in the providence of the brief regarding organizational mechanisms, which leads small and medium-sized enterprises towards new strategies of innovation since most of the scholars to believe that dynamic capabilities of the forms are the unique feature of the

small entrepreneurial firms. At this moment, there is not much information has been retrieved regarding the types of organizational capabilities that are required in pursuing innovative and pioneering strategies within SMEs. It is for the reason that the ranges of organizational capabilities that are required by the SMEs in the current business world to overcome the challenges and grab the opportunities are very less explored in the prior research. Thus study also contributes in the study of SMEs to open new aspects and required capabilities of the firms in order to compete well in the current business environment and perform in a more enhanced way since the reason behind the success of the firm lies on its competitive advantage and how the firm is performing in accordance with its customers' need.

As mentioned earlier that SMEs in any country contributes in the gross domestic product of the country thus, this study regarding dynamic capabilities and performance of the firms in Pakistan will definitely help to increase the GDP of Pakistan as wells since this study benefits the SMEs in Pakistan and those benefited SMEs provide an advantage to Pakistan. The credibility of this research lies in the fact that it receives primary data with the help of the survey. Furthermore, the sample size of this research also contributes to its reliability that 516 different managers were surveyed in this research in order to construct a valid and reliable result of the research. Thus, it can be said that the research possesses the significance because of carrying out the empirical experiment on this topic, which is very scant in the prior studies. Moreover, if the research provides benefits directly or indirectly to the country, it is said to have significantly contributed to the research and country. Since Pakistan is a developing state and it requires gaining higher GDP; thus, any research that provides knowledge helps to build strong GDP is very significant.

1.6. Operational definition

In this part of the study, operational definitions and construct instrumentation have been discussed. As discussed earlier, the data has been collected to a self-administrated questionnaire survey. The questionnaire used in the study comprised 76 items of constructs, and nine questions comprised of general information regarding the respondent. The questionnaire of this study is divided into seven sections. The first section comprises items to collect information about the attributes of respondents, liked department, age, gender, education, and experience. The second section consists of items of dynamic capability. In this section, 17 items of 4 constructs (sensing capability, learning capability, integrating capability, and coordinating capability) are included. In

the third section, 17 items of learning orientation have been included from 4 constructs (commitment to learning, shared vision, open-mindedness, intra-organizational knowledge sharing). In the fourth section, 13 items of entrepreneurial orientation have been included from 4 constructs (autonomy, competitive aggressiveness, innovativeness, and risk-taking proactiveness). In the fifth section, 18 items from 2 constructs (Involvement and Consistency) of organizational culture have been included. In the sixth section, seven items of 2 constructs (financial performance and non-financial performance) of firm performance have been included. In the last section, to measure the moderating effect of environmental dynamism have seven items have been included. The questionnaire has been attached in appendix-A.

1.6.1. Dynamic Capabilities

Dynamic abilities are fundamental with the end goal to address new challenges. Firms and their personnel require the ability to learn rapidly and to put up key resources (Mazzero et al., 2015). New vital resources, for example, ability, innovation, and feedback from the client must be coordinated and integrated inside the organization. Existing key resources must be changed or reconfigured.

3.

3.1.

3.2.

3.3.

3.4.

3.5.

3.6.

3.6.1.

1.6.2. Sensing capabilities

In several research articles of Teece on the topic of dynamic capabilities, there were three types of managerial level activities identified, which makes the capability of firm dynamic. Those capabilities were sensing capability, seizing capability, and transforming capability (Lessard, Teece, & Leih, 2016; Teece, 2017). The sensing capability of the firm for attaining dynamic capability was defined as the identification and assessment of opportunities that are outside the firm, which can be mobilized with the resources in order to capture its value by the seizing capabilities. The transforming capability defined by Teece is the process of constant renewal.

The management is required to develop sensing capabilities in which the firm needs to recognize the probable opportunities. In order to do so, management needs to regularly look at their surroundings and seek the potential opportunities which can be opened either inside the organization or outside the organization (Teece & Linden, 2017). Classic practices or activities that come under the umbrella of sensing capabilities are the processes of examining the new inventors, exploration of needs in the market, develop a skilled and strong process of research and development because of which the creation of new and enhanced knowledge can be enabled which results in the comprehension of information related with the contemporary technology. However, sensing capabilities do not entail the scanning of an environment with the intention of finding out the opportunities only; it also entails the sensing of potential threats as well that might subsist in the environment (Teece, 2017). Therefore, sensing capabilities can be defined in simpler words as the process to sense and share the opportunities as well as the treats. The example of sensing capabilities includes exploration of new things by using and exploiting prior knowledge or meeting in order to gather current information.

1.6.3. Learning Capabilities

The dimension of dynamic capabilities also entails the learning capabilities of the firm, which required coordinated search procedures and common codes of communication (Lessard, Teece, & Leih, 2016). Organizational learning capabilities are helping to enable organizations to identifies their dysfunctional practices and avoid tactical blind spots, which can be acquired by the patterns of interaction that persist in the behaviour of groups and several sub-routines. Practices are outlines of communications that symbolize booming solutions to specific problems. Therefore, the generated knowledge of the organization exists in new outlines of practices (Teece, 2017). Likewise, the learning capability, the strategic assets building, is also the dynamic learning capability, which includes association and attainment of routines that facilitate firms in order to bring new planned assets into the firm from external resources.

The research of Hung et al. (2010) also demonstrated that the dynamic capabilities of the organization impact the performance of the firm by the mediation of learning capability. The dynamic capabilities of the firm hold sub-dimensions, which include learning as an important sub-dimension; however, coordination and competitiveness are also the sub-dimensions of dynamic capabilities. Dynamic learning capabilities of the firm further have a dimension that is integrating capabilities and

coordinating capabilities that are identified in the studies of Pavlou and Sawy (2011) and Protogerou et al. (2011). The meaning of a firm's learning capabilities to develop dynamic capabilities is the flow of experience and knowledge in the organization. Strategic learning cycles can be implemented in order to transform the organization by building learning capabilities.

1.6.4. Integrating Capabilities

In the study of Pavlou and Sawy (2011), it was mentioned that integrating capabilities of the firm referred to the incorporation of new resources and assets. The firm's performance is also determined by the effective and efficient integration of strategic assets in the company. The fast-increasing competitive advantage is also required the integrating capabilities for incorporating external activities and technologies such as integration of associations and virtual firms. Internal human and technological resources and external human and technological resources are linked to the commercialization of technology (Teece, 2017).

1.6.5. Coordinating Capabilities

The definition of coordinating capabilities is that it entails the coordination of managerial and organizational processes, as defined in the study of Pavlou and Sawy (2011) and Protogerou et al. (2011). The viable and effective inside coordination of key resources may likewise decide the performance of a firm. As indicated by Lessard, Teece, & Leih, (2016, quality of performance is determined by unique, authoritative schedules for acquiring and handling data, connecting client encounters with building plan decisions, and planning manufacturing industrial units and part suppliers.

1.6.6. Learning Orientation

The operational definition of learning orientation is that it represents the core aspect of organizational learning. It can be said that learning orientation is the attitude of an organization that it holds towards the learning necessity. This learning orientation can be reflected in certain routines of learning capabilities. The research has shown that the learning orientation of the firms shows the inclination of the firm to which organization sets significance on learning for benefits in longer-terms (Mahmoud et al., 2016). Questioning of organizational standards is integrated into the learning orientation, which impacts on the strategies of the organization. Therefore, the learning orientation of a firm is verified by the degree to which utilization of knowledge is important for the firm with the help of its attainment, development, and transfer. It is one of the organizational characteristics that impact on how the data and information is

being processed in the firm. In order to have a strong and powerful learning orientation in the organization, it required to have such a managerial structure that supports and integrates employees in the process of learning (Rigolizzo & Roloff, 2018).

1.6.7. Commitment to learning

Commitment to learning is determined as to whether the firm view learning as the vital and core fundamental activity or not. When the organization places significant value upon its learning, significant learning is probable to have occurred similarly. If the organization places less value on its learning, less learning is probable to have occurred (Wolff, Pett, & Ring, 2015). The ability of the firm to advance its comprehension related to its environment has a prerequisite of organizational culture that is willing towards learning. Organizations are reflective when they value efficient learning and value the need for comprehending the reasons and outcomes of their acts. When the organization values these things, the employees get encouraged by the attitude, which facilitates them to challenge the traditional rules and regulations within a firm. The research has also defined that commitment to learning lets employees to reflect and rationale outside the pre-recognized structure of the firm (Jyoti & Dev, 2015). Learning to commitment is measured by four of the following aspects:

1. Agreement of managers that competitive advantage can be gained the powerful ability of a firm to learn
2. Culture of the organization encourages an employee to be committed with learning
3. Key to improvement is the basic value of learning
4. The learning of employee is the investment in the firm

1.6.8. Shared Vision

Shared Vision in the organization serves as the factor because of which the employees within the organization get more likely to know the expectations of the organizations and the results in order to measure the operations (Alt, Díez-de-Castro, & Lloréns-Montes, 2015). Scholars have suggested that shared goals in the organization are necessary for practical and positive learning for the reason that they facilitate in providing the direction for learning. Without having a dedication to direction and concurrence with the direction, the organization is less likely to be motivated towards learning.

In this vague environment, the motivated employee for learning is not able to figure out what is necessary to be learned. However, the research of Jyoti & Dev, (2015)

has shown that employees are required to develop the collective wish for learning. The sketch of share vision is the goal convergence. The research of Strese et al., (2018) indicated that when employees do not understand the focus of the organization collectively, there is a lesser motivation for them towards learning. With the help of shared vision, the organization gets a sense of function and direction; however;, it is subjected to the evaluation and evolves with respect to time as an organizational assumption. There are three measures for shared vision as well, which defines how much the organization holds a shared vision among its employees:

1. Organizational total agreement on the vision across all the levels of employees
2. The commitment of employees towards the goals of a certain business unit
3. The perspective of employees as collaborators in graphing the road of an organization

1.6.9. Open-Mindedness

With the passage of time, employees adopt a familiar way of thinking, which reduces their ability to question. When the employees of the firm are open-minded, they possess the ability to question (Wolff, Pett, & Ring, 2015). The idea of unlearning is linked with the concept of open-mindedness, and the ability of employees to unlearn is important in its learning orientation. The research has signified that if the employees do not hold the ability to actively unlearn prior knowledge, the organizations get in danger of making their key capabilities as rigid (Calantone, Cavusgil, & Zhao, 2002). The hazard of competency traps is also common when employees do not hold the capability to unlearn. Scholars have suggested that unlearning is the process that closely engages introspection, which not only enquires the practices but also questions the underpinning assumptions of those practices. But, the help of this frequent introspection, the organization, leads towards the achievement of goals with formal procedures restricted to the memory of the organization. The process in which the fundamental norms, policies, and objectives of the organizations get to change is known as the generative learning of double-loop learning (Wolff, Pett, & Ring, 2015). In order to measure the open-mindedness of the firm, there are three aspects that are kept into consideration.

1. The business unit gives high importance to the open-mindedness
2. The leaders and managers motivate employees to think outside the box
3. The organization highly values innovative and original ideas.

1.6.10. Intra-Organizational Knowledge Sharing

Collective learning of the organizational employees is facilitated by the help of effective sharing of knowledge between the organizations, which is inter-organizational sharing of knowledge and within the organization, which is intra-organizational sharing of knowledge (Dong et al., 2017). The focus of this section is upon the sharing of knowledge within the organization, which is intra-organizational knowledge sharing. There is primary importance in the organization regarding the connection between the sharing of knowledge and learning of organization, which have given rise to increasing the interest in knowledge management. In many of the studies, the one fundamental factor important for the attainment of competitive advantage is knowledge, which is regarded as the tool for the better performance of the organization. It is perceived that those organizations which give value to the sharing of knowledge within the organization as the major recourse, they are more likely to gain higher productivity with the lesser operational costs.

Management of knowledge, which is commonly known as KM, holds one of the central activities, which are sharing of knowledge in the organization (Hislop, Bosua, & Helms, 2018). It is considered as the primary component in knowledge management for the reason that it allows knowledge to be useable and accessible within the organization. It can be said that sharing knowledge is a means by which the employees within the organization can contribute to the application of knowledge, competitive advantage, and innovation in the organization. By the help of intra-organizational knowledge sharing, organizations could be enabled for the utilization of organizational knowledge-based resources which include the expertise of employees for innovation and creativity, leaning of organizations, increase in the productivity, developing new capabilities and skills, and maintaining the competitive advantage (Calantone, Cavusgil, & Zhao, 2002). It is perceived in the literature that when the organization is able to improve its learning with the help of knowledge sharing, it is more likely to operate effectively. In this route, the role of leadership is very constructive, which facilitates the relationship as a moderator between knowledge sharing and organizational learning.

Since the business of today's world is characterized by the unexpected, fast, and dramatic changes, organizations are required to learn, which helps them to cope up with these unexpected, fast, and dramatic transformations. Intra-organizational knowledge sharing promotes learning in the organization, which takes place at two levels that are

organizational level and individual level of learning (Serenko & Bontis, 2016). Individual learning is the learning of employees in which they learn about new expertise, capabilities, and competent ways to carry out their tasks from organizational resources, which includes its customers also. Hence, the process of sharing knowledge from the intellects of clients is significant for the learning of employees and eventually for the success of organizations. It is required by the managers and the employees to be adaptive learners, along with their high performances, so that organizations become successful. There are many elements that were recognized in the literature for knowledge sharing. One of those elements belongs to the type of knowledge that is characterized by explicit and tacit. The explicit knowledge sharing is easier as compared to the tacit knowledge sharing for the reason that because explicit knowledge is in the form of hard knowledge. The researchers have also identified that the performance of a leader along its support and commitment has a great influence on the sharing of knowledge (Dong et al., 2017). Therefore, it can be said that a leader in the organization is the knowledge builder, which influences the process and behaviour of knowledge sharing in the organization by its leading capabilities. Thus intra-organizational knowledge sharing is very crucial for the success and proficiency of the organization.

1.6.11. Entrepreneurial orientation

Entrepreneurial orientation is a procedure that is used to build up new companies, merchandises, services, or procedures within a prior business to generate value and new revenue increase by the help of entrepreneurial ideas and acts (Dess & Lumpkin, 2005). Entrepreneurial orientation places the situation for modernization and expansion. The basic objective of corporate leadership is to create innovative and creative ideas in the organization and materialize them in order to generate revenues. Commonly, entrepreneurs are also known as innovators for the reason that they bring change in the surrounded world by creating ideas and opportunities for employment. The process in which the company creates new products or services with the prior organization that is the potential to generate revenues for the existing organization is termed as entrepreneurial orientation . Organizations always encourage their employees to bring new ideas for the company's product line, which is the potential to make a profit (Kazanjian, Drazin, & Glynn, 2017). Organizations promote the most from entrepreneurial orientation for the reason that they generate revenues. In addition, the identification and esteem of an organization could get radically progressed with a team

of corporate entrepreneurs. One of the first benefits for the organization regarding the encouragement of entrepreneurial ideas is that the organizations are able to save money on employment while ensuring that they generate revenue.

Entrepreneurial orientation is advantageous in numerous ways. An organization becomes able to generate a lot of revenues from the creation of a distinct and flourishing initiative. The employee who generated the idea, which is a corporate entrepreneur, becomes able to achieve much gratitude within the organization along with the financial reward as well in the form of a bonus, promotion, or increment. Irrespective of the origin of the idea, everyone becomes able to get an advantage from entrepreneurial orientation. The prior research in the field of entrepreneurial orientation represents that it contains five primary dimensions, namely competitive aggressiveness, autonomy, innovativeness, risk-taking, and proactiveness (Dess & Lumpkin, 2005).

1.6.12. Autonomy

The concept of entrepreneurial orientation is defined as the team that initiate a new business with the prior business, however, to develop and bring something new and innovative, the teams are required to be functional outside the conventional norms and limitation of the SMEs which facilitates them to perform and imagine autonomously from their supervisors in SMEs. The organizations that provide and encourage strategies for innovations, it provides their low-level managers with the autonomy and authority to seek and try new approaches for exploring opportunities for market and technology (Dess & Lumpkin, 2005). Therefore, autonomy is an essential element for the development of new business for the reason that the knowledge related to the parameters of the market, such as customer and technology, is low in the new business. This lack of market parameters knowledge may lead the organization towards the impulsiveness of activities related to business development. In these circumstances, the activities related to business development are recognized by means of experiences of the team that is being gathered by them when it interacts closely with the customers and technology, which is collectively known as market stimuli. Thus, it is difficult for the lower-level managers to manage and plan if the autonomy is dispersed by a higher level of management, which includes the leaders from the team of business development. On the other hand, it has also been noticed that a higher degree of autonomy provided to the low-level managers may become increase the risk of making activities inefficient (Kazanjian, Drazin, & Glynn, 2017). Moreover, it is potential that supervision and leaders of the organization might lose their control over the activities.

Consequently, it has become a challenge for the leaders and the managers of the organization to handle the degree of autonomy so as to facilitate the business development team in gathering the experience by examining the market close by interacting with it as well as keep the activities in their control. It could be concluded that autonomy management in the SMEs holds necessary implications on the new business with respect to its success and development for the reason that adequate level of autonomy is the key to success however very less or very high level of autonomy is also potential to increase the rate of failure for the new business development.

1.6.13. Competitive Aggressiveness

The idea of competitive aggressiveness is that organizations beat its competitors to the punch, as suggested by the numerous scholars' definitions (Kazanjian, Drazin, & Glynn, 2017; Dess & Lumpkin, 2005). This concept is associated with the type of strength and competition that the new businesses in the market are required to compete with the existing rivals in the market. The studies of various researchers have shown that the performance of entrepreneurial orientation is facilitated by the strategies of aggressive competition. Thus it would not be wrong to state that strategies for the competitive aggressiveness play a mediating role between performance and entrepreneurial orientation. In this sense, the companies that hold a greater degree of entrepreneurial orientation are inclined to devise positive types of strategies that will persuade the performance of the organization. With the help of strategies for the competitive aggressiveness, the element of entrepreneurial orientation elevated and guided its performance in the same way as the training of boxing and its strategies direct towards the aggressiveness of the boxer. It can be perceived in the manner that competitive strategies are vital in the organization in order to take full advantage of entrepreneurial orientation in the performance of the company (Giachetti, 2016). In simpler words, the concept of competitive aggressiveness indicates the relation of companies with their competitors.

1.6.14. Innovativeness

The other dimension of entrepreneurial orientation is innovativeness, which is also one of its significant components for the reason that it imitates the vital means through which the organization is able to chase new opportunities. There are several forms of innovativeness that a company could take (Dess & Lumpkin, 2005). In order to understand innovativeness in the broader context, it's the scale from a simple motivation to either seek an innovative item for consumption or experimentation with

the venue for new advertising, to a zealous dedication and loyalty to take command over the most recent advancements in products or technology. The research has identified that SMEs are the more appropriate for the innovation in comparison to the larger sized organization for the reason that SMEs are more flexible which is why they are potential to adapt any of the changes in the market to innovate any new product or service (Kazanjian, Drazin, & Glynn, 2017).

1.6.15. Risk-Taking & Pro-activeness

The dealing of the company related to the opportunities in the market in order to make entry along with the influence on trends. The proactiveness of the organization is the potential to create demand as well. The concept of proactiveness in the corporate is to act in the expectancy of future problems, changes, or the needs which is critical for the entrepreneurial orientation for the reason that it proposes a perspective for forward-looking which is convoyed by the activities of innovativeness and new ventures (Morris, 2015). It is found as a significant and positive contributing factor towards the performance of entrepreneurial orientation. Risk-taking, on the other hand, is concerned with the attitude and approach of the organization, which often associated with the approach of innovativeness in the management of the company. With the help of the risk-taking factor in entrepreneurial orientation, the company engages itself in the innovative and creative process; thus, it is productively associated with the overall performance of entrepreneurial orientation. In one of the researches, the innovativeness and risk-taking ability of the organization is linked closely with each other for the performance of the firm (Glaser, Stam, & Takeuchi, 2016). Such organizations are seemed to be more successful in making revenues in the entrepreneurs possess a higher degree of risk tolerance, willingness for using new technologies, and the factor of innovativeness. Due to the element of risk-taking and proactiveness, entrepreneurial orientation has a smooth growth in comparison to the organization where a low degree of risk-taking and proactiveness is found. Among the new SMEs in the market, organizations that possess a higher level of entrepreneurial orientation along with above mentioned intangible assets hold higher rates of growth in contrast to those SMEs that have limited entrepreneurial orientation along with its limited elements (Morris, 2015).

1.6.16. Organizational Culture

The concept of organizational culture is explained as the fundamental assumptions, practices, values, beliefs, and ways of interactions that made up the

distinct environment in the organization in terms of social and psychology are counted collectively as the organizational culture (Fey & Denison, 2003).

1.6.17. Involvement

Involvement refers to the engagement of employees in the organization. It is recommended in the literature that SMEs must build an organizational culture of involvement (Fey & Denison, 2003). In order to build a culture of involvement in the organization, it requires the employees and teams who managed their work on their own, which is undeniably the most challenging endeavour in leadership at the same time it is most rewarding as well. Leaders in organizations are responsible for building the culture of employee involvement or engagement by promoting trust and openness (Chan, Shaffer, & Snape, 2004). Moreover, the culture of involvement also develops by the development of risk-taking culture; thus, leaders play an important role in empowering employees to carry out their daily tasks on their own.

1.6.18. Consistency

In order to build a great culture in the company, consistency is the one major rule. It does not matter what standards are made under the culture of the organization; however, it matters that how long the company followed those standards productively for a long duration of time (Fey & Denison, 2003). There are several major benefits of consistency in culture for organizations that also influence its customers the most. Moreover, it is also the potential to increase the performance of the organization (Selart & Schei, 2016).

1.6.19. Firm Performance perceived Firm Performance

The exploit of non-financial evaluations to manage organizations appears as a productive association with the performance of the firm. The examples of nonfinancial measures include the satisfaction of employees, and the satisfaction of the customer, which is the potential to increase the performance of the firm (Wu et al., 2006).

1.7. Structure of the Thesis

The first chapter will discuss the background of the study, problem statement, research objectives, and research questions, along with the providence of the significance of the study. The second chapter of the research will be related to the literature review in which different previous researchers would be considered. The third chapter will be related to the methodology in which different methods that were used for the purpose of the collection, analysis, and interpretation of data. The fourth chapter of the research will be about the data analysis, findings, and the results. The last chapter

of the research will be related to the discussion, conclusion, and recommendations that will be including the deductions taken from the study, along with the recommendations.

CHAPTER 02
LITERATURE REVIEW

2.1. Introduction

The enterprise in this competitive world of business requires the various elements of dynamic capabilities (Teece & Leih, 2016). To fully benefit from the dynamic capabilities, enterprise performance must be measured. The chapter studies the various aspects of the dynamic capabilities that are in the literature. The link of dynamic capability has also been studied in relation to its effectiveness towards environmental change and learning. For the literature review, several numbers of research articles have been studied in order to gain a deep insight into information present in the past papers regarding dynamic capabilities and firms' performances. The dynamic capability of the firm is considered to be a broad umbrella term that can entail various mediator and moderator terms such as innovation capability of the organization, entrepreneurial orientation, organizational culture, and dynamism of environment.

According to Birkinshaw, Zimmermann, & Raisch, (2016), the firm's dynamic capability is its evolutionary expansion of the resource-based perspective for the reason that dynamic capabilities clearly observe the evolution of capabilities along with the observance of managing turbulence of environment in the organization. Capabilities of the firm usually include the ability of an organization to produce new services and products, however; the factor of dynamic along with the capability of the firm changes its meaning and suggests that it is the firm's capability of reforming the approach and method of developing new services and products within the firm. On the other hand, Lusch & Nambisan, (2015) stated regarding the dynamic capabilities of the firm that they not straightly associated with the fabrication of the service or a good. In this view, it can be said that the dynamic capabilities of the firm do not strongly impact the productivity of the organization.

However, Wilden & Gudergan, (2015) mentioned that dynamic capabilities do possess the impact on the process of production, ultimately by the help of incorporating, rearranging, increasing, and liberating the resources of the firm in order to act in response towards turbulence in an organizational environment. There are diverse views and outlook extant upon the topic that dynamic capabilities of the firm are helpful to improve the performance of the firm or to gain the competitive advantage in the business market (Cavusgil & Knight, 2015; Camisón & Villar-Lopez, 201); Chen & Miller, 2015). For example, in the study of Teece, (2018), it was argued that firms could exhibit dynamic capabilities in the best way, which illustrates different factors of the firms such as substitutability, equifinality, and homogeneity. The process of adopting dynamic capabilities within the operational abilities of the firm is the unique and distinctive process of the firm that helps to enhance the firm productivity and performance, yet many of the organizations possess commonness in adopting dynamic capabilities in the firm, but the extent of effectiveness varies from organization to organization.

Rothaermel (2015) also stated that the dynamic capabilities do not directly gain the competitive advantage of the firm for the reason that dynamic capabilities establish value to the organization in an indirect manner, such as redesigning the resource base of the organization. However, Wang, Senartne, & Rafiq, (2015) study has shown that there are some of the scenarios where the dynamic capability of the firm fails to attain the intended result even after redesigning. Thus it has been proved that redesigning the firm's resource base is not always appropriate to bring the intended outcome.

Chen & Miller (2015) suggested in the study that prior performance measures, which include competitive advantage, value creation, and sustainable competitive advantage, can also be functional and useful for the dynamic capabilities. Though, these mentioned measures do not consist of a time aspect (apart from the measure of sustainable competitive advantage) and not integrate the characters of dynamic capabilities. Here, two of the questions arise, that are associated with the firms' performance. The first question is that how well the dynamic capabilities of the secure facilities it to build its value through establishing, expanding, and reforming the resource base of the firm and the next question asks the indication regarding the capability of the firm for adapting and handling the turbulence in the work environment. According to Birkinshaw, Zimmermann, & Raisch (2016), it has been said that firms that maintain to carry on the business operations effectively on the longer terms are the ones that effectively facilitate by the dynamic capabilities through establishing, expanding, and reforming its resource base. In addition to firms' sustainability, Storey (2016) suggested that the survival of the firm in an unstable environment is essential for the growth of the firm. On the other hand, it has also been noticed that dynamic capabilities do not automatically lead the organization towards better performance.

2.2. Dynamic Capability in Early Times

In the publication of Teece et al., (1997), the notion of the dynamic capability of the firm was discussed. From that time till date, the focus of the studies on the topic of dynamic capabilities remains conceptual most of the time and emphasize on the basic level of issues (Biesenthal, Gudergan, & Ambrosini, 2018; Wilden, Devinney, & Dowling, 2016). The current literature analysis has exhibited that there has not been any significant progress in the analysis of dynamic capabilities and its issue for the firm. However, there were six basic capabilities recognized in the literature that is relevant to the firms' dynamic capabilities. The capabilities of the manager/leader to develop dynamic capability have been recognized widely, particularly in the process of redesigning the resource-based view (Uzhegova et al., 2018). On the other hand, the dynamic marketing capabilities of the firm recognized as the ability of the organization, which develops, releases, and integrates the knowledge of the market to effectively deal with the market changes. It further helps to determine the demands and needs of the consumer in the process of acquiring market knowledge.

Dynamic capability is the concept that is acquiring recognition in the field of management and, more specifically, in the field of strategic management. However, it

has also been observed in many of the studies that the new concept of dynamic capabilities in the firm may lead to confusion for the reason of its contemporariness. The basic perception of dynamic capability can only be understood when considering the definition of dynamic capability as given by Tecece, Pisano & Shuen (1997) in the working paper. The reason behind considering the concept of these authors, based on the two foremost reasons; one is that these authors were the first who seriously promoted the idea of dynamic capabilities and the second reason is that their article is one of the most cited and referred article in the field of management from the time of the 1990s to the current era. Looking at the research papers, it has been revealed that there are total six of the functions that are associated with the concept of dynamic capabilities regardless of any capability lifecycle's level such as founding, maturity or even development, whichever is the level; it allows the firm to reinforce the appearance of the organization in the new or existing market. The names of these six functions of dynamic capabilities, as defined by Helfat & Peteraf, (2003), revamp, recombine, redistribute, reproduce, economize, and retiring the capabilities or resources of the firm. Therefore, it can be said that the functionality of dynamic capabilities is not restricted to the creation of resources, but it is also associated with the elimination of the resources whenever a certain situation takes place. The reason is that dynamic capabilities evaluate the environment and reorganize the firm's resources to uplift the future performance of the firm (Teece, 2018). In an unstable environment, the control of the collection of resources is not powerfully supporting the competitive advantage of the enterprises. It is crucial for the firms to continuously rearrange their resources in the highly volatile market to maintain the competitive advantage and to generate a series of short-range competitive advantages where the firm could emphasize the managing of resources in the useful techniques to modifying it. Therefore, it has been revealed that devoid of the dynamic capabilities, the resources of firms solely are not probable to be transformed into the effective performance of the firm in the highly unpredictable market changes.

The hypothesis regarding the dynamic capability which is widely recognized is that firms that possess the dynamic capabilities can meet the change which is required to sustain and make a strong competitive advantage. The concept behind this hypothesis is that in the business strategy field, unique and distinguishing capabilities are the fundamental source of a firm's competitive advantage. Thus, dynamic capabilities are a critical aspect of maintaining a competitive advantage in this fast-changing

environment (Teece, 2018). The scholars have come up to the conclusion that dynamic capabilities are vital in achieving a competitive advantage in the extremely unpredictable environment of business. The dynamic capability process shows that the entire system and process of dynamic capabilities, which suggests that dynamic capabilities, which include individual-level dynamic capabilities as well as organizational level dynamic capabilities, lead towards the entrepreneurial orientation behaviour of the firm that search opportunity, recognize the opportunity and explore it. The process of dynamic capability and entrepreneurial orientation leads towards innovation in business and products, thus implies the competitive advantage and, eventually, the growth of the economy. It can be said that entrepreneurial orientation and the dynamic capabilities go hand in hand in the firms for the success and competitive advantage.

2.3. Capabilities vs. Dynamic Capabilities of the Firm

The capabilities of the firm are the processes that are based on the collection, analysis, and dissemination of information, which deploys the resources of an organization to realize the objectives (Yan & Yanni, 2016). Capabilities are the source for the company that helps to perform well in the business market. It has been viewed in the research that if the capabilities of the firm do not revise in accordance with the changes in the business environment, the capabilities then become less effective for the organizational performance to comply with the changing situation. In such scenarios where capabilities failed to comply with the external changing, the concept of dynamic capabilities heaves. According to (Teece et al., 1997) Dynamic capabilities of the organization can assemble and restructure its resources to act following the transforms taking place in the environment of business. Such capabilities not only assist towards changes in the market, but it also assists in contributing to new resources for the firm that will be valuable in later times. Innovation capability is one of the forms of dynamic capability a firm holds (Piening & Salge, 2015).

Researchers of the strategic management studies have seen in recent times that the rise of dynamic capability is an idea that guarantees to respond on the topic of how SMEs seem to secure a competitive advantage in a dynamic business environment. The rapid changing in the business market and environment are the reasons which give rise to the emergence and need for dynamic capabilities. It is the concept that has developed upon the assumption that capabilities can offer a competitive advantage to the firm and the potential to generate higher revenues. The relation between competencies and

capabilities is that they facilitate the firm to transfer attention to the final's ability of firm in integrating and organizing for accomplishing competitive advantage.

In this manner, notwithstanding the asset-based view, it is associated with dynamism here this looking to address how capabilities are restored after some time to give ground-breaking reactions towards changes in the business market. It would thus be able to be said that the dynamic abilities approach is a transformative form of the resource-based view of the firm, in that it is a back to front approach, yet acknowledges the impact of outside incidents. Current progress (Barney, 2017) put forward a necessary reframing of the firm's dynamic capabilities concept by challenging some of the fundamental resource-based view hypotheses. The first challenge is that besides being distinctive, the dynamic capabilities are said to demonstrate commonalities across firms which contradict the resource-based view concept in the way that dynamic capability allows developing best practice suggestions about imitating and diffusing them whereas the assumption of resource-based view states that there is a determined heterogeneity across the firms.

The second challenge is that dynamic capability, while evolution is path-dependent, which implies that dynamic capabilities can develop by various firms from various points and along various pathways. Moreover, it has also been noticed that besides being the necessary factor for the competitive advantage, but it is not a sufficient one in the way to attain long term competitive advantage. Besides, long-term competitive advantage is said not to be recurrent in fast-changing markets, in which rivalry develops around a progression of brief favourable circumstances. Other than testing a portion of the fundamental tenants of the resource-based view of the firm, the dynamic abilities mean interfaces additionally with the developing discussion encompassing the information economy, and specifically to the learning-based perspective of the firm. This possibly symbolizes development from the resource-based view by recommending knowledge architecture as the re-conceptualization of the firm (Henderson & Clark 1990), where firms as accessible as knowledge stores, information being accumulated, and learned in routines of the organizational entrenched in the administrative systems.

The connection between dynamic capabilities and the knowledge-based view gets from the apparent impact of information-based components and hierarchical learning forms for reestablishing skills. Because the dynamic abilities of the firm are unique and distinctive, it is recognized that it may be derived from implicit knowledge.

As well as the resource base view arrives from the idea of resource bequests are oppressive in any case of short-run implies that firms are to some extent fixed with what they own and might have to survive with what firms require (Barney, 2017). This statement suggests the path dependency in which the collection of prior capabilities and competencies facilitate or restrain the necessary restoration procedure. The popularity and recognition of the dynamic capability roots from the potential of this concept, which is connected with the resource-based view along with the budding knowledge economy discussion, which is widespread in existing arguments. It is true that the dynamic capabilities of the firm are associated with the capabilities of the firm and its routines and processes, but all these attributes cannot be counted under the umbrella of dynamic capabilities.

Moreover, all of them cannot be the source of persistent competitive advantage. Likewise, the capabilities of the firms, which are common among the firms, are not able to become the source of competitive advantage. There are some of the sources that are able to reproduce in the firm while some resources are not able to imitate; thus, there are some measures that differentiate between those processes or routines that are dynamic ones. The measure is that capabilities that are used in the resource base restoration are the dynamic capabilities that are known to be the highest form of capabilities in the organizations.

2.4. Definition of Dynamic Capabilities of the Firm

There are various definitions provided by different scholars on the topic of dynamic capability. However, every definition has its link with the basic definition of Teece, (1994) ("The subset of the competences and capabilities that allow the firm to create new products and processes and respond to changing market circumstances.") yet the evolution of definition has taken place which enhances the dimension as well. Teece, Pisano, and Shuen formally presented the first definition of dynamic capability. The definition of Leonard-Barton (1992), stated that “Dynamic capabilities as the firm's ability to integrate, build, and reconfigure internal and external competences to address rapidly changing environments”. According to the definition of dynamic capability as elaborated by some renowned scholars Teece, Pisano, & Shuen, (1997) that any firm can build, integrate, and reorganize the internal competencies as well as external competencies in order to cope up and comply with the fast-changing business environment. It is to note down here that there is a difference between dynamic capabilities and the operational capabilities for the reason that operational capabilities

of the firm affect the on-going operations of the firm whereas, the dynamic capabilities of the firm is referred to those capabilities that establish, expands, and reform the resource base with determination (Teece et al., 1997). Progressing, the definition of dynamic capability is "the firm's processes that use resources –specifically the processes to integrate, reconfigure, gain and release resources – to match and even create market change," and "… the organizational and strategic routines by which firms achieve new resources and configurations as markets emerge, collide, split, evolve, and die" as stated by Eisenhardt& Martin (2000). On the other hand, Makadok, (2001) defined the notion of dynamic capability of the firm as "dynamic capabilities are developed and embedded within the firm as they progress through time, via the accumulation of experience and specific investments."

Another perspective that has been revealed in the study of Zollo & Winter (2002) is that the framework of the dynamic capability states that core competencies of the firm should be utilized to transform the short-term competitive advantage in the market, which can assist in acquiring a long-term competitive position. In the study of dynamic capabilities, there has been a lot of work carried out that represents several definitions and concepts of dynamic capabilities, yet most of the studies and conceptualizations reside on the basic definitions provided by either Teece, Eisenhardt, and Martin, or Zollo and Winter. The definition given by Teece has been elaborated previously that competencies of the firm allow modifying its operation with respect to change in the resource base of the firm (Helfat & Winter 2011). Teece et al. (1997) have stated that the competencies of the firm are its pattern of current learning and practice. The definition of Teece was then refined by Eisenhardt& Martin (2000), which states that dynamic capabilities of the firm are its processes of the firm that utilize its resources in order to go with the change in the market. Afar from enlightening the idea of change in the market, the study of Eisenhardt and Martin pull the concentration towards certain process and practices of the organization that demonstrates vital commonality in the firm and helps to bring the new resources. The example of such processes and practices include alliance or achievement practices. It has also been stated in the concept of dynamic capability given by them that perception changes according to the context of high to a moderate organization.

On the other hand, the definition of dynamic capability provided by Zollo & Winter (2002) stated that it is the cultured and constant outline of shared movement of the organization that methodically produces and transforms its routine operations to

enhance the efficacy of the organization. The framework of these scholars has been built upon the revolutionary economics to differentiate the dynamic capabilities with the operational capabilities, as it has also been discussed earlier in the section as well. The recent work of Teece (2007) regarding the dynamic capabilities of the firm is also the extended version of its prior study that argues that the role of dynamic capability in the firm is not only to pertain that capability of the firm in reconfiguring its resource base, but it also has the role to the intellect, grabs and prospectively forms the market environment. Moreover, the current work of Teece also divided the dynamic capabilities into "distinct skills, processes, procedures, organizational structures, decision rules, and disciplines" (Teece 2007; 1319) with the purpose to elucidate the sustainability of firms for high performances using these dynamic capabilities.

In one of the studies of Augier & Teece, (2007), it has been disclosed that there are four main factors that underlie and construct the multi-dimensional dynamic capabilities. Those key factors are strong communication, constant learning, thorough sensing, and response to the competition in the marketplace. With the help of these factors, the relationship of organizational performances with dynamic capabilities can be explored. The studies in the literature that are based on empirical findings hold the hypothesis that dynamic capabilities of the firm possess a direct and positive effect on the performance of the firm (Lin & Wu, 2014). It has also been revealed that competencies of the organization also held a direct and constructive role in the relationship between dynamic capabilities and organizational performances.

Below are the exact definitions that are presented by scholars regarding dynamic capabilities that will be discussed further with the reference of other definitions:

"A dynamic capability is to identify the foundations upon which distinctive and difficult-to-replicate advantages can be built, maintained, and enhanced." – (Teece, Pisano, & Shuen, 1997)

"The capability to renew competencies to achieve congruence with the changing business environment by adapting, integrating, and reconfiguring internal and external organizational skills, resources, and functional competencies." – (Teece et al., 1997).

"Dynamic capability is a collective activity, arguing that adapting in a disjointed way is not a demonstration of dynamic capability." – (Zollo & Winter, 2002).

"Dynamic capabilities are a capability that not only needs to change the resource base, but also needs to be embedded in the company, and in the end, can be repeated." – (Helfat and Peteraf, 2003).

“Dynamic capabilities view the assumption that it is important for firms to reconfigure resources as environments change.” – (Katila, 2005).

“Dynamic capabilities are the abilities to reconfigure a firm’s resources and routines in a manner envisioned and deemed appropriate by the firm’s principal decision-maker(s).” – (Zahra et al., 2006).

“Dynamic capability as the capability of an organization to purposefully create, extends, and modifies its resource base. The ‘resource base’ includes the ‘tangible, intangible, and human assets (or resources) as well as capabilities that the organization owns, controls, or has access to on a preferential basis.” – (Helfat et al., 2007).

“Dynamic capabilities as a firm’s behavioural orientation to constantly integrate, reconfigure, renew and recreate its resources and capabilities, and most importantly, upgrade and reconstruct its core capabilities in response to the changing environment to attain and sustain competitive advantage.” – (Wang & Ahmed, 2007).

“Dynamic capabilities are the ability of a firm to deploy new configurations of operational competencies relative to the competition by effectively sensing the environment, as well as absorptive, integrating, innovative activities.” – (Jia-Jeng Hou, 2008).

“Dynamic capabilities are the internal process to modify the resource of a given organization.” – (Ambrosini & Bowman, 2009).

“Dynamic capabilities as processes that shape the firm’s resource base confronts satisfactorily problem arising when they are directly related to firm performance.” – (Protogerouet al., 2011).

“Dynamic capabilities are their ability to exploit their existing resources and capabilities, but because they can renovate and develop their organizational capabilities.” – (Landroguez, Castro & Cepeda-Carrio´n, 2011).

“Dynamic capabilities are the processes managers use to modify their organizations in order to ‘keep in touch’ with changes occurring in their industrial setting... to be more agile, adapting to industrial change and even driving it.” – (David, 2013).

The definitions of Leonard-Barton, Teece, Pisano, & Shuen, Teece et al., Eisenhardt & Martin, Zahra et al., Helfat et al., Landroguez, Jia-Jeng Hou, and Castro and Cepeda-Carrio´n presented the same opinion in the literature that dynamic capability is the ability of a firm to reorganize. Integrate, develop, and exploit the

company’s resources. However, scholars such as Wang & Ahmed, and Winter have presented some of the different views regarding the dynamic capability definition.

2.5. Core Dimensions of Dynamic Capabilities

Considering the definitions that were mentioned above in the literature, the concept of dynamic capability is based on the following dimensions. However, it is to note down that the dimensions of the definitions are discussed according to the timeline of the definitions. According to the definition of Leonard-Barton, (1992), the dimensions of a firm’s dynamic capabilities are integration, building, and reconfiguration of internal as well as external competences. The definition also exhibits the dimension of addressing rapidly towards the changing environment. The next dimensions are connected with the definition of Teece, Pisano, and Shuen, (1997}, which are identification, replication, building, maintenance, and enhancement of the distinctive advantages and resources when the environment faces rapid changing so that competitive advantage remains maintained. When considering the dimensions of Teece, Pisano, and Amy, for the dynamic capabilities, the dimensions are given by Teece et al., (1997) can never be skipped since Teece was the first one who coined this termed in the field of strategic management. In the definition of dynamic capability, as provided by Teece et al. (1997), the dimensions include adaptation, integration, and reconfiguration of internal and external resources, competences, and organizational skills. These three definitions indicate that integration, building, and reconfiguration of the organizational resources are the core dimensions for the dynamic capabilities of the firm.

The following definition on the list is Eisenhardt & Martin, (2000), which also elucidates the same dimensions of dynamic capabilities, which are integration and reconfiguration, however; two additional dimensions are also defined in the definition which is gain and release of the organizational resources. The definition also has given the time instances regarding when to implement these dimensions, which are the emergence, collision, evolution, or diminish of the markets. Thus the two new dimensions are introduced in the definition provided by Eisenhardt and Martin. Makadok also has defined the concept of dynamic capabilities, which has mentioned some of the dimensions such as development, accumulation, and implantation of the firm's experience and particular investments (Makadok, 2001). Considering the dimensions that have discussed up till now, it can be said that as the definitions are

progressing, the dimension is increasing or modifying along with the need for the change in the business environment.

The definition of Zollo & Winter (2002), however, elucidates the dimensions that are not part of the dynamic capability. According to them, adapting in a disjointed way does not count under the concept of dynamic capability. Thus the dimension of dynamic capability, according to Zollo and Winter are integration and reconfiguration of organizational competences. Looking at the definition provided by Bowman & Ambrosini, (2003), the process which entails the implementation of dynamic capabilities in the firm consists of the four dimensions, namely reconfiguration, leveraging, learning, and integration. This definition given by Bowman and Ambrosini opens up the two further new dimensions which have not been introduced before in any research article related to the topic of dynamic capabilities.

The popular article of Helfat and Peteraf demonstrates the dimensions that are need of dynamic capabilities. The dimensions of dynamic capability are not only a change of resource base but also a repetition of the implantation process continually. Thus the dimensions regarding the need for dynamic capability have been unfolded in this definition. Discussing the following definition on the list, which is given by Winter (2003), explains the dimensions that are a crucial requirement for the firms, namely, continue to have a resource base that facilitates the firm to survive competitively. There are some of the authors that have discussed very briefly on the topic of dynamic capabilities such as Katila (2005) agrees in the definition that reconfiguration of the resources is the basic necessity that a firm is required in the changing environment. In 2006, the article of Zehra et al. also coincides that the dimension of dynamic capabilities, as given in their definition, is a reconfiguration of the resource base of the firm. Thus even after passing more than one entire decade, the dimension that has not changed in the definition of the dynamic capabilities is a reconfiguration of the organizational resources.

As the definition of Helfat et al (2007) has been discussed earlier, the dimensions that are extracted from their definition consist of creation, extension, and modification of the organizational resource base. The definition signifies that configuration, creations, and building are the constant dimension of the dynamic capabilities; however, some of the scholars have added some new dimensions while these dimensions are the constant. The following definition in the consideration is of Wang & Ahmed, which is primarily based on the dimensions of the behavioural

orientation of the firm when dynamic capabilities are required. These dimensions are integration, reconfiguration, recreation, renewal, up-gradation, and reconstruction of the resources and core capabilities of the organization for the response of environmental change so that competitive advantage can be accomplished (Wang & Ahmed, 2007).

The concept of dynamic capabilities is, however, based on the Teece's concept but every scholar has modified its content such as Jia-JendHou, (2008) has elucidated hat deployment of a new configuration, sensing the environment, and absorbing and integrating the innovative activities are the core dimension of dynamic capabilities. Ambrosini & Bowman (2009) have now introduced one more definition of the dynamic capabilities that indicates the dimensions of modification of the internal organizational process. The prior four dimensions that were given by them have now become the five dimensions by the addition of the medication dimension. The definition is given by Jeroen, Spender, & Aard, (2010) has defined the dimensions that coincide with the dimensions given by Eisenhardt & Martin, (2000), which are integration, reconfiguration, gain, and release of the resources that are required for the market change. From the time of 2000 till the time of 2010, it can be said that there hardly come any changes in the dimensions of dynamic capabilities.

Considering the definition of Protogerou et al., (2011) for the dynamic capability, the one dimension has been extracted out, which is shaping the resource base of a firm, and it has mentioned that shaping is directly associated with the performance of the firm. In the same year, the definition by Landroguez, Castro, & Cepeda-Carrio´n (2011) has provided their definition of dynamic capability, which indicates the dimensions such as exploitation, renovation, and development of the abilities and capabilities of the organization. The last definition to discuss while considering the dimensions of the dynamic capabilities is of Atkinson (2013), who has defined that modification is the dimension of dynamic capability that organizations are required at the time of environmental change.

From the discussion of the dimensions of dynamic capabilities as extracted out from the definitions of the expert and renowned scholars, it can be said that the common categories dimension of dynamic capabilities include ability, behaviour, process, and basic requirement where each of this category consists of dimension namely reconfiguration, integration, modification, construction, alteration, renovation, creation, development, implantation, extension, and exploitation. These dimensions remained constant in the definitions of the scholar form the past two decades that have revealed

the credibility of these dimensions that remained persistent over time. Considering above dimension, it is to state that organizations that are required to implement dynamic capabilities in the organization must adopt the dimension of reconfiguration, integrating, modifying, constructing, alternating, renovating, creating, developing, embedding, extending, and exploiting the resources of the firm which include tangible as well as intangible resources.

The reason for this intangibility and interactivity, the services' diversity is causing the huge diversity in the nature of the industry. Due to the factor of diversity, the heterogeneity in the sector is evident (Ahmed, Kristal, & Pagell, 2014). Furthermore, the rapidly changing and the instability of the business environment in the global world, the fast progression of innovative technologies, and the changing characteristics of the customers are giving serious effect to the enterprises which require the firms to reconsider their strategic management actions if they want to sustain and flourish (Barney. 2017).

If the comparison takes place between the manufacturing and service-oriented firms, the services area are less centralized and less standardized; therefore, the conventional advance literature cannot supply a sufficient portrayal of innovation in service. The approach of dynamic capability can be applied in the innovation literature. Reliable with that the dynamic capabilities are the constructive and practice approach towards the comprehension of those capabilities that are required by the firm in order to develop new services as well as for scrutinizing whether these capabilities are probable to give a foundation from which a firm can achieve competitive advantage sustained it in the shorter and longer run. It is certain that if the firm lacks dynamic capabilities, it hinders the path of innovation in the sector of services. Therefore, for the firm to be able to produce new and innovative services constantly, it needs to develop dynamic capabilities so as to enable its characteristic of being innovative services and product producer. Looking at the example of the hotel industry, the dynamic environment is affecting its practices, and the traditional approaches of management seem to by dysfunctional now. Hence, the businesses of the hotel are required to think dynamically and develop emergent strategies dynamically. Achieving dynamic capability fully implies that a hotel can justify its capability to predict and react accordingly with the environment.

It points out the significance of the development of dynamic capability within the firm of any sector so that a firm could take adequate actions and work to

continuously enhance and progress the services and products so as to achieve a competitive advantage. There are significant implications for innovation by the nature of service. In the process of executing the strategy of innovation, the consequences are highly dependable upon the actions of customers and the workforce to make it functional. Moreover, the contribution of an employee is significant for constructively implementing innovation in services and products. There are many researchers that have been performed so as to identify the process that leads towards the achievement of dynamic capabilities by recognizing its core processes, dimensions, main components, factors, and the hierarchies of capabilities. One of the research has identifies the four dimensions of the dynamic capability, which are arranging capability, adaptive capability, administrative capability, and absorptive capability, which are explained in the later sections.

2.6. Individual Level and Organizational Level Dynamic Capabilities

Many of the studies have discussed that dynamic capabilities reside at various levels of the organization. Hitherto, a great amount of research was carried out, which emphasizes the single unit of study, which is an organizational level of dynamic capabilities. However, many studies also have discussed the significance of dynamic capability on the micro-level, which is an individual level of dynamic abilities. There is still much research that is needed solely in the area of the dynamic capabilities of the individual in the organization. It has been argued by Rothaermel & Hess, (2007) that studies that investigate on firm-level dynamic capabilities, based on the two suppositions. Those two suppositions are that individual-level dynamic capabilities are also similar up to some extent, and the firm level capabilities are independent, thus holds no impact on by the individual level dynamic capability.

Neglecting the dynamic capabilities of an individual while focusing on the dynamic capabilities of an organization may lead to inappropriate conclusions. Thus it can be said that the individual capabilities of employees within the firm are the driving factor for the organizational level of macro-level dynamic capabilities. It is frequent to consider individual employees as the most fundamental level when capabilities are being disaggregated (Grant 1996, cited in Janssen et al., 2016). In the literature, such as Teece et al., Eisenhardt & Martin, and Rodenbach, Malte & Brettel have examined the dynamic capability of executives and managers in terms of their ability to manage the resource of the organization (Teece et al., 1997; Eisenhardt and Martin, 2000; Rodenbach, Malte & Brettel, 2012). The workforce in the firm has played a vital role

in building and adopting dynamic capabilities. Gutierrez-Gutierrez, Barrales-Molina, & Kaynak, (2018) argued that the role of upper managers impacts on the changes in the process of management as well as an overall organizational process. Similarly, the research of Saebi, Lien, & Foss, (2017) also supported the point by stating that upper management and its team is the source that facilitates the adaptability or inactivity towards the environmental change. To elaborate dynamic capability of the individual level, it can be defined as the capability of the manager to sense and seize the opportunity and then reconfigure the activities in order to take the full benefit of the opportunity (Teece, 2018). Such as, when opportunities are foretasted, both entrepreneurs, as well as the managers, must assess and then deduce the condition, actions plan, and forecast the reactions of customers and competitors.

On the other hand, the assessment of several other main components of the dynamic capability at the individual level, which includes on reconfiguration and adaptive capabilities, is still lacking in the literature. It has also been observed that the macro-level of dynamic capabilities, which are organizational capabilities, are dominating on the literature of strategic management, nonetheless emphasizing on a simply a single level of investigation cannot exhibit a considerable amount of discrepancy in improvement, which is enlightened by factors of individual level. Therefore, it is essential to study the dynamic capability at the level of individual or micro, which is an aspect that is highly disregarded. As long as the organizational level of dynamic capabilities is concerned, there are four distinct capabilities that are essential for the organization to respond to the change. These four capabilities might correlate, but they are conceptually distinctive. Each of these capabilities holds specific emphasis. The names of these four capabilities are adaptive dynamic capability, absorptive dynamic capability, arranging dynamic capability, and administration dynamic capability.

The adaptive capability focus on the firm's ability to recognize and respond to the environmental change taking place in a business environment. This ability of the organization is very significant to recognize how the firm can offer more advanced, innovative, and reliable products in accordance with the change in the environment (Eshima & Anderson, 2017). The effectiveness of the firm when it senses the changes in environment links this adaptive capability with the market intelligence so as to assist its workforce in understanding the market environment and identify concerning opportunities and threats. Besides adaptive capability, researchers have also identified

the absorptive capability of the firms (Lee, Hsu, & Chen, 2018). While the focus of adaptive capabilities was on the effectual exploration and capitalizing on rising opportunities in the market, absorptive capability, in contrast, reflects the ability of an organization to discover and refurbish the subsisting knowledge and information of the organization so as to build new sets of knowledge and information that acts as the advances knowledge set for the firm. While differentiating both capabilities of the organization, it is to note down that both of these dynamic capabilities of the organization are linked with the external knowledge and information. While the focus of adaptive capabilities is on recognizing the market change and takes benefits from the change, the focus of absorptive capabilities is towards the highlighting of new knowledge/information amalgamation's importance for the firms using the prior knowledge and information.

Alike the adaptive dynamic capability and absorptive dynamic capabilities, the arranging capability, which is the third dynamic capability of the firm, is also associated with external factors of the market environment. However, the focus of this dynamic capability (arranging capability of the firm) is to effectually reorganize the subsisting resources so that they become able to fit in the changing market environment. According to Helfat & PEteraf, (2003), the arranging capability of the firm facilitates to innovatively redeploy the existing resources of the firm. The fourth capability is identified as the administration capability, which differs from the prior three capabilities discussed for the reason that it focuses on the organization and management of internal assets and actions whereas the adoptive, absorptive, and arranging capability emphasizes upon the exterior sources of market intelligence. The administration capability of the firm facilitates to evaluate and assess the usefulness in organizing dependencies among internal assets and actions, in addition to incorporating the inputs of the individuals (Zawislak, Fracasso, & Tello-Gamarra, 2018). Considering the motives and focus of all four capabilities of the firm (adaptive capability, absorptive capability, arranging capability, and administration capabilities), they contain dynamic quality for the reason that the intention of this capability is on purposely changing the resource base of the firm. It can further be stated that these four dynamic capabilities of the firm conjointly account for the separate but connected dimensions of the dynamic capability overall. Moreover, these capabilities of the firm broadly cover the affluence of the character of dynamic capabilities; further, the dynamic capabilities are constructed and produced instead of bringing in the market. This entire discussion

implies that the developmental path for the dynamic capability is not based on the single path; instead, there are four different types of dynamic capabilities that are effective for the diverse and different contexts. For example, the absorptive capability in the innovation process of services and products, whereas, the adoptive capabilities in the United Kingdom-based machine-tools industry. Each of the dynamic capabilities of the firm can be related to the other capabilities of the firm in many other ways when they are functional in the activities of the firm to adopt to counter the market change.

2.7. Theories of dynamic capabilities

There different theories that are related to the aspects of firm performance are elaborated thoroughly, which include behavioral theory, organizational learning theory, contingency theory, strategic choice theory, evolutionary management theory, institutional theory, resource-based theory, capability-based theory, and dynamic capability theory. How these theories relate to attaining dynamic capabilities for enhancing a firm's performance are also discussed in each of the sections. Each of the theory has been presented to relate it with the concept of dynamic capabilities and build a direct or indirect relationship with theory. Theories play an important role in understanding and predicting the scenarios of the organization. The reason to discuss theories while evaluating the role of dynamic capabilities in enhancing the firm's performance is to assess different schools of thought towards the relationship of firms' performance and dynamic capabilities.

2.7.1. Behavioral Theory

Simon (1976) describes the aim of behavioral theory as intending "to show how organizations can be understood in terms of their decision processes", since "decision-making processes hold the key to the understanding of organizational phenomena" (Simon, 1976). Applying this to the context of this study means that managerial decision-making is the driver for companies' ability to adapt to changes. Behavioral theory was one of the first theories to claim that uncertainty, which is caused by unpredictable events in the business environment or by unpredictable consequences of companies' actions, for instance, should be included in the management decision process. Theories of a behavioral organization are several such as human relation behavioral theory (Argyris.2017), decision making behavioral theory (Thompson, 2017), and Servant Leadership Behavioral Theory (Panaccio et al., 2015) which are helpful in developing the protocol of workplace so that it can aid in the increase of productivity and efficiency (Greve & Argote, 2015). The fundamental idea of

behavioral theory applied in organizations to enhance firm performance is that it is a scientific approach that manages the employees. Thus, it is also the potential to manage the capabilities of the employees. Behavioral theory linked with the dynamic capabilities' concept in such a manner that allows an organization to understand how the behavior of employees in an organization is effective towards the performance of the business while taking fundamental aspects of behavior into consideration.

2.7.2. Organizational Learning Theory

Likewise, behavioral theory, there are multiple theories that come under the umbrella of organizational learning theory, such as experiential learning theory (Kolb, 2014) and adaptive & generative learning theory (Chiva & Habib, 2015). In terms of definition for the organizational learning theories, there exists a diversification of focus on the thoughts of two distinct schools. The idea of cognitive school focuses on the thinking element of organizational learning, whereas behavioral school focuses on the action element of organizational learning. McGill and Slocum (1994), cited in the research of Zhou, Hu, & Shi, (2015), elaborates on the organizational learning as responsibility towards the new knowledge through modification on the programming by which the prior information is processed and evaluated. Employees in the organization learn by observing other employees if the dynamic capabilities are managed effectively. It is basically the process that is used to maintain as well as improve the performance of the organization based on the expertise of the employees (Zhou, Hu, & Shi, 2015). Assuming that firms that have dynamic capabilities among their employees possess more expertise, thus, the process of organizational learning in such an organization helps in improved performance of the firms.

2.7.3. Contingency Theory

The fundamental belief of contingency theory is that there is no single best way of managing the best performance of employees to lead an organization (Miner, 2015). However, it has emphasized the managerial and leadership trait while leading an organization successfully. The theory further has the concept of dependent and independent variables, which can be affected by certain situational factors (Otley, 2016). The independent variables such as leadership and motivation are the cause of the change in the dependent variables such as turnover, productivity, and absenteeism. It implies that the dependent variables of the organization are the response that is affected by the independent variable (Miner, 2015). Therefore, the performance of the firm of the dependent variable is caused by the dynamic capabilities of employees. Since there is

no one effective method that applies to each of the organizations to ensure its performance, it can be said that the dynamic capabilities of the employees in the SMEs of Pakistan can be the best approach. However, its evaluation will be disclosed in the later chapters of the research.

2.7.4. The Strategic Choice Theory

As the name suggests, the strategic choice is the systematic theory based on strategy. The foundation of this theory is built on the idea of communication where organizations adapt to their organizational environment in a manner of self-regulation so that it can achieve its goals (Wheelen et al., 2017). In one of the research, it has also been noticed that the strategic choice theory of organizations also elaborates on the role of a leader who plays the influencing role in making the choices for the organization in any dynamic process (Hill, Jones, & Schilling, 2014). Here, the dynamic process could be the management of the dynamic capabilities of the team. The study of the strategic choice theory was done with the aspect of employees' responses to their everyday tasks. The finding of the theory includes that employees also use a number of strategies changes over the times in order to carry out the work or find the solution to any problem (Whittington, 2014). Thus it can be said that the dynamic capabilities of the employees are also potential to change or modify with respect to time and situation. The strategic choice theory also implies that the dynamic capabilities of the firm also change with respect to the need for organizational performance.

2.7.5. Institutional Theory

Institutional theory in the context of organizational management puts the businesses at the center of the assessment of the design and conduct of the institutions (Greenwood et al., 2017). Institutional theory to explain adaptation is illustrated by Greenwood and Hinings (1996). One fundamental reason why organization resist change is that they are embedded in their institutional context. Greenwood and Hinings (1996) quote the example of an accounting firm from which it quite clear that based on the institutional theory, an organization not only has to respond to market forces but also to institutional pressures or demands, such as regulatory agency requirements, or general social expectations (Greenwood & Hinings, 1996). Considering this aspect of institutional theory in the context of organizational studies, it can be said that organizations are the homegrown instantiations of large institutions. The concept of an institution is beliefs to be taken for granted in terms of its norms, rules, creating shape, and preaching the forms, practices, and feature's design of the organization. These

elements are, eventually, effective in building dynamic capabilities. The emergence of organizational, institutional theory indicated a sense of dissatisfaction with other theories since they put the efficiency of the organizational action as the centre (Bolman& Deal, 2017). Here, the link is clear that institutional theory is associated with organizational efficiency. Considering this theory, the dynamic capabilities of the organizational employees are not the core of the efficient performance of the firms. Therefore, it can be said that under this theory, the dynamic capabilities of the employees hold less significance as compare to the other theories. However, it has focused upon the aspect of design and culture of organization that makes it an institution thus it can indirectly relate with the organizational learning that when employees have dynamic capabilities and contribute towards learning process according to the organizational culture, it can lead towards an institutional design (Greenwood et al., 2017). The institutional theory of organizations puts institutions at the core of the analysis of an organization's design and conduct. From this point of view, organizations are local instantiations of wider institutions. Institutions, understood as taken-for-granted beliefs, rules, and norms, shape the creation and spreading of organizational forms, design features, and practices. Indirectly, it can be said that organizational dynamic capabilities can be achieved by implementing institutional theory.

2.7.6. Resource-Based View

The concept of resource based-view claims that organizations are required to hold strategic resources that provide them with the golden opportunity to improve the firms' performance and gain competitive advantage (Lin & Wu, 2014). Having limited resources in the organization restricts its ability to complete achieve dynamism. However, with the help of enhanced performance and competitive advantage, the organization is able to gain more revenues. Therefore, the concept of this theory entails that firms' resources are mean to ensure competitive advantage and a firm's performance. The research of Bromiley & Rau, (2016) signified that the discipline of economics brings the contribution of dynamic capabilities and resource-based theory. These two options (resource-based theory and dynamic capabilities) are considered as the options that are the potential to develop the strategic management approach in the organization. Thus, it is a significant contribution to the enhancement of a firm's performance. Resources play an important role in enabling the organization to achieve dynamic abilities, whereas limited resources can become hinder the organization from performing dynamically. Concluding the concept, if resource-based theory, it can be

said that the capabilities of the employee in an organization are the major concept under this theory and thus contribute towards the firm performance. It has also been noticed that the dynamic capabilities of the employees arise with the passage of time as the actions taken by the firm towards the building of strategic resources (intangible resources) (Nieves & Haller, 2014).

2.7.7. Capability-Based Theory

The scholars of strategic management have proposed three of the most common explanations for the conditional and resolute changes in firm performance, which are linked with a resourced based review, capabilities perspective, and strategic factor of the market (Low & Ho, 2016). These different perspectives united on the statement that suggests the ability of a firm to control, share, and access the productive resources varies. One explanation for the emergence of these differences is provided by the factor market and performance differences among close competitors are partially explained by the differences in resources based, factor market situations, and capabilities of the organization, these three statements collectively indicate that management holds a constructive role in influencing, collecting, and establishing unique resources in the way that facilities the organizations to seize some of the valuable performances (Lin & Wu, 2014; Low & Ho, 2016). The focus of the capability-based market is to enhance the capabilities of the firm to perform better so that competitive advantage will be achieved. By this means, capability - a based theory also links the dynamic capability of the employees with the performance of a firm in order to gain competitive advantage (Mezger, 2014; Bhattacharyya & Jha, 2015).

2.7.8. Dynamic Capability Theory

Since the concept of dynamic capability originated by Teece, the theory of dynamic capabilities also focuses on the features that have been discussed in the concept. Dynamic capabilities work as the extension towards the resource-based view (Teece, 2014; Denrell & Powell, 2016). Therefore, there is a slight difference in the resource-based theories and dynamic capabilities theory. It has been noticed that dynamic capability theories perceived the success of the organizations due to their ability to demonstrate responsiveness to marker dynamic timely (Bhattacharyya & Jha, 2015). Market dynamics are eventually tackled if the employees of the organization hold dynamic capabilities. There are no two opinions under this theory that dynamic capabilities enhance firm's performances thus it is also standing in the favour that organizational performance increases when the organization gain ability to handle

market dynamics and the ability of an organization to handle market dynamics gained when its employees hold dynamic capabilities (Teece, 2014).

While analyzing different theories in order to build the relationship between the dynamic capabilities of the employees with the enhanced performance of employees, it has been noticed that the relation of dynamic capability is more with the competitive advantage rather than directly with the performance of the firm. To explain it further, consider that the dynamic capabilities of the employees in the business allow the high productivity, which impacts the competitive advantage of the firm directly in the market. Eventually. When the competitive advantage of the firm gained and maintained the performance, it is said to enhance or improve its performance. There are many theories that have been discussed in this chapter that links the dynamic capability with firm performance. In a nutshell, it can be said that theories such as strategic choice theory, resource-based theory, capability-based theory, contingency theory, and of course, dynamic capability theory suggested that dynamic capabilities of the employees in the organization helps to improve the performance of the firms.

2.8. Dynamic Capabilities in SMEs

Considering the entire world, small and medium-sized enterprises are becoming evidence of success as they are playing an important role in the development of the national economy of their country. Gaining a lot of consideration and a subject of close attention in the world, especially in developing countries; however, developed countries are also giving their attention due to their significant success. In the economies of the markets, the engine for economic development belongs to SMEs only for the reason that they are playing important role for the national economies by supplying numerous products and services, creating multiple employment opportunities, helped to develop the regional communities and economies, and strengthening the factor of market competition which allows innovation and creativity. All of this because of their own tenure, a spirit of entrepreneurial, their adaptability, and flexibility in addition to their ability to react to the instability of the changing environments, which makes the SMEs contribute to sustainable development and job productions in a considerable mode.

For the economic growth in the small and medium-sized enterprises (SMEs), the most underpinning fundamental process is innovation. Innovation in SMEs plays a vital role in driving and influencing the innovative performance that would help the firm to become distinctive from the other organization in the same market. Due to the innovative factors, the firms attain high performances while being the SMEs. In

numerous studies, the most important dynamic capability is termed as the innovation, which helps to build innovative strategies such as strategy for proactive and creative in the SMEs that oriented with growth-risk. The act of entrepreneurial orientation is observed as the incorporation of opportunity-seeking and benefit-seeking activities, which helps to offer the latest, useful, practical, and distinct concepts of business. Several studies have studied how resource-based view of the firms, particularly the innovation, can contribute to building the firms' dynamic capabilities. According to certain studies, it has been stated that there are four of the categories that develop dynamic capabilities critically in the entrepreneurial position of SMEs namely capability to acquire resources (Alvesson, 2012), capabilities to align strategic path (Birkinshaw, Zimmermann, & Raisch, 2016), capabilities to internally and externally reconfigure and integrate (Cavusgil & Knight, 2015), and capabilities for learning network (Feng, Morgan, & Rego, 2015). Most of the connections are moderate to extremely numerical important for the associations of dynamic capabilities with innovative strategies. In entrepreneurial team development and dynamic capabilities present in the small and medium-sized enterprise, the firms establish, identify, realize, and make use of certain and prospect opportunities in a usual manner so as to keep themselves ahead from their competitors. It is the well-known fact that the key outcome of the entrepreneurial process is to create a new business, and new business in the market mostly employs very few personnel. The developing researches on dynamic capabilities and its role in value creation are questioned with contradictions, common characteristics definitions, and absolute inconsistencies yet the academic and operational significance of building and pertaining dynamic capabilities in order to keep up the competitive advantage of firm in heterogeneous and unstable outer environment of market has propelled this subject in the front of the study outline for several researchers.

In the study of Khalique et al. (2015), it has been stated that dynamic capabilities in the SMEs help to adopt the change in compliance with the market environment. A remarkable frequent denominator of the hypothetical and experiential study on dynamic capabilities has great stress on revolution. According to Teece & Leih, (2016), dynamic capabilities helps the firm to modify its awareness, aptitudes, its routine operations, and its configuration of resources. The increasing research on an empirical study regarding change processes in firms has even formed substantiation of innovation practice inside the firms.

2.9. Dynamic capability on Firm Performance

The main reason behind adopting and implementing dynamic capabilities is based on either maintaining or gaining a competitive advantage in the highly unstable business environment. Firms gain competitive advantage only when their performances meet the benchmark (Breznik & Hisrich, 2014). The progress and development of dynamic capabilities are prejudiced by the creation of knowledge, codification, and incorporation, as well as asset processes. Dynamic capabilities are not supposed to directly associate with the performance of the firm for producing goods or provision of a profitable service and consequently cannot be directly affected upon the output of the firm (Helfat & Peteraf, 2003). In contrast, they affect the process of production, ultimately by integrating, reconfiguring, gaining, and releasing the organizational resources in order to take action for environmental instability and create change internally or externally.

According to Teece et al. (1997), the concept of dynamic capabilities can be defined as "the firm's ability to integrate, build, and reconfigure internal and external competencies to address rapidly changing environments" that creates long-run competitive success for the firm. Accordingly, dynamic capabilities can be considered as a dynamic process that purposefully and create, acquire, integrate, or modify the operational capabilities (Eisenhardt & Martin, 2000). Considering the approach of Teece et al. (1997), this study distinguishes the dimensions of dynamic capabilities: dynamic integrating/coordinating, dynamic learning, and dynamic reconfiguration capability. Although the relationship between orientations, dynamic capabilities, and firm performance is well researched, and usually links strategy orientations to firm performance through dynamic capabilities engagement (Zhou et al., 2005; Voss & Voss 2000), little empirical research has investigated the mediating effect of different type of dynamic capabilities with performance relationship (Lumpkin & Dess, 1996; Jantunen et al., 2005).As highlighted by Wu (2007), dynamic capabilities can positively mediate the relationship between a firm's resources and performance. In addition, Lin & Wu (2014) suggested that dynamic capabilities effectively mediate a firm's valuable assets to improve performance. Zhou & Li (2007) see the need for future studies to examine mediating mechanisms from a dynamic capability perspective. Competition in the market facilitates an organization to set their strategies, and tactic outlines those acts which are planned to accomplish the goals of the organization. Hierarchical activities rely upon their capabilities to accomplish new imaginative types of an upper hand.

Dynamic capabilities are the impression of this capability that incorporates, form, and reconfigure inner and outer skills to address quickly evolving situations. In order to distinguish basic capabilities, directors centre around those activities and practices that are fundamental for intensity ". The essence of competence and capabilities is embedded in organizational processes of one thing or another" (Teece, Pisano, and Shuen, 1997). The foundation of organizational capabilities is the ability of its employees at the individual-level. Learning, an asset (Drucker, 2005; Grant, 1996), is included in the schedules and procedures of the associations. Routines of the organization, which are fundamental units (Porter, 1996), are included in the schedules, and the upside of a setup firm finished another comer basically lies in the hierarchical schedules that it has consummated after some time (Grant, 1991). Hierarchical schedules are customary and unsurprising examples of action which are comprised of a succession of composed activities by people. A capability is, generally, a schedule, or various interfacing schedules. A capability creates capabilities that speak to the information, aptitude, and capability of people or groups in the association to achieve work and is surveyed by blending the aggregate capability of people inside the association (Ulrich, 1993). Hierarchical learning is a capability that influences cognizance and conduct of the representatives as additionally avowed by Levitt and March (1988). It very well may be inferred that a procedure is a result of a learning association (McGill & Slocum, 1993). By looking and the previous studies and theories (theory of dynamic capability and resource base view), relationship between dynamic capability and firm performance shows significant relationship with each other. If the organization use its internal capabilities/resources then it makes organization to gain competitive advantage in the external environment. Hence, the hypothesis in this regard is:

H1: Dynamic capabilities are significantly related to Firm Performance.

2.10. Entrepreneurial Orientation (EO)

To define the concept of entrepreneurial orientation, the firms that exhibit the behaviour of entrepreneurship are said to have the entrepreneurial orientation. Formally, Anderson et al. (2015) mentioned the definition of entrepreneurial orientation, which proposed that it is the ability of the firm to acknowledge the potential loss from a risk and its tendency to challenge its competing firms. As an organizational attribute, EO saturates managerial philosophies, practices of making a decision, and strategic behaviour of firms. The firms that hold high EO (Entrepreneurial Orientation) are those

who observe the business market with the intention to discover the business prospects and obstructions Wolff, Pett, & ring, (2015). While doing sol, a firm eventually builds the ability to develop dynamic capabilities, which leads to observe high performances. There is conflict found in the literature regarding the relationship of Entrepreneurial Orientation and the innovative capabilities of the firms. Some of the scholars have suggested that there are three elements of entrepreneurial orientation namely risk acceptance, innovation capability, and proactiveness (Zhai et al., 2018) while on the other hand, there are some of the researchers that do not count innovation capability under the umbrella of entrepreneurial orientation and argued that innovation capability is not associated with aspect of entering into a new business market which is the foundation of entrepreneurship. However, in some of the studies, the entrepreneurial orientation has been associated with the marketing capabilities of the firms for the reason that entrepreneurship includes the collection and analyses of the information regarding new business market, therefore, by the presence of this element, many scholars have associated entrepreneurial orientation with the marketing capability instead of innovation capability (Martin & Javalgi, 2016; Brouthers, Nakos & Dimitrators, 2015). Having said that, firms that work on developing dynamic capabilities are the one that initially develops entrepreneurial orientation. Anyhow, it can be said that there is an effect of dynamic capabilities on the entrepreneurial orientation, which ultimately impacts the performance of the firms. Firms that are oriented towards entrepreneurship sustain and demonstrate a constant pattern for the innovative processes and the task where pro-activeness and risk-taking are involved. When the firm exhibits the behaviour of pure entrepreneurship, it is viable to increase its status and reputation as well in the community. In this way, the discussion can be concluded by the sentence that it would not be wrong to say that the entrepreneurial orientation affects positively the reputation of the firm.

2.10.1. Effect of dynamic capability on entrepreneurial orientation

Since the exhibition of entrepreneurship characteristics increases the reputation of the firm, it shows that the internal and external matters of the organization are in accordance with the environmental changes of the business. Considering deeply on the roots of entrepreneurial orientation, it has been noticed that the roots are attached from the dynamic capabilities of the organization which facilitates them to exhibit entrepreneurial orientation which eventually raise the performance of the organization and reputation of the firms. To further understand how dynamic capabilities are affected

upon the entrepreneurial orientation, the literature has proved the thorough understanding. In general, entrepreneurs face rapidly changing and highly uncertain environments. As a result, they must be able to respond quickly and effectively to extensive changes in a wide range of external conditions. “Dynamic capabilities reflect the firm's ability to integrate, build, and reconfigure internal and external competences to address rapidly changing environments” (Teece et al., 1997). In literature entrepreneurial resources may play a role in the capability to respond effectively to such dynamic environments, in several ways. Zahra et al.’s (2006) model indicates that a firm’s entrepreneurial activities are the starting point for the conception, development, configuration and maintenance of dynamic capabilities. Lee & Kelley, (2008) propose that dynamic capabilities are not routines, but comprise managerial practices involving first, the selection of entrepreneurs who take on the primary task of assembling and integrating the resources needed to create innovations. Wu (2007) proposed that as an intermediate variable dynamic capability is between entrepreneurial resources and firm’s start-up performance. In Wu’s (2007) study initial stage of the firm’s; “resource integration capability (e.g.,Teece et al., 1997; Eisenhardt et al., 2000), resource reconfiguration capability (e.g.,Teece et al. 1997), learning capability and ability to respond to changes” are variables of dynamic capabilities. Wu (2007) found that the more abundant the entrepreneur’s resources the greater the start-up's dynamic capabilities. Organizational internal capabilities make organization to develop better procedures, products and services in market. In case of SME’s dynamic capabilities helps firm’s to achieve better performance but entrepreneurial orientation in SME’s of Pakistan doesn’t look clear. According to previous researches in highly volatile economies corporate fails to achieve entrepreneurial orientation. As the Pakistan falls in developing economy it may create different results as compare to developed and developing economies. Hence, the hypothesis in this regard is:

H4: Dynamic capabilities are significantly related to entrepreneurial orientation.

2.10.2. Effect of entrepreneurial orientation on firm performance

As it has been witnessed earlier that the roots of the entrepreneurial orientation is attached with the dynamic capabilities of the firm, it must has the impact on the firm performance for the reason that dynamic capabilities have indirect effect on the performance of the firms as it has been notices in the earlier sections of literature review. Since there are three factors of entrepreneurial orientation, namely pro-activeness, risk-

taking, and innovativeness which are also the main key feature for the better performance of the SMEs, the effect of the entrepreneurial orientation must be positive on the performance of the firms. The literature has also defined the effect of entrepreneurial orientation on the performance of firm which is defined under this heading.

The concept of entrepreneurial orientation encapsulates the firm-level processes, practices, decision-making style (Lumpkin & Dess, 1996), and strategic orientation (Wiklund & Shepherd, 2003) of an entrepreneurially-oriented firm. It is a multidimensional construct, which in its commonly used form consists of dimensions of innovativeness, proactiveness and risk-taking (Covin & Slevin, 1989; Wiklund, 1999). Innovativeness reflects a firm's tendency to enter into experimentation, support new ideas and depart from established practices (Lumpkin & Dess, 1996). Entrepreneurial orientation has been found to lead to improved performance (Zahra & Covin, 1995; Wiklund & Shepherd, 2005), although the empirical results are mixed. Lee et al. (2001) found only weak evidence of a positive relationship between entrepreneurial orientation and the start-up's performance, while Slater & Narver (2000) found no relationship at all with business profitability. Wiklund & Shepherd (2003) suggest that an entrepreneurial orientation enhances the relationship between a firm's knowledge-based resources and its performance. Further, the findings of Zahra & Garvis (2000) suggest that entrepreneurial activities enhance overall and foreign profitability and revenue growth, and that entrepreneurship moderates the relationship between environmental hostility and performance, to the advantage of the latter. Dess et al. (2003) argue, the relationship between entrepreneurship, the process of dynamic capability renewal, and internationalization is clearly an important research subject The studies on entrepreneurial orientation in developed economies especially after 1990's have revealed that entrepreneurial activities within the firms provide successful firm performances (Lumpkin & Dess, 2001). Several studies investigating the relationship between entrepreneurial orientation and firm performance concluded that entrepreneurial orientation has led to the development of the company performance Many studies conclude that EO is positively associated with a company's growth and profitability (Covin & Slevin, 1991; Zahra & Covin, 1995), & argue that CE is a good predictor of growth of small firms (Covin, 1991). Entrepreneurial orientation within the organization showed significant relationship the firm performance in previous studies. Entrepreneurial helps organization to achieve better response to external environment

which ultimately affects the firm performance in the market. As researches suggest that entrepreneurial orientation in developing economies or high crisis economies showed insignificant relationships with firm performance. In case of SME's in Pakistan, we cannot suggest whether the affect entrepreneurial orientation on firm performance is significant or insignificant for this we need to test the hypothesis. In diverse researches entrepreneurial orientation is used as significant mediator to affect the firm performance. As suggested by previous studies dynamic capability and firm performance has significant relationship with each other so test the direct and indirect effect of entrepreneurial orientation on dynamic capability and firm performance following hypothesis are suggested:

H6. Entrepreneurial orientation mediates the relationship between dynamic capabilities and Firm Performance.

2.11. Learning Orientation

Learning orientation, market orientation, and the concept of innovation are interlinked with each other when the dynamic capabilities are being discussed. When the firms possess strong learning orientation, it is capable of facing many new challenges in the business environment. There are several definitions given by many scholars regarding organizational learning. The example of the definition includes the ability or procedures within an enterprise in order to sustain or nourish its performance based upon its prior experiences. In simpler words, the learning orientation of the organization can be defined as the process of the firm, which consists of improving the actions by better understanding and knowledge. Organizations give both official and unofficial modes and formations for gaining, sharing, and utilization of skills and knowledge. In this period of time, learning is no longer observed exclusively as an activity in the classroom. However, it is equally vital for the employees to enable them to become more skillful towards a particular task by emphasizing more on the learning orientation of the firm. Additionally, firms are required to put more resources on facilitating situations such as a platform for communication and some training programs so as to promote the environment of organizational learning in the firm. As a result, enterprises are determined to form more openings for constant learning of employees, such as by the help of empowerment, extensive job structures, and design, and teamwork. The factors regarding the learning orientation of the firm gaining a lot of attraction by firms and helping the firms to bring more opportunities for business and employment; moreover, it encourages more tough competition in the market.

2.11.1. Effect of learning orientation on firm performance

With the help of learning and training, the employees become capable of improving and enhancing their skills as well as they transfer their constructive behaviour within the organization. According to (Goh & Richards, 1997), the objective and goal of conducting programs and workshops for learning and introducing the new ways are to transform the employees' behaviour, information, and approach of doing work by learning. The main intention of any training program is to enhance their proficiency in a specific area. According to Ocasio, Rhee, & Milner, (2017), learning orientation can be created by the help of formal training. According to Wolff, Pett, & Ring, (2015), the process of learning orientation is an activity that endures in longer terms and builds a competitive advantage gradually. In this process, the attention of the management is sustained along with its commitment and efforts. When the learning orientation of an organization takes place, it learns by means of direct experimentations and practices, which implies that employees and management are allowed to take risks, innovate, explore, experiment, and produce new processes and products for the organization. Furthermore, along the learning orientation of the organization, it is also important to consider the approach which an organization undertakes while processing the experience. Conducting experiments or trials is a methodical and technical method in order to search for knowledge encouraged by opportunities and growth prospects that are not concerned about present complexities and necessitates inquiring the existing state of affairs and traditions of trial, which is satisfied and maintained at all the levels of the organization.

It is necessary for the organizations to maintain and assess the history of organizational success and failure when it learns from past experience and history; moreover, employees of the organization must have given the access to this record in order to devise any strategy based on the past experience. The prior experience of the organization regarding any change or strategy which resulted either as success or failure is helpful in learning, and the knowledge which is learned by the experience of failure is said to be more worthy for a reason that or provide the insight and comprehension for the future success of the organization if learned from the wrong decisions. Those experiences that are direct lead to change the practices and beliefs by experiments and error trials, and through implementing improved practices that bring about those outcomes that are favorable for the organization, supplementary give rise to the

transformation of practices along with the enhancement in actions that boost capabilities.

2.11.1. Effect of learning orientation on entrepreneurial orientation

According to Covin and Slevin (1989), entrepreneurial orientation relates to the methods, practices, and decision-making styles that managers use to act entrepreneurially. Entrepreneurial orientation has been characterized by three dimensions (Miller, 1983). These are innovativeness, proactiveness, and the propensity to risk investments in new businesses. Innovativeness refers to the pursuit of creative or novel solutions or challenges (Knight, 1997). Proactiveness is thus closely allied to competitive aggressiveness (Lumpkin & Dess, 1996). This is defined as how firms respond to trends and demands that already exist in the marketplace. Risk-taking is the willingness to commit large amounts of resources to projects whose results are unknown and where the cost of failure may be high (Miller & Friesen, 1978). Entrepreneurial orientation encourages the firm's adoption of an innovative and proactive behaviour that enables it to create new knowledge that is required to achieve novel distinctive capabilities. Entrepreneurial orientation could be an important measure of how organizations use knowledge-based resources to discover and exploit fresh opportunities (Wiklund & Shepherd, 2003). Zahra, Nielsen & Bogner (1999) suggest a model in which the influence of entrepreneurial orientation on organizational learning provides a mechanism to create new knowledge. This lays the foundation for new competences or the revitalizing of existing ones. However, the later studies that are evaluated below reflect that OL is a predictor for EO in this dynamic market environment. It shows that entrepreneurial orientation relates positively to organizational learning.

2.11.2. Effect of dynamic capability on learning orientation

Organizational learning defined as the operational process of obtaining information and converting it into knowledge (Franco & Haase, 2009); as a detection and correction of error (van Grinsven & Visser, 2011) where error is a conflict between that what is aimed to be achieved and what is actually achieved (Argyris & Schon, 1996). In the light of dynamic capabilities concept that are currently discussed, organizational learning might be treated as the way to incorporate dynamic capabilities into the internal processes of the firm yet there is a need to consider it from another perspective that organizational learning in the context of understanding market trends only is not sufficient, which could make the performance of the firm declined. In the

historical perspective, organizational learning is well recognized as an essential element in the models of sustained competitiveness. Researchers (Franco & Haase, 2009) have found that organizational learning has positive outcomes on a firm's performance, both financial and non-financial. On the other hand, we build the argument that dynamic capabilities impact on firm's performance is mediated by internal processes within an organization or more physical capabilities that might be reconfigured by dynamic capabilities. Eisenhardt & Martin (2000) support the above idea and suggest that dynamic capabilities become more noticeable through the process of learning that generates new knowledge. Acting mainly within the internal environment of the firm organizational learning is seen as one of the key internal processes within an organization. Therefore, it can help mediate the relationship between dynamic capabilities and firm performance. The history-dependent nature of organizational learning (Levitt & March, 1988) adds value to dynamic capabilities that are mainly future-oriented (Breznik & Hisrich, 2014). Moreover, the resource and capability changing a characteristic of dynamic capabilities (Breznik & Hisrich, 2014) might be manifested through organizational learning processes that are found to be routine-based and target-oriented (Levitt & March, 1988). This way, dynamic capabilities through the mediation of organizational learning processes become a primary source of competitive advantage (Shane & Venkataraman, 2000). Above literature suggest that organizational dynamic capabilities improve understanding capacity of environment in the dynamic environment. Dynamic capabilities consist of both internal and external capabilities by which they can gather information. Organization uses this this information the organizational leanring process or in the learning orientation. In case of SME's in Pakistan, they are practicing the learning orientation constructs, But by looking at the organization environment is not clear whether the learning orientation is affect by the dynamic capabilities. Or learning orientation is mediating the relationship between the dynamic capability and firm performance. In SME's dynamic capability and learning orientation exist but they are no aware of how those dimension can be used to increase the performance of the organization in this regard, the hypotheses are included:

H2. Dynamic capabilities are significantly related to Learning Orientation.

H5: learning orientation mediates the significant relationship between dynamic capabilities and firm performance.

Furthermore, on the basis of pervious hypothesis of entrepreneurial orientation and learning orientation Hypothesis 8 has been developed. To check the sequestial

mediation of entrepreneurial orientation and learning orientation between dynamic capabilities and firm performance. In this regard is hypothesis is:

H8: Learning Orientation and entrepreneurial orientation sequentially mediates the relationship between dynamic capabilities and firm performance.

2.12. Organizational Culture

The definition of organizational culture is elaborated as the underlying assumptions, beliefs, ways, and values of the organization while interacting. All these elements contribute to the distinct societal and psychosomatic atmosphere of the firm. Culture of the organization incorporates the anticipations, encounters, reasoning, and additionally the estimations of an association that controls the conduct of its employees, and is communicated in a self-portrait of an employee, inward workings, co-operations with the external environment, and future anticipations (Teece et al., 1997). Culture depends on shared demeanours, convictions, traditions, and composed and unwritten tenets that have been produced after some time and are viewed as substantial. Essentially expressed, authoritative culture is how things are done around the business. Business pioneers are essential to the creation and correspondence of their working environment culture. In any case, the connection of leadership with the culture is not limited to a single side only. While pioneers are the essential modellers of culture, a built-up culture impacts what sort of initiative is conceivable (Schein, 2010). Hierarchical culture is not dormant. Individuals from an association build up a mutual conviction around what right resembles as they collaborate after some time and realize what yields achievement and what does not. At the point when those convictions and presumptions prompt not as much as victories, the way of life must advance for the association to remain important in a changing situation.

2.12.

2.12.1. Effect of organizational culture and Firm performance

Many researchers believe that performance of a firm is partly attributable to organizational culture (Homburg and Pflesser, 2000; Kendra & Taplin, 2004; Kotter & Heskett, 1992; Nahm, Vonderembse, & Koufteros, 2004; Rosenthal & Masarech, 2003; Wilkins & Ouchi, 1983), and therefore have conducted numerous studies to establish the relationship between culture and firm performance (Denison, 1990; Denison & Mishra, 1995; Heskett & Kotter 1992). Those studies, however, show mixed results, due to a number of issues such as measurement, level of analysis, and ambiguity and arbitrariness of cultural analysis (Alvesson, 2012). O'Reilly et al. (1991) operationalize

culture as 54 value statements and find that person-organization fit is related to organizational commitment, job satisfaction, and negatively related to employment turnover; Denison (1990) and Denison & Mishra (1995) operationalize culture as four dimensions including involvement, consistency, adaptability, and mission, and find that each of the dimensions are related to some performance measures such as sales growth, Return on Assets (ROA), and Return on Inventory (ROI). By including the complementarily between organizational culture and dynamic capability, this study may explain the relationship between organizational culture and firm performance better than previous studies. The following subsection reviews complementarily theory that may explain the interaction between dynamic capability and organizational culture. On the basis of behavioral theory, dynamic capabilities of the firm affect the overall culture of the organization. Theory is related to dynamic capabilities' concept in such a manner that allows an organization to understand how the behavior of employees in an organization is effective towards the performance of the business while taking fundamental aspects of behavior. In SME's of Pakistan, organizational culture is very different from other corporates and SME's of other developed countries. In Pakistani SME's there is serious lackness of organization culture. To test the theory whether dynamic capability affect the culture in Pakistan and mediating affect f organizational culture between dynamic capability and firm performance following hypothesis has been developed:

H3. Dynamic capabilities are significantly related to organizational culture.

H7. Organizational culture mediates the relationship between dynamic capabilities and Firm Performance.

Furthermore, on the basis of pervious hypothesis of organizational culture and learning orientation Hypothesis 9 has been developed. To check the sequential mediation of organizational culture and learning orientation between dynamic capabilities and firm performance. In this regard is hypothesis is:

H9. Learning Orientation and organizational culture sequentially mediates the relationship between Dynamic capabilities and firm performance.

2.13. Environment Dynamism

The concept of dynamism of the environment refers to the meaning that represents the environmental rate of change. Scholars have also defined the environmental dynamism as the rate at which the inclinations of customers as the rate at which the preferences of consumers and the products of organizations change over

time which allows the products of organizations to be changed gradually or frequently depending upon the rate (He et al., 2018). As the name suggests, a dynamic environment is unpredictable, without any certain patterns or promptness. Decision making and exploration are some of the implications of environmental dynamism. Other implications include organizational strategies and export strategies, leadership, and emotional capabilities. There are certain positive consequences of environmental dynamism on the organization. One key advantage includes the promotion of the exploration orientation, where firms try to get hold of more knowledge (Alvesson, 2012). When environmental dynamism combines with a strong vision and productive assets, it constructively associated with the exploration orientation. The major mechanism that remained underpinned by the effect of dynamism in an environment is uncertainty (Birkinshaw, Zimmermann, & Raisch, 2016). Dynamism can be defined as the dynamic heterogeneity that characterizes the organizational environment. It is manifested by the amount of change in technologies, customer preferences, and modes of competition in the firm's principal industries (Miller, 1987). Environmental context can be important to the analysis of resources and performance as diverse environments entail different valuations of resources (Penrose, 2009). Moreover, Teece et al. (Teece et al., 1997) explicate the meaning of dynamic capabilities and their importance for achieving competitive advantage in shifting environments. Given their outward-looking nature, Dynamic capabilities are influenced by market conditions (Eisenhardt & Martin, 2000; Zahra, Sapienza & Davidson, 2006). Dynamic capabilities may exhibit different patterns under different levels of market dynamism – the rate of change of different elements in the market in which a firm operates (Jaworski & Kohli, 1993; Miller & Friesen, 1983). In moderately dynamic markets where established and complicated organizational routines are in operation (Eisenhardt & Martin, 2000). The types of learning that underpin Dynamic capabilities vary in different market conditions. In a moderately dynamic market, firms' incremental development of existing resources mainly depends on prior experience and routines, hence it is largely underpinned by exploitative learning (Gupta, Smith & Shalley, 2006) or 'learning before doing' (Pisano, 1994). Further, the moderating effect of market dynamism on the Dynamic capabilities and firm performance relationship is debatable. Zahra, Sapienza & Davidson (2006) also propose that firms' potential gain from Dynamic capabilities is greater in dynamic environments. Environmental dynamism means that business environment keeps on changing. From the previous studies its has been concluded that firm can exploit its

environment, if it is dynamic because change in customer need can create abnormal profits for the business. The concept of dynamic capabilities is based on the continues change in knowledge or information from internal and external environment. If the business environment keeps on changing and firm in continually updating its knowledge with change in business environment then firm can generate superior performance. In case of Pakistani SME's, they accept change after change in global environment to meet their needs. In SME's of Pakistan there is no proactive approach regarding the environment dynamism. From this discussion, the hypothesis is developed as Environment dynamism moderate the relationship between dynamic capabilities and firm performance.

H10. Environment dynamism moderates between dynamic capabilities and firm performance.

2.14. List of Hypotheses

Following Hypotheses has been generated from the literature reviewed:

H1. Dynamic capabilities are significantly related to Firm Performance.

H2. Dynamic capabilities are significantly related to Learning Orientation.

H3. Dynamic capabilities are significantly related to organizational culture.

H4. Dynamic capabilities are significantly related to entrepreneurial orientation.

H5. Learning Orientation mediates the relationship between dynamic capabilities and Firm Performance.

H6. Entrepreneurial orientation mediates the relationship between dynamic capabilities and Firm Performance.

H7. Organizational culture mediates the relationship between dynamic capabilities and Firm Performance.

H8. Learning Orientation and entrepreneurial orientation sequentially mediates the relationship between dynamic capabilities and firm performance.

H9. Learning Orientation and organizational culture sequentially mediates the relationship between Dynamic capabilities and firm performance.

H10. Environment dynamism moderates between dynamic capabilities and firm performance.

2.15. Framework

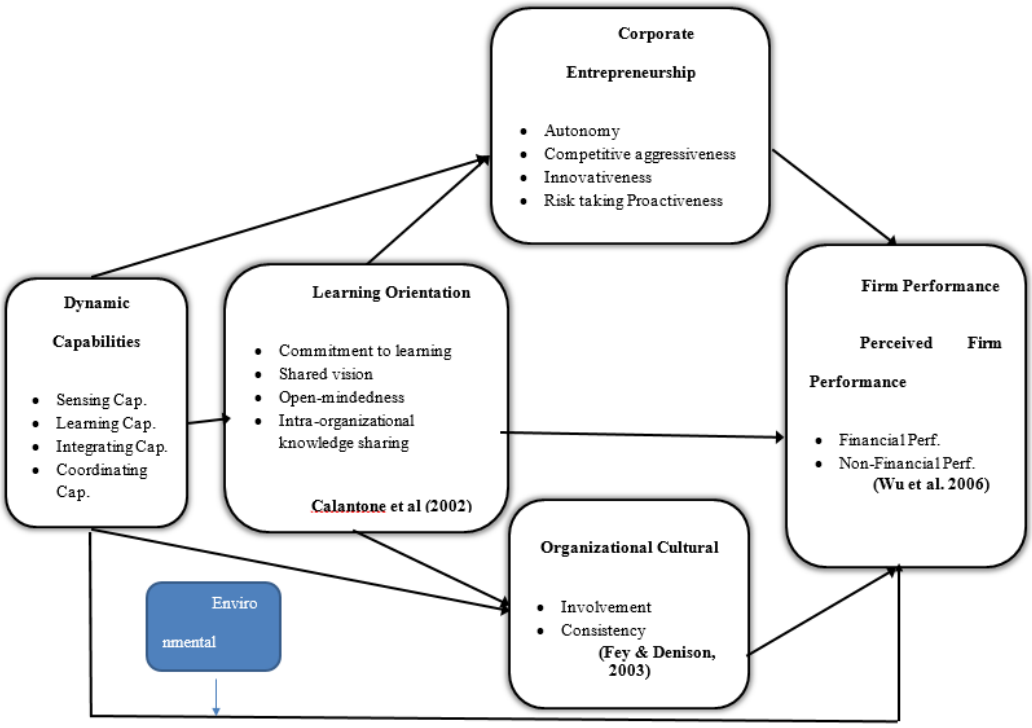


Figure 2.1: Conceptual Framework

CHAPTER 03

STUDY DESIGN AND RESEARCH METHODOLOGY

3.1. Overview

The main focus of this chapter is to illustrator the procedure of achieving the objectives of the study. This study consists of quantitative methodology, and the discussed elements in this chapter include study sample, research design, target population, and selected sample size. Furthermore, chapter includes a collection of data, pilot study, result testing, reliability and validity of the research instrument, and finally, structure equation modelling is used for the data analysis.

3.2. Introduction of research design and methodology

According to Mingers (2003), methodology refers to the set of structured methods and techniques that assist people in the study. In practical terms methodology and research, technique shows a researcher's views the world and how he or she tries to study the problem. It is important for the researcher to express how he or she had developed its work because it affects the methodology, data collection, and analysis of data (Clarke & Dawson, 1999). This study is based on a quantitative technique. A self-administrated questionnaire is used for the collection of data. The problem of research is to identify the factors influencing the outcomes or help to understand the best factors affecting the outcome. As a result, due to the problem of this study, a quantitative technique is recommended (Creswell, 2003). As the quantitative technique is selected, as some scholars argue the lack of empirical work on dynamic capability (Newbert, 2007). and other researchers argued that there is weak empirical support (Arend & Bromiley, 2009).

This study investigates the impact of dynamic capability on performance in the SMEs sector of Pakistan. Moreover, Study also explored the mediating role of learning orientation, organizational culture, and entrepreneurial orientation. The study also explores the moderating role of environmental dynamism on firm performance. A hypothesis has been tested by various data analysis techniques. The study is based on the factual knowledge and required for the verification and Association between constructs. The study will provide the knowledge in understanding dynamic capability and its relationship with a firm performance that also helps firms in integrating different capabilities in SME's sector of Pakistan to enhance the firm performance.

According to Mingers (2003), methodology refers to the set of structured methods and techniques that assist people in the study. In practical terms methodology and research, the technique shows the researcher's views of the world and how he or she tries to study the problem. It is important for the researcher to express how he or she had developed its work because it affects the methodology, data collection, and analysis of data (Clarke & Dawson, 1999). This study is based on a quantitative technique. A self-administrated questionnaire is used for the collection of data. The problem of research is to identify the factors influencing the outcomes or help to understand the best factors affecting the outcome. As a result, due to the problem of this study, a quantitative technique is recommended (Creswell, 2003). As the quantitative technique is selected, as some scholars argue the lack of empirical work on dynamic capability (Newbert, 2007) and other researchers argued that there is weak empirical support (Arend & Bromiley, 2009).

3.3. Research design

As discussed earlier, this study based on quantitative techniques to collect the data for statistical analysis. Surveys are those known techniques to collect data by ousting selected questions who specific questions in an organization, where such answers create the data will be studied (Fowler, 2002). As research design defines a systematic plan to carry out his research, different procedures and method can be employed to complete the job of data collection and interpretation of information. Other such a design basically consists of the sample collection, operationalization, instrumentation, data collection, hypothesis testing, and interpretation of results gathered in the study (Zikmund, 2003). In this study, the survey technique is used to collect data from participants. The data is collected from self-administrated questionnaires. The survey technique is considered to be the best technique with the help of a questionnaire with a target sample (Cooper & Emory, 2001). As in the context of this study, constructs were adopted, is essential to validate the research instrument before data collection. Therefore, instrument development is considered as next. In the research, which is performed in two steps, content validity, and pilot test. Gradual Development and validation at that stage helps to overcome limitations and improves the content and reliability of the research instrument (Davis, 1989; Moore and Benbasat, 1991).

3.4. Type of study and sampling Technique

The current study is descriptive in nature. The data is collected in the natural environment. A cross-sectional methodology is implemented for the data collection due to lack of time.

3.5. Unit of analysis

The unit of analysis defines the total level of accumulation of data collected for the analysis. The unit of analysis can be individual, groups, culture, and organizations. In this study unit of analysis, Strategic level individual managers, and Asst. managers who take part in an organization's decision-making process.

3.6. Target Population

The target population of the study is the small and medium enterprises in Pakistan located in Gujrat, Sialkot, Gujranwala, warizabad, and jalapur jattan. SME's sector is the backbone of Pakistan's economy. A combination of the following areas provides a varied and explanatory sample to understand the phenomena of dynamic capability. SMEs sector in following areas consists of Ceramic, Sanitary fitting, home appliances, Wooden furniture, Sports good, power loons, Foundry, and Cutlery. The subsequent industry produces goods on a small and medium scale in the region. The following criteria have been taken into account during the selection of the target population. First, manufacturing firms that are registered with SMEDA. Secondly, enterprises belong to the target population area. Third, enterprises are not restricted by a particular industry or sector. The main interest of the study is to capture the effect of factors of dynamic capability. A broad group of firms and industries will be pursued for this study in order to maximize the variation of variables and increase the generalizability of results (Simsek and Heavey, 2011). Various other SMEs are operating the area, which is also included in the study. There is a total of 2358 enterprises are registered with SMEDA Pakistan.

According to the literature, Some researchers consider one respondent should be selected from an individual organization (Hussain, Akhtar & butt, 2009; Llusor et al., 2009; Kaynak, 2003). On the other hand, some researcher believes multiple responses from individual organizations can be collected (Douglas & Judge, 2001; Rungtusanatham et al. 1998). The literature presents individuals working in the same organization have distinctive perspectives on a similar point of view due to distinct levels of information and viewpoint (Kumar, stern & Anderson, 2004). So it is an important matter in selecting the selection procedure of participants. Looking at the

literature and keeping restriction of judgment-based sampling in mind, data is collected from various respondents from the individual organization because individuals working in the organization have distinctive perspectives and levels of information, and it is difficult to find individuals with the best level of information available to them. Therefore, the manager and assistant managers who take part in the decision are selected for responses. Responses have been included from different departments like accounts/finance, HR/admin, sales/marketing, and operations.

The population size of the study is determined as follows: In the current study participant in the study is managers and asst. manager who take part in the decision making of the making. In research, there is no exact figure on how many managers and asst. managers exist in SMEs. So looking at the pilot study of the research, we had selected 3 participants from each organization. In the study, there are 2358 SME's and 3 respondents from each SME, and then it makes the total population of 7074.

3.7. Sampling technique

The number of respondents in the study by keeping in view the recommendations of different researchers. The sample size for multivariate research should be 10 times larger than the number of variables of the study (Sekaran, 2013, 2005). Other researchers argued that a sample size larger than 30 and less than 500 is also acceptable (Field, 2005). So keeping in view, the recommendation 516 respondents have been selected. In the study convenience sampling technique is the best technique to understand the phenomena of dynamic capability in the region, as the target population is located in different geographical areas. The random sampling technique is better than non-random sampling. In the study, a strata has been created on the bases of regions. Respondents from each region have been selected from the region on the bases of proportionate sampling to understand the phenomena of dynamic capability from every region on equal proportionate. By looking at this, 460 respondents for Sialkot has been selected. From Gujranwala, 24 respondent is selected for the study. 22 respondents are selected from Gujrat. 5 respondents are from Jalalpur Jattan and Wazirabad. After the selection of respondents from each city, convenience sampling is used for the selection of managers and asst. managers.

3.7. Research instruments

3.7.1. Measurement of Dynamic Capability

Dynamic capability scale is developed by the Teece DJ, (1997), Scale has been used by various researchers in their studies like is adapted and used in the study. All 4-

dimension constructs (sensing capability, learning capability, integrating capability, and coordinating capability) are measured on a 5-point Likert scale (1= strongly disagree to 5= strongly agree).

3.7.2. Measurement of Organizational Culture

Various Surveys of organizational culture have been used in research like Fey & Denison (2003), Denison & Mishra, 1995; Cameron & Quinn, 1999; & Chatman & Spataro, 2005. (Fey & Denison, 2003) organizational culture scale is used in this study. All dimensions (Involvement and Consistency) are measured on a 5-point Likert scale (1= strongly disagree to 5= strongly agree).

3.7.3. Measurement of Learning Orientation

The scale is developed of learning orientation is developed Calantone et al. (2002). In this study, the Calantone et al. (2002) scale has been used to measure learning orientation in SMEs. There are various surveys like Chiva et al. (2007), Jerez-Gómez et al. (2005), Marsick and Watkins (2003), Moilanen (2001), Goh, and Richards (1997), DiBella et al. (1996). All dimensions (autonomy, competitive aggressiveness, innovativeness, and risk-taking proactiveness) are measured on a 5-point Likert scale (1= strongly disagree to 5= strongly agree).

3.7.4. Measurement of Firm Performance

In this study, firm performance has been measured by the perceived financial and market performance (Wu, Yeniyurt, Kim, & Cavusgil, 2006). There is a number of dimensions are used to measure firm performance, like Devaraj & Kohli, 2003; Hitt & Brynjolfsson, 1996. In this study, performance is measured by the perceived financial and market performance (Wu, Yeniyurt, Kim, & Cavusgil, 2006). All dimensions (Perceived financial performance and non-financial performance) are measured on a 5-point Likert scale (1= strongly disagree to 5= strongly agree).

3.7.5. Measurement of entrepreneurial orientation

Various researchers like Guth & Ginsberg (1990), Covin & Slevin (1991), Covin & Slevin (1986), Hornsby et al. (1993), Lumpkin & Dess (1996), Zahra et al. (1999), Antoncic & Hisrich (2001) and Kuratko et al. (2005) developed different scales to measures the entrepreneurial orientation. The scale used in this study originally developed by the Covin & Slevin (1986)s' and scale is revised by Dess & Lumpkin (2005). All dimensions (autonomy, competitive aggressiveness, innovativeness, and risk-taking proactiveness) are measured on a 5-point Likert scale (1= strongly disagree to 5= strongly agree).

3.7.6. Measurement of Environmental dynamism

The scale is adapted from Garg et al., (2003), the scale is originally developed by the Miller & Droge, (1986), partly by Jaworski & Kohli (1993). All dimensions are measured on a 5-point Likert scale (1= strongly disagree to 5= strongly agree).

3.8. Pilot study

This pilot study is related to the casual ways in order to analyzed data on the basis of AMOS and SPPSS software. Therefore, analysis is conducted to find the regression and correlation with the help of thirteen factors SC, CC, IC, LC, CE, ED, I, C, FP, CL, SV, OM, IKS. The relation between all these factors is determined through the correlation between dependent and independent variables. All the items are measured through a five-point Likert scale to measure the dynamic capability. The factors are also highlighted in the questionnaire with the given variables to analyze data. Dynamic capabilities are based upon the following variables provided above; therefore, to test all these, the test has been conducted, which are showing the chances of reliability acceptance. In all these factors, the study will be highlighting that entrepreneurial orientation has a high-value of reliability than all because it's Cronbach's Alpha, Split-Half Correlation, Spearman-Brown Prophecy, Mean for Test, S.D for Test, KR21 and KR20 all values are showing better results than others.

The elements below are used to perform the test of capabilities or variables in order to produce new services and products within the organization.

Table 3.1 Pilot Study

Sr #	Factor	Items	Crob. Alpha	Split-Half Correlation	Spearman-Brown Prophecy	Mean for Test	S.D for Test	KR21	KR20
1	SC	4	0.75	0.59	0.74	13.79	4.03	4.1	4.1
2	CC	4	0.66	0.43	0.60	13.45	3.68	4.47	4.47
3	IC	4	0.73	0.54	0.70	13.63	3.49	4.92	4.92
4	LC	5	0.75	0.65	0.79	16.4	4.59	3.47	3.47
5	CE	16	0.76	0.47	0.64	52.56	8.01	3.06	3.06
6	ED	7	0.77	0.57	0.73	23.99	4.87	4.03	4.03
7	I	9	0.78	0.61	0.76	31.24	5.88	3.63	3.64
8	C	9	0.79	0.57	0.73	28.53	5.84	3.17	3.17
9	FP	7	0.75	0.6	0.75	27.75	4.35	6.23	6.23
10	CL	4	0.73	0.64	0.78	13.21	3.13	5.46	5.46
11	SV	4	0.67	0.65	0.79	15.41	2.85	8.55	8.55
12	M	4	0.69	0.48	0.65	13.99	2.97	6.62	6.63
13	IKS	5	0.77	0.58	0.73	14.93	4.73	2.9	2.91

3.7.7. Cronbach's alpha

Cronbach's alpha is determined through running and integrating data into SPPSS; however, the value of alpha is different for each item. From the reliability analysis, table values of alpha for the value of DC code are 0.75, 0.66, 0.73, and 0.75, with items 4 and 5. A set of items SC, CC, IC, LC in a group are analyzed as well as Cronbach's alpha is the reliability coefficient, although an acceptable range for the alpha to test the elements is 0.7. From the given questionnaire the scanning environment value to determine business is each different perhaps all the values are equivalent to 0.7 but value for the variables CC, SV and OM are 0.66, 0.67 and 0.69 which are minimal low values therefore here is a limited chance to accept these values, but these can be considered in case if a number of items become less than 4 minimum two or three meanwhile the maximum value till 0.9 can be acceptable if the unnecessary elements from CC must be removed. The Cronbach's alpha ensures that the data is reliable and accurate, that is showing by all variables, and is evaluated through several factors as well as according to the responses, the reliability can be measured from the data collection phase (Bonett & Wright, 2015). A maximum value of α that is 0.79 of Cronbach's, indicates that the result is acceptable; however, to achieve excellence, the range of α should ≥ 0.8. It is ensured that 70% of the data is accurately entered.

3.7.8. In split-half Correlation

It is the correlation coefficient that is calculated between the scores such that split-half correlation for the factors SC, CC, IC, LC, CE, ED, I, C, FP, CL, SV, OM, IKS is calculated and run on the SPSS software which gave the values from minimum 0.43 to maximum 0.65. Split-half correlation is the factor that rely upon other factors like a number of items and Cronbach's Alpha as well as it also depends upon the split-half method in order to find the internal consistency of the questionnaire and to test dynamic capabilities of an organization for example organization skills to organize the skills of employees, its aim and objectives. All the parts of the test are equally measured, such that for the SC factor, the value is 0.59, which means that there are more chances to accept this factor; however, in C 0.57 but due to the greater value of Cronbach's Alpha of this factor, it would be accepted. Furthermore, according to the fact that dynamic capabilities are strongly related to the firm's performance it is now proved that the team is the basic building block of any organization and to analyze all the factors which are provided in the table a Split-Half Correlation is measured which shows that most of the participants are agree with the statements and factors however only the

minimum chances of good results are with SV, OM, and CC due to the redundancy particles in data. According to the variables particularly from C it is concluded that 60% of the data is accurate and the respondents agree with this factor or in other words organization culture, beliefs and its practices effect to a larger extent on employees, for example, the coordination of management in complex situations, its ethical code guidelines, and decision-making process.

3.7.9. Spearman-Brown Prophecy

Spearman-Brown Prophecy formula in SPSS is used to test the reliability of data that how much it is reliable to the participants (Fehrmann et al., 2015). Such that to test the dynamic capabilities it had seen from the questionnaire that factors are analyzed through determining their relationship with variables. It is concluded that the Spearman-Brown prophecy produces a valid estimation for the variables. In order to test the reliability of a longer test, it is run on SPSS software. The highest value of the reliability of Spearman-Brown Prophecy, according to the reliability table, is 0.79, which shows that learning orientation influences 79% on the firm's performance. According to many researchers, it is necessary to attain minimum reliability of 0.6 to 0.7 per cent but not in all cases because it depends upon the quality and of items. The number of variables that are used to measure the firm performance is also accurately measured, with the value of 0.75 are showing acceptable reliability. Other variables like entrepreneurial orientation and Dynamic Capability also shows ET= 16 with 0.64, and DC= 17 with max 0.79 value also have acceptable reliability. It is analyzed from the number of items, and the number of items for the DC variable is high; therefore, it has maximum chances to attain good reliability.

3.7.10. Mean for Test

The mean test to test the variables is conducted through running into SPSS; it is to prove the hypothesis of study that depends upon variables including dynamic capabilities significance, learning orientation relationship with dynamic capabilities, environmental dynamism, and firms performance. The higher value of mean from the table indicates that certain variables have a strong relationship with items as well as the statistics of mean with lower values are highlighting that these variables have a weak relationship with items such that the value of CC. On the other hand, it is determined that α value within the maximum range 0.7-0.79 in the reliability table is proving the acceptance. However, the value of mean for CE is higher than all other values which mean that entrepreneurial orientation efficiently influences upon the organization or

firm performance because it is the basis of any organization, for example, entrepreneurship functions like new venture, innovation process, a formation of new products and services. CE has also higher availability of items, which is indicating that managerial techniques, strategies, and innovative activities of an organization are the most prominent dynamic capabilities which affect organization performance (Hazelton, & Murphy, 2016).

3.7.11. S.D for Test

The standard deviation test is calculated to test the reliability of mean how fairly the value of the mean is. Standard deviation to test the distribution of variables on the same measurement scale is calculated to test the reliability. Furthermore, the standard deviation for each variable is positive, which are indicating that the mean for each item is fairly calculated. The higher value of S.D, according to the table, is 8.01 entrepreneurial orientation, which means that CE influences more on the performance of the firm as well as in comparison with other factors like DC, FP, OC, LO, and ED. The mean value of entrepreneurial orientation is also higher as compared to all other variables due to which its S.D has maximum value because S.D value entirely depends upon mean value. According to several types of research, entrepreneurs influence upon business profit in order to tackle the risks and increases organization profit too (Kuratko, Hornsby & Hayton, 2015). From the reliability table, it is proved that the entrepreneurship variable is directly related to the financial performance of a firm. entrepreneurial orientation helps to bring new ventures, and latest innovative techniques for an organization as well as most of the industrial manufacturing firms are adopting this technique to maintain competitiveness at both national and international business platforms (Urban & Wood, 2015).

3.7.12. KR21 and KR20

KR21 (Kurder-Richardson 21 Formula) and KR20 (Spearman-Brown formula) are used to calculate the reliability. Both the tests ran on SPPSS and measured the reliability for each variable and item. A reliability table is showing both KR20 and KR21 scores of all the variables CE, FP, OC, LO, ED, and DC; however, the value range which is closer to one as compared to all is 3.06 such that KR21 and KR20 > 1 but is closer to 1. It is showing that entrepreneurship activities within the firm affect firms' performance on a large scale. Other values of entrepreneurial orientation variable such that the value of DC, FP, LO, ED, and ET are not much closer to 1 it means that these variables have minimum chances of acceptance as compared to CE.

3.9. Measurement of normality and Collinearity

Different tests that are present provide the sample for the normally distributed score sets with the mean and the standard deviation. For the small samples, usually, the normality tests provide the rejection for the null hypothesis, and therefore the samples that are small usually pass the normality test (Ghasemi, & Zahediasl, 2012). The sample size that was used in this research was 100, which is relatively small. Therefore it is expected that it will pass the normality test. For the large samples, the significant results are needed to be derived in the small deviation.

Multicollinearity can be easily seen in the different cases, including the large changes in the estimated coefficients whenever a variable is added or deleted. It can be detected through the examination of the tolerance for the different independent variables. Tolerance is the amount of the variability in which one independent variable is not explained by the other independent variables. The tolerance value of less than 0.10 shows the collinearity. If the collinearity lies in the regression output, then the relationships that are interpreted must be considered as false until the resolution (Jamal, 2017). For resolving the multicollinearity, the high correlated variables must be combined using the principal component analysis, or the variables can be omitted from the section of analysis.

CHAPTER 04

RESULTS AND ANALYSIS

4.1. Introduction

The following chapter analyzes the results of the study in order to support the practices that would be drawn for a conclusion. In this chapter, different outcomes of the study are discussed on the basis of results generated from statistical software. Moreover, the chapter also focuses on the aspects that have been accepted and rejected by analyzing the responses gathered from data collection instruments. Later in the section, these results are used to test the hypothesis, while different scholarly articles are also reviewed to investigate the reliability of these results and their interpretation.

4.2. Descriptive Statistics

The demographic characteristics of has been collected, which was consisted of strategic level manager of SMEs are shown in tables.

Table 4.1 Participations means, standard deviation, skewness, and kurtosis

Description		Frequency	Percent	Valid Percent	Cumulative Percent
Designation	Owner	23	4.4	4.4	24
	Manager level	284	55.1	55.1	59.5
	Asst. Manager level	209	40.5	40.5	100
Gender	Male	486	94.2	94.2	94.2
	Female	30	5.8	5.8	100
Education	Matric	57	11	11	11
	FA/F.Sc/Diploma	253	49	49	60
	BA/B.Sc	189	36.6	36.6	96.7
	Masters or Higher	17	3.3	3.3	100
Age	21-30	112	21.7	21.7	21.7
	31-40	203	39.3	39.3	61
	41-50	161	31.2	31.2	92.2
	51-above	40	7.8	7.8	100

4.3. Measurement of the normality

Table 4.1 Participations means, standard deviation, skewness, and kurtosis

Constructs	Mean	Std. Deviation	Skewness	Kurtosis
SC	3.319	0.912	-0.342	-0.679
CC	3.380	1.004	-0.229	-0.583
IC	3.482	1.052	-0.337	-0.611
LC	3.414	1.030	-0.376	-0.366
CL	3.208	0.926	-0.300	-0.654
SV	3.896	0.781	-1.014	1.518
OM	3.540	0.857	-0.499	-0.246
IKS	3.218	1.334	-0.234	-1.247
A	3.263	0.786	-0.038	-0.703
CA	3.342	0.721	-0.178	-0.491
Li	3.299	0.730	-0.117	-0.261
RT	3.284	0.729	-0.181	-0.348
I	3.558	0.902	-0.496	0.212
C	3.167	1.005	-0.483	-0.203
NF	3.714	0.715	-0.584	0.487
F	3.651	0.730	-0.640	0.319
ED	3.381	0.836	-0.098	-0.514

As per the research assumption of the multivariate analysis, data should be normal. There are two ways to check the normality of the data, first, skewness and kurtosis, and second, graphical representation. According to Hall & Wang, (2005), the value of skewness and kurtosis should be between +2 & -2, if the value of skewness and kurtosis doesn't lie in between of above-mentioned values, data will not be considered normal. As shown in table no. 4.1 all the variables are normally distributed.

4.4. Assessment of multi-collinearity

All the assumptions of multivariate analysis should be fulfilled to examine the data. Variance inflation factor (VIF) and tolerance are a good way to test the multi-collinearity. The researcher suggests that the value of VIF should be less than 10, and the tolerance value should be higher than the .1. As shown in table 4.2, the current study is free from the multi-collinearity issue.

Table 4.2 Assessment of multi-collinearity

SR	Variables	Collinearity Statistics	
		Tolerance	VIF
1	LO	0.935	1.07
2	CE	0.691	1.447
3	OC	0.832	1.202
4	FP	0.708	1.413
5	ED	0.633	1.579

Dependent Variable: DC

4.5. Factor Analysis

Factor Analysis and Principal Component Analysis are the techniques to classify and detect data structure. Before the final data analysis, it is useful to apply Factor Analysis on all items to determine their preservation. If the value of factor loadings for a question is greater than 0.5, then we may adopt that question in the final questionnaire; otherwise, we have to make some minor changes or have to remove it. Before applying factor analysis, Kaiser-Meyer-Olkin (KMO) and Bartlett's Test of Sphericity are recommended to check whether factor analysis is suitable or not. The KMO and Bartlett's Test results are shown.

4.6. KMO and Bartlett's Test

Table 4.3 KMO and Bartlett's Test

KMO Measure of Sampling Adequacy.	**Bartlett's Test of Sphericity**		
	Approx. Chi-Square	df	P-value
0.835	13303.5	3081	0.000

KMO is the Measure of Sampling Adequacy –If the value of KMO is greater than 0.60, then its first indicator that factor analysis can be used. Bartlett's Test gives statistically significant results, so this is the second indicator, which suggests that factor analysis can be used, as both indicators are good, so factor analysis may be useful. The KMO Measure of Sampling Adequacy is measured as 0.835 and the value for approx. Chi-Square in Bartlett's Test of Sphericity is calculated as 13303.5. The df value is 3081, and P-value is 0.000, as shown in table 4.3.

Table 4.4 Total Variance Explained

Sr #	Factor	Items	Cronbach's Alpha	Split-Half Correlation	Spearman-Brown Prophecy	Mean for Test	S.D for Test	KR21	KR20
1	SC	4	0.75	0.59	0.74	13.79	4.03	4.1	4.1
2	CC	4	0.66	0.43	0.6	13.45	3.68	4.47	4.47
3	IC	4	0.73	0.54	0.7	13.63	3.49	4.92	4.92
4	LC	5	0.75	0.65	0.79	16.4	4.59	3.47	3.47
5	CE	16	0.76	0.47	0.64	52.56	8.01	3.06	3.06
6	ED	7	0.77	0.57	0.73	23.99	4.87	4.03	4.03
7	I	9	0.78	0.61	0.76	31.24	5.88	3.63	3.64
8	C	9	0.79	0.57	0.73	28.53	5.84	3.17	3.17
9	FP	7	0.75	0.6	0.75	27.75	4.35	6.23	6.23
10	CL	4	0.73	0.64	0.78	13.21	3.13	5.46	5.46
11	SV	4	0.67	0.65	0.79	15.41	2.85	8.55	8.55
12	M	4	0.69	0.48	0.65	13.99	2.97	6.62	6.63
13	IKS	5	0.77	0.58	0.73	14.93	4.73	2.9	2.91

The above table 4.4 shows the results of Total Variance Explained in Exploratory Factor Analysis; it shows that 19 factors whose Eigen values are more than 1 were considered for factorization and these nineteen factors were explaining 79.16% variation; which was considerably good and acceptable. The factor loadings of all the questions and their rotated matrix are shown in table 4.4.

Table 4.5 Explanatory Factor Analysis

Item	F. loading	Rotated Component Matrix																
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
SC1	0.64												0.71					
SC2	0.5												0.5					
SC3	0.61												0.68					
SC4	0.5												0.48					
CC1	0.68										0.8							
CC2	0.57										0.71							
CC3	0.56										0.72							

CC 4	0.62										0.76								
IC1	0.57						0.65												
IC2	0.61						0.67												
IC3	0.65						0.67												
IC4	0.61						0.66												
LC 1	0.63					0.71													
LC 2	0.56					0.66													
LC 3	0.59					0.61													
LC 4	0.63					0.73													
LC 5	0.56					0.54													
A1	0.64											0.74							
A2	0.58											0.72							
A3	0.57											0.71							
A4	0.61											0.74							
CA 1	0.67																0.53		
CA 2	0.69																0.67		
CA 3	0.45																0.7		
I1	0.67															0.39			
I2	0.63															0.77			
I3	0.61															0.81			
RT 1	0.4														0.53				
RT 2	0.59														0.72				
RT 3	0.62														0.73				
ED 1	0.56			0.62															

ED 2	0.59			0.68															
ED 3	0.62			0.67															
ED 4	0.51			0.59															
ED 5	0.57			0.67															
ED 6	0.62			0.66															
ED 7	0.63			0.76															
I1	0.61	0.73																	
I2	0.58	0.69																	
I3	0.54	0.64																	
I4	0.52	0.61																	
I5	0.52	0.62																	
I6	0.53	0.64																	
I7	0.52	0.63																	
I8	0.57	0.68																	
I9	0.54	0.67																	
C1	0.54		0.64																
C2	0.51		0.61																
C3	0.52		0.61																
C4	0.49		0.58																
C5	0.55		0.64																
C6	0.47		0.59																
C7	0.53		0.61																
C8	0.53		0.66																
C9	0.45		0.57																

F1	0.58																	0.52
F2	0.61																	0.63
F3	0.62																	0.73
NF1	0.64													0.56				
NF2	0.66													0.75				
NF3	0.56													0.63				
NF4	0.43													0.43				
CL1	0.69								0.79									
CL2	0.66								0.78									
CL3	0.49								0.64									
CL4	0.53								0.69									
SV1	0.63							0.73										
SV2	0.62							0.76										
SV3	0.58							0.73										
SV4	0.64							0.74										
OM1	0.7									0.82								
OM2	0.66									0.78								
OM3	0.67									0.6								
OM4	0.59									0.7								
IKS1	0.69				0.8													
IKS2	0.65				0.79													
IKS3	0.61				0.74													
IKS4	0.6				0.76													
IKS5	0.57				0.73													

The above table 4.5 shows the results of Factor Loading and Rotated Component Matrix in Exploratory Factor Analysis; it is useful to apply Factor analysis (PCA with a rotation of varimax) on all items to determine item preservation (Coyle-Shapiro et al. 2004). If the value of factor loading is greater than 0.50, then we may adopt that questionnaire in the final analysis; otherwise, we have to make some minor changes or have to remove it from a final questionnaire. All the high factor loading was greater than 0.50 in the main study analysis. The rotated matrix shows 7 sub-dimensions created by EFA from the overall questionnaire, and each item was it is on the dimension, no overlapping found. So Exploratory Factor Analysis describes our questionnaire was well constructed.

4.6.1. KMO AND BARTLETT'S TEST for sensing capability

KMO is used to measure the adequacy of the sample. If the value of sampling adequacy is higher than 0.60, the Variable/construct can be used for the analysis in the study. Bartlett's test gives statistically significant results, so this is the second indicator, which suggests that factor analysis can be used, as both indicators are good, so factor analysis may be useful. Sampling adequacy measure (KMO) is 0.739, and the Chi-square value of approx. in bartlett's test of sphericity is 360.186. Df and P-values are 6 & .000, respectively, as mentioned in the above table 4.6.1. Which means that variables have enough correlation between performing PCA. The results of total variance explained in exploratory factor analysis in table 4.6.1 (b); it shows that factors whose eigen values are considered for factorization and these factors were explaining 53.531% variation; which was considerably good and acceptable. Communalities of the constructs have been shown in table 4.6.1 (a).

Table 4.6.1: Sensing Capability - KMO AND BARTLETT'S TEST

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.739
Bartlett's Test of Sphericity	Approx. Chi-Square	360.186
	df	6
	Sig.	.000

Table 4.6.1 (a)

Communalities		
	Initial	Extraction
SC1	1.000	.615
SC2	1.000	.467
SC3	1.000	.569
SC4	1.000	.490

Extraction Method: Principal Component Analysis.

Table 4.6.1 (b)

Total Variance Explained						
Com	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.141	53.531	53.531	2.141	53.531	53.531
2	.682	17.051	70.582			
3	.672	16.791	87.373			
4	.505	12.627	100.000			

Extraction Method: Principal Component Analysis.

4.6.2. KMO AND BARTLETT'S TEST for learning capability

KMO is used to measure the adequacy of the sample. If the value of sampling adequacy is higher than 0.60, the Variable/construct can be used for the analysis in the study. Bartlett's test gives statistically significant results, so this is the second indicator, which suggests that factor analysis can be used, as both indicators are good, so factor analysis may be useful. Sampling adequacy measure (KMO) is 0.827, and the Chi-square value of approx. in bartlett's test of sphericity is 639.224. Df and P-values are 360 & .000, respectively, as mentioned in the above table 4.6.2. Which means that variables have enough correlation between performing PCA. The results of total variance explained in exploratory factor analysis in table 4.6.2 (b); it shows that factors whose eigen values are considered for factorization and these factors were explaining 54.035% variation; which was considerably good and acceptable. Communalities of the constructs have been shown in table 4.6.2 (a).

Table 4.6.2: Learning Capability - KMO AND BARTLETT'S TEST

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.827
Bartlett's Test of Sphericity	Approx. Chi-Square	639.224
	Approx. Chi-Square	360
	Sig.	.000

Table 4.6.2 (a)

Communalities		
	Initial	Extraction
LC1	1.000	.587
LC2	1.000	.501
LC3	1.000	.529
LC4	1.000	.566
LC5	1.000	.519

Extraction Method: Principal Component Analysis.

Table 4.6.2 (b)

Total Variance Explained						
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.702	54.035	54.035	2.702	54.035	54.035
2	.660	13.194	67.230			
3	.600	12.003	79.232			
4	.551	11.013	90.245			
5	.488	9.755	100.000			

Extraction Method: Principal Component Analysis.

4.6.3. KMO AND BARTLETT'S TEST for integrating capability

KMO is used to measure the adequacy of the sample. If the value of sampling adequacy is higher than 0.60, the Variable/construct can be used for the analysis in the study. Bartlett's test gives statistically significant results, so this is the second indicator, which suggests that factor analysis can be used, as both indicators are good, so factor

analysis may be useful. Sampling adequacy measure (KMO) is 0.786 and a Chi-square value of approx. in bartlett's test of sphericity is 556.596. Df and P-values are 360 & .000, respectively, as mentioned in the above table 4.6.3. Which means that variables have enough correlation between performing PCA. The results of total variance explained in exploratory factor analysis in table 4.6.3 (b); it shows that factors whose eigen values are considered for factorization and these factors were explaining 60.881% variation; which was considerably good and acceptable. Communalities of the constructs have been shown in table 4.6.3 (a).

Table 4.6.3: Integrating Capability - KMO AND BARTLETT'S TEST

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.786
Bartlett's Test of Sphericity	Approx. Chi-Square	556.596
	Approx. Chi-Square	360
	Sig.	.000

Table 4.6.3 (a)

Communalities		
	Initial	Extraction
IC1	1.000	.527
IC2	1.000	.646
IC3	1.000	.635
IC4	1.000	.627

Extraction Method: Principal Component Analysis.

Table 4.6.3 (b)

Total Variance Explained						
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.435	60.881	60.881	2.435	60.881	60.881
2	.609	15.234	76.115			
3	.501	12.536	88.651			

4	.454	11.349	100.000

Extraction Method: Principal Component Analysis.

4.6.4. KMO AND BARTLETT'S TEST for coordinating capability

Table 4.6.4: Coordinating Capability - KMO AND BARTLETT'S TEST

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.749
Bartlett's Test of Sphericity	Approx. Chi-Square	455.166
	Approx. Chi-Square	360
	Sig.	.000

Table 4.6.4 (a)

Communalities		
	Initial	Extraction
CC1	1.000	.654
CC2	1.000	.509
CC3	1.000	.528
CC4	1.000	.589

Extraction Method: Principal Component Analysis.

Table 4.6.4 (b)

Total Variance Explained						
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.280	56.990	56.990	2.280	56.990	56.990
2	.673	16.826	73.816			
3	.601	15.017	88.833			
4	.447	11.167	100.000			

Extraction Method: Principal Component Analysis.

KMO is used to measure the adequacy of the sample. If the value of sampling adequacy is higher than 0.60, the Variable/construct can be used for the analysis in the study. Bartlett's test gives statistically significant results, so this is the second indicator, which suggests that factor analysis can be used, as both indicators are good, so factor analysis may be useful. Sampling adequacy measure (KMO) is 0.749, and Chi-square

value of approx. in bartlett's test of sphericity is 455.166. Df and P-values are 360 & .000, respectively, as mentioned in the above table 4.6.4. Which means that variables have enough correlation between performing PCA. The results of total variance explained in exploratory factor analysis in table 4.6.4 (b); it shows that factors whose eigen values are considered for factorization and these factors were explaining 56.99% variation; which was considerably good and acceptable. Communalities of the constructs have been shown in table 4.6.4 (a).

4.6.5. KMO AND BARTLETT'S TEST for commitment to learning

KMO is used to measure the adequacy of the sample. If the value of sampling adequacy is higher than 0.60, the Variable/construct can be used for the analysis in the study. Bartlett's test gives statistically significant results, so this is the second indicator, which suggests that factor analysis can be used, as both indicators are good, so factor analysis may be useful. Sampling adequacy measure (KMO) is 0.724, and the Chi-square value of approx. in bartlett's test of sphericity is 475.700. Df and P-values are 360 & .000, respectively, as mentioned in the above table 4.6.5. Which means that variables have enough correlation between performing PCA. The results of total variance explained in exploratory factor analysis in table 4.6.5 (b); it shows that factors whose eigen values are considered for factorization and these factors were explaining 56.362% variation; which was considerably good and acceptable. Communalities of the constructs have been shown in table 4.6.5 (a).

Table 4.6.5: Commitment to Learning - KMO AND BARTLETT'S TEST

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.724
Bartlett's Test of Sphericity	Approx. Chi-Square	475.700
	Approx. Chi-Square	360
	Sig.	.000

Table 4.6.5 (a)

Communalities		
	Initial	Extraction
CL1	1.000	.694
CL2	1.000	.648
CL3	1.000	.419
CL4	1.000	.494

Extraction Method: Principal Component Analysis.

Table 4.6.5 (b)

Total Variance Explained						
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.254	56.362	56.362	2.254	56.362	56.362
2	.723	18.070	74.432			
3	.648	16.210	90.642			
4	.374	9.358	100.000			

Extraction Method: Principal Component Analysis.

4.6.6. KMO AND BARTLETT'S TEST for a shared vision

KMO is used to measure the adequacy of the sample. If the value of sampling adequacy is higher than 0.60, the Variable/construct can be used for the analysis in the study. Bartlett's test gives statistically significant results, so this is the second indicator, which suggests that factor analysis can be used, as both indicators are good, so factor analysis may be useful. Sampling adequacy measure (KMO) is 0.763, and the Chi-square value of approx. in bartlett's test of sphericity is 450.000. Df and P-values are 360 & .000, respectively, as mentioned in the above table 4.6.6. Which means that variables have enough correlation between performing PCA. The results of total variance explained in exploratory factor analysis in table 4.6.6 (b); it shows that factors whose eigen values are considered for factorization and these factors were explaining 57.245% variation; which was considerably good and acceptable. Communalities of the constructs have been shown in table 4.6.6 (a).

Table 4.6.6: Shared Vision - KMO AND BARTLETT'S TEST

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.763
Bartlett's Test of Sphericity	Approx. Chi-Square	450.000
	Approx. Chi-Square	360
	Sig.	.000

Table 4.6.6 (a)

Communalities		
	Initial	Extraction
SV1	1.000	.567
SV2	1.000	.606
SV3	1.000	.523
SV4	1.000	.594

Extraction Method: Principal Component Analysis.

Table 4.6.6 (b)

Total Variance Explained						
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.290	57.245	57.245	2.290	57.245	57.245
2	.663	16.580	73.826			
3	.538	13.459	87.285			
4	.509	12.715	100.000			

Extraction Method: Principal Component Analysis.

4.6.7. KMO AND BARTLETT'S TEST for open-mindedness

KMO is used to measure the adequacy of the sample. If the value of sampling adequacy is higher than 0.60, the Variable/construct can be used for the analysis in the study. Bartlett's test gives statistically significant results, so this is the second indicator, which suggests that factor analysis can be used, as both indicators are good, so factor analysis may be useful. Sampling adequacy measure (KMO) is 0.749, and Chi-square value of approx. in bartlett's test of sphericity is 477.383. Df and P-values are 360 & .000, respectively, as mentioned in the above table 4.6.7. Which means that variables have enough correlation between performing PCA. The results of total variance explained in exploratory factor analysis in table 4.6.7 (b); it shows that factors whose eigen values are considered for factorization and these factors were explaining 57.479% variation; which was considerably good and acceptable. Communalities of the constructs have been shown in table 4.6.7 (a).

Table 4.6.7: Open-Mindedness - KMO AND BARTLETT'S TEST

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.749
Bartlett's Test of Sphericity	Approx. Chi-Square	477.383
	Approx. Chi-Square	360
	Sig.	.000

Table 4.6.7 (a)

Communalities		
	Initial	Extraction
OM1	1.000	.654
OM2	1.000	.628
OM3	1.000	.470
OM4	1.000	.547

Extraction Method: Principal Component Analysis.

Table 4.6.7 (b)

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.299	57.479	57.479	3.299	57.479	57.479
2	1.688	17.211	74.690			
3	1.591	14.764	89.464			
4	1.421	10.536	100.000			

Extraction Method: Principal Component Analysis.

4.6.8. KMO AND BARTLETT'S TEST for intra-organizational knowledge sharing

KMO is used to measure the adequacy of the sample. If the value of sampling adequacy is higher than 0.60, the Variable/construct can be used for the analysis in the study. Bartlett's test gives statistically significant results, so this is the second indicator, which suggests that factor analysis can be used, as both indicators are good, so factor analysis may be useful. Sampling adequacy measure (KMO) is 0.851, and Chi-square value of approx. in bartlett's test of sphericity is 841.217. Df and P-values are 360 & .000, respectively, as mentioned in the above table 4.6.8. Which means that variables have enough correlation between performing PCA. The results of total variance explained in exploratory factor analysis in table 4.6.8 (b); it shows that factors whose eigen values are considered for factorization and these factors were explaining 59.253% variation; which was considerably good and acceptable. Communalities of the constructs have been shown in table 4.6.8 (a).

Table 4.6.8: Intra-Organizational Knowledge Sharing - KMO AND BARTLETT'S TEST

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.851
Bartlett's Test of Sphericity	Approx. Chi-Square	841.217
	Approx. Chi-Square	360
	Sig.	.000

Table 4.6.8 (a)

Communalities		
	Initial	Extraction
IKS1	1.000	.644
IKS2	1.000	.621
IKS3	1.000	.571
IKS4	1.000	.580
IKS5	1.000	.547

Extraction Method: Principal Component Analysis.

Table 4.6.8 (b)

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.963	59.253	59.253	2.963	59.253	59.253
2	.599	11.986	71.239			
3	.531	10.611	81.850			
4	.470	9.395	91.245			
5	.438	8.755	100.000			

Extraction Method: Principal Component Analysis.

4.6.9. KMO AND BARTLETT'S TEST for autonomy

KMO is used to measure the adequacy of the sample. If the value of sampling adequacy is higher than 0.60, the Variable/construct can be used for the analysis in the study. Bartlett's test gives statistically significant results, so this is the second indicator, which suggests that factor analysis can be used, as both indicators are good, so factor analysis may be useful. Sampling adequacy measure (KMO) is 0.73 and a Chi-square value of approx. in bartlett's test of sphericity is 370.016. Df and P-values are 360 & .000, respectively, as mentioned in the above table 4.6.9. Which means that variables have enough correlation between performing PCA. The results of total variance explained in exploratory factor analysis in table 4.6.9 (b); it shows that factors whose eigen values are considered for factorization and these factors were explaining 53.839% variation; which was considerably good and acceptable. Communalities of the constructs have been shown in table 4.6.9 (a).

Table 4.6.9: Autonomy - KMO AND BARTLETT'S TEST

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.730
Bartlett's Test of Sphericity	Approx. Chi-Square	370.016
	Approx. Chi-Square	360
	Sig.	.000

Table 4.6.9 (a)

Communalities

	Initial	Extraction
A1	1.000	.554
A2	1.000	.515
A3	1.000	.515
A4	1.000	.570

Extraction Method: Principal Component Analysis.

Table 4.6.9 (b)

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.154	53.839	53.839	2.154	53.839	53.839
2	.729	18.237	72.076			
3	.609	15.221	87.296			
4	.508	12.704	100.000			

Extraction Method: Principal Component Analysis.

4.6.10. KMO AND BARTLETT'S TEST for competitive aggressiveness

KMO is used to measure the adequacy of the sample. If the value of sampling adequacy is higher than 0.60, the Variable/construct can be used for the analysis in the study. Bartlett's test gives statistically significant results, so this is the second indicator, which suggests that factor analysis can be used, as both indicators are good, so factor analysis may be useful. Sampling adequacy measure (KMO) is 0.641, and the Chi-square value of approx. in bartlett's test of sphericity is 298.296. Df and P-values are 360 & .000, respectively, as mentioned in the above table 4.6.10. Which means that variables have enough correlation between performing PCA. The results of total variance explained in exploratory factor analysis in table 4.6.10 (b); it shows that factors whose eigen values are considered for factorization, and these factors were explaining 62.732% variation; which was considerably good and acceptable. Communalities of the constructs have been shown in table 4.6.10 (a).

Table 4.6.10: Competitive Aggressiveness - KMO AND BARTLETT'S TEST

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.641
Bartlett's Test of Sphericity	Approx. Chi-Square	298.296
	Approx. Chi-Square	360
	Sig.	.000

Table 4.6.10 (a)

Communalities		
	Initial	Extraction
CA1	1.000	.687
CA2	1.000	.697
CA3	1.000	.498

Extraction Method: Principal Component Analysis.

Table 4.6.10 (b)

Total Variance Explained						
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	.882	62.732	62.732	.882	62.732	62.732
2	683	22.768	85.500			
3	435	14.500	100.000			

Extraction Method: Principal Component Analysis.

4.6.11. KMO AND BARTLETT'S TEST for the innovativeness

KMO is used to measure the adequacy of the sample. If the value of sampling adequacy is higher than 0.60, the Variable/construct can be used for the analysis in the study. Bartlett's test gives statistically significant results, so this is the second indicator, which suggests that factor analysis can be used, as both indicators are good, so factor analysis may be useful. Sampling adequacy measure (KMO) is 0.657, and Chi-square

value of approx. in bartlett's test of sphericity is 249.297. Df and P-values are 360 & .000, respectively, as mentioned in the above table 4.6.11. Which means that variables have enough correlation between performing PCA. The results of total variance explained in exploratory factor analysis in table 4.6.11 (b); it shows that factors whose eigen values are considered for factorization and these factors were explaining 61.177% variation; which was considerably good and acceptable. Communalities of the constructs have been shown in table 4.6.11 (a).

Table 4.6.11: Innovativeness - KMO AND BARTLETT'S TEST

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.657
Bartlett's Test of Sphericity	Approx. Chi-Square	249.297
	Approx. Chi-Square	360
	Sig.	.000

Table 4.6.11 (a)

Communalities		
	Initial	Extraction
Ii1	1.000	.567
Ii2	1.000	.601
Ii3	1.000	.668

Extraction Method: Principal Component Analysis.

Table 4.6.11 (b)

Total Variance Explained						
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	1.835	61.177	61.177	1.835	61.177	61.177
2	.645	21.499	82.676			
3	.520	17.324	100.000			

Extraction Method: Principal Component Analysis.

4.6.12. KMO AND BARTLETT'S TEST for risk-taking proactiveness

KMO is used to measure the adequacy of the sample. If the value of sampling adequacy is higher than 0.60, the Variable/construct can be used for the analysis in the study. Bartlett's test gives statistically significant results, so this is the second indicator, which suggests that factor analysis can be used, as both indicators are good, so factor analysis may be useful. Sampling adequacy measure (KMO) is 0.657, and Chi-square value of approx. in bartlett's test of sphericity is 307.043. Df and P-values are 360 & .000, respectively, as mentioned in the above table 4.6.12. Which means that variables have enough correlation between performing PCA. The results of total variance explained in exploratory factor analysis in table 4.6.12 (b); it shows that factors whose eigen values are considered for factorization and these factors were explaining 63.729% variation; which was considerably good and acceptable. Communalities of the constructs have been shown in table 4.6.12 (a).

Table 4.6.12: Risk Taking Proactiveness - KMO AND BARTLETT'S TEST

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.657
Bartlett's	Approx. Chi-Square	307.043
Test of Sphericity	Approx. Chi-Square	360
	Sig.	.000

Table 4.6.12 (a)

Communalities		
	Initial	Extraction
RT1	1.000	.558
RT2	1.000	.708
RT3	1.000	.646

Extraction Method: Principal Component Analysis.

Table 4.6.12 (b)

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	.912	63.729	63.729	.912	63.729	63.729
2	.636	21.204	84.933			
3	.452	15.067	100.000			

Extraction Method: Principal Component Analysis.

4.6.13. KMO AND BARTLETT'S TEST for involvement

KMO is used to measure the adequacy of the sample. If the value of sampling adequacy is higher than 0.60, the Variable/construct can be used for the analysis in the study. Bartlett's test gives statistically significant results, so this is the second indicator, which suggests that factor analysis can be used, as both indicators are good, so factor analysis may be useful. Sampling adequacy measure (KMO) is 0.915, and the Chi-square value of approx. in bartlett's test of sphericity is 1437.94. Df and P-values are 360 & .000, respectively, as mentioned in the above table 4.6.13. Which means that variables have enough correlation between performing PCA. The results of total variance explained in exploratory factor analysis in table 4.6.13 (b); it shows that factors whose eigen values are considered for factorization, and these factors were explaining 46.782% variation; which was considerably good and acceptable. Communalities of the constructs have been shown in table 4.6.13 (a).

Table 4.6.13: Involvement - KMO AND BARTLETT'S TEST

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.915
Bartlett's Test of Sphericity	Approx. Chi-Square	1437.940
	Approx. Chi-Square	360
	Sig.	.000

Table 4.6.13 (a)

Communalities

	Initial	Extraction
I1	1.000	.569
I2	1.000	.527
I3	1.000	.450
I4	1.000	.419
I5	1.000	.421
I6	1.000	.488
I7	1.000	.403
I8	1.000	.473
I9	1.000	.459

Extraction Method: Principal Component Analysis.

Table 4.6.13 (b)

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.210	46.782	46.782	4.210	46.782	46.782
2	.821	9.117	55.899			
3	.709	7.875	63.774			
4	.638	7.090	70.863			
5	.611	6.793	77.656			
6	.568	6.313	83.969			
7	.517	5.741	89.710			
8	.481	5.349	95.059			
9	.445	4.941	100.000			

Extraction Method: Principal Component Analysis.

4.6.14. KMO AND BARTLETT'S TEST for consistency

KMO is used to measure the adequacy of the sample. If the value of sampling adequacy is higher than 0.60, the Variable/construct can be used for the analysis in the study. Bartlett's test gives statistically significant results, so this is the second indicator, which suggests that factor analysis can be used, as both indicators are good, so factor

analysis may be useful. Sampling adequacy measure (KMO) is 0.907, and the Chi-square value of approx. in bartlett's test of sphericity is 1142.775. Df and P-values are 360 & .000, respectively, as mentioned in the above table 4.6.14. Which means that variables have enough correlation between performing PCA. The results of total variance explained in exploratory factor analysis in table 4.6.14 (b); it shows that factors whose eigen values are considered for factorization and these factors were explaining 42.499% variation; which was considerably good and acceptable. Communalities of the constructs have been shown in table 4.6.14 (a).

Table 4.6.14: Consistency - KMO AND BARTLETT'S TEST

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.907
Bartlett's Test of Sphericity	Approx. Chi-Square	1142.775
	Approx. Chi-Square	360
	Sig.	.000

Table 4.6.14 (a)

Communalities		
	Initial	Extraction
C1	1.000	.508
C2	1.000	.422
C3	1.000	.392
C4	1.000	.425
C5	1.000	.410
C6	1.000	.342
C7	1.000	.460
C8	1.000	.471
C9	1.000	.393

Extraction Method: Principal Component Analysis.

Table 4.6.14 (b)

Total Variance Explained						
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %

1	3.825	42.499	42.499	3.825	42.499	42.499
2	.817	9.079	51.579			
3	.751	8.347	59.925			
4	.704	7.820	67.746			
5	.656	7.287	75.032			
6	.615	6.837	81.870			
7	.575	6.385	88.254			
8	.547	6.077	94.331			
9	.510	5.669	100.000			

Extraction Method: Principal Component Analysis.

4.6.15. KMO AND BARTLETT'S TEST for financial performance

KMO is used to measure the adequacy of the sample. If the value of sampling adequacy is higher than 0.60, the Variable/construct can be used for the analysis in the study. Bartlett's test gives statistically significant results, so this is the second indicator, which suggests that factor analysis can be used, as both indicators are good, so factor analysis may be useful. Sampling adequacy measure (KMO) is 0.664, and the Chi-square value of approx. in bartlett's test of sphericity is 278.442. Df and P-values are 360 & .000, respectively, as mentioned in the above table 4.6.15. Which means that variables have enough correlation between performing PCA. The results of total variance explained in exploratory factor analysis in table 4.6.15 (b); it shows that factors whose eigen values are considered for factorization, and these factors were explaining 62.733% variation; which was considerably good and acceptable. Communalities of the constructs have been shown in table 4.6.15 (a).

Table 4.6.15: Financial Performance - KMO AND BARTLETT'S TEST

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.664
Bartlett's Test of Sphericity	Approx. Chi-Square	278.442
	Approx. Chi-Square	360
	Sig.	.000

Table 4.6.15 (a)

Communalities	
Initial	Extraction

F1	1.000	.598
F2	1.000	.602
F3	1.000	.682

Extraction Method: Principal Component Analysis.

Table 4.6.15 (b)

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	1.882	62.733	62.733	1.882	62.733	62.733
2	.619	20.646	83.379			
3	.499	16.621	100.000			

Extraction Method: Principal Component Analysis.

4.6.16. KMO AND BARTLETT'S TEST for non-financial performance

KMO is used to measure the adequacy of the sample. If the value of sampling adequacy is higher than 0.60, the Variable/construct can be used for the analysis in the study. Bartlett's test gives statistically significant results, so this is the second indicator, which suggests that factor analysis can be used, as both indicators are good, so factor analysis may be useful. Sampling adequacy measure (KMO) is 0.754, and the Chi-square value of approx. in bartlett's test of sphericity is 396.815. Df and P-values are 360 & .000, respectively, as mentioned in the above table 4.6.16. Which means that variables have enough correlation between performing PCA. The results of total variance explained in exploratory factor analysis in table 4.6.16 (b); it shows that factors whose eigen values are considered for factorization and these factors were explaining 54.996% variation; which was considerably good and acceptable. Communalities of the constructs have been shown in table 4.6.16 (a).

Table 4.6.16: Non-Financial Performance - KMO AND BARTLETT'S TEST

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.754
Bartlett's Test of Sphericity	Approx. Chi-Square	396.815
	Approx. Chi-Square	360

	Sig.	.000

Table 4.6.16 (a)

Communalities		
	Initial	Extraction
NF1	1.000	.622
NF2	1.000	.586
NF3	1.000	.572
NF4	1.000	.420

Extraction Method: Principal Component Analysis.

Table 4.6.16 (b)

Total Variance Explained						
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.200	54.996	54.996	2.200	54.996	54.996
2	.719	17.972	72.968			
3	.565	14.132	87.101			
4	.516	12.899	100.000			

Extraction Method: Principal Component Analysis.

4.6.17. KMO AND BARTLETT'S TEST for environmental dynamism

KMO is used to measure the adequacy of the sample. If the value of sampling adequacy is higher than 0.60, the Variable/construct can be used for the analysis in the study. Bartlett's test gives statistically significant results, so this is the second indicator, which suggests that factor analysis can be used, as both indicators are good, so factor analysis may be useful. Sampling adequacy measure (KMO) is 0.886 and a Chi-square value of approx. in bartlett's test of sphericity is 1080.74. Df and P-values are 360 & .000, respectively, as mentioned in the above table 4.6.17. Which means that variables have enough correlation between performing PCA. The results of total variance explained in exploratory factor analysis in table 4.6.17 (b); it shows that factors whose eigen values are considered for factorization and these factors were explaining

50.249% variation; which was considerably good and acceptable. Communalities of the constructs have been shown in table 4.6.17 (a).

Table 4.6.17: Environmental Dynamism - KMO AND BARTLETT'S TEST

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.886
Bartlett's Test of Sphericity	Approx. Chi-Square	1080.740
	Approx. Chi-Square	360
	Sig.	.000

Table 4.6.17 (a)

Communalities		
	Initial	Extraction
ED1	1.000	.390
ED2	1.000	.574
ED3	1.000	.566
ED4	1.000	.432
ED5	1.000	.497
ED6	1.000	.476
ED7	1.000	.582

Extraction Method: Principal Component Analysis.

Table 4.6.17 (b)

Total Variance Explained						
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	.517	50.249	50.249	.517	50.249	50.249

2			10.5		60.7
	735	02		51	
3			9.39		70.1
	657	2		43	
4			8.97		79.1
	628	7		20	
5			8.09		87.2
	566	1		11	
6			6.63		93.8
	464	4		45	
7			6.15		100.
	431	5		000	

Extraction Method: Principal Component Analysis.

4.7. The goodness of Fit test

Table 4.7: Goodness of Fit Threshold Statistics

Sr. No	Fit Indices	Level	Range
1	Relative / Normal chi-square (CMIN/ DF)	Best Fit	1-3
		Reasonably acceptable	3-5
		Poor Fit	>5
2	Goodness Fit Index (GFI) and the Adjusted Goodness Fit Index (AGFI)	Best/excellent fit	0.90-1
		Reasonably acceptable	0.80-0.90
		Poor Fit	<0.80
3	Root Mean Square Error of Approximation (RMSEA)	Best/excellent fit	<0.05
		Reasonably acceptable	0.05-0.06
		Poor Fit	>0.06

Table 4.7 given above shows the value that is considered to be generally acceptable values of any test. If the value of test of Relative / Normal Chi-square (CMIN/DIF) for the hypothesis is between the ranges of one to three, it is considered to be the best fit, whereas, if the value is between the ranges of three to five, it is considered as reasonably acceptable. On the other hand, if the value of Relative / Normal Chi-square (CMIN/DIF) is above the range of five, it is said to be poorly fit. Similarly, another test for the hypothesis to analyze its fit in accordance with the research is the goodness of fit index (GFI) and adjusted goodness of fit index (AGFI). This analyzes whether a factor or the hypothesis is appropriately fit between the

hypothesized model and the observed covariance matrix. The table above shows that if the value of GFI id between the ranges of 0.90 to 1, the hypothesis is considered to be excellent or the best fit. If its value is between the ranges of 0.80 to 0.90, it is said to be reasonably acceptable for the study. However, if the value is below the range of 0.80, it is said to be poorly fit for the study. Thus it can be considered apposite for the study. The third measure that is discussed in the study is Root Mean Square Error of Approximation (RMSEA), which is used to depict fit or misfit in the applications of the structural equation modelling in social research. In this way. RMSEA is used to determine the ratio of error present between two data sets. If the value of RMSEA for any data sets is below the range of 0.05, the data sets are considered to be best or excellent fit, and if the value is between the ranges of 0.05-0.06, it is said to be reasonably fit for the research. Whereas, if the value lies above the value of 0.06, it is poorly fit for social research.

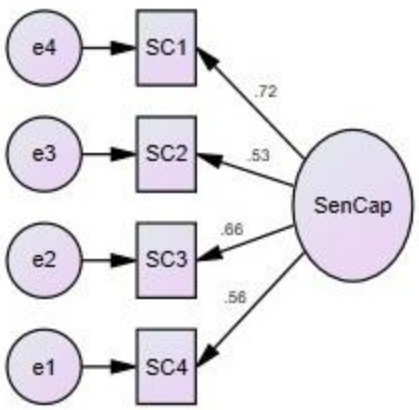
4.8. Confirmatory Factor Analysis

4.8.1. Confirmatory Factor Analysis of Sensing Capability

Table 4.8.1: Model Summary of Confirmatory Factor Analysis of Sensing Capability

Items			Parameter Estimate	Standard Error	C.R.	P
SC4	<---	SC	0.557			
SC3	<---	SC	0.657	0.124	9.348	***
SC2	<---	SC	0.531	0.115	8.366	***
SC1	<---	SC	0.72	0.146	9.48	***

Chi-Square=3.15 df=2 X2/df=1.575 GFI=0.997 AGFI=0.985
RMSEA=0.033



4.8.2. Figure 4.1: Measurement Model for Sensing Capability

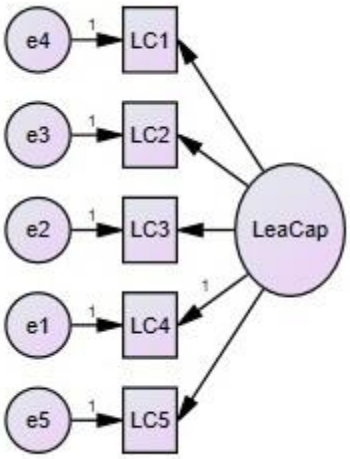
The table 4.8.1 above shows the model summary of the confirmatory factor analysis of the factors of Sensing Capability ' SC' in this research. The Sensing Capability is given with the alias 'SC'; however, four constructs were identified that were given name as SC1, SC2, SC3, and SC4. The parameter estimates for SC1 is 0.72, whereas the parameter estimates for SC2, SC3, and SC4 is 0.531, 0.657, and 0.557 respectively that is higher than the threshold level of 0.5, which show a strong relationship among observed variables/ constructs (Lewis & Byrd, 2003) and results show convergent validity. Further, higher t-values show that constructs of autonomy are practically significant. After SC1, the highest parameter estimate is of SC3. The standard error, as shown in table # 4.8.1, is 0.146 for SC1, 0.115 for SC2, and 0.124 for SC3. It is shown that SCI and SC3 have higher values for the standard error as compared to the standard error of SC2. The table also shows that critical ratio (CR) for SC1 is 9.48, 8.366 is for SC2, and 9.348 is for SC3. It depicts that SC1 has the highest CR, whereas SC2 has the lowest T stats. The df value is 2, and the value for x^2/df is 1.575. The table also shows that value for goodness fit index (GFI) is 0.997which lies in the category of best or excellent fit for the study as interpreted in the first table. Similarly, the value for adjusted goodness fit index (AGFI), as shown in Table 4.8.1 above is 0.985, which also lies in the category of best or excellent fit for the study. The value of Root Mean Square Error of Approximation (RMESEA) is 0.033, which is below the value of 0.05 implies the best fit for the study. For the Sensing Capability, Table shows the model estimates of confirmatory factor analysis for Sensing Capability.

4.8.3. Confirmatory Factor Analysis of Learning Capability

Table 4.8.2: Model Summary of Confirmatory Factor Analysis of Learning Capability

Items			Parameter Estimate	Standard Error	C.R.	P
LC4	<---	LC	0.678			
LC3	<---	LC	0.636	0.078	11.596	***
LC2	<---	LC	0.615	0.075	11.295	***
LC1	<---	LC	0.699	0.08	12.38	***
LC5	<---	LC	0.633	0.075	11.558	***

Chi-Square=8.666 df=5 X2/df=1.733 GFI=0.994 AGFI=0.981
RMSEA=0.038



4.8.4. Figure 4.2: Measurement Model for Learning Capability

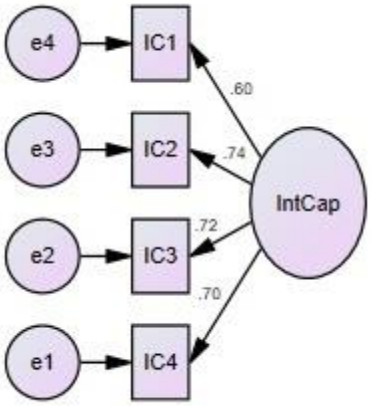
The table 4.8.2 above shows the model summary of the confirmatory factor analysis of the factors of Learning Capability 'LC' in this research. The Learning Capability is given with the alias 'LC'; however, and four constructs were identified that were given name as LC1, LC2, LC3, LC4, and LC5. The parameter estimates for LC1 is 0.699, whereas the parameter estimates for LC2, LC3, LC4 and LC5is 0.615, 0.636, 0.678 and 0.633 respectively that is higher than the threshold level of 0.5, which show a strong relationship among observed variables/ constructs (Lewis & Byrd, 2003) and results show convergent validity. Further, higher t-values show that constructs of autonomy are practically significant. After LC1, the highest parameter estimate is of LC4. The standard error, as shown in Table 4.8.2, is 0.08 for LC1, 0.075 for LC2, 0.078 for LC3, and 0.075 for LC4. It is shown that LC1 and LC3 have higher values for the standard error as compared to the standard error of LC2 & LC4. The table also shows that CR for LC1 is 12.38, 11.295 is for LC2,11.558 for LC4 11.596 is for LC3. The df value is 5, and the value for x2/df is 1.733. The table also shows that value for goodness fit index (GFI) is 0.994, which lies in the category of best or excellent fit for the study, as interpreted in the first table. Similarly, the value for adjusted goodness fit index (AGFI), as shown in the table above, is 0.981, which also lies in the category of best or excellent fit for the study. The value of Root Mean Square Error of Approximation (RMESEA) is 0.038, which is below the value of 0.05 implies the best fit for the study. For the Learning Capability, Table shows the model estimates of confirmatory factor analysis for Learning Capability.

4.8.5. Confirmatory Factor Analysis of Integrating Capability

Table 4.8.3: Model Summary of Confirmatory Factor Analysis of Integrating Capability

Items			Parameter Estimate	Standard Error	C.R.	P
IC4	<---	IC	0.704			
IC3	<---	IC	0.724	0.077	13.047	***
IC2	<---	IC	0.735	0.075	13.147	***
IC1	<---	IC	0.603	0.074	11.405	***

Chi-Square=2.02 df=2 X2/df=1.01 GFI=0.998 AGFI=0.99
RMSEA=0.004



4.8.6. Figure 4.3: Measurement Model for Integrating Capability

The table 4.8.3 above shows the model summary of the confirmatory factor analysis of the factors of Integrating Capability ' IC' in this research. The Integrating Capability is given with the alias 'IC' however; four constructs were identified that were given name as IC1, IC2, IC3, and IC4. The parameter estimates for IC1 is 0.603, whereas the parameter estimates for IC2, IC3, and IC4 is 0.735, 0.724, and 0.704 respectively that is higher than the threshold level of 0.5, which show a strong relationship among observed variables/ constructs (Lewis & Byrd, 2003) and results show convergent validity. Further, higher t-values show that constructs of autonomy are practically significant. After IC2, the highest parameter estimate. The standard error, as shown in table # 3, is 0.074 for IC1, 0.075 for IC2, and 0.077 for IC3. It is shown that IC3 and IC2 have higher values for the standard error as compared to the standard error of IC3. The table also shows that CR for IC1 is 11.405, 13.147 is for IC2, and 13.047 is for IC3. It depicts that IC2 has the highest CR, whereas IC3 has the lowest

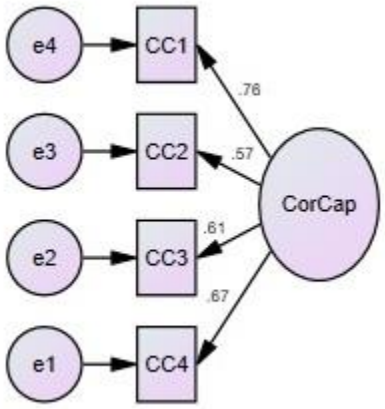
CR. The df value is 2, and the value for x2/df is 1.01. The table also shows that value for goodness fit index (GFI) is 0.998which lies in the category of best or excellent fit for the study as interpreted in the first table. Similarly, the value for adjusted goodness fit index (AGFI), as shown in table number 2 above, is 0.99, which also lies in the category of best or excellent fit for the study. The value of Root Mean Square Error of Approximation (RMESEA) is 0.004, which is below the value of 0.05 implies the best fit for the study. For the Integrating Capability, Table # 9 shows the model estimates of confirmatory factor analysis for Integrating Capability.

4.8.7. Confirmatory Factor Analysis of Coordinating Capability

Table 4.8.4: Model Summary of Confirmatory Factor Analysis of Coordinating Capability

Items			Parameter Estimate	Standard Error	C.R.	P
CC4	<---	CC	0.669			
CC3	<---	CC	0.609	0.089	10.707	***
CC2	<---	CC	0.573	0.086	10.228	***
CC1	<---	CC	0.761	0.092	11.721	***

Chi-Square=9.381 df=2 X2/df=4.69 GFI=0.991 AGFI=0.956 RMSEA=0.085



4.8.8. Figure 4.4: Measurement Model for Coordinating Capability

The table 4.8.4 above shows the model summary of the confirmatory factor analysis of the factors of coordinating capability 'CC' in this research. The Coordinating capability is given with the alias 'CC'; however, four constructs were identified that were given name as CC1, CC2, CC3, and CC4. The parameter estimates for CC1 is 0.761, whereas the parameter estimates for CC2, CC3, and CC4 is 0.573,

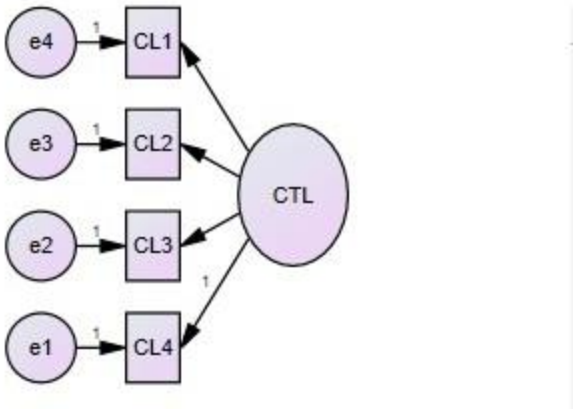
0.609, and 0.669 respectively that is higher than the threshold level of 0.5, which show the strong relationship among observed variables / constructs (Lewis & Byrd, 2003) and results show convergent validity. Further, higher t-values show that constructs of autonomy are practically significant. After CC1, the highest parameter estimate. The standard error, as shown in Table 4.8.4, is 0.092 for CC1, 0.086 for CC2, and 0.089 for CC3. It is shown that CC1 and CC3 have higher values for the standard error as compared to the standard error of CC2. The table also shows that CR for CC1 is 11.721, 10.228 is for CC2, and 10.707 is for CC3. It depicts that CC1 has the highest CR, whereas CC2 has the lowest T stats. The df value is 2, and the value for x2/df is 4.69. The table also shows that value for goodness fit index (GFI) is 0.991, which lies in the category of best or excellent fit for the study, as interpreted in the first table. Similarly, the value for adjusted goodness fit index (AGFI), as shown in the table above, is 0.956, which also lies in the category of best or excellent fit for the study. The value of Root Mean Square Error of Approximation (RMESEA) is 0.085, which is below the value of 0.05 implies the best fit for the study. For the Coordinating Capability, Table shows the model estimates of confirmatory factor analysis for Coordinating Capability.

4.8.9. Confirmatory Factor Analysis of Commitment to learning

Table 4.8.5: Model Summary of Confirmatory Factor Analysis of Commitment to learning

Items			Parameter Estimate	Standard Error	C.R.	P
CL4	<---	CL	0.534			
CL3	<---	CL	0.473	0.109	8.143	***
CL2	<---	CL	0.751	0.124	10.567	***
CL1	<---	CL	0.817	0.138	10.524	***

Chi-Square=6.782 df=2 X2/df=3.391 GFI=0.993 AGFI=0.967
RMSEA=0.068



4.8.10. Figure 4.5: Measurement Model for Commitment to learning

The table 4.8.5 above shows the model summary of the confirmatory factor analysis of the factors of commitment to learning 'CL' in this research. The Commitment to learning is given with the alias 'CL' however; four constructs were identified that were given name as CL1, CL2, CL3, and CL4. The parameter estimates for CL1 is 0.817, whereas the parameter estimates for CL2, CL3, and CL4 is 0.751, 0.473, and 0.534 respectively that is higher than the threshold level of 0.5, which show a strong relationship among observed variables/ constructs (Lewis & Byrd, 2003) and results show convergent validity. Further, higher t-values show that constructs of autonomy are practically significant. After CL1, the highest parameter estimate. The standard error, as shown in Table 4.8.5, is 0.138 for CL1, 0.124 for CL2, and 0.109 for CL3. It is shown that CL1 and CL2 have higher values for the standard error as compared to the standard error of CL3. The table also shows that CR for CL1 is 10.524, 10.567 is for CL2, and 8.143 is for CL3. The df value is 2, and the value for x2/df is 3.391. The table also shows that value for goodness fit index (GFI) is 0.993, which lies in the category of best or excellent fit for the study, as interpreted in the first table. Similarly, the value for adjusted goodness fit index (AGFI), as shown in the table above, is 0.967, which also lies in the category of best or excellent fit for the study. The value of Root Mean Square Error of Approximation (RMESEA) is 0.068, which is below the value of 0.05 implies the best fit for the study. For the Commitment to learning, Table shows the model estimates of confirmatory factor analysis for Commitment to learning.

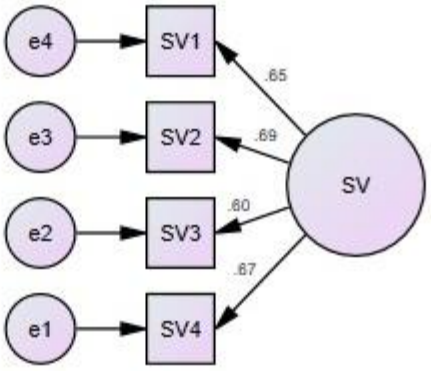
4.8.11. Confirmatory Factor Analysis of Shared vision

Table 4.8.6: Model Summary of Confirmatory Factor Analysis of Shared vision

Items	Parameter Estimate	Standard Error	C.R.	P

SV4	<---	SV	0.673			
SV3	<---	SV	0.601	0.085	10.435	***
SV2	<---	SV	0.695	0.098	11.325	***
SV1	<---	SV	0.655	0.093	11.021	***

Chi-Square=6.908 df=2 X2/df=3.454 GFI=0.993 AGFI=0.966
RMSEA=0.069



4.8.12. Figure 4.6: Measurement Model for Shared vision

The table 4.8.6 above shows the model summary of the confirmatory factor analysis of the factors of shared vision 'SV' in this research. The Shared vision is given with the alias 'SV'; however, four constructs were identified that were given name as SV1, SV2, SV3, and SV4. The parameter estimates for SV1 is 0.655, whereas the parameter estimates for SV2, SV3, and SV4 is 0.695, 0.601, and 0.673 respectively that is higher than the threshold level of 0.5, which show a strong relationship among observed variables/ constructs (Lewis & Byrd, 2003) and results show convergent validity. Further, higher t-values show that constructs of autonomy are practically significant. After SV2, the highest parameter estimate. The standard error, as shown in the table, is 0.093 for SV1, 0.098 for SV2, and 0.085 for SV3. It is shown that SV2 and SV1 have higher values for the standard error as compared to the standard error of SV3. The table also shows that CR for SV1 is 11.021, 11.325 is for SV2, and 10.435 is for SV3. It depicts that SV2 has the highest CR, whereas SV1 and SV3 have the lowest CR. The df value is 2, and the value for x2/df is 3.454. The table also shows that value for goodness fit index (GFI) is 0.993which lies in the category of best or excellent fit for the study as interpreted in the first table. Similarly, the value for adjusted goodness fit index (AGFI), as shown in the table above, is 0.966, which also lies in the category of best or excellent fit for the study. The value of Root Mean Square Error of

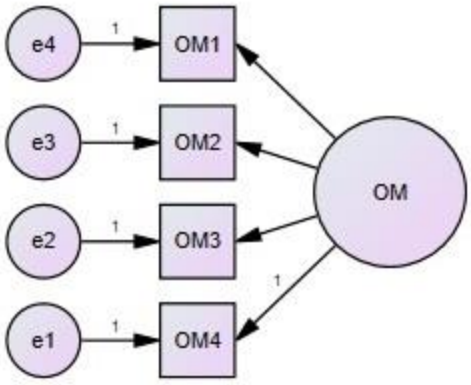
Approximation (RMESEA) is 0.069, which is below the value of 0.05 implies the best fit for the study. For the Shared vision, Table shows the model estimates of confirmatory factor analysis for Shared vision.

4.8.13. Confirmatory Factor Analysis of Open-mindedness

Table 4.8.7: Model Summary of Confirmatory Factor Analysis of Open-mindedness

Items			Parameter Estimate	Standard Error	C.R.	P
OM4	<---	OM	0.599			
OM3	<---	OM	0.53	0.096	9.238	***
OM2	<---	OM	0.733	0.112	11.241	***
OM1	<---	OM	0.764	0.116	11.314	***

Chi-Square=8.779 df=2 X2/df=4.39 GFI=0.991 AGFI=0.957 RMSEA=0.081



4.8.14. Figure 4.7: Measurement Model for Open-mindedness

The table 4.8.7 above shows the model summary of the confirmatory factor analysis of the factors of Open-mindedness 'OM' in this research. Open-mindedness is given with the alias 'OM,' however. Four constructs were identified that were given names as OM1, OM2, OM3, and OM4. The parameter estimates for OM1 is 0.764, whereas the parameter estimates for OM2, OM3, and OM4 is 0.733, 0.53, and 0.599 respectively that is higher than the threshold level of 0.5, which show a strong relationship among observed variables / constructs (Lewis & Byrd, 2003) and results show convergent validity. Further, higher t-values show that constructs of autonomy are practically significant. After OM1, the highest parameter estimate. The standard error, as shown in the table, is 0.116 for OM1, 0.112 for OM2, and 0.096 for OM3. It is shown

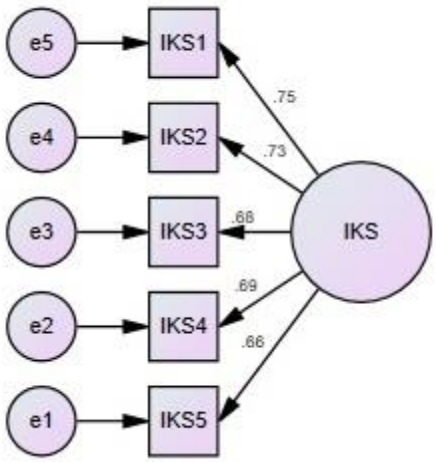
that OM1 and OM2 have higher values for the standard error as compared to the standard error of OM3. The table also shows that CR for OM1 is 11.314, 11.241 is for OM2, and 9.238 is for OM3. The df value is 2, and the value for x2/df is 4.39. The table also shows that value for goodness fit index (GFI) is 0.991, which lies in the category of best or excellent fit for the study, as interpreted in the first table. Similarly, the value for adjusted goodness fit index (AGFI), as shown in the table above, is 0.957, which also lies in the category of best or excellent fit for the study. The value of Root Mean Square Error of Approximation (RMESEA) is 0.081, which is below the value of 0.05 implies the best fit for the study. For the Open-mindedness, Table shows the model estimates of confirmatory factor analysis for Open-mindedness.

4.8.15. Confirmatory Factor Analysis of Intra-organizational knowledge sharing

Table 4.8.8: Model Summary of Confirmatory Factor Analysis of Intra-organizational knowledge sharing

Items			Parameter Estimate	Standard Error	C.R.	P
IKS5	<---	IKS	0.657			
IKS4	<---	IKS	0.692	0.083	12.803	***
IKS3	<---	IKS	0.676	0.081	12.575	***
IKS2	<---	IKS	0.726	0.084	13.26	***
IKS1	<---	IKS	0.751	0.085	13.561	***

Chi-Square=7.917 df=5 X2/df=1.583 GFI=0.994 AGFI=0.982 RMSEA=0.034



4.8.16. Figure 4.8: Measurement Model for Intra-organizational knowledge sharing

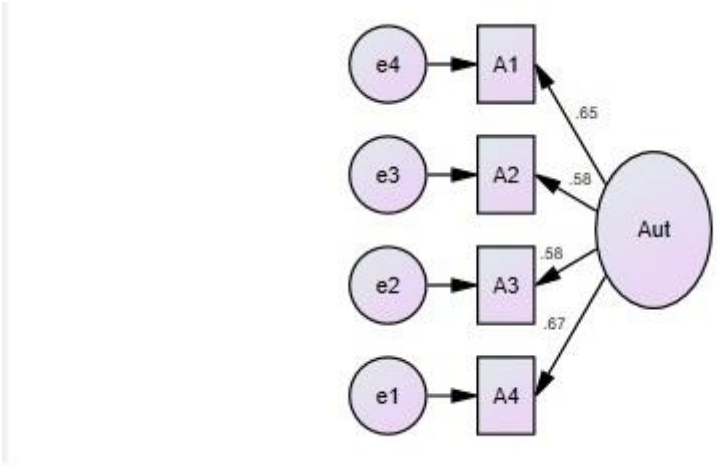
The table 4.8.8 above shows the model summary of the confirmatory factor analysis of the factors of Intra-organizational knowledge sharing 'IKS' in this research. Intra-organizational knowledge sharing is given with the alias 'IKS'; however, four constructs were identified that were given name as IKS1, IKS2, IKS3, IKS4, and IKS5. The parameter estimates for IKS1 is 0.751, whereas the parameter estimates for IKS2, IKS3, IKS4 and IKS5is 0.726, 0.676, 0.692 and 0.657 respectively that is higher than the threshold level of 0.5, which show a strong relationship among observed variables/ constructs (Lewis & Byrd, 2003) and results show convergent validity. Further, higher t-values show that constructs of autonomy are practically significant. After IKS1, the highest parameter estimate. The standard error, as shown in the table, is 0.085 for IKS1, 0.084 for IKS2, 0.081 for IKS3, and 0.083 for IKS4. It is shown that IKS1 and IKS2 have higher values for the standard error as compared to the standard error of IKS3 and IKS4. The table also shows that CR for IKS1 is 13.561, 13.26 is for IKS2,12.803 for IKS4 12.575 is for IKS3. The df value is 5, and the value for x2/df is 1.583. The table also shows that value for goodness fit index (GFI) is 0.994vwhich lies in the category of best or excellent fit for the study as interpreted in the first table. Similarly, the value for adjusted goodness fit index (AGFI), as shown in the table above, is 0.982, which also lies in the category of best or excellent fit for the study. The value of Root Mean Square Error of Approximation (RMESEA) is 0.034, which is below the value of 0.05 implies the best fit for the study. For Intra-organizational knowledge sharing, Table shows the model estimates of confirmatory factor analysis for Intra-organizational knowledge sharing.

4.8.17. Confirmatory Factor Analysis of Autonomy

Table 4.8.9: Model Summary of Confirmatory Factor Analysis of Autonomy

Items			Parameter Estimate	Standard Error	C.R.	P
A4	<---	A	0.666			
A3	<---	A	0.583	0.094	9.471	***
A2	<---	A	0.582	0.086	9.459	***
A1	<---	A	0.648	0.102	9.951	***

Chi-Square=14.546 df=2 X2/df=7.273 GFI=0.986 AGFI=0.93 RMSEA=0.11



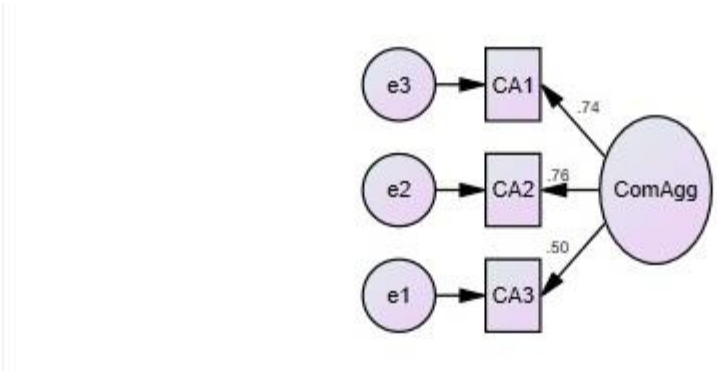
4.8.18. Figure 4.9: Measurement Model for Autonomy

The table 4.8.9 above shows the model summary of the confirmatory factor analysis of the factors of Autonomy 'A' in this research. The Autonomy is given with the alias 'A'; however, four constructs were identified that were given name as A1, A2, A3, and A4. The parameter estimates for A1 is 0.648, whereas the parameter estimates for A2, A3, and A4 is 0.582, 0.583, and 0.666 respectively that is higher than the threshold level of 0.5, which show a strong relationship among observed variables/ constructs (Lewis & Byrd, 2003) and results show convergent validity. Further, higher t-values show that constructs of autonomy are practically significant. After A4, the highest parameter estimate. The standard error, as shown in Table 4.8.9, is 0.102 for A1, 0.086 for A2, and 0.094 for A3. It is shown that A3 and A1 have higher values for the standard error as compared to the standard error of A2. The table also shows that CR for A1 is 9.951, 9.459 is for A2, and 9.471 is for A3. The df value is 2, and the value for x2/df is 7.273. The table also shows that value for goodness fit index (GFI) is 0.986which lies in the category of best or excellent fit for the study as interpreted in the first table. Similarly, the value for adjusted goodness fit index (AGFI), as shown in the table above, is 0.93, which also lies in the category of best or excellent fit for the study. The value of Root Mean Square Error of Approximation (RMESEA) is 0.11, which is below the value of 0.05 implies the best fit for the study. For the Autonomy, Table shows the model estimates of confirmatory factor analysis for Autonomy.

4.8.19. Confirmatory Factor Analysis of Competitive aggressiveness

Table 4.8.10: Model Summary of Confirmatory Factor Analysis of Competitive aggressiveness

Items			Parameter Estimate	Standard Error	C.R.	P
CA3	<---	CA	0.498			
CA2	<---	CA	0.764	0.174	8.658	***
	<---	CA	0.739	0.16	8.817	***



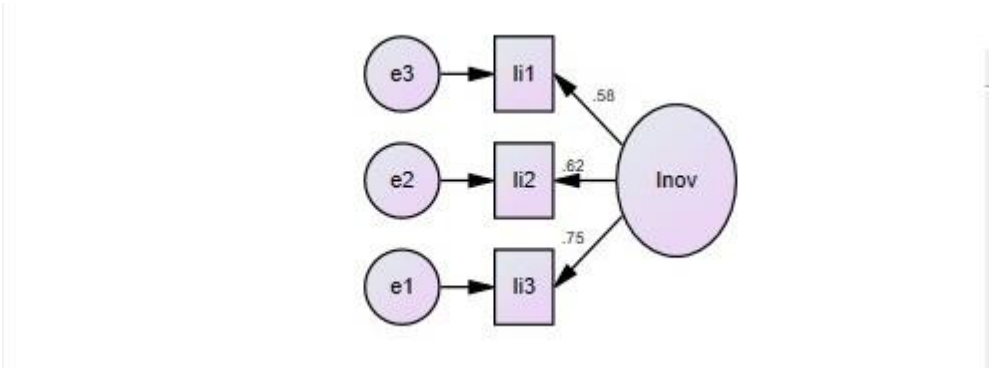
4.8.20. Figure 4.10: Measurement Model for Competitive aggressiveness

The table 4.8.10 above shows the model summary of the confirmatory factor analysis of the factors of Competitive aggressiveness 'CA' in this research. The Competitive aggressiveness is given with the alias 'CA'; however, four constructs were identified that were given name as CA1, CA2, and CA3. The parameter estimates for CA1 is 0.739, whereas the parameter estimates for CA2 and CA3 is 0.764 and 0.498, respectively that is higher than the threshold level of 0.5, which show a strong relationship among observed variables/ constructs (Lewis & Byrd, 2003) and results show convergent validity. Further, higher t-values show that constructs of autonomy are practically significant. After CA3, the highest parameter estimate is of Competitive aggressiveness. The standard error, as shown in Table 4.8.10, is 0.16 for CA1 and 0.174 for CA2. It is shown that CA2 has higher values for the standard error as compared to the standard error of CA1. The table also shows that CR for CA1 is 8.817, and 8.658 is for CA2. The table shows the model estimates of confirmatory factor analysis for Competitive aggressiveness.

4.8.21. Confirmatory Factor Analysis of Innovativeness

Table 4.8.11: Model Summary of Confirmatory Factor Analysis of Innovativeness

Items			Parameter Estimate	Standard Error	C.R.	P
Ii3	<---	Ii	0.746			
Ii2	<---	Ii	0.62	0.097	8.455	***
	<---	Ii	0.576	0.098	8.406	***



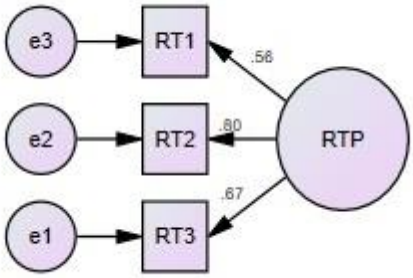
4.8.22. Figure 4.11: Measurement Model for Innovativeness

The table 4.8.11 above shows the model summary of the confirmatory factor analysis of the factors of Innovativeness ' Ii' in this research. The Innovativeness is given with the alias 'Ii'; however, four constructs were identified that were given name as Ii1, Ii2, and Ii3. The parameter estimates for Ii1 is 0.576, whereas the parameter estimates for Ii2 and Ii3 is 0.62 and 0.746, respectively, that is higher than the threshold level of 0.5, which show a strong relationship among observed variables/ constructs (Lewis & Byrd, 2003) and results show convergent validity. Further, higher t-values show that constructs of autonomy are practically significant. After Ii1, the highest parameter estimate is of Innovativeness. The standard error, as shown in the table, is 0.098 for Ii1 and 0.097 for Ii2. It is shown that Ii1 has higher values for the standard error as compared to the standard error of Ii2. The table also shows that CR for Ii1 is 8.406, and 8.455 is for Ii2. It depicts that Ii2 has the highest CR, whereas Ii1 has the lowest CR. The table shows the model estimates of confirmatory factor analysis for Innovativeness.

4.8.23. Confirmatory Factor Analysis of Risk-taking Proactiveness

Table 4.8.12: Model Summary of Confirmatory Factor Analysis of Risk-taking Proactiveness

Items			Parameter Estimate	Standard Error	C.R.	P
RT3	<---	RT	0.67			
RT2	<---	RT	0.8	0.121	9.542	***
	<---	RT	0.562	0.084	9.863	***



4.8.24. Figure 4.12: Measurement Model for Risk-taking Proactiveness

The table 4.8.12 above shows the model summary of the confirmatory factor analysis of the factors of Risk-taking Proactiveness 'RT' in this research. The Risk-taking Proactiveness is given with the alias 'RT'; however, four constructs were identified that were given name as RT1, RT2, and RT3. The parameter estimates for RT1 is 0.562, whereas the parameter estimates for RT2 and RT3 is 0.8 and 0.67, respectively, that is higher than the threshold level of 0.5, which show a strong relationship among observed variables/ constructs (Lewis & Byrd, 2003) and results show convergent validity. Further, higher t-values show that constructs of autonomy are practically significant. After RT2, the highest parameter estimate is of Risk-taking Proactiveness. The standard error, as shown in table # 3, is 0.084 for RT1 and 0.121 for RT2. It is shown that RT2 has higher values for the standard error as compared to the standard error of RT1. The table also shows that CR for RT1 is 9.863, and 9.542 is for RT2. It depicts that RT1 has the highest CR, whereas RT2 has the lowest CR. The table shows the model estimates of confirmatory factor analysis for Risk-taking Proactiveness.

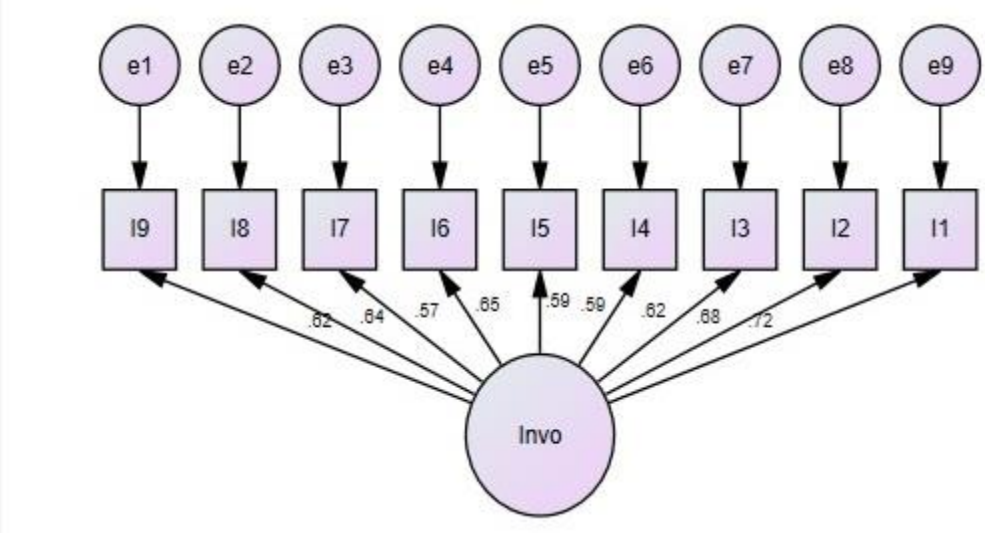
4.8.25. Confirmatory Factor Analysis of Involvement

Table 4.8.13: Model Summary of Confirmatory Factor Analysis of Involvement

Items			Parameter Estimate	Standard Error	C.R.	P
I9	<---	I	0.624			
I8	<---	I	0.637	0.087	11.881	***
I7	<---	I	0.574	0.085	10.936	***
I6	<---	I	0.652	0.085	12.093	***
I5	<---	I	0.592	0.091	11.212	***
I4	<---	I	0.594	0.084	11.234	***
I3	<---	I	0.621	0.088	11.644	***
I2	<---	I	0.681	0.09	12.494	***
I1	<---	I	0.719	0.085	12.993	***

Chi-Square=58.994 df=27 X2/df=2.185 GFI=0.975 AGFI=0.958

RMSEA=0.048



4.8.26. Figure 4.13: Measurement Model for Involvement

The table 4.8.13 above shows the model summary of the confirmatory factor analysis of the factors of Involvement 'I' in this research. The Involvement is given with the alias 'I'; however, four constructs were identified that were given name as I1, I2, I3, I4, I5, I6, I7, I8, and I9. The parameter estimates for I1 is 0.719, whereas the parameter estimates for I2, I3, and I4,I5, I6, I7, I8, and I9 is 0.681, 0.621, 0.594, 0.592, 0.652, 0.574, 0.637 and 0.624 respectively that is higher than the threshold level of 0.5, which show strong relationship among observed variables / constructs (Lewis & Byrd,

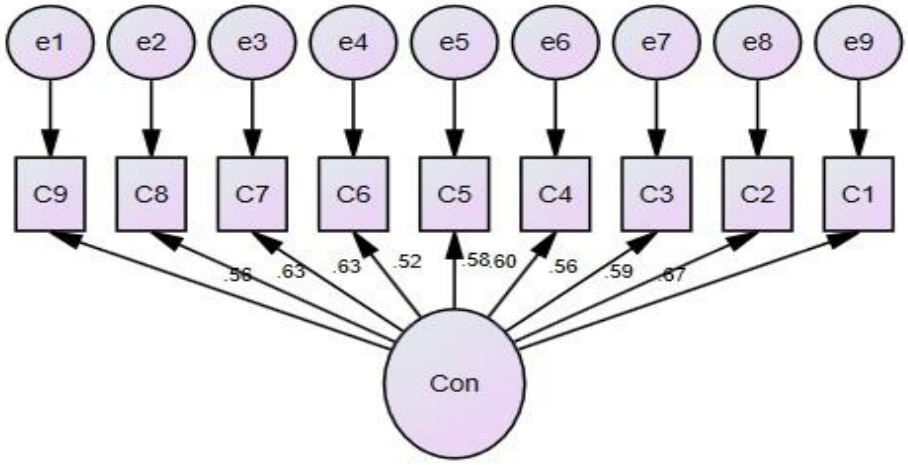
2003) and results show convergent validity. Further, higher t-values show that constructs of autonomy are practically significant. After I1, the highest parameter estimate. The standard error as shown in table is 0.085 for I1, 0.09 for I2, 0.088 for I3, 0.084 for I4, 0.091 for I5, 0.085 for I6, 0.085 for I7 and 0.087 for I8. It is shown that I5 has higher values for the standard error as compared to the standard error. The table also shows that CR for I1 is 12.993, 12.494 is for I2, 11.644 is for I3 , 11.234 is for I4, 11.212 is for I5, 12.093 is for I6, 10.936 is for I7 and 11.881 is for I8. It depicts that I1 has the highest CR. The df value is 27, and the value for x2/df is 2.185. The table also shows that value for goodness fit index (GFI) is 0.975which lies in the category of best or excellent fit for the study as interpreted in the first table. Similarly, the value for adjusted goodness fit index (AGFI), as shown in table number 2 above is 0.958, which also lies in the category of best or excellent fit for the study. The value of Root Mean Square Error of Approximation (RMESEA) is 0.048, which is below the value of 0.05 implies the best fit for the study. For the Involvement, Table shows the model estimates of confirmatory factor analysis for Involvement.

4.8.27. Confirmatory Factor Analysis of Consistency

Table 4.8.14: Model Summary of Confirmatory Factor Analysis of Consistency

Items			Parameter Estimate	Standard Error	C.R.	P
C9	<---	C	0.564			
C8	<---	C	0.634	0.1	10.627	***
C7	<---	C	0.627	0.104	10.549	***
C6	<---	C	0.516	0.097	9.216	***
C5	<---	C	0.579	0.099	10.008	***
C4	<---	C	0.597	0.1	10.217	***
C3	<---	C	0.565	0.1	9.832	***
C2	<---	C	0.588	0.098	10.107	***
C1	<---	C	0.669	0.106	10.989	***

Chi-Square=36.578 df=27 X2/df=1.355 GFI=0.984 AGFI=0.974 RMSEA=0.026



4.8.28. Figure 4.14: Measurement Model for Consistency

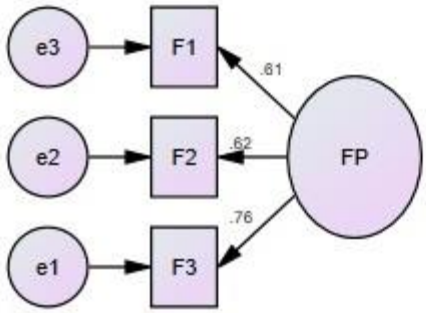
The table 4.8.14 above shows the model summary of the confirmatory factor analysis of the factors of Consistency 'C' in this research. The Consistency is given with the alias 'C'; however, four constructs were identified that were given name as C1, C2, C3, C4, C5, C6, C7, C8, and C9. The parameter estimates for C1 is 0.669, whereas the parameter estimates for C2, C3, and C4,C5, C6, C7, C8 and C9 is 0.588, 0.565, 0.597, 0.579, 0.516, 0.627, 0.634 and 0.564 respectively that is higher than the threshold level of 0.5, which show strong relationship among observed variables / constructs (Lewis & Byrd, 2003) and results show convergent validity. Further, higher t-values show that constructs of autonomy are practically significant. After C1, the highest parameter estimate. The standard error as shown in table is 0.106 for C1, 0.098 for C2, 0.1 for C3, 0.1 for C4, 0.099 for C5, 0.097 for C6, 0.104 for C7 and 0.1 for C8. It is shown that C3 has higher values for the standard error as compared to the standard error of A2. The table also shows that CR for C1 is 10.989, 10.107 is for C2, 9.832 is for C3 , 10.217 is for C4, 10.008 is for C5, 9.216 is for C6, 10.549 is for C7 and 10.627 is for C8. It depicts that C1 has the highest CR. The df value is 27, and the value for x2/df is 1.355. The table also shows that value for goodness fit index (GFI) is 0.984which lies in the category of best or excellent fit for the study as interpreted in the first table. Similarly, the value for adjusted goodness fit index (AGFI), as shown in the table above, is 0.974, which also lies in the category of best or excellent fit for the study. The value of Root Mean Square Error of Approximation (RMESEA) is 0.026, which is below the

value of 0.05 implies the best fit for the study. For the Consistency, Table shows the model estimates of confirmatory factor analysis for Consistency.

4.8.29. Confirmatory Factor Analysis of Financial Performance

Table 4.8.15: Model Summary of Confirmatory Factor Analysis of Financial Performance

Items			Parameter Estimate	Standard Error	C.R.	P
F3	<---	F	0.762			
F2	<---	F	0.62	0.089	9.14	***
	<---	F	0.614	0.091	9.131	***



4.8.30. Figure 4.15: Measurement Model for Financial Performance

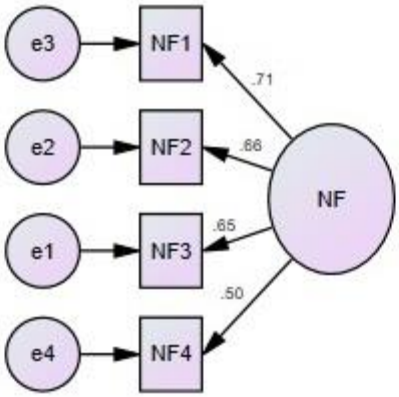
The table 4.8.15 above shows the model summary of the confirmatory factor analysis of the factors of Financial Performance 'F' in this research. The Financial Performance is given with the alias 'F'; however, four constructs were identified that were given name as F1, F2, and F3. The parameter estimates for F1 are 0.614, whereas the parameter estimates for F2 and F3 are 0.62 and 0.762 respectively that is higher than the threshold level of 0.5, which shows a strong relationship among observed variables/ constructs (Lewis & Byrd, 2003) and results show convergent validity. Further, higher t-values show that constructs of autonomy are practically significant. After F3, the highest parameter estimate is of Financial Performance. The standard error, as shown in the table, is 0.091 for F1 and 0.089 for F2. It is shown that F1 has higher values for the standard error as compared to the standard error of F2. The table also shows that CR for F1 is 9.131, and 9.14 is for F2. It depicts that F2 has the highest CR, whereas F1 has the lowest CR. The table shows the model estimates of confirmatory factor analysis for Financial Performance.

4.8.31. Confirmatory Factor Analysis of Non-Financial Performance

Table 4.8.16: Model Summary of Confirmatory Factor Analysis of Non-Financial Performance

Items			Parameter Estimate	Standard Error	C.R.	P
NF3	<---	NF	0.653			
NF2	<---	NF	0.664	0.09	10.673	***
NF1	<---	NF	0.714	0.1	10.877	***
NF4	<---	NF	0.499	0.086	8.783	***

Chi-Square=36.578 df=27 X2/df=1.355 GFI=0.984 AGFI=0.974 RMSEA=0.026



4.8.32. Figure 4.16: Measurement Model for Non-Financial Performance

The table 4.8.16 above shows the model summary of the confirmatory factor analysis of the factors of Non-Financial Performance 'NF' in this research. The Non-Financial Performance is given with the alias 'NF'; however, four constructs were identified that were given name as NF4, NF1, NF2, and NF3. The parameter estimates for NF1 is 0.499, whereas the parameter estimates for NF1, NF2, and NF3 is 0.714, 0.664, and 0.653 respectively that is higher than the threshold level of 0.5, which show a strong relationship among observed variables/ constructs (Lewis & Byrd, 2003) and results show convergent validity. Further, higher t-values show that constructs of autonomy are practically significant. After NF1, the highest parameter estimate is of NF3. The standard error, as shown in table # 3, is 0.086 for NF4, 0.1 for NF1, and 0.09 for NF2. It is shown that A3 and A4 have higher values for the standard error as compared to the standard error of A2. The table also shows that CR for NF4 is 8.783, 10.877 is for NF1, and 10.673 is for NF2. It depicts that NF1 has the highest CR,

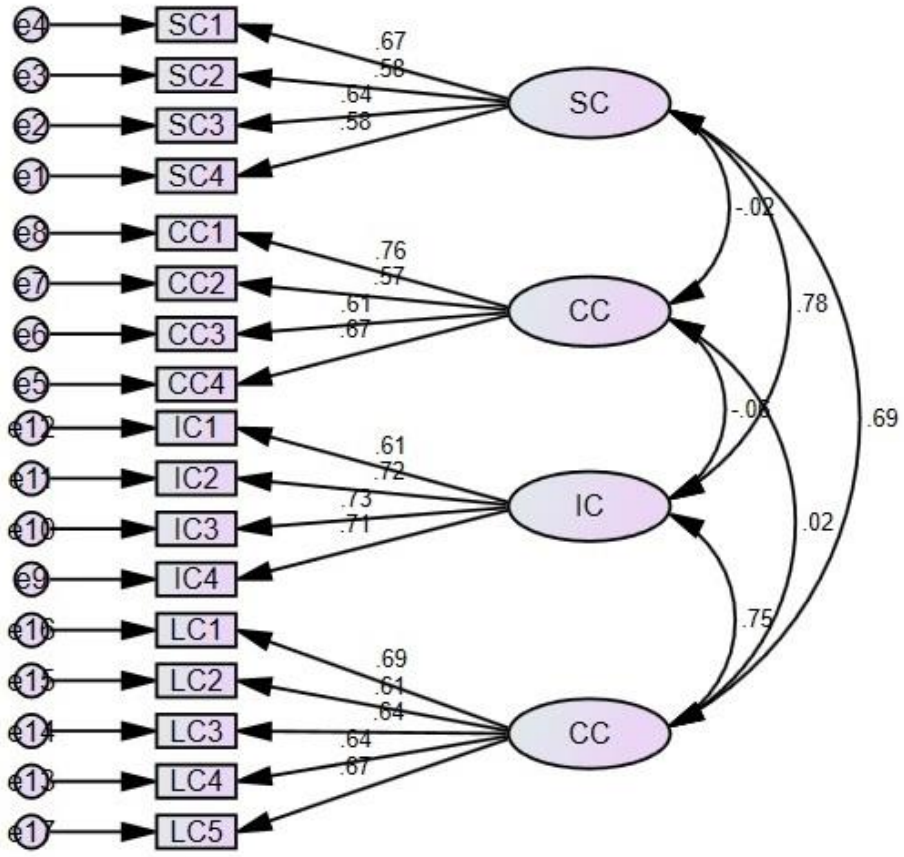
whereas NF4 has the lowest CR. The df value is 27, and the value for x2/df is 1.355. The table also shows that value for goodness fit index (GFI) is 0.984which lies in the category of best or excellent fit for the study as interpreted in the first table. Similarly, the value for adjusted goodness fit index (AGFI), as shown in the table above, is 0.974, which also lies in the category of best or excellent fit for the study. The value of Root Mean Square Error of Approximation (RMESEA) is 0.026, which is below the value of 0.05 implies the best fit for the study. For the Non-Financial Performance, Table shows the model estimates of confirmatory factor analysis for Non-Financial Performance.

4.8.33. Confirmatory Factor Analysis of Dynamic Capability

Table 4.8.17: Model Summary of Confirmatory Factor Analysis of Dynamic Capability

Items			Parameter Estimate	Standard Error	C.R.	P
SC4	<---	SC	0.584			
SC3	<---	SC	0.641	0.103	10.467	***
SC2	<---	SC	0.582	0.103	9.834	***
SC1	<---	SC	0.668	0.115	10.725	***
CC4	<---	CC	0.671			
CC3	<---	CC	0.607	0.088	10.698	***
CC2	<---	CC	0.574	0.085	10.262	***
CC1	<---	CC	0.76	0.092	11.754	***
IC4	<---	IC	0.708			
IC3	<---	IC	0.726	0.07	14.34	***
IC2	<---	IC	0.723	0.067	14.296	***
IC1	<---	IC	0.612	0.069	12.322	***
LC4	<---	LC	0.642			
LC3	<---	LC	0.645	0.082	11.827	***
LC2	<---	LC	0.614	0.079	11.385	***
LC1	<---	LC	0.688	0.083	12.41	***
LC5	<---	LC	0.67	0.08	12.172	***

Chi-Square=154.007 df=113 X2/df=1.363 GFI=0.966 AGFI=0.955 RMSEA=0.027



4.8.34. Figure 4.17: Measurement Model for Dynamic Capability

The table 4.8.17 above shows the model summary of the confirmatory factor analysis of the factors of dynamic capability in this research. The df value is 113, and the value for X2/df is 1.363. The table also shows that the value for Goodness Fit Index (GFI) is 0.966, which lies in the category of best or excellent fit for the study, as interpreted in the previous section. Similarly, the value for the Adjusted Goodness Fit Index (AGFI), as shown in Table 4.8.17, is 0.955, which also lies in the category of best or excellent fit for the study. The value of Root Mean Square Error of Approximation (RMSEA) is 0.027, which is below the value of 0.05 implies the best fit for the study. For the 'Dynamic Capability,' four factors identified that were named as Sensing Capability, Learning Capability, Integrating Capability, and Coordinating Capability. Table 4.8, given above, shows the Model Estimates of Confirmatory Factor Analysis for Dynamic Capability.

4.8.35. Sensing Capability

The sensing capability is given with the alias 'SC'; however, its four items are named as SC1, SC2, SC3, and SC4. The parameter estimate for SC1 is 0.668, whereas

the parameter estimates for SC2, SC3, and SC4 is 0.582, 0.641, and 0.584, respectively. The standard error, as shown in table 0.115 for SC1, 0.103 for SC2, and 0.103 for SC3. It is shown that SC3 and SC4 have the same values for the standard error, which is lesser than the standard error of SC2. The table also shows that CR for SC1 is 10.725, SC2 is 9.834, and SC3 is 10.467. It depicts that SC1 has the highest CR, whereas SC2 has the lowest CR.

4.8.36. Coordinating Capability

The coordinating capability is given with the alias 'CC'; however, its four items are named as CC1, CC2, CC3, and CC4. The parameter estimate for CC1 is 0.76, whereas the parameter estimates for CC2, CC3, and CC4 is 0.574, 0.607, and 0.671, respectively. The standard error, as shown in the table, is 0.092 for CC1, 0.085 for CC2, and 0.088 for CC3. It is shown that SC1 has higher values for the standard error. The table also shows that CR for CC1 is 11.754, CC2 is 10.262, and CC3 is 10.698. It depicts that CC1 has the highest CR, whereas CC2 has the lowest CR.

4.8.37. Integrating Capability

The integrating capability is given with the alias 'IC'; however, its four items are named as IC1, IC2, IC3, and IC4. The parameter estimate for IC1 is 0.612, whereas the parameter estimates for IC2, IC3, and IC4 is 0.723, 0.726, and 0.708, respectively. The standard error, as shown in the table, is 0.069 for IC1, 0.067 for IC2, and 0.07 for IC3. It is shown that 1C3 has higher values for the standard error. The table also shows that CR for IC1 is 12.322, IC2 is 14.296, and IC3 is 14.34. It depicts that IC3 has the highest CR, whereas IC1 has the lowest CR.

4.8.38. Learning Capability

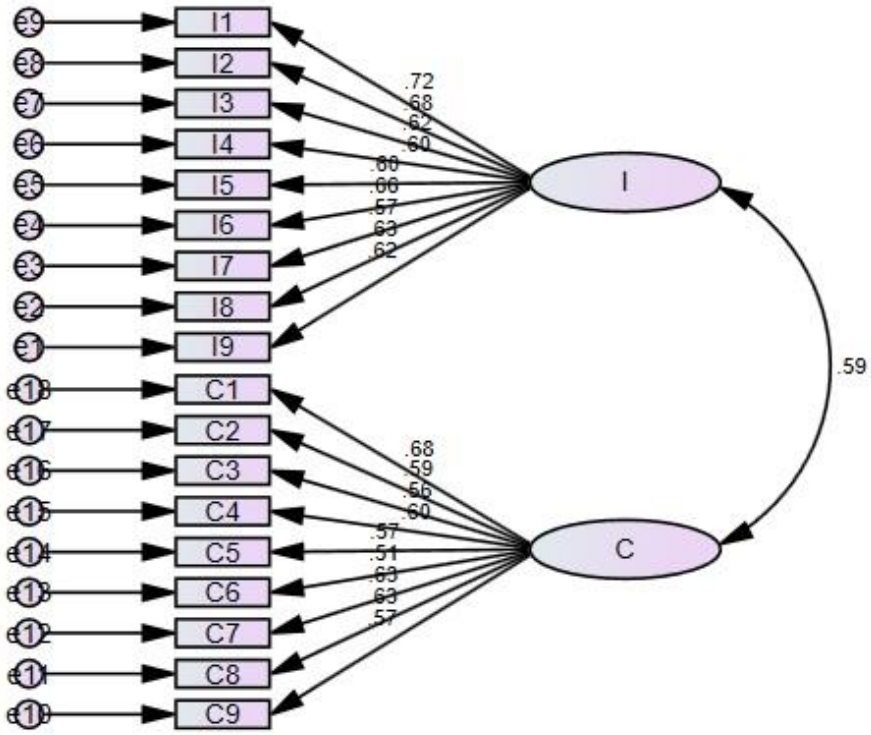
The learning capability is given with the alias 'LC'; however, its four items are named as LC4, LC1, LC2, and LC3 and LC5. The parameter estimate for LC4 is 0.642 whereas the parameter estimates for LC1, LC2, LC3 and LC5 is 0.688, 0.614, 0.645 and 0.67 respectively. The standard error, as shown in the table, is 0.08 for LC5, 0.083 for LC1 0.079 for LC2, and LC3 is 0.082. It is shown that LC1 has higher values for the standard error. The table also shows that CR for LC5 is 12.172, LC1 is 12.41, LC2 is 11.385, and 11.827 for LC3. It depicts that LC1 has the highest CR, whereas LC2 has the lowest CR.

4.8.39. Confirmatory Factor Analysis of Organizational Culture

Table 4.8.18: Model Summary of Confirmatory Factor Analysis of Organizational Culture

Items			Parameter Estimate	Standard Error	C.R.	P
I9	<---	I	0.623			
I8	<---	I	0.633	0.087	11.865	***
I7	<---	I	0.571	0.084	10.933	***
I6	<---	I	0.656	0.085	12.204	***
I5	<---	I	0.595	0.091	11.308	***
I4	<---	I	0.598	0.084	11.347	***
I3	<---	I	0.623	0.088	11.73	***
I2	<---	I	0.68	0.089	12.535	***
I1	<---	I	0.716	0.085	13.025	***
C9	<---	C	0.57			
C8	<---	C	0.628	0.097	10.771	***
C7	<---	C	0.634	0.101	10.835	***
C6	<---	C	0.509	0.094	9.27	***
C5	<---	C	0.569	0.096	10.056	***
C4	<---	C	0.601	0.097	10.45	***
C3	<---	C	0.563	0.097	9.983	***
C2	<---	C	0.586	0.095	10.27	***
C1	<---	C	0.676	0.103	11.287	***

Chi-Square=174.369 df=134 X2/df=1.301 GFI=0.964 AGFI=0.954
RMSEA=0.024



4.8.40. Figure 4.18 : Measurement Model for Organizational Culture

The table 4.8.18 above shows the model summary of the confirmatory factor analysis of the factors of organizational culture in this research. The df value is 134, and the value for X2/df is 1.301. The table also shows that the value for Goodness Fit Index (GFI) is 0.964, which lies in the category of best or excellent fit for the study, as interpreted in the previous section. Similarly, the value for the Adjusted Goodness Fit Index (AGFI), as shown in Table 4.8.18, is 0.954, which also lies in the category of best or excellent fit for the study. The value of Root Mean Square Error of Approximation (RMSEA) is 0.024, which is below the value of 0.05 implies the best fit for the study.

4.8.41. Involvement

The involvement is given with the alias 'I'; however, its four items are named as I5, I2, I3, I4, I5, I6, I7, I8, and I1. The parameter estimate for I5 is 0.595 whereas the parameter estimates for I2, I3, I4, I5, I6, I7, I8 and I1 is 0.68, 0.623, 0.598, 0.595, 0.656, 0.571, 0.633 and 0.716 respectively. The standard error as shown in table is 0.085 for I1, 0.089 for I2 0.088 for I3, I4 is 0.084, I5 is 0.091, I6 is 0.085, I7 is 0.084 and I8 is 0.087. It is shown that I5 has higher values for the standard error. The table also shows that CR for I1 is 13.025, I2 is 12.535, I3 is involvement, 11.347 for I4, 11.308 for I5, 12.204 for I6, 10.933 for I7 and 11.865 for I8. It depicts that I3 has the highest CR, whereas I7 has the lowest CR.

4.8.42. Consistency

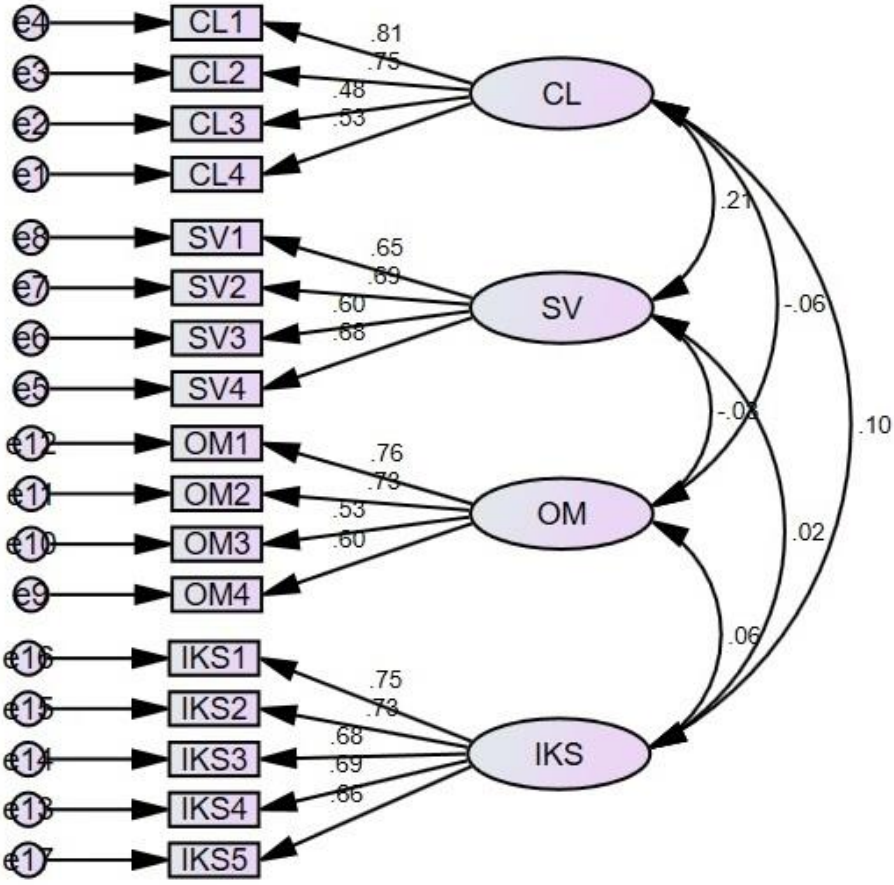
The consistency is given with the alias 'C'; however, its four items are named as C5, C2, C3, C4, C5, C6, C7, C8, and C1. The parameter estimate for C5 is 0.569 whereas the parameter estimates for C2, C3, C4, C5, C6, C7, C8 and C1 is 0.586, 0.563, 0.601, 0.569, 0.509, 0.634, 0.628 and 0.676 respectively. The standard error as shown in table # 3 is 0.103 for C1, 0.095 for C2 0.097 for C3, C4 is 0.097, C5 is 0.096, C6 is 0.094, C7 is 0.101 and C8 is 0.097. It is shown that C1 has higher values for the standard error. The table also shows that CR for C1 is 11.287, C2 is 10.27, C3 is consistency, 10.45 for C4, 10.056 for C5, 9.27 for C6, 10.835 for C7 and 10.771 for C8. It depicts that C1 has the highest CR, whereas C6 has the lowest CR.

4.8.43. Confirmatory Factor Analysis of Learning Orientation

Table 4.8.19: Model Summary of Confirmatory Factor Analysis of Learning Orientation

Items			Parameter Estimate	Standard Error	C.R.	P
CL4	<---	CL	0.534			
CL3	<---	CL	0.479	0.109	8.21	***
CL2	<---	CL	0.753	0.125	10.58	***
CL1	<---	CL	0.813	0.137	10.579	***
SV4	<---	SV	0.675			
SV3	<---	SV	0.602	0.084	10.501	***
SV2	<---	SV	0.693	0.096	11.4	***
SV1	<---	SV	0.653	0.092	11.076	***
OM4	<---	OM	0.6			
OM3	<---	OM	0.53	0.095	9.245	***
OM2	<---	OM	0.734	0.112	11.263	***
OM1	<---	OM	0.762	0.115	11.332	***
IKS4	<---	IKS	0.692			
IKS3	<---	IKS	0.678	0.072	13.139	***
IKS2	<---	IKS	0.725	0.076	13.878	***
IKS1	<---	IKS	0.75	0.076	14.229	***
IKS5	<---	IKS	0.657	0.073	12.804	***

Chi-Square=125.98 df=113 X2/df=1.115 GFI=0.972 AGFI=0.962
RMSEA=0.015



4.8.44. Figure 4.19: Measurement Model for Learning Orientation

The table 4.8.19 above shows the model summary of the confirmatory factor analysis of the factors of learning orientation in this research. The df value is 113, and the value for X2/df is 1.115. The table also shows that the value for Goodness Fit Index (GFI) is 0.972, which lies in the category of best or excellent fit for the study, as interpreted in the previous section. Similarly, the value for the Adjusted Goodness Fit Index (AGFI), as shown in Table 4.8.19, is 0.962, which also lies in the category of best or excellent fit for the study. The value of Root Mean Square Error of Approximation (RMSEA) is 0.015, which is below the value of 0.05 implies the best fit for the study.

4.8.45. Commitment to Learning

The commitment to learning is given with the alias 'CL'; however, its four items are named as CL1, CL2, CL3, and CL4. The parameter estimate for CL1 is 0.813, whereas the parameter estimates for CL2, CL3, and CL4 is 0.753, 0.479, and 0.534, respectively. The standard error, as shown in the table, is 0.137 for CL1, 0.125 for CL2,

and 0.109 for CL3. It is shown that CL1 has higher values for the standard error. The table also shows that CR for CL1 is 10.579, CL2 is 10.58, and CL3 is 8.21. It depicts that CL2 has the highest CR, whereas CL3 has the lowest CR.

4.8.46. Shared Vision

The shared vision is given with the alias 'SV'; however, its four items are named as SV1, SV2, SV3, and SV4. The parameter estimate for SV1 is 0.653, whereas the parameter estimates for SV2, SV3, and SV4 is 0.693, 0.602, and 0.675, respectively. The standard error, as shown in the table, is 0.092 for SV1, 0.096 for SV2, and 0.084 for SV3. It is shown that SV2 has the same values for the standard error. The table also shows that CR for SV1 is 11.076, SV2 is 11.4, and SV3 is 10.501. It depicts that SV2 has the highest CR, whereas SV3 has the lowest CR.

4.8.47. Open-Mindedness

The open-mindedness is given with the alias 'OM'; however, its four items are named as OM1, OM2, OM3, and OM4. The parameter estimate for OM1 is 0.762, whereas the parameter estimates for OM2, OM3, and OM4 is 0.734, 0.53, and 0.6, respectively. The standard error, as shown in the table, is 0.115 for OM1, 0.112 for OM2, and 0.095 for OM3. It is shown that OM1 has higher values for the standard error. The table also shows that CR for OM1 is 11.332, OM2 is 11.263, and OM3 is 9.245. It depicts that OM1 has the highest CR, whereas OM3 has the lowest CR.

4.8.48. Intra-Organizational Knowledge

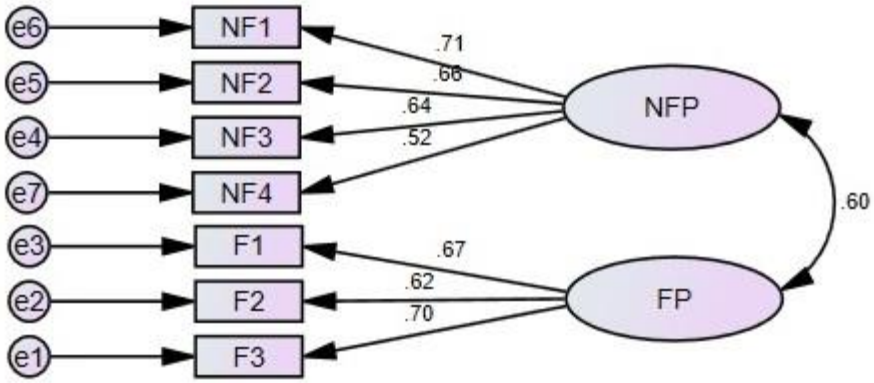
The intra-organizational knowledge is given with the alias 'IKS'; however, its four items are named as IKS4, IKS1, IKS2 and IKS3, and IKS5. The parameter estimate for IKS4 is 0.692, whereas the parameter estimates for IKS1, IKS2, IKS3, and IKS5 is 0.75, 0.725, 0.678, and 0.657, respectively. The standard error, as shown in the table, is 0.073 for IKS5, 0.076 for IKS1 0.076 for IKS2, and IKS3 is 0.072. It is shown that IKS2 and IKS1 have the same values for the standard error, which is greater than the standard error of IKS3. The table also shows that CR for IKS5 is 12.804, IKS1 is 14.229, IKS2 is 13.878, and 13.139 for IKS3. It depicts that IKS1 has the highest CR, whereas IKS5 has the lowest CR.

4.8.49. Confirmatory Factor Analysis of Firm Performance

Table 4.8.20: Model Summary of Confirmatory Factor Analysis of Firm Performance

Items			Parameter Estimate	Standard Error	C.R.	P
F3	<---	F	0.698			
F2	<---	F	0.625	0.087	10.379	***
F1	<---	F	0.672	0.093	10.69	***
NF3	<---	NF	0.645			
NF2	<---	NF	0.66	0.088	10.991	***
NF1	<---	NF	0.709	0.096	11.371	***
NF4	<---	NF	0.521	0.086	9.304	***

Chi-Square=23.791 df=13 X2/df=1.83 GFI=0.987 AGFI=0.971 RMSEA=0.04



4.8.50. Figure 4.20: Measurement Model for Firm Performance

The table 4.8.20 above shows the model summary of the confirmatory factor analysis of the factors of firm performance in this research. The df value is 13, and the value for X2/df is 1.83. The table also shows that the value for Goodness Fit Index (GFI) is 0.987, which lies in the category of best or excellent fit for the study, as interpreted in the previous section. Similarly, the value for the Adjusted Goodness Fit Index (AGFI), as shown in Table 4.8.20, is 0.971, which also lies in the category of best or excellent fit for the study. The value of Root Mean Square Error of Approximation (RMSEA) is 0.04, which is below the value of 0.05 implies the best fit for the study.

4.8.51. Non-Financial Performance

The non-financial performance is given with the alias 'NF'; however, its four items are named as NF4, NF1, NF2, and NF3. The parameter estimate for NF4 is 0.521, whereas the parameter estimates for NF1, NF2, and NF3 is 0.709, 0.66, and 0.645, respectively. The standard error, as shown in table # 3, is 0.086 for NF1, 0.096 for NF2, and 0.088 for NF3. It is shown that NF2 has higher values for the standard error. The table also shows that CR for NF4 is 9.304, NF1 is 11.371, and NF2 is 10.991. It depicts that NF1 has the highest CR, whereas NF4 has the lowest CR.

4.8.52. Financial Performance

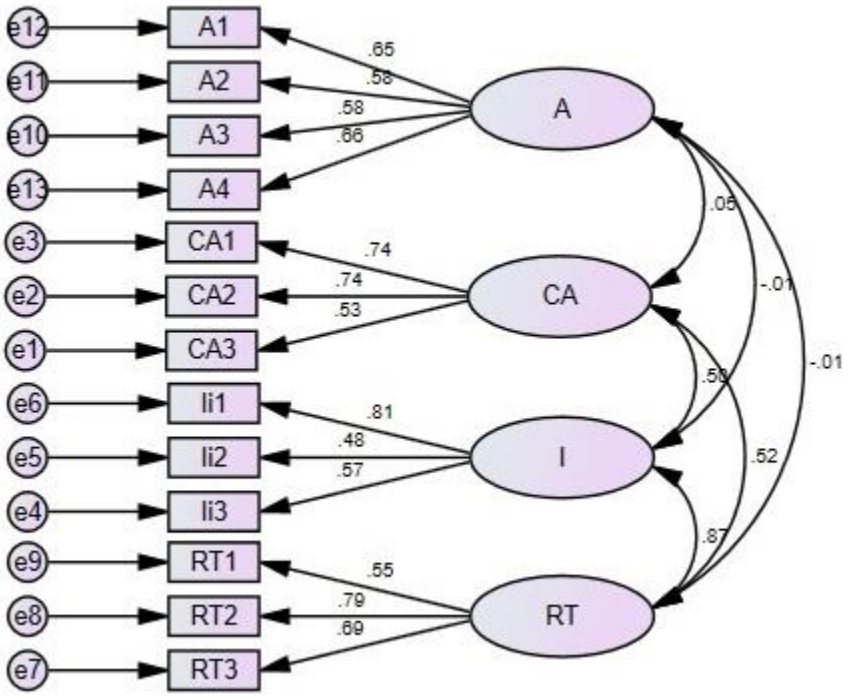
The Financial performance is given with the alias 'F'; however, its four items are named as F1, F2, and F3. The parameter estimate for F1 is 0.672, whereas the parameter estimates for F2 and F3 are 0.625 and 0.698, respectively. The standard error, as shown in the table, is 0.093 for F1 and 0.087 for F2. It is shown that F1 has higher values for the standard error. The table also shows that CR for F1 is 10.69, and F2 is 10.379. It depicts that F1 has the highest CR, whereas F2 has the lowest CR.

4.8.53. Confirmatory Factor Analysis of entrepreneurial orientation

Table 4.8.21: Model Summary of Confirmatory Factor Analysis of entrepreneurial orientation

Items			Parameter Estimate	Standard Error	C.R.	P
CA3	<---	CA	0.532			
CA2	<---	CA	0.742	0.14	9.751	***
CA1	<---	CA	0.737	0.135	9.751	***
Ii3	<---	Ii	0.568			
Ii2	<---	Ii	0.485	0.098	8.602	***
Ii1	<---	Ii	0.805	0.133	11.361	***
RT3	<---	RT	0.688			
RT2	<---	RT	0.79	0.079	14.047	***
RT1	<---	RT	0.552	0.074	10.757	***
A3	<---	A	0.582			
A2	<---	A	0.582	0.102	8.93	***
A1	<---	A	0.651	0.122	9.399	***
A4	<---	A	0.664	0.118	9.457	***

Chi-Square=176.604 df=59 X2/df=2.993 GFI=0.948 AGFI=0.92
RMSEA=0.062



4.8.54. Figure 4.21: Measurement Model for entrepreneurial orientation

The table 4.8.21 above shows the model summary of the confirmatory factor analysis of the factors of entrepreneurial orientation in this research. The df value is 59, and the value for X2/df is 2.993. The table also shows that the value for Goodness Fit Index (GFI) is 0.948, which lies in the category of best or excellent fit for the study, as interpreted in the previous section. Similarly, the value for the Adjusted Goodness Fit Index (AGFI), as shown in Table 4.8.21, is 0.92, which also lies in the category of best or excellent fit for the study. The value of Root Mean Square Error of Approximation (RMSEA) is 0.062, which is below the value of 0.05 implies the best fit for the study.

4.8.55. Autonomy

The autonomy is given with the alias ‘A’; however, its four items are named as A4, A1, A2, and A3. The parameter estimate for A4 is 0.664, whereas the parameter estimates for A1, A2, and A3 is 0.651, 0.582, and 0.582, respectively. The standard error, as shown in table # 3, is 0.118 for A1, 0.122 for A2, and 0.102 for A3. It is shown that A2 has higher values for the standard error. The table also shows that CR for A4 is 9.457, A1 is 9.399, and A2 is 8.93. It depicts that A4 has the highest CR, whereas A1 has the lowest CR.

4.8.56. Competitive Aggressiveness

The Competitive aggressiveness is given with the alias 'CA'; however, its four items are named as CA1, CA2, and CA3. The parameter estimate for CA1 is 0.737, whereas the parameter estimates for CA2 and CA3 is 0.742 and 0.532, respectively. The standard error, as shown in the table, is 0.135 for CA1 and 0.14 for CA2. It is shown that CA2 has the same values for the standard error. The table also shows that CR for CA1 is 9.751, and CA2 is 9.751. It depicts that CA1 & CA2 has the same CR values.

4.8.57. Innovativeness

The Innovativeness is given with the alias 'Ii'; however, its four items are named as Ii1, Ii2, and Ii3. The parameter estimate for Ii1 is 0.805, whereas the parameter estimates for Ii2, and Ii3 is 0.485 and 0.568, respectively. The standard error, as shown in the table, is 0.133 for Ii1 and 0.098 for Ii2. It is shown that Ii1 has higher values for the standard error. The table also shows that CR for Ii1 is 11.361, and Ii2 is 8.602. It depicts that Ii1 has the highest CR, whereas Ii2 has the lowest CR.

4.8.58. Risk-Taking Proactiveness

The Risk-taking Proactiveness is given with the alias 'RT'; however, its four items are named as RT1, RT2, and RT3. The parameter estimate for RT1 is 0.552, whereas the parameter estimates for RT2, and RT3 is 0.79 and 0.688, respectively. The standard error, as shown in the table, is 0.074 for RT1 and 0.079 for RT2. It is shown that RT2 has higher values for the standard error, which is lesser than the standard error of SC2. The table also shows that CR for RT1 is 10.757, and RT2 is 14.047. It depicts that RT2 has the highest CR, whereas RT1 has the lowest CR.

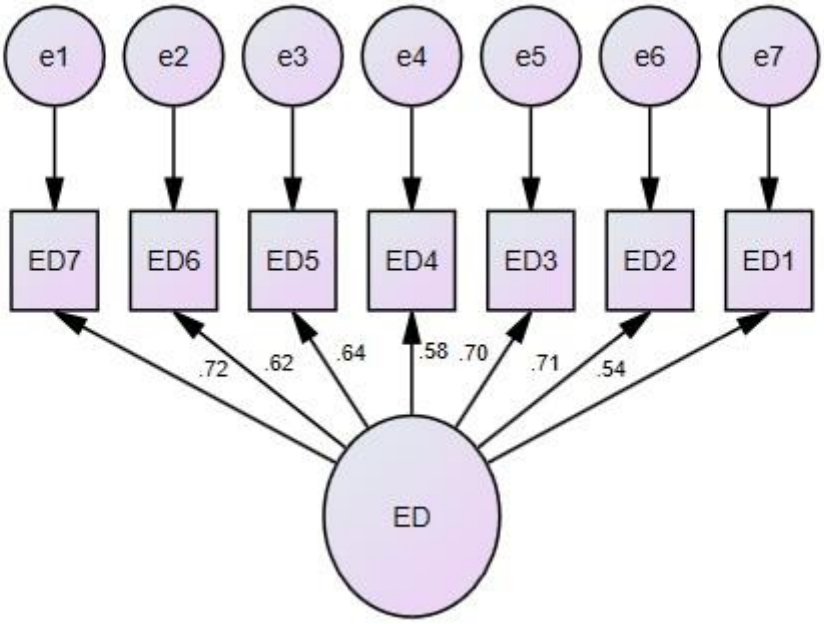
4.8.59. Confirmatory Factor Analysis of Environmental Dynamism

Table 4.8.22: Model Summary of Confirmatory Factor Analysis of Environmental Dynamism

Items			Parameter Estimate	Standard Error	C.R.	P
ED7	<---	ED	0.718			
ED6	<---	ED	0.621	0.067	12.657	***
ED5	<---	ED	0.64	0.07	13.02	***
ED4	<---	ED	0.583	0.067	11.937	***
ED3	<---	ED	0.704	0.069	14.224	***
ED2	<---	ED	0.714	0.073	14.391	***

ED1	<---	ED	0.544	0.07	11.159	***

Chi-Square=28.991 df=14 X2/df=2.071 GFI=0.985 AGFI=0.97
RMSEA=0.046



4.8.60. Figure 4.22: Measurement Model for Environmental Dynamism

The table 4.8.22 above shows the model summary of the confirmatory factor analysis of the factors of environmental dynamism in this research. The df value is 14, and the value for X2/df is 2.071. The table also shows that the value for Goodness Fit Index (GFI) is 0.985, which lies in the category of best or excellent fit for the study, as interpreted in the previous section. Similarly, the value for the Adjusted Goodness Fit Index (AGFI), as shown in Table 4.7, is 0.97, which also lies in the category of best or excellent fit for the study. The value of Root Mean Square Error of Approximation (RMSEA) is 0.046, which is below the value of 0.05 implies the best fit for the study.

4.8.61. Environmental Dynamism

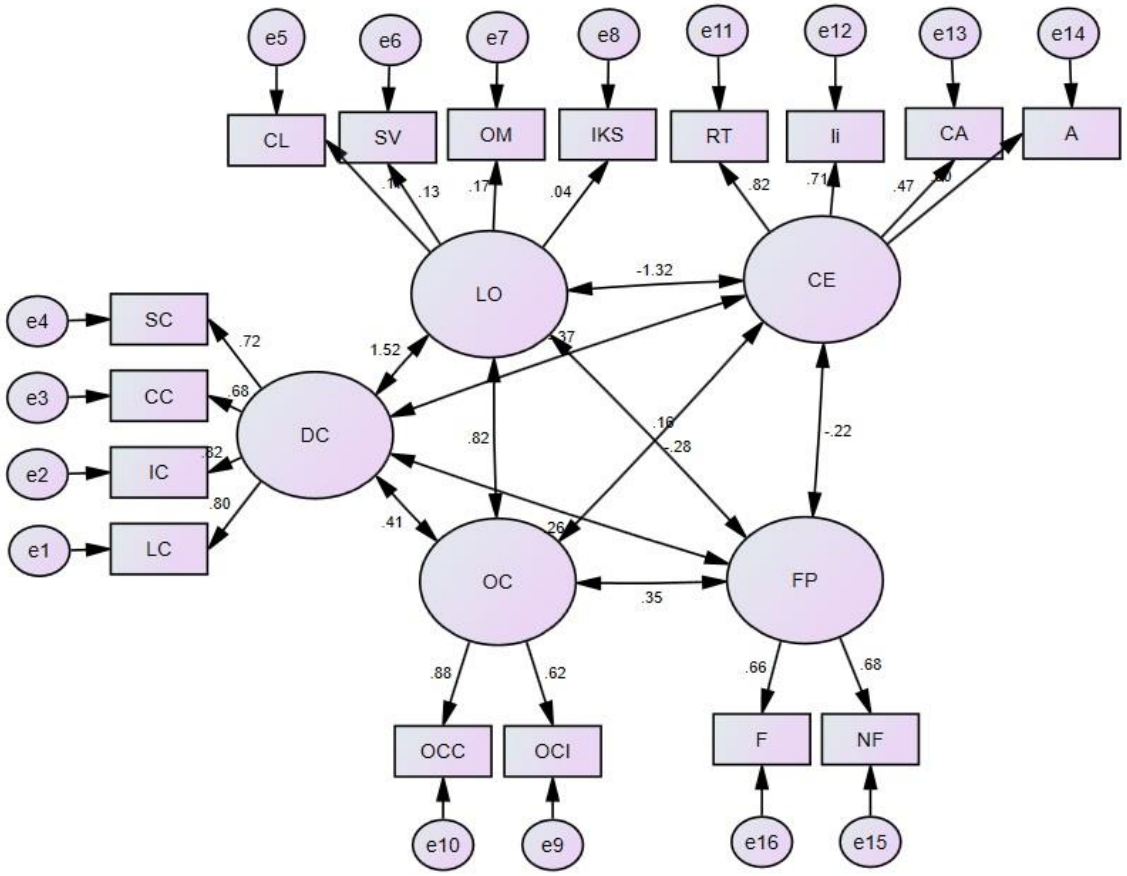
The environmental dynamism is given with the alias 'ED,' however. Its four items are named ED5, ED2, ED3, ED4, ED5, ED6, ED7, and ED1. The parameter estimate for ED5 is 0.64 whereas the parameter estimates for ED2, ED3, ED4, ED5, ED6, ED7, and ED1 are 0.714, 0.704, 0.583, 0.64, 0.621, 0.718, and 0.544 respectively. The standard error as shown in table is 0.07 for ED1, 0.073 for ED2 0.069 for ED3, ED4 is 0.067, ED5 is 0.07, ED6 is 0.067. It is shown that ED2 has higher values for the standard error. The table also shows that CR for ED1 is 11.159, ED2 is 14.391, 11.937

for ED4, 13.02 for ED5, 12.657 for ED6. It depicts that ED2 has the highest CR, whereas ED1 has the lowest CR.

4.8.62. Confirmatory Factor Analysis of Full Model test

Table 4.8.23: Model Summary of Confirmatory Factor Analysis of Full Model test

Chi-Square	df	X^2/df	GFI	AGFI	RMSEA
139.788	94	1.487	0.967	0.953	0.031



4.8.63. Figure 4.23: Measurement Model for Full Model test

The table 4.8.23 above shows the model summary of the confirmatory factor analysis of the factors of the Full Model test in this research. The df value is 94, and the value for X2/df is 1.487. The table also shows that the value for Goodness Fit Index (GFI) is 0.967, which lies in the category of best or excellent fit for the study, as interpreted in the previous section. Similarly, the value for the Adjusted Goodness Fit

Index (AGFI), as shown in Table 4.7, is 0.953, which also lies in the category of best or excellent fit for the study. The value of Root Mean Square Error of Approximation (RMSEA) is 0.031, which is below the value of 0.05 implies the best fit for the study.

4.9. Reliability Analysis

Table 4.9 Reliability Analysis

Sr#	Factor	Items	CA	CR	AVE
1	SC	4	0.710	0.687503	0.361725
2	CC	4	0.745	0.835523	0.560025
3	IC	4	0.785	0.757829	0.438975
4	LC	5	0.787	0.786708	0.42726
5	A	4	0.714	0.818142	0.529425
6	CA	3	0.699	0.669734	0.4066
7	I	3	0.681	0.708219	0.467033
8	RT	3	0.714	0.70155	0.444067
9	ED	7	0.834	0.84739	0.4437
10	I	9	0.857	0.872435	0.432544
11	C	9	0.830	0.843814	0.375611
12	F	3	0.702	0.662592	0.400067
13	NF	4	0.725	0.68843	0.364475
14	CL	4	0.735	0.817155	0.52955
15	SV	4	0.751	0.828865	0.54775
16	OM	4	0.752	0.818157	0.5327
17	IKS	5	0.827	0.875358	0.58444

Thresholds: Reliability: CA & CR >0 .7,CA Cronbach Alpha; CR Composite Reliability, Convergent Validity: CR>AVE; AVE>0.5, AVE Average Variance Explained,

The reliability analysis in qualitative data is the capability of an instrument to provide nearly identical results in repeated measurement under the same conditions. For the reliability test, the result of CA (Cronbach Alpha) and the result of CR (Composite Reliability) must be greater than 0.7. However, to achieve convergent validity, the value of CR and AVE must be greater than 0.5; thus, if the value of CR and AVE (Average Variance Explained) is greater than 0.5, it is validated. Table 4.17 shows that the factor Sensing capability from Dynamic capability has four items, and the value of its Cronbach Alpha is 0.710, which is greater than the threshold value. However, the value of AVE is 0.361725, which is not greater than 0.5, and the value of CR is also less than 0.7 but greater than 0.5, i.e., 0.687503. It can be said that the factor SC has reliability, but convergent validity does not exist.

For the second factor of dynamic Capability, which is Coordinating capability, the table shows that it also has four items, and the value for its Cronbach Alpha is 0.745, which greater than a threshold, thus shows reliability. In addition to that, the values of its Composite Reliability and Average Variance Explained are also greater than the threshold implies that the CC factor holds convergent validity along with the reliability since CR is equal to 0.835523 and AVE is equal to 0.560025.

For the third factor of dynamic capability, which is Integrating Capability, the table reflects that it also has four factors. In terms of reliability, the value for the CA is 0.785, and the value of CR is 0.7577829 implies that these values are greater than a threshold and make the factor IC reliable. However, the value of AVE is 0.438975, which is lower than 0.5; thus, convergent validity does not exist for IC.

For the fourth variable of Dynamic Capability, which is Learning Capability, the table shows five items, and value of its Cronbach Alpha is 0.787, which is greater than 0.7 as well as the value of its Composite Reliability is 0.786708 which is also greater than 0.7 enforces the reliability of LC. However, its AVE value of 0.42726, which is lower than 0.5, implies that convergent validity does not exist for this factor.

The fifth factor is related to entrepreneurial orientation, i.e., autonomy. The table shows that it has four items, and its value of Cronbach Alpha is 0.714. The value of Composite Reliability is 0.818142 implies that CA and CR are greater than the threshold value; thus, this factor autonomy is found to be reliable. On the other hand, the value of its AVE is 0.529425, i.e., greater than the threshold implies that convergent validity also exists. Thus, the factor of autonomy is reliable and validated.

The sixth factor also forms entrepreneurial orientation , namely, competitive aggressiveness. The table shows the results that it has four items, and the value is CA is 0.699, which is less than 0.7, which implies that it is not reliable. Whereas the value for its CR is 0.669734, that is also less than -.7, but since it is greater than 0.5, it can be said that this factor ET_CA is convergent valid although the value of ACE for ET_CA is 0.4066, which is also lower than the threshold value.

The seventh factor also forms the entrepreneurial orientation , namely Innovativeness which has three items; CA equals to 0.681, and CR equals to 0.708219. The reliability of this factor ET_I is not fully achieved since one of its value lies below the threshold. On the other hand, its AVE value is 0.467033 implies that it is also lower than the threshold value of convergent validity. Thus this factor ET_I is neither reliable nor valid.

The eight factors also form the entrepreneurial orientation , namely risk-taking pro-activeness, which also have three variables. The value of its Cronbach Alpha is 0.714, and the value of Composite Reliability is 0.70155. Both of these values are greater than 0.7, i.e., threshold implies that the factor ET_RT is reliable. However, the value of its AVE is less than 0.5, which is 0.444067; thus, convergent validity does not exist for the ET_RT factor.

The ninth factor is of ED and contains 7 items. The Cronbach Alpha value of this factor is 0.834, and the Composite Reliability's value of this factor is 0.84739. Both of these values are lower than 0.7, i.e., threshold implies that the factor ED is not reliable. In addition to that, the AVE value of this factor is 0.4437, which is also lower than the threshold value. Thus, this factor of ED is neither reliable, not valid.

The 10th factor is related to the organizational culture involvement, and its Cronbach Alpha value is 0.857. The Composite Reliability's value of this factor is 0.872435. The CA value and CR value is higher than the threshold value; thus, the factor OCI is reliable. The value of its AVE is 0.432544. Similarly, the 11th factor is also related to the organizational culture named consistency, and its Cronbach Alpha value is 0.830. The Composite Reliability's value of this factor is 0.843814. The CA value and CR value is higher than the threshold value; thus, the factor OCI is reliable. But the value of its AVE is 0.376511, which is very lower than the threshold value.

The 12th factor is financial performance, which is related to firm performance. It has 3 items, and the Cronbach Alpha's value of this factor is 0.702, which is higher than its threshold value, making this factor reliable. However, this AVE value is 0.400067 implies that convergent validity does not exist for the FR_F factor. On the other hand, the 13th factor is of non-financial performance, which is also related to firm performance. It also 4 items, and the Cronbach Alpha's value of this factor is 0.725, which is higher than its threshold value, making this factor reliable. However, this AVE value is 0.364475 implies that convergent validity does not exist for the FR_NF factor also.

The 14th factor is a commitment to learning, which is related to the learning orientation. The table shows that it has four items. The CA's value of this factor is 0.735, and CR's value is 0.817155, which is higher than the threshold value; thus, LOCL is the factor that is reliable. On the other hand, the AVE value of this factor is 0.52955, which is also higher than the threshold value of AVE implies that LOCL also has convergent validity. Similarly, the 15th factor is of a shared vision, which is also related

to the learning orientation. The CA's value of this factor is 0.751, and CR's value is 0.828865, which is higher than the threshold value; thus, LOSV is the factor that is reliable. On the other hand, the AVE value of this factor is 0.54775, which is also higher than the threshold value of AVE implies that LOSV also has convergent validity.

The 16th factor is Open-mindedness, which is also related to the learning orientation. The CA's value of this factor is 0.752, and CR's value is 0.818157, which is higher than the threshold value; thus, LOOM is the factor that is reliable. On the other hand, the AVE value of this factor is 0.5327, which is also higher than the threshold value of AVE implies that LOOM also has convergent validity. The last factor, i.e., the 17th factor, is associated with intra-organizational knowledge sharing, which is also related to the learning orientation. The CA's value of this factor is 0.827, and CR's value is 0.875358, which is higher than the threshold value; Thus, LOIKS is the factor that is reliable. On the other hand, the AVE value of this factor is 0.58444, which is also higher than the threshold value of AVE implies that LOIKS also has convergent validity.

Overall, the values of almost all the indexes of reliability lie within a given range of above thresholds, so our data is considered reliable, whereas convergent validity and discriminant validity also exists.

4.10. Regression Analysis

4.10.1. Mediating Variable Entrepreneurial orientation between Learning Orientation & Firm Performance

Table 4.2.1: Mediating Variable Entrepreneurial orientation between Learning Orientation & Firm Performance

Model No.		Coefficient Estimates						Model Summary		
		DV	IV	Coefficient	SE	T-test	P-value	R^2	F-test	P-value
1		CE	Constant	4.37	0.22	19.5	0.0000	0.03	20.2	0.000
			LO	-0.29	0.06	-4.5	0.0000			
2	**2**	FP	Constant	3.19	0.21	15.1	0.0000	0.04	18.9	0.000
			LO	0.26	0.06	4.4	0.0000			
3	**3**	FP	Constant	4.34	0.27	16.2	0.0000	0.11	32.3	0.000
			LO	0.18	0.06	3.2	0.0017			
			CE	-0.27	0.04	-6.6	0.0000			
Sobel Test		Effect 0.077		SE 0.021		Test 3.7		P 0.000		Portion (X→ Y) Due M 28.9%

The above table 4.18, Shown the results of mediation analysis, which subdivided into three sections. The first model is to check weather IV significantly affects the mediator; the unstandardized coefficient of IV is -0.295 with p-value 0.000, which is considered as statistically significant. The second model is to check weather IV effect DV; the un-standardized beta coefficient is 0.318, with a p-value 0.000, which is also significant. The third model is a multiple regression used to check the effect of IV in the presence of a mediator. The coefficient of IV now becomes 0.239 with p-value 0.000, which is significant, however including mediator in a model, the effect of IV reduced than its original (direct) effect on DV, so this shows that partial meditation exists in the model. Sobel test shows that the indirect effect of IV on DV is 0.078, with a p-value 0.000, which shows that entrepreneurial orientation plays the role of a mediating variable in the model.

4.10.2. Mediating Variable Organizational Culture between Learning Orientation & Firm Performance

Table 4.2.2: Mediating Variable Organizational Culture between Learning Orientation & Firm Performance

Model	Coefficient Estimates						Model Summary		
No.	DV	IV	Coefficient	SE	t-test	P-value	R^2	F-test	P-value
1	OC	Constant	2.5	0.23	10.9	0.0000	0.03	15.8	0.000
		LO	0.26	0.06	3.9	0.0001			
2	FP	Constant	3.19	0.21	15.1	0.0000	0.04	18.9	0.000
		LO	0.26	0.06	4.4	0.0000			
3	FP	Constant	2.33	0.22	10.6	0.0000	0.16	51.2	0.000
		LO	0.17	0.06	3.06	0.0023			
		OC	0.34	0.04	8.97	0.0000			

Sobel Test Effect 0.089 SE 0.024 Test 3.6 P 0.000 Portion (X→ *Y*) Due M 33.5%

Above table 4.19 of mediation 2 shows the results of the mediation 2 analysis, which subdivided into three sections. The first model is to check weather IV significantly affects the mediator; the unstandardized coefficient of IV is 0.26 with p-value 0.001, which is considered as statistically significant. The second model is to check weather IV effect DV; the unstandardized beta coefficient is also 0.26 with p-

value 0.000, which is also significant. The third model is a multiple regression used to check the effect of IV in the presence of a mediator. The coefficient of IV now becomes 0.51 with p-value 0.023, which is significant, however including mediator in the model, the effect of IV reduced than its original (direct) effect on DV, so this shows that partial meditation exists in the model. Sobel test shows that the indirect effect of IV on DV is 0.089 with p-value 0.000, which shows that organizational culture plays the role of a mediating variable in the model.

4.10.3. Mediating Variable Organizational Culture between Dynamic Capability & Firm Performance

Table 4.2.3: Mediating Variable Organizational Culture between Dynamic Capability & Firm Performance

Model No.	Coefficient Estimates						Model Summary		
	DV	IV	Coefficient	SE	t-test	P-value	R^2	F-test	P-value
1	OC	Constant	2.3	0.14	17.1	0.0000	0.11	59.4	0.000
		DC	0.29	0.04	7.7	0.0001			
2	FP	Constant	2.9	0.12	23.5	0.0000	0.14	84.5	0.000
		DC	0.32	0.04	9.2	0.0000			
3	FP	Constant	2.32	0.151	15.3	0.0000	0.22	72.9	0.000
		DC	0.24	0.035	6.79	0.0000			
		OC	0.28	0.038	7.26	0.0000			

Sobel Test Effect 0.083 SE 0.016 Test 5.2 P 0.000 Portion (X→ *Y*) Due M 25.7%

The above table 4.20 of mediation 3 shows the results of the mediation 3 analysis, which subdivided into three sections. The first model is to check weather IV significantly affects the mediator; the unstandardized coefficient of IV is 0.29 with p-value 0.001, which is considered as statistically significant. The second model is to check weather IV effect DV; the unstandardized beta coefficient is 0.32, with a p-value 0.000, which is also significant. The third model is a multiple regression used to check the effect of IV in the presence of a mediator. The coefficient of IV now becomes 0.24 with p-value 0.000, which is significant, however including mediator in a model, the effect of IV reduced than its original (direct) effect on DV, so this shows that partial meditation exists in the model. Sobel test shows that indirect effect of IV on DV is 0.083 with p-value 0.000 which shows that organizational culture plays the role of mediating variable in the model

4.10.4. Mediating Variable Entrepreneurial orientation between Dynamic Capability & Firm Performance

Table 4.2.4: Mediating Variable Entrepreneurial orientation between Dynamic Capability & Firm Performance

Model	Coefficient Estimates						Model Summary		
No.	DV	IV	Coefficient	SE	t-test	P-value	R^2	F-test	P-value
1	CE	Constant	4.24	0.14	60.5	0.0000	0.07	41.5	0.000
		DC	-0.25	0.04	-6.4	0.0000			
2	FP	Constant	2.97	0.12	23.5	0.0000	0.14	84.5	0.000
		DC	0.32	0.04	9.2	0.0000			
3	FP	Constant	3.86	0.206	18.6	0.0000	0.43	58.9	0.000
		DC	0.27	0.036	7.61	0.0000			
		CE	-0.21	0.039	-5.35	0.0000			

Sobel Test Effect 0.053 SE 0.013 Test 4.1 P 0.000 Portion (X→ *Y*) Due M 16.1%

The above table of mediation 4 shows the results of the mediation 4 analysis, which subdivided into three sections. The first model is to check weather IV significantly affect mediator; the unstandardized coefficient of IV is -0.25 with p-value 0.000, which is considered as statistically significant. The second model is to check weather IV effect DV; the unstandardized beta coefficient is 0.32, with a p-value 0.000, which is also significant. The third model is a multiple regression used to check the effect of IV in the presence of a mediator. The coefficient of IV now becomes -0.21 with p-value 0.000, which is significant, however including mediator in a model, the effect of IV reduced than its original (direct) effect on DV, so this shows that partial meditation exists in the model. Sobel test shows that indirect effect of IV on DV is 0.053 with p-value 0.000 which shows that entrepreneurial orientation play role of mediating variable in the model

4.10.5. Mediating Variable learning orientation between Dynamic Capability & Firm Performance

Table 4.2.5: Mediating Variable learning orientation between Dynamic Capability & Firm Performance

Model	Coefficient Estimates						Model Summary		
No.	DV	IV	Coefficient	SE	t-test	P-value	R^2	F-test	P-value
1	LO	Constant	2.83	0.09	30.2	0.0000	0.08	49.3	0.000

		DC	0.18	0.03	7.03	0.0000			
2	FP	Constant	2.97	0.12	23.5	0.0000	0.14	84.5	0.000
		DC	0.32	0.04	9.2	0.0000			
3	FP	Constant	2.64	0.210	12.6	0.0000	0.15	44.4	0.000
		DC	0.301	0.037	8.21	0.0000			
		LO	0.119	0.059	1.99	0.047			

Sobel Test Effect 0.021 SE 0.011 Test 1.8 P 0.058 Portion (X→ *Y*) Due M 6.8%

The above table of mediation 5 shows the results of the mediation 5 analysis, which subdivided into three sections. The first model is to check weather IV significantly affect mediator; the unstandardized coefficient of IV is 0.18 with p-value 0.0000, which is considered as statistically significant. The second model is to check weather IV effect DV; the unstandardized beta coefficient is 0.32, with a p-value 0.0000, which is also significant. The third model is a multiple regression used to check the effect of IV in the presence of the mediator. The coefficient of IV now becomes 0.037 with p-value 0.0000, which is significant, however including mediator in a model, the effect of IV reduced than its original (direct) effect on DV, so this shows that partial meditation exists in the model. Sobel test shows that indirect effect of IV on DV is 0.021 with p-value 0.000 which shows that learning orientation does not play the role of mediating variable in the model

4.10.6. Mediating Variable Learning Orientation & Organizational Culture between Dynamic Capability & Firm Performance

Table 4.2.6: Mediating Variable Learning Orientation & Organizational Culture between Dynamic Capability & Firm Performance

Model No.	Coefficient Estimates						Model Summary		
	DV	IV	Coefficient	SE	t-test	P-value	R^2	F-test	P-value
1	FP	Const.	2.97	0.13	23.52	0	0.14	84.52	0
		DC	0.32	0.04	9.19	0			
2	LO	Const.	2.8254	0.0935	30.2251	0	0.0875	49.2907	0
		DC	0.1822	0.0259	7.0207	0			
3	OC	Const.	1.99	0.23	8.71	0	0.11	31.79	0

		DC	0.27	0.04	6.81	0			
		LO	0.13	0.06	1.95	0.05			
4	FP	Const.	2.09	0.22	9.72	0	0.22	49.43	0
		DC	0.23	0.04	6.19	0			
		LO	0.08	0.06	1.46	0.14			
		OC	0.28	0.04	7.12	0			

The above table of mediation shows the results of mediation analysis, which subdivided into three sections. The first model is to check weather IV significantly affect mediator; the unstandardized coefficient of IV is 0.32 with p-value 0.000, which is considered as statistically significant. The second model is to check weather IV effect DV; the unstandardized beta coefficient is 0.27, with a p-value 0.000, which is also significant. The third model is a multiple regression used to check the effect of IV in the presence of a mediator. The coefficient of IV now becomes 0.23 with p-value 0.000, which is significant, however including mediator in a model, the effect of IV reduced than its original (direct) effect on DV, so this shows that partial meditation exists in the model.

Indirect effect(s) of X on Y:				
Sr	Effect	BootSE	BootLLCI	BootULCI
	0.097	0.021	0.06	0.139
	0.015	0.01	-0.005	0.036
	0.075	0.019	0.041	0.115
	0.006	0.0038	-0.0002	0.0145

Indirect effect key:						
Ind1	DC	->	LO	->	FP	
Ind2	DC	->	OC	->	FP	
Ind3	DC	->	LO	->	OC	-> FP

4.10.7. Mediating Variable Learning Orientation & Entrepreneurial orientation between Dynamic Capability & Firm Performance

Table 4.2.7: Mediating Variable Learning Orientation & Entrepreneurial orientation between Dynamic Capability & Firm Performance

Model No.	Coefficient Estimates						Model Summary		
	DV	IV	Coefficient	SE	t-test	P-value	R^2	F-test	P-value
1	FP	Const.	2.97	0.13	23.52	0	0.14	84.52	0
		DC	0.32	0.04	9.19	0			
2	LO	Const.	2.8254	0.094	30.225	0	0.088	49.291	0
		DC	0.1822	0.026	7.0207	0			
3	OC	Const.	1.99	0.23	8.71	0	0.11	31.79	0
		DC	0.27	0.04	6.81	0			
		LO	0.13	0.06	1.95	0.05			
4	FP	Const.	2.09	0.22	9.72	0	0.22	49.43	0
		DC	0.23	0.04	6.19	0			
		LO	0.08	0.06	1.46	0.14			
		OC	0.28	0.04	7.12	0			

The above table of mediation shows the results of mediation analysis, which subdivided into three sections. The first model is to check weather IV significantly affect mediator; the unstandardized coefficient of IV is 0.32 with p-value 0.000, which is considered as statistically significant. The second model is to check weather IV effect DV; the unstandardized beta coefficient is 0.27, with a p-value 0.000, which is also significant. The third model is a multiple regression used to check the effect of IV in the presence of a mediator. The coefficient of IV now becomes 0.23 with p-value 0.000, which is significant, however including mediator in a model, the effect of IV reduced than its original (direct) effect on DV, so this shows that partial meditation exists in the model.

Indirect effect(s) of X on Y:				
Sr	Effect	BootSE	BootLLCI	BootULCI
Total	0.097	0.021	0.06	0.139
Ind1	0.015	0.01	-0.005	0.036
Ind2	0.075	0.019	0.041	0.115
Ind3	0.006	0.0038	-2E-04	0.0145

Indirect effect key:				
Ind1	DC	->	LO	-> FP

Ind2	DC	->	OC	->	FP		
Ind3	DC	->	LO	->	OC	->	FP

4.10.8. Moderating Variable Environment Dynamism Dynamic Capability & Firm Performance

Table 4.2.8: Moderating Variable Environment Dynamism Dynamic Capability & Firm Performance

Model No.	Coefficient Estimates								Model Summary		
	DV	IV	Coefficient	SE	t-test	P-value	LLCI	ULCI	R^2	F-test	P-value
1	FP	constant	6.09	0.56	10.95	0	5	7.18	0.2775	65.5656	0
		DC	-0.2	0.14	-1.43	0.15	-0.48	0.08			
		ED	-0.83	0.16	-5.3	0	-1.14	-0.52			
		Int_1	0.13	0.04	3.21	0	0.05	0.21			

This model is a multiple regression used to check the effect of IV in the presence of a mediator. The coefficient of IV now becomes -0.20 with p-value 0.015, which is significant, however including mediator in a model, the effect of IV reduced than its original (direct) effect on DV, so this shows that partial meditation exists in the model.

4.11. Summary of Accepted/Rejected Hypotheses

Sr.	Hypothesis	Status
H1.	Dynamic capabilities are significantly related to Learning Orientation.	Accepted
H2.	Dynamic capabilities are significantly related to organizational culture.	Accepted
H3.	Dynamic capabilities are significantly related to entrepreneurial orientation .	Accepted
H4.	Dynamic capabilities are significantly related to Firm Performance.	Accepted
H5.	Learning Orientation mediates the significant relationship between dynamic capabilities and firm performance.	Accepted
H6.	Entrepreneurial orientation mediates the significant relationship between dynamic capabilities and firm performance.	Accepted
H7.	Organizational culture mediates the significant relationship between dynamic capabilities and firm performance.	Rejected

H8.	Learning Orientation and entrepreneurial orientation sequentially mediates the significant relationship between dynamic capabilities and firm performance.	Accepted
H9.	Learning Orientation and organizational culture sequentially mediates the significant relationship between Dynamic capabilities and firm performance.	Rejected
H10	Environment dynamism moderate the relationship between dynamic capabilities and firm performance.	Accepted

4.12. Conclusion

In the following section, eleven different hypotheses have been identified, which are proved on the basis of interpreted results. The analysis of the results indicates that SMEs in Pakistan performs on the basis of critical parameters which are subjected to the involvement of employees, entrepreneurs, marketing and management strategies, as well as crucial environmental changes. The above analysis provides clear knowledge regarding the performance of small and medium-sized organizations and how different factors participate in affecting its growth. Moreover, their relationship with dynamic capabilities is also analyzed, which reveals that each of the factors is subjected to changes and dynamism in the environment that allow organizations to adopt measures in order to improve its state. A number of different theories and literature are also reflected in order to understand the meaning and significance of each aspect in light of the proposed study.

CHAPTER 05
DISCUSSION, CONCLUSION AND RECOMMENDATIONS

In this chapter, the entire research study has been concluded from the objective and research question of the study to the results and analysis of the study. The chapter has also provided managerial implications and recommendations for SMEs in Pakistan to facilitate them in growing dynamic capabilities. Furthermore, this chapter has also provided a piece of brief information about the contribution of this study to the present study and its limitations.

5.1. Discussion of Hypotheses

Using the literature of the study, a number of factors have been identified, which demonstrates their relationship with one another. These hypotheses are developed to understand that SMEs in Pakistan have distinct features and specialization to provide effective services to their consumers while their performance solely depends on the capabilities it exhibits. Few capabilities of SMEs in Pakistan are identified as innovation, technological changes, leadership methods, and marketing approaches to achieve a competitive advantage in the business industry. It is also identified from the discussed theories and literature that firms not only stresses on managing desired resources, but there is a greater deal of strategies that mainly targets the elimination of inadequate use of resources. Thus, the dynamic capabilities of SMEs in Pakistan comprises of many aspects that are formally accounted for in order to achieve success.

The following are the list of hypotheses that are analyzed on the basis of interpreted results, as well as literature to address research questions of the study.

5.1.1. Hypothesis 1

Learning orientation is one of the important characteristics at the organizational level, which adds learning value and culture to the workforce (Najafi-Tavani, Sharifi, & Najafi-Tavani, 2016). It is identified from the literature that by focusing on effective learning processes, organizational behaviour is influenced, whereas the capability of organizations to adopting, integrating, and creating resources increases. He et al. (2018) also analyzes the relationship between learning orientation and dynamic capabilities of organizational performance in terms of knowledge innovation, commitment to learning, shared vision, and open-mindedness. The interpretation of the results shows that the reliability test completely satisfies the relationship between learning orientation and

commitment to learning (Janssen, Castaldi, & Alexiev, 2016). From the results, it is analyzed that an organization's dynamic capability is the result of stressing on effective learning, which engages the organization to achieve a competitive advantage.

Significantly, it is also analyzed from the research that organizations that have the power to build team trusts and encourage employees to share their knowledge and creative ideas tend to improve their performance on the whole (Fraj, Matute, & Melero, 2015). The study developed by Wolff, Pett, & Ring (2015) also emphasized the importance of shared vision in the organizational culture, which is mostly developed by engaging leaders and managers in the circumstances that allow team members to provide their response. From the results of the reliability test, it is also analyzed that the majority of the participants have clearly indicated their positive response, i.e., an average value of CA is calculated as 0.75 while CR is 0.83. The results show that when organizational culture is developed collaborative and interactive processes, employees are facilitated to provide their participation due to which the gap between employees and organizational objectives are diminished. Hence, with the approach to increased shared vision influences in the organization, SMEs in Pakistan are reportedly performing better.

Open-mindedness and inter-organizational knowledge sharing are other two components of learning orientation, which are developed to increase the dynamic capability of the organization that, in turn, results in the positive performance (Najafi-Tavani, Sharifi, & Najafi-Tavani, 2016). The results of the study indicate that both of the variables are interchangeable in the organizational culture, which improves quality relationships and motivation to perform according to the vision and mission of the organization. From the perceptions of the participants, it is revealed that the values of open-mindedness and inter-organizational knowledge sharing are greater than 0.7, which ensures that these variables are one of the reliable elements to investigate the relationship between dynamic capabilities and learning orientation. According to Wu, Tsai, & Yeh (2014), organizations which tend to appreciate a high level of participation of employees and to become an open-minded resource to accept new ways of learning, are considered to perform beyond their goals and objectives (Janssen, Castaldi, & Alexiev, 2016). Based on the SMEs of Pakistan and feedback of the respondents, it is analyzed that firms are performing significantly because they engage their employees in effective learning where they are capable of learning and providing information beyond their level of expertise. Similarly, collective learning and sharing of knowledge

in groups and teams often let the organizations to achieve a competitive advantage, and thus, it is indicated in the results as well that sharing knowledge within workforce culture place great importance for high performance (Fraj, Matute, & Melero, 2015).

Thus, reliability test and regression analysis confirm that dynamic capabilities have a mediating relationship with learning orientation due to which organizations tend to perform exceptionally, which influences their outputs and increased reputation in the industry. Analysis of the results reveals that the following hypothesis is accepted while its variables are reliable and authentic for the research domain.

5.1.2. Hypothesis 2

Organizational culture is another important factor that reflects significant strategies of the organization that are undertaken to improve its performance. A number of researchers have pinpointed some of the critical aspects on the basis of which organizational culture is developed. These studies have clearly indicated that the dynamic capability of an organization is only perceived when there is a significant culture is developed. In the following study, two important variables are discussed which structures organizational culture, i.e., involvement and consistency. It is analyzed that these two variables determine the foundations of organizational culture and its effect on the performance that enables the organization to achieve its successful goals. According to Violinda & Jian (2017), the authors mention that in with dynamic capabilities and organizational culture, an organization becomes capable of achieving competitive advantage while its evolutionary fitness is highly improved. However, the researchers have also indicated that both of the components have an indirect relationship, which affects the performance of the organization at large.

In the study, two elements of organizational culture are discussed, which ensures that if organization SMEs increases engagement of employees in the organization, it is possible that it could achieve a significant position in the industry while its growth and performance would be improved. To understand the factor, different questions were asked by the participants regarding organizational culture and its effect on organizational performance. It is analyzed from the results that involvement satisfied reliability test, which ensures that participants support effective organizational culture in order to perform significantly in the organization (Fraj, Matute, & Melero, 2015). Furthermore, it is also analyzed that the dynamic capability of an organization is interlinked with the involvement of employees towards designated activities and circumstances. It is supported by the literature developed by Felipe, Roldán, & Leal-

Rodríguez (2017) that the involvement of employees often increases the capability to engage in areas that increase the potential of the company to survive in the competition. When asked from the participants regarding team building and improved work engagement, they provided acceptable responses due to which the variable is satisfying the concept of the proposed study.

Another variable, i.e., consistency, is tested to prove the relationship between dynamic capabilities and organizational culture of the SMEs in Pakistan. From the questions, it is analyzed that the participants were provided with a set of questions in which the values and norms of the organization were discussed. According to Odhiambo, Kibera, & Musyoka (2015), consistency of the organizational culture is often referred to as following standards and practices for a longer time in order to retain its position and reputation while performance is influenced. The results of the study show that consistency is an important factor that establishes an organizational culture, which increases the level of dynamic capabilities of the organization. From the results, it is determined that $p = 0.000$, while the beta coefficient is 0.25, which is statistically significant. Using the results and information gathered from the literature, the proposed hypothesis is accepted.

5.1.3. Hypothesis 3

Entrepreneurial orientation is perceived in terms of environmental changes that affect entrepreneurial strategies at large. From the literature, it is analyzed that the dynamic capability of the organization is achieved when entrepreneurial strategies are effectively implemented to utilize significant resources in a diverse environment. It is also analyzed from the proposed literature that entrepreneurial outcomes are greatly affected when employees and teams pursue business opportunities without involving their supervisors. In this way, the environment is not only influenced by a negative, but the entrepreneurial strategy is also greatly affected. According to Zahra, Sapienza, & Davidsson (2006), the dynamic capabilities of the organization are witnessed when management stresses on selecting appropriate entrepreneur to handle organizational decisions effectively. The study has also indicated that entrepreneurial activities comprise different stages which form an organizational environment, and thus, it establishes an effective relationship with dynamic capabilities.

The results of the reliability test indicate that factors involved in entrepreneurial orientation are reliable; however, their validity is satisfied with respect to assessing the values of convergence and discriminant. In terms of autonomy, it is revealed from the

results that the value of CA is 0.7, whereas the value of CR is 0.82. This shows that autonomy is one of the factors that increase the domain of entrepreneurial orientation, while it has a greater influence on increasing a firm's performance. The study developed by Telussa, Stam, & Gibcus (2006) stresses the importance of autonomy, which increases the level of affirmation regarding the use of resources and parameters that are involved in setting up a business. Moreover, it also highlights that team building is one of the ways that could support the organization in its developmental phases.

Another important factor in the light of entrepreneurial orientation is competitive aggressiveness, which is associated with excessive competition in the market. Based on the reliability test, the values for competitive aggressiveness are slightly low, i.e., 0.7 and 0.67 of CA and CR, respectively, which indicates that companies are more towards entering the market with reputation rather than focusing on effective strategies that would enable them to improve their position. It is analyzed that most of the SMEs in Pakistan have to undergo different actions and strategies that would gain them success while their position is retained in the competitive industry. The responses with respect to the questions determine that firms overcome competitive activities by adopting strategies that help them in improving their performance. Hence, it is analyzed that there is an effective relationship between entrepreneurial orientation and the dynamic capabilities of the firm, which increases its performance.

Innovativeness and risk-taking practices are other two important elements that are related to entrepreneurial orientation , and thus, relationships with dynamic capabilities are identified on the basis of these elements. It is analyzed from the results that by focusing on innovativeness, firms become digitally and technically strong due to which their performance is also enhanced (Giniuniene & Jurksiene, 2015). With respect to dynamic capabilities, innovation acts as a significant role because it increases an organization's efficiency when it comes to performing different tasks and activities. However, it is one of the significant aspects that is considered as a dynamic capability of the organization and, thus, plays an influential role in improving the performance of the organization. However, risk-taking practices is another variable which is associated with entrepreneurial orientation . Based on the study developed by Pundziene & Teece (2016), it is analyzed that most of the SMEs in Pakistan engage their activities towards building a competitive reputation in the industry so that a number of consumers could be entertained while profitable outcomes are achieved. This approach is vitally

associated with increased performance, whereas it is the dynamic capability of the organization, which allows it to face challenges in order to achieve a significant position.

From reviewing the above analysis and results of the study, it is identified that entrepreneurial orientation is the skills that develop the dynamic capabilities of the organization, and thus, its performance is elevated to the greatest extent. Using the reliability test and its results, it is determined that dynamic capabilities are significantly linked with entrepreneurial orientation, while statistical analysis accepts the following hypothesis of the study.

5.1.4. Hypothesis 4

Dynamic capabilities are significantly related to Firm Performance.

Dynamic capabilities visualized as a single component that is associated with the high efficiency and potentials of the organization (Fraj, Matute, & Melero, 2015). The results of the following study place great emphasis on the relationship between dynamic capabilities and firm performance, which indicates that a company is subjected to achieve its goals and primary objectives only when it is potentially active to perform in the dynamic situations. In Pakistan, most of the SMEs are critical to surviving in the environment due to a lack of available resources and knowledge regarding specific strategies that cause them to improve. According to Rehman & Saeed (2015), dynamic capabilities are fundamental for an organization's growth while it provides a basis for the organization in order to develop a sustainable competitive advantage.

It can be assessed from the literature as well that organizations in changing the external environment are likely to improve when suitable dynamic capabilities are involved. This allows companies to perform diligently while it creates functional competencies to the greatest extent. In addition, the reliability test also provides informative results which prove that the set variables regarding developed hypothesis are valid, as well as reliable. The positive relationship determined by the results clearly states that dynamic capabilities have an indirect relation with the performance of the company, which is determined by addressing key approaches used by the companies to achieve competitive advantage. Thus, the developed hypothesis regarding a firm's performance and dynamic capabilities are accepted.

5.1.5. Hypothesis 5

Learning Orientation mediates the relationship between dynamic capabilities and organizational culture.

With reference to hypothesis 2, it is analyzed that learning orientation has a mediating relationship with dynamic capabilities and organizational culture (Najafi-Tavani, Sharifi, & Najafi-Tavani, 2016). It is analyzed on the basis of mediation regression analysis that there is a positive relationship between two variables, which proves that SMEs in Pakistan tend to perform productively when its dynamic capabilities, organizational culture, and learning orientation are satisfied. Based on the article proposed by He, Huang, Zhao, & Wu (2018), it s determined that when a productive culture is developed within the organization, managers and leaders focus on achieving organizational objectives in order to satisfy competitive advantage. In this process, teams are managed by addressing some of the basic elements of learning orientation so that successful outcomes could be achieved in an appropriate manner.

Similarly, the research conducted also determines when an engaged organizational culture is developed organizations are mostly sensing the positive pathways leading to competitive advantage due to which their performance is enhanced (Janssen, Castaldi, & Alexiev, 2016). Moreover, in this way, teams play their significant role in providing support to decision making and problem-solving approaches so that organizations could cater innovative and creative experiences in order to build their position and significant reputation in the market. From the study conducted, it is analyzed that learning orientation in Pakistan's SMEs is not high, but it places great emphasis on improving the state of the business. It is also ensured that by focusing on the learning orientation, organizational culture is improved, whereas it becomes more strategic towards external environments. Thus, it is proved that the following hypothesis is accepted.

5.1.6. Hypothesis 6

Entrepreneurial orientation is not only based on taking decisive actions against new trends and policies, but it also relates effective strategies to improve efficiency, skills, experiences, and innovative trends. According to the study, entrepreneurial orientation is often satisfied when companies utilize their scope and talents to overcome the challenges faced due to increased market demands. With this fact, it is also analyzed that dynamic capabilities allow firms to introduce more specific measures that would allow them to achieve competitive advantage (Fraj, Matute, & Melero, 2015). However, this could only result when entrepreneurs develop learning arenas for their employees so that they could initiate problem-solving tactics, as well as strategies that would let the companies act accordingly.

The mediating regression analysis provides more statistical evidence of the assumptions in order to account for significant relations between the three variables (Najafi-Tavani, Sharifi, & Najafi-Tavani, 2016). It is estimated that the coefficient value of entrepreneurial orientation and learning orientation is -0.29 while the p-value is 0.000. This ensures that variables are statistically significant while their balanced relationship in terms of increased organizational performance is also satisfied. Moreover, the table also reveals the significance of learning orientation and dynamic capabilities as well. It is analyzed that the coefficient value is 0.18, while the p-value is 0.000, which proves that the relationship is statistically significant. Hence, it is confirmed that the goals of learning orientation are achieved when organizations support dynamic capabilities and entrepreneurial orientation . Also, the following hypothesis is accepted, which clearly states that organizational performance is dependent on the strategic alliances with a learning orientation and the other two variables.

5.1.7. Hypothesis 7

On the basis of hypothesis 4, it is acknowledged that dynamic capabilities are considered vital with respect to progressing a firm's performance. In the case of Pakistan's SMEs, most of the organizations frame their strategic goals by addressing opportunities related to competitive advantage. Also, they analyze the trends of globalization and the changing environment on the basis of which dynamic approaches are catered (Najafi-Tavani, Sharifi, & Najafi-Tavani, 2016). In this situation, employees are considered as key roles that support the improvement of the current state of the organization so that the company can achieve important goals. In this way, it is confirmed that a firm's performance is satisfied when the dynamic capabilities of the organization are encountered (Janssen, Castaldi, & Alexiev, 2016).

Similarly, a positive relationship between learning orientation and these variables is also analyzed through mediation regression analysis, as well as illustrated literature. The authors also reveal that when employees are engaged in different operational activities, they tend to perform in a different way where their dynamic skills and expertise are recognized. In this way, employees provide their support to enhance the productivity of the organization while it also develops pathways for the organizations to achieve opportunities (Fraj, Matute, & Melero, 2015). Moreover, the responses have also indicated that SMEs in Pakistan is also providing useful resources to its employees, which are helping them to improve their operational performance in

order to sustain its position in the competitive environment. On the basis of mediation regression analysis, it is analyzed that the coefficient value of the subjected relation is 0.28, while p is 0.000. This proves that the developed hypothesis is accepted, which is statistically significant.

5.1.8. Hypothesis 8

In the above analysis, it is determined that a firm's performance is related to learning orientation and effective dynamic capabilities, which is mainly accounted with respect to the measures taken to stabilize its position in the changing environment (Najafi-Tavani, Sharifi, & Najafi-Tavani, 2016). In the proposed hypothesis, the role of learning orientation and entrepreneurial orientation is addressed, which serves as important elements towards improving a firm's position, reputation, and performance. According to the following research, leadership is one of the ways which regulates internal and external functions of the organization that helps it to grow beyond the boundaries. The entrepreneurial orientation is mainly associated with innovativeness, which comes when entrepreneurs encourage their employees to perform according to developed knowledge and skills. All of these components create a fine between an organization's effective growth and increased performance.

In addition, learning orientation is also a part of entrepreneurial orientation , which is promoted in a strategic way in order to develop a significant reputation in the growing market (Janssen, Castaldi, & Alexiev, 2016). The relationship between these variables is also highlighted by these authors, which clearly states that if organizations tend to improve their performance, they must undergo significant learning and development approaches while entrepreneurs must look for opportunities that are appropriate for the organization and the employees to accept. Based on mediating regression analysis, it is confirmed that the relationship illustrated in the hypothesis is positive, while the hypothesis itself is accepted because of its significant values.

5.1.9. Hypothesis 9

In terms of organizational culture, the performance of the organization is improved when the internal environment is enhanced. As discussed above, organizational culture is developed by effective employee engagement, and that too comes from participating in different activities that increase an organization's reputation, as well as its position in the competitive environment. In the study conducted by Breznik & Lahovnik (2016), a strategic relationship between learning orientation, organizational culture, and dynamic capabilities, firm performance is

idealized. It is elaborated that organizations flourish in the competition when significant organizational culture is developed in which each and every individual is engaged in providing its approach while also learn new skills to influence related areas. However, dynamic capabilities are also established with increased awareness and emphasis on improving the culture. Thus, it can be acknowledged that all of these variables are interlinked.

Using statistical analysis, it is analyzed that learning orientation and organizational culture have mediating relation with the other two variables. It is estimated from the received responses that people are also aware of the level of understanding, employee relationships, learning and development programs, team building, participating in decision-making activities, and innovative circumstances are all associated with increased organizational performance while all of these components are part of learning orientation and developing engaged and effective organizational culture (Najafi-Tavani, Sharifi, & Najafi-Tavani, 2016). These authors also satisfy the mediating relation by describing the importance of each aspect in terms of the positive growth and success of the organization. The developed study provides relevant details regarding effective internal relationships that play a significant role in team productivity while also encourages team members to initiate proper innovative measures that correlate to developing effective organizational culture. Hence, the developed hypothesis is accepted, while significant values of the mediating relationship also indicate acceptance of key variables and their underlying relations.

5.1.10. Hypothesis 10

Not all variables have a strong relationship with each other due to their nature and influence on an organization's productivity. With respect to environment dynamism, it is illustrated in the literature that the variable is associated with changes in the environment that are mainly encountered in terms of different players. For SMEs in Pakistan, environment dynamism is often associated with a change in consumer behaviour, political influences, economic elevations, and even technological effects. All of these changes have a significant impact on an organization's performance due to which internal policies and standards have to be changed in order to achieve strategic goals. In light of dynamic capabilities, certain measures are reflected to account for significant changes that are mainly analyzed on the basis of environmental changes. Thus, the relationship among these variables is often discussed in most of the areas,

which indicates that firms are responsive to changed behaviour in order to attain maximum performance results.

By analyzing statistical results, it is analyzed that environment dynamism is responsible for influencing SMEs' performance in Pakistan. These results are supported by the literature in which past studies have been discussed in the light of moderate relationship. According to Breznik & Lahovnik (2016), a number of advantages lie under dynamic capabilities that are encountered during environmental transitions. It is also explored that firms tend to perform adequately when they excessively analyze their routines and previously implemented actions on the current situations that lead it to successful opportunities. However, the impact of such dynamic capabilities has been analyzed in terms of changing aspects and approaches that are undertaken with respect to the extent of environmental changes. The interpretation of the results has also given the correct measure to understand how each of the variables is interlinked, while their relationship with each other is moderate. Hence, it is affirmed that the relationship is positive, while the developed hypothesis is accepted.

5.2. Summary of Research Results

There is a very important place or position held by all the SMEs in the world at all the economies; however, the importance of SMEs is much higher in developing countries such as Pakistan. Considering with respect to the large category, SMEs are vulnerable to many of different challenges in terms of distribution, income, or employment. It is found in many of the studies that SMEs are the growth engine, which is essential for the countries' development. It can be said that SMEs help in building efficient and competitive markets of business and reduce the rate the poverty in the countries. There are many of the research papers which have stated that Small and Medium-Sized Enterprises contributes towards the growth of employment at very higher rates in comparison to the large-sized organization. The rough estimate shows that more than 99% of the enterprises in the European economy are SMEs, in which 90% to 93% of SMEs are micro-enterprises. The small-sized companies are one of the major sources of the building and recruiting qualified and competent employees and play a significant role in the creation of a competitive business base.

It is noticed that one factor which mainly affects the performance of SMEs in the business world is uncertainty. It is also noticed in different studies that uncertainty is not the same as risks; thus, it can be managed by using several approaches and tools. The risk is defined as the outcomes that are known or predictable in which the

likelihood of reoccurrences is well-regulated. On the other hand, uncertainty is associated with all unknown aspects that can neither be defined nor projected. Therefore, addressing the uncertainties is one of the major challenges for SMEs, especially in such economies where a rapid and swift change in technology and approaches are observed. In order to manage the dilemma of uncertainties, many scholars have suggested firms to have robust dynamic capabilities which help them in becoming the agile organization and keeping all their options open every time. The dynamic capability also allows SMEs to remain in a continuous state of essential transformations. However, it has also noticed sometimes that change is pricy for the organization, and organizations may have to sacrifice its efficiency for the achievement of agility. Thus, SMEs are required to analyze the need for agility and the extent of agility for being agile and efficient at the same time. In today's world, management for risks entails easy steps in comparison to the management of uncertainties.

The economy of this current time is regarded as the innovation economy, which is characterized by uncertainties that are immeasurable and require innovative management. Many of the researchers have even looked closely at the reasons that have stem unpredictability in this economy. The answers include the basic reasoning that approaches, tactics, or rules are continually being modified. The new players in the innovative economy are not only required to combine or recombine the elements of technology, but they are also required to create entirely new technologies and tactics. Surprises have now become the rules and disturbing the specific business sector has now become a compulsion.

A lot number of scholars have emphasized that dynamic capabilities are essential to developing for managing uncertainties of the business market. In this way, SMEs in developing countries such as Pakistan needs to have the ability to effectively and efficiently redeploying their resources to higher-revenue generating activities in accordance with its internal conditions and external conditions. For the market full of deep uncertainties, agility can be promoted by the help of the framework of dynamic capability. The research study above has shown that there are three of the major clusters in which the dynamic capabilities of the organization fall, namely sensing, seizing, and transforming. Sensing is related to the recognition and valuation of opportunities related to the technology that has an association with the needs of customers. Seizing is the development of opportunities related to the technology that has an association with the needs of customers. However, the transforming cluster is the optimizations in order to

continue the renewal. With the help of these clusters, SMEs will have the capability of sustaining them for the longer term. Although, the research of some scholars in the research study has mentioned that these dynamic capabilities depend upon the two elements that are present in the firms. The first element is the capability of entrepreneurial management to combine and recombine the technologies, and the second element is the flexibility in the structures so that it can be modified rapidly.

The background of the study provided in this research reflects that the competitive advantage of the organizations improves with the help of the dynamic capabilities of the organization. The first chapter of this research also implies that dynamic capabilities are fundamentally the extension of the resource-based view, which is related to the endure-ability of the competitive edge of SMEs. The fundamental purpose of this research study was to reconnoitre the link of dynamic capability with the performance of SMEs in a practical way. Furthermore, the purpose is also to understand the progress of organizational capabilities in SMEs (micro-enterprises). The research study has confirmed that the dynamic capabilities of the organization reinforces the competitive advantage of the companies as well as underpin their capability to respond towards change, either internal change or external change.

There were four basic objective behind this study which as to identify the relationship between dynamic capabilities on firm performance, to identify the moderating effect of Learning Orientation, organizational culture and entrepreneurial orientation between dynamic capabilities and firm performance, to identify the relationship between of dynamic capabilities on firm performance, and to identify the moderating effect of environment dynamism between dynamic capabilities on firm performance. These objectives were fulfilled to answer four research questions, i.e., is there any effect of dynamic capabilities on firm performance? How Learning Orientation, organizational culture, and entrepreneurial orientation mediate the relationship between dynamic capabilities on firm performance? How Learning Orientation and organizational culture both mediate the relationship between dynamic capabilities on firm performance? And to what extent environment dynamism moderate the relationship between dynamic capabilities on firm performance?

The major significance of this study is based on its impact on the Pakistani SMEs as this research has explored the concepts and aspects of dynamic capabilities in-depth for the SMEs. The literature has started to shed light on the dynamic capability from the early times by the help of many well-known scholars from the past. The

research has also defined that there is a difference between the capabilities and dynamic capabilities of the organization. Capabilities of the organizations help them to perform efficiently in the market; however, dynamic capabilities help the organizations to deal with all the uncertainties of the market while performing effectively and efficiently. This research study has also discussed the core dimensions of dynamic capability under the light of many well-known researchers. Such as the dimension to address instantly towards the changing environment of the business market, identification, replication, building, maintenance, and growth of the unique advantages and resources, or integration, reconfiguration, gain and release of the organizational resources are some of the discussed core dimensions of the organizational dynamic capabilities.

Dynamic capabilities are not only restricted to the organizational level; this research study has elucidated that dynamic capabilities at an individual level also exists. However, it has not researched much to date. The conclusion for the dynamic capabilities of the individual level and organizational level, it can be said that both of these capabilities are vital for the firm to gain a competitive advantage. However, the literature has mostly focused on the organizational dynamic capabilities while neglecting the importance of individual-level dynamic capabilities; however, some of the scholars have focused on the individual level dynamic capabilities, yet the amount of work is not sufficient enough. Therefore, it is the need that scholars must work upon the significance, identification, and the advancements of the individual level dynamic capabilities.

While researching the impact or relationship of dynamic capability on the firm's performance, the research has also studied the link of firm performance with its marketing capabilities. It also emphasized that marketing capabilities in any organization are the capability to address the changing need of its customers and allow them to react accordingly so that business targets will achieve. Along with these capabilities, the innovative capability has also been researched as a part of dynamic capabilities, which is defined as the capability of the organization to generate innovative services or products so that the needs of the customers can be satisfied.

Five major factors were identified in the literature based on which the questionnaire has been formed. Those factors were Dynamic capabilities, learning orientation, entrepreneurial orientation , firm performance, and organizational culture. Under these factors, certain sub-factors were also analyzed. The dynamic capability has four items, namely sensing capability, learning capability, integrating capability, and

coordinating capability. Similarly, learning orientation also has four items, namely, commitment to learning, shared vision, open-mindedness, and Intra-organizational Knowledge sharing. The factor of financial performance was identified with two items that are financial performance and non-financial performance. Likewise, the organizational culture was also identified with two items that were involvement and consistency. The factor of entrepreneurial orientation also has four items that are named as autonomy, competitive aggressiveness, innovativeness, and risk-taking, and pro-activeness.

By statistically analyzing these factors and their items, the 10 hypotheses of the research were accepted, and the null hypotheses were rejected. The result of this research implies that dynamic capability is significantly related to all these above-mentioned factors, i.e., learning orientation, entrepreneurial orientation, firm performance, and organizational culture. The results have further signified that learning orientation mediates the significant relationship between dynamic capabilities and organizational culture, firm performance, and entrepreneurial orientation that is associated with hypotheses in this research. The results of the study also accept that Firm Size moderate the relationship between dynamic capabilities and firm performance.

In a nutshell, various authors defined that dynamic capability of the firm is the ability of the organization to initiate change inside the organization in order to handle the instability in the environment of work and business which is mainly done by the approach of redesigning and modifying the resource base (resource-based view) of an organization. Consequently, organizations vary when it comes to demonstrating their dynamic capabilities for the reason of different resource bases. The dynamic capabilities of the organization achieved by redesigning the operational abilities of the firm can assist indirectly in achieving the competitive advantage and sustainable competitive advantage.

5.3. Managerial Implication and Recommendation

As it has been noticed that business these days are encountered by various uncertainties that can neither be defined not predicted (Teece & Leih, 2016). In Pakistan, there are lots of SMEs present that are facing the challenge of uncertainty in the market. When a corporate setting is described by unfathomable improbability, having dynamic capabilities in an organization is very indispensable. On the other hand, increasing agility for the organization can lead the organization to expense its operational

efficiency at times. Transformation, either in a larger organization or small to medium size organizations, is not easy every time. Nonetheless, it is impossible to avoid change. When SMEs in the organization develop the mentioned or discussed factors in their firm, their performance can increase significantly. The results are specifically applied to the industry of technological advancement.

Currently, many SMEs are taking initiatives to strive for innovation. However, there are the rest of the factors that were not taken into consideration by the SMEs. It is to state SMEs should work on their Learning Orientation, Organizational Culture, Entrepreneurial orientation, and Firm performance to develop dynamic capabilities, which in turn help them cope with the environmental uncertainties. SMEs of Pakistan are not focusing on any of the factors regardless of knowing the fact that more than 90% of the enterprises in Pakistan are SMEs (Khalique et al., 2015).

- SMEDA (Small and Medium Enterprises Development Authority) can utilize the results of this study and devise such policies that boost the growth of SMEs in the country as well as help them in overcoming the challenges of market uncertainties (Raza et al., 2018).
- The top management in SMEs that normally entail Leaders and Managers are required to strive to line up the procedures of sensing, seizing, and transforming resources through the help of the overall strategy of the organization (Fern, Ferreira, & Rose, 2017).
- SMEs in Pakistan should recognize the interrelationship of the choices that are made today and with the prospect situation of the SMEs contained by this speedily growing and changing contexts (Warren, 2016).
- SMEs in Food Sector, tourism sector, or construction sector should focus on enhancing their firm performance using their dynamic capabilities that are mediated by organizational culture, entrepreneurial orientation, or learning orientation (Kasemsap, 2017).

5.4. Novel findings of Study

The literature present currently in journals is mainly focused on exploring the topic in the context of large-sized enterprises. However, this research study contributes to providing information solely related to the context of Small to Medium-Sized Enterprises. It has been found that significant relation of ***dynamic capability with learning orientation, entrepreneurial orientation, organization culture and firm performance***. As per the result study shows that dynamic capabilities influence the firm

performance. Study also identifies the ***significant mediating effect of learning orientation and entrepreneurial orientation***. But ***insignificant mediating role of organizational culture between dynamic capability and firm performance***. Second study also finds the ***significant sequentially mediation of learning orientation and corporate entrepreneurship between dynamic capabilities and firm performance***. But ***learning orientation and organizational culture has no significant sequentially mediation has been identified between dynamic capabilities and firm performance.*** Finally, ***significant moderating effect of environment dynamism has been identified between dynamic capabilities and firm performance.*** Besides, the main contribution of this research is to answer and explore a highly ignored link between dynamic capabilities on organizational performance. This study is helpful for SMEs to know about the most preferred dynamic capability for the purpose of improving organizational performance. In order to compete successfully in the marketplace, this study will help managers to either help to adapt organization culture or entrepreneurial orientation for the purpose of improving organizational performance. It also helps further improve their internal and external knowledge of the organization, which will ultimately contribute to organizational performance. Another important contribution of this research is that, yet to date, not a single study was conducted regarding dynamic capabilities on organizational performance in the SMEs sector of Pakistan. The importance of this study lies in finding the result of this thesis that will answer its research questions. With the help of answers, the firms in Pakistan can employ various capabilities of firms by visualizing their impacts and effectiveness. Using the primary data of this research study, many of the studies in the future can construct their findings in order to investigate the importance and effect of dynamic capabilities in certain business sectors for SMEs.

5.5. Limitation and Future Research Direction

This study has researched thoroughly in order to strengthen and validate the results. However, every research study holds some of the limitations which barricade the 100 per cent effectively of the research. In this research, there was also a certain limitation encountered. The first limitation is that the ***study has not focused on a certain business sector of SMEs located in the sample area. The results of the study are generalized for every SMEs belonging to any of the business sectors. However, the result has tried to provide a macro view of how all the SMEs, regardless of which industry they serve. Results can be stronger if the sample is obtained from the whole***

Pakistan. The second limitation of this ***research study is that it has included any primary quantitative data which provides additional insight into the topic. However, to overcome this limitation, an extensive survey has been conducted along with its qualitative analysis.*** In addition to that, a vast amount of literature has also been analyzed form various well-known and reliable scholarly journals to gather an adequate amount of information. Third limitation in this ***study perceptual performance measures are taken to study performance measure in future financial data can be used to study the impact on performance***. Further adding to the limitations***, in future studies constructs of dynamic capabilities can be studied individual to better understand their individual effect on firm performance***. In this way, results are still reliable and valid instead of these limitations. In order to research in the ***future, the researchers may consider narrowing down this study further, which may include focusing on the single industry in SMEs rather than considering the link of dynamic capability and firm's performances of all the industry***. Considering the research with respect to the industry, it can be observed that which industry is on the verge of losing sustainability due to lack of dynamic capability.

References

Abro, Q. M. M., Memon, N. A., & Arshdi, P. S. (2011). Dynamic Capabilities and Firm Performance: A Case of Two SMEs in Pakistan. *Mehran University Research Journal of Engineering & Technology, 30*(3), 521-530.

Ahmed, M. U., Kristal, M. M., & Pagell, M. (2014). Impact of operational and marketing capabilities on firm performance: Evidence from economic growth and downturns. *International Journal of Production Economics*, *154*, 59-71.

Albrecht, S. L., Bakker, A. B., Gruman, J. A., Macey, W. H., & Saks, A. M. (2015). Employee engagement, human resource management practices and competitive advantage: An integrated approach. *Journal of Organizational Effectiveness: People and Performance, 2*(1), 7-35.

Alonso-Almeida, M. D. M., Bremser, K., & Llach, J. (2015). Proactive and reactive strategies deployed by restaurants in times of crisis: Effects on capabilities, organization and competitive advantage. *International Journal of Contemporary Hospitality Management, 27*(7), 1641-1661.

Alt, E., Díez-de-Castro, E. P., & Lloréns-Montes, F. J. (2015). Linking employee stakeholders to environmental performance: The role of proactive environmental strategies and shared vision. *Journal of Business Ethics*, *128*(1), 167-181.

Alvesson, M. (2012). Understanding organizational culture. *Sage*

Anderson, B. S., Kreiser, P. M., Kuratko, D. F., Hornsby, J. S., & Eshima, Y. (2015). Reconceptualizing entrepreneurial orientation. *Strategic Management Journal*, *36*(10), 1579-1596.

Argyris, C. (2017). Integrating the Individual and the Organization. Routledge.

Argyris, C., & Schon, D. A. (1996). *Organiational learning II*. Addison Wesley.

Augier, M., & Teece, D. J. (2007). Dynamic capabilities and multinational enterprise: Penrosean insights and omissions. *Management international review*, *47*(2), 175-192.

Baker, M. J. (2014). Marketing strategy and management. *Macmillan International Higher Education.*

Baker, W. E., & Sinkula, J. M. (1999). Learning orientation, market orientation, and innovation: Integrating and extending models of organizational performance. *Journal of market-focused management*, *4*(4), 295-308.

Barney, J. B. (2017). Resources, capabilities, core competencies, invisible assets, and knowledge assets: Label proliferation and theory development in the field of strategic management. *The SMS Blackwell handbook of organizational capabilities*, 422-426.

Barreto, I. (2010). Dynamic capabilities: A review of past research and an agenda for the future. *Journal of management*, *36*(1), 256-280.

Battisti, M., & Deakins, D. (2017). The relationship between dynamic capabilities, the firm's resource base and performance in a post-disaster environment. *International Small Business Journal, 35*(1), 78-98.

Bhattacharyya, S. S., & Jha, S. (2015). Mapping micro small and medium enterprises from the resource-based view and dynamic capability theory perspectives and innovation classification. *International Journal of Entrepreneurship and Small Business*, *25*(3), 331-350.

Biesenthal, C., Gudergan, S., & Ambrosini, V. (2018). The role of ostensive and performative routine aspects in dynamic capability deployment at different organizational levels. *Long Range Planning*.

Birkinshaw, J., Zimmermann, A., & Raisch, S. (2016). How do firms adapt to discontinuous change? Bridging the dynamic capabilities and ambidexterity perspectives. *California Management Review*, *58*(4), 36-58.

Birkinshaw, J., Zimmermann, A., & Raisch, S. (2016). How do firms adapt to discontinuous change? Bridging the dynamic capabilities and ambidexterity perspectives. *California Management Review*, *58*(4), 36-58.

Bolman, L. G., & Deal, T. E. (2017). *Reframing organizations: Artistry, choice, and leadership*. John Wiley & Sons.

Breznik, L., & D. Hisrich, R. (2014). Dynamic capabilities vs. innovation capability: are they related? *.Journal of small business & enterprise development, 21*(3), 368-384.

Breznik, L., & Lahovnik, M. (2016). Dynamic capabilities and competitive advantage: Findings from case studies. Management: *journal of contemporary management issues, 21(Special issue)*, 167-185.

Bromiley, P., & Rau, D. (2016). Operations management and the resource based view: Another view. *Journal of Operations Management*, *41*, 95-106.

Brouthers, K. D., Nakos, G., & Dimitratos, P. (2015). SME entrepreneurial orientation, international performance, and the moderating role of strategic alliances. *Entrepreneurship Theory and Practice, 39*(5), 1161-1187.

Bustinza, O. F., Bigdeli, A. Z., Baines, T., & Elliot, C. (2015). Servitization and competitive advantage: the importance of organizational structure and value chain position. *Research-Technology Management, 58*(5), 53-60.

Calantone, R. J., Cavusgil, S. T., & Zhao, Y. (2002). Learning orientation, firm innovation capability, and firm performance. *Industrial marketing management*, *31*(6), 515-524.

Camisón, C., & Villar-López, A. (2014). Organizational innovation as an enabler of technological innovation capabilities and firm performance. *Journal of business research*, *67*(1), 2891-2902.

Cavusgil, S. T., & Knight, G. (2015). The born global firm: An entrepreneurial and capabilities perspective on early and rapid internationalization. *Journal of International Business Studies, 46*(1), 3-16.

Cavusgil, S. T., & Knight, G. (2015). The born global firm: An entrepreneurial and capabilities perspective on early and rapid internationalization. *Journal of International Business Studies*, *46*(1), 3-16.

Chan, L. L., Shaffer, M. A., & Snape, E. (2004). In search of sustained competitive advantage: the impact of organizational culture, competitive strategy and human resource management practices on firm performance. *The International Journal of Human Resource Management*, *15*(1), 17-35.

Chen, M.J. & Miller, D., 2015. Reconceptualizing competitive dynamics: A multidimensional framework. *Strategic Management Journal*, *36*(5), pp.758-775.

Chiva, R., & Habib, J. (2015). A framework for organizational learning: zero, adaptive and generative learning. *Journal of Management & Organization*, *21*(3), 350-368.

Chiva, R., & Alegre, J. (2009). Organizational learning capability and job satisfaction: An empirical assessment in the ceramic tile industry. *British Journal of Management*, *20*(3), 323-340.

Coyle-Shapiro, J. A. M., Kessler, I. & Purcell, J. (2004). Exploring Organizationally Directed Citizenship Behavior: Reciprocity or "it"s my job"? *Journal of Management Studies, 41*(1), 85–106.

Da Mota Pedrosa, A., Jasmand, C., Lassen, A. H., & Laugen, B. T. (2010). Development of a Measurement Scale for Absorptive Capability at the Individual level. In *17th International Product Development Management Conference*.

Denison, D. R. (1990). Corporate culture & organizational effectiveness. *John Wiley & Sons*.

Denison, D. R., & Mishra, A. K. (1995). Toward a theory of organizational culture & effectiveness. *Organization science*, 6(2), 204-223.

Denrell, J., & Powell, T. C. (2016). Dynamic capability as a theory of competitive advantage: contributions and scope conditions.

Dess, G. G., & Lumpkin, G. T. (2005). The role of entrepreneurial orientation in stimulating effective entrepreneurial orientation . *Academy of Management Perspectives*, *19*(1), 147-156.

Donaires, O. S., & Martinelli, D. P. (2018). Evolutionary Management: From Theory to Action. *Systems Research and Behavioral Science*.

Dong, Y., Bartol, K. M., Zhang, Z. X., & Li, C. (2017). Enhancing employee creativity via individual skill development and team knowledge sharing: Influences of dual-focused transformational leadership. *Journal of Organizational Behavior*, *38*(3), 439-458.

Doorley, J., & Garcia, H. F. (2015). Reputation management: The key to successful public relations and corporate communication. Routledge.

Dowling, G. R. (2016). Defining and measuring corporate reputations. *European Management Review*, *13*(3), 207-223.

Drnevich, P. L., & Kriauciunas, A. P. (2011). Clarifying the conditions and limits of the contributions of ordinary and dynamic capabilities to relative firm performance. *Strategic management journal*, *32*(3), 254-279.

Eisenhardt, K. M., & Martin, J. A. (2000). Dynamic capabilities: what are they?. *Strategic management journal, 21*(10-11*),* 1105-1121.

Eshima, Y., & Anderson, B. S. (2017). Firm growth, adaptive capability, and entrepreneurial orientation. *Strategic Management Journal*, *38*(3), 770-779.

Eriksson, T., Nummela, N., & Saarenketo, S. (2014). Dynamic capability in a small global factory. *International business review*, *23*(1), 169-180.

Felipe, C., Roldán, J., & Leal-Rodríguez, A. (2017). Impact of organizational culture values on organizational agility. *Sustainability, 9*(12), 2354.

Feng, H., Morgan, N. A., & Rego, L. L. (2015). Marketing department power and firm performance. *Journal of Marketing*, *79*(5), 1-20.

Fern, B., Ferreira, J. M., & Rese, N. (2017). The inception of dynamic capabilities in SMEs. *International Journal of Entrepreneurship*.

Fey, C. F., & Denison, D. R. (2003). Organizational culture and effectiveness: can American theory be applied in Russia?. *Organization science*, *14*(6), 686-706.

Fraj, E., Matute, J., & Melero, I. (2015). Environmental strategies and organizational competitiveness in the hotel industry: The role of learning and innovation as determinants of environmental success. *Tourism Management, 46*, 30-42.

Franco, M., & Haase, H. (2009). Entrepreneurship: an organisational learning approach. *Journal of Small Business & Enterprise Development, 16*(4), 628-641.

Friedman, S. D. (2017). Succession systems in large corporations: Characteristics and correlates of performance. In *Leadership succession* (pp. 15-38). Routledge.

Ghasemi, A., & Zahediasl, S. (2012). Normality tests for statistical analysis: a guide for non-statisticians. *International journal of endocrinology and metabolism*, *10*(2), 486.

Giachetti, C. (2016). Competing in emerging markets: Performance implications of competitive aggressiveness. *Management International Review*, *56*(3), 325-352.

Giniuniene, J., & Jurksiene, L. (2015). Dynamic capabilities, innovation and organizational learning: interrelations and impact on firm performance. *Procedia-Social and Behavioral Sciences, 213*, 985-991.

Girod, S. J., & Whittington, R. (2017). Reconfiguration, restructuring and firm performance: Dynamic capabilities and environmental dynamism. *Strategic Management Journal, 38*(5), 1121-1133.

Glaser, L., Stam, W., & Takeuchi, R. (2016). Managing the risks of proactivity: A multilevel study of initiative and performance in the middle management context. *Academy of Management Journal*, *59*(4), 1339-1360.

Goh, S., & Richards, G. (1997). Benchmarking the learning capability of organizations. *European Management Journal*, *15*(5), 575-583.

Grant, R. M. (2016). Contemporary strategy analysis: Text and cases edition. John Wiley & Sons.

Grant, R. M. (2016). Contemporary strategy analysis: Text and cases edition. John Wiley & Sons.

Greenwood, R., & Hinings, C. R. (1996). Understanding radical organizational change: Bringing together the old and the new institutionalism. *Academy of management review*, *21*(4), 1022-1054.

Greenwood, R., Oliver, C., Lawrence, T. B., & Meyer, R. E. (Eds.). (2017). *The Sage handbook of organizational institutionalism*. Sage.

Greve, H. R., & Argote, L. (2015). Behavioral Theories of Organization.

Gupta, A. K., Smith, K. G., & Shalley, C. E. (2006). The interplay between exploration & exploitation. *Academy of management journal, 49*(4), 693-706.

Gutierrez-Gutierrez, L. J., Barrales-Molina, V., & Kaynak, H. (2018). The role of human resource-related quality management practices in new product development: A dynamic capability perspective. *International Journal of Operations & Production Management*, *38*(1), 43-66.

Hafeez, M. H., Shariff, M. N. M., & Lazim, H. B. M. (2012). Relationship between entrepreneurial orientation, firm resources, SME branding and firm's performance: Is innovation the missing link. *American Journal of Industrial and Business Management*, *2*(4), 153-159.

Hall, D. B., & Wang, L. (2005). Two-component mixtures of generalized linear mixed effects models for cluster correlated data. *Statistical Modelling, 5*(1), 21-37.

Hair, J. F., Anderson, R. E., Tatham, R. L. and Black, W. C. (1998). *Multivariate Data Analysis. NJ: Prentice Hall.*

He, X., Huang, S. Z., Zhao, K., & Wu, X. (2018). The Relationship between Learning Orientation and Dynamic Capability based on Environmental Education. EURASIA Journal of Mathematics*, Science and Technology Education, 14*(6), 2193-2202.

Helfat, C. E. & M. A. Peteraf (2003), 'The dynamic resource-based view: capability lifecycles,' *Strategic Management Journal, 24*(10), 997–1010.

Helfat, C. E., & Winter, S. G. (2011). Untangling dynamic and operational capabilities: Strategy for the (N) ever-changing world. *Strategic management journal*, *32*(11), 1243-1250.

Hermano, V., & Martín-Cruz, N. (2016). The role of top management involvement in firms performing projects: A dynamic capabilities approach. *Journal of Business Research, 69*(9), 3447-3458.

Heskett, J. L., & Kotter, J. P. (1992). Corporate culture and performance. *Business Review. Vol*, *2*(5), 83-93.

Hill, C. W., Jones, G. R., & Schilling, M. A. (2014). *Strategic management: theory: an integrated approach*. Cengage Learning.

Hislop, D., Bosua, R., & Helms, R. (2018). *Knowledge management in organizations: A critical introduction*. Oxford University Press.

Homburg, C., & Pflesser, C. (2000). A multiple-layer model of market-oriented organizational culture: Measurement issues & performance outcomes. *Journal of marketing research*, 37(4), 449-462.

Hoogervorst, J. A. (2018). Foundations of Enterprise Governance and Enterprise Engineering: Presenting the Employee-Centric Theory of Organization. Springer.

Hung, R. Y. Y., Yang, B., Lien, B. Y. H., McLean, G. N., & Kuo, Y. M. (2010). Dynamic capability: Impact of process alignment and organizational learning culture on performance. *Journal of World Business*, *45*(3), 285-294.

Inkpen, A. C., & Crossan, M. M. (1995). Believing is seeing: Joint ventures and organization learning. *Journal of management studies*, *32*(5), 595-618.

Jamal I. Daoud 2017 J. Phys.: Conf. Ser. 949 012009

Janssen, M. J., Castaldi, C., & Alexiev, A. (2016). Dynamic capabilities for service innovation: conceptualization and measurement. *R&D Management*, *46*(4), 797-811.

Jantunen, A., Puumalainen, K., Saarenketo, S., & Kyläheiko, K. (2005). Entrepreneurial orientation, dynamic capabilities and international performance. *Journal of International Entrepreneurship*, *3*(3), 223-243.

Jaworski, B. J., & Kohli, A. K. (1993). Market orientation: antecedents and consequences. *The Journal of marketing*, 53-70.

Jyoti, J., & Dev, M. (2015). The impact of transformational leadership on employee creativity: the role of learning orientation. *Journal of Asia Business Studies*, *9*(1), 78-98.

Kasemsap, K. (2017). Strategic innovation management: An integrative framework and causal model of knowledge management, strategic orientation, organizational innovation, and organizational performance. In *Organizational Culture and Behavior: Concepts, Methodologies, Tools, and Applications* (pp. 86-101). IGI Global.

Kazanjian, R. K., Drazin, R., & Glynn, M. A. (2017). Implementing strategies for entrepreneurial orientation : A knowledge-based perspective. *Strategic entrepreneurship: Creating a new mindset*, 173-199.

Kendra, K., & Taplin, L. J. (2004). Project success: A cultural framework. *Project management journal*, 35(1), 30-45.

Khalique, M., Bontis, N., Abdul Nassir bin Shaari, J., & Hassan Md. Isa, A. (2015). Intellectual capital in small and medium enterprises in Pakistan. *Journal of Intellectual Capital*, *16*(1), 224-238.

Kolb, D. A. (2014). Experiential learning: Experience as the source of learning and development. FT press.

Lam, S. K., Sleep, S., Hennig-Thurau, T., Sridhar, S., & Saboo, A. R. (2017). Leveraging frontline employees' small data and firm-level big data in frontline management: An absorptive capability perspective. *Journal of Service Research*, *20*(1), 12-28.

Lechner, C., & Gudmundsson, S. V. (2014). Entrepreneurial orientation, firm strategy and small firm performance. *International Small Business Journal*, *32*(1), 36-60.

Lee, H., & Kelley, D. (2008). Building dynamic capabilities for innovation: an exploratory study of key management practices. *R&d Management*, *38*(2), 155-168.

Lee, J. C., Hsu, W. C., & Chen, C. Y. (2018). Impact of absorptive capability on software process improvement and firm performance. *Information Technology and Management*, *19*(1), 21-35.

Lei, D., Slocum, J. W., & Pitts, R. A. (1999). Designing organizations for competitive advantage: the power of unlearning and learning. *Organizational dynamics*, *27*(3), 24-38.

Leonard-Barton, D. (1992). Core capabilities and core rigidities: A paradox in managing new product development. *Strategic management journal*, *13*(S1), 111-125.

Lessard, D., Teece, D. J., & Leih, S. (2016). The Dynamic Capabilities of Meta-Multinationals. *Global Strategy Journal*, *6*(3), 211-224.

Levitt, B. & March, J. G. (1988). Organizational Learning. *Annual Review of Sociology*, 14, 319-340.

Li, D. Y., & Liu, J. (2014). Dynamic capabilities, environmental dynamism, and competitive advantage: Evidence from China. Journal of Business Research, 67(1), 2793-2799.

Lin, Y., & Wu, L. Y. (2014). Exploring the role of dynamic capabilities in firm performance under the resource-based view framework. *Journal of business research*, *67*(3), 407-413.

Lin, Y., & Wu, L. Y. (2014). Exploring the role of dynamic capabilities in firm performanceunder the resource-based view framework. *Journal of business research*, *67*(3), 407-413.

Lin, Y., & Wu, L. Y. (2014). Exploring the role of dynamic capabilities in firm performance under the resource-based view framework. *Journal of business research*, *67*(3), 407-413.

Low, K. Y. J., & Ho, E. Y. C. (2016). A knowledge-based theory of the multinational economic organization. *Long Range Planning*, *49*(6), 641-647.

Lumpkin, G. T., & Dess, G. G. (1996). Clarifying the entrepreneurial orientation construct and linking it to performance. *Academy of management Review*, *21*(1), 135-172.

Lusch, R. F., & Nambisan, S. (2015). Service innovation: A service-dominant logic perspective. *MIS quarterly*, *39*(1).

Mahmoud, M. A., Blankson, C., Owusu-Frimpong, N., Nwankwo, S., & Trang, T. P. (2016). Market orientation, learning orientation and business performance: The mediating role of innovation. *International Journal of Bank Marketing*, *34*(5), 623-648.

Makadok, R. (2001). Toward a synthesis of the resource-based & dynamic-capability views of rent creation. *Strategic management journal*, 22(5), 387-401.

Makkonen, H., Pohjola, M., Olkkonen, R., & Koponen, A. (2014). Dynamic capabilities and firm performance in a financial crisis. *Journal of Business Research, 67*(1), 2707-2719.

Martin, S. L., & Javalgi, R. R. G. (2016). Entrepreneurial orientation, marketing capabilities and performance: The moderating role of competitive intensity on Latin American international new ventures. *Journal of Business Research*, *69*(6), 2040-2051.

Mazzero, M., Rosati, F., Andersen, M. M., & Li-Ying, J. (2015). Strategizing for sustainability in a changing world: a dynamic capability approach. In *DTU Sustain Conference 2015*. Technical University of Denmark (DTU).

Mezger, F. (2014). Toward a capability-based conceptualization of business model innovation: insights from an explorative study. *R&D Management*, *44*(5), 429-449.

Miller, D. (1987). Strategy making & structure: Analysis & implications for performance. *Academy of management journal*, 30(1), 7-32.

Miller, D., & Friesen, P. H. (1983). Strategy-making and environment: the third link. *Strategic management journal*, *4*(3), 221-235.

Miner, J. B. (2015). Organizational behavior 1: Essential theories of motivation and leadership. Routledge.

Morris, M. H. (2015). Entrepreneurial intensity. *Wiley Encyclopedia of Management*, 1-5.

Moura e Sá, P., & Amorim, M. (2017). A typology of customer-to-customer interaction and its implications for excellence in service provision. *Total Quality Management & Business Excellence*, *28*(9-10), 1183-1193.

Nahm, A. Y., Vonderembse, M. A., & Koufteros, X. A. (2004). The impact of organizational culture on time-based manufacturing & performance. *Decision sciences*, 35(4), 579-607.

Najafi-Tavani, S., Sharifi, H., & Najafi-Tavani, Z. (2016). Market orientation, marketing capability, and new product performance: The moderating role of absorptive capability. *Journal of Business Research, 69*(11), 5059-5064.

Nieves, J., & Haller, S. (2014). Building dynamic capabilities through knowledge resources. *Tourism Management*, *40*, 224-232.

Nieves, J., & Haller, S. (2014). Building dynamic capabilities through knowledge resources. *Tourism Management, 40*, 224-232.

O'Cass, A., & Sok, P. (2014). The role of intellectual resources, product innovation capability, reputational resources and marketing capability combinations in firm growth. *International Small Business Journal*, *32*(8), 996-1018.

O'Brien, J. P., & David, P. (2014). Reciprocity and R&D search: Applying the behavioral theory of the firm to a communitarian context. *Strategic Management Journal*, *35*(4), 550-565.

Ocasio, W., Rhee, L., & Milner, D. (2017). Attention, Knowledge, and Organizational Learning. In *The Oxford Handbook of Group and Organizational Learning*.

Odhiambo, O. J., Kibera, F., & Musyoka, R. (2015). The influence of organizational culture and marketing capabilities on performance of microfinance institutions in Kenya. *Journal of Marketing Management (JMM), 3*(1), 91-99.

O'Reilly, C. A., Chatman, J., & Caldwell, D. F. (1991). People & organizational culture: A profile comparison approach to assessing person-organization fit. *Academy of management journal*, 34(3), 487-516.

Otley, D. (2016). The contingency theory of management accounting and control: 1980–2014. *Management accounting research*, *31*, 45-62.

Panaccio, A., Henderson, D. J., Liden, R. C., Wayne, S. J., & Cao, X. (2015). Toward an understanding of when and why servant leadership accounts for employee extra-role behaviors. *Journal of Business and Psychology*, *30*(4), 657-675.

Pavlou, P. A., & El Sawy, O. A. (2011). Understanding the elusive black box of dynamic capabilities. *Decision sciences*, *42*(1), 239-273.

Penrose, E. T. (2009). The Theory of the Growth of the Firm. *Oxford university press*.

Pervan, M., Curak, M., & PavicKramaric, T. (2017). The Influence of Industry Characteristics and Dynamic Capabilities on Firms' Profitability. *International Journal of Financial Studies, 6(*1*),* 4.

Peters, M. D., Wieder, B., Sutton, S. G., & Wakefield, J. (2016). Business intelligence systems use in performance measurement capabilities: Implications for enhanced competitive advantage. *International Journal of Accounting Information Systems, 21*, 1-17.

Piening, E. P., & Salge, T. O. (2015). Understanding the antecedents, contingencies, and performance implications of process innovation: A dynamic capabilities perspective. *Journal of Product Innovation Management*, *32*(1), 80-97.

Pisano, G. P. (1994). Knowledge, integration, & the locus of learning: An empirical analysis of process development. *Strategic management journal*, 15(S1), 85-100.

Protogerou, A., Caloghirou, Y., & Lioukas, S. (2011). Dynamic capabilities and their indirect impact on firm performance. *Industrial and Corporate Change*, *21*(3), 615-647.

Pundziene, A., & Teece, D. J. (2016). New applications of dynamic capability research. *Baltic Journal of Management, 11*(3).

Raithel, S., & Schwaiger, M. (2015). The effects of corporate reputation perceptions of the general public on shareholder value. *Strategic Management Journal*, *36*(6), 945-956.

Raza, S., Minai, M. S., Zain, A. Y. M., Tariq, T. A., & Khuwaja, F. M. (2018). Dissection Of Small Businesses In Pakistan: Issues And Directions. *International Journal of Entrepreneurship*, *22*(4).

Rehman, K. U., & Saeed, Z. (2015). Impact of Dynamic Capabilities on Firm Performance: Moderating Role of Organizational Competencies. *Sukkur IBA Journal of Management and Business, 2(2)*, 20-42.

Rigolizzo, M., & Roloff, K. S. (2018, July). The Role of Learning Orientation in the Process of Learning. In *Academy of Management Proceedings* (Vol. 2018, No. 1, p. 15140). Briarcliff Manor, NY 10510: Academy of Management.

Rockart, S. F., & Dutt, N. (2015). The rate and potential of capability development trajectories. *Strategic Management Journal, 36*(1), 53-75.

Rosenthal, J., & Masarech, M. A. (2003). High-performance cultures: How values can drive business results. *Global Business & Organizational Excellence*, 22(2), 3-18.

Ross, J. E. (2017). Total quality management: Text, cases, and readings.

Rothaermel, F. T. (2015). *Strategic management*. McGraw-Hill Education.

Rothaermel, F. T., & Hess, A. M. (2007). Building dynamic capabilities: Innovation driven by individual-, firm-, and network-level effects. *Organization science*, *18*(6), 898-921.

Saebi, T., Lien, L., & Foss, N. J. (2017). What drives business model adaptation? The impact of opportunities, threats and strategic orientation. *Long range planning*, *50*(5), 567-581.

Schaltegger, S., & Wagner, M. (2017). Managing the business case for sustainability: The integration of social, environmental and economic performance. Routledge.

Schilke, O. (2014). On the contingent value of dynamic capabilities for competitive advantage: The nonlinear moderating effect of environmental dynamism. *Strategic management journal*, *35*(2), 179-203.

Selart, M., & Schei, V. (2016). Organizational culture.

Serenko, A., & Bontis, N. (2016). Understanding counterproductive knowledge behavior: antecedents and consequences of intra-organizational knowledge hiding. *Journal of knowledge management*, *20*(6), 1199-1224.

Shane, S. & Venkataraman, S. (2000). The Promise of Entrepreneurship as a Field of Research. *Academy of Management Review*, 25, 217-226.

Simon, H. A. (1976). From substantive to procedural rationality. In *25 years of economic theory* (pp. 65-86). Springer, Boston, MA.

Sok, P., O'Cass, A., & Miles, M. P. (2016). The performance advantages for SMEs of product innovation and marketing resource–capability complementarity in emerging economies. *Journal of Small Business Management, 54*(3), 805-826.

Song, M., Droge, C., Hanvanich, S., & Calantone, R. (2005). Marketing and technology resource complementarity: An analysis of their interaction effect in two environmental contexts. *Strategic management journal*, *26*(3), 259-276.

Stadler, C., Helfat, C. E., & Verona, G. (2013). The impact of dynamic capabilities on resource access & development. *Organization science*, 24(6), 1782-1804.

Storey, D. J. (2016). *Entrepreneurship and new firm*. Routledge.

Storey, D. J. (2016). Understanding the small business sector. Routledge.

Strese, S., Keller, M., Flatten, T. C., & Brettel, M. (2018). CEOs' passion for inventing and radical innovations in SMEs: The moderating effect of shared vision. *Journal of Small Business Management*, *56*(3), 435-452.

Salunke, S., Weerawardena, J., & McColl-Kennedy, J. R. (2011). Towards a model of dynamic capabilities in innovation-based competitive strategy: Insights from project-oriented service firms. *Industrial Marketing Management*, *40*(8), 1251-1263.

Tan, Q., & Sousa, C. M. (2015). Leveraging marketing capabilities into competitive advantage and export performance. *International Marketing Review, 32*(1), 78-102.

Teece, D. J. (2007). Explicating dynamic capabilities: the nature and microfoundations of (sustainable) enterprise performance. *Strategic management journal*, *28*(13), 1319-1350.

Teece, D. J. (2014). The foundations of enterprise performance: Dynamic and ordinary capabilities in an (economic) theory of firms. *Academy of management perspectives*, *28*(4), 328-352.

Teece, D. J. (2014). The foundations of enterprise performance: Dynamic and ordinary capabilities in an (economic) theory of firms. *Academy of management perspectives, 28*(4), 328-352.

Teece, D. J. (2016). Dynamic capabilities and entrepreneurial management in large organizations: Toward a theory of the (entrepreneurial) firm. *European Economic Review, 86,* 202-216.

Teece, D. J. (2017). Towards a capability theory of (innovating) firms: implications for management and policy. *Cambridge Journal of Economics*, *41*(3), 693-720.

Teece, D. J. (2018). Business models and dynamic capabilities. *Long Range Planning*, *51*(1), 40-49.

Teece, D. J. (2018). Dynamic capabilities as (workable) management systems theory. *Journal of Management & Organization*, *24*(3), 359-368.

Teece, D. J., & Linden, G. (2017). Business models, value capture, and the digital enterprise. *Journal of Organization Design*, *6*(1), 8.

Teece, D. J., Pisano, G., & Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic management journal*, *18*(7), 509-533.

Teece, D., & Leih, S. (2016). Uncertainty, innovation, and dynamic capabilities: An introduction. *California Management Review*, *58*(4), 5-12.

Telussa, J., Stam, E., & Gibcus, P. (2006). Entrepreneurship, dynamic capabilities and new firm growth. *Scientific Analysis of Entrepreneurship and SMEs,* 1-28.

Thompson, J. D. (2017). Organizations in action: Social science bases of administrative theory. Routledge.

Tseng, S. M., & Lee, P. S. (2014). The effect of knowledge management capability and dynamic capability on organizational performance. Journal of Enterprise Information Management, 27(2), 158-179.

Tzokas, N., Kim, Y. A., Akbar, H., & Al-Dajani, H. (2015). Absorptive capability and performance: The role of customer relationship and technological capabilities in high-tech SMEs. *Industrial Marketing Management*, *47*, 134-142.

Uzhegova, M., Torkkeli, L., Salojärvi, H., & Saarenketo, S. (2018). CSR-Driven Entrepreneurial Internationalization: Evidence of Firm-Specific Advantages in International Performance of SMEs. In *Emerging Issues in Global Marketing* (pp. 257-289). Springer, Cham.

Van Grinsven, M., & Visser, M. (2011). Empowerment, knowledge conversion & dimensions of organizational learning. *The learning organization*, 18(5), 378-391.

Villar, C., Alegre, J., & Pla-Barber, J. (2014). Exploring the role of knowledge management practices on exports: A dynamic capabilities view. *International Business Review, 23*(1), 38-44.

Violinda, Q., & Jian, S. (2017). Dynamic Capabilities, Organizational Culture and Competitive Advantage: Evidence from Agriculture Cooperatives in China. Asia-Pacific Management and Business Application, 4(3), 136-153.

Volberda, H. W., & Karali, E. (2015). Reframing the Compositional Capability: A Resource-Based View on 'A Composition-Based View of Firm Growth'. *Management and Organization Review*, *11*(3), 419-426.

Voss, G. B., & Voss, Z. G. (2000). Strategic orientation and firm performance in an artistic environment. *Journal of marketing*, *64*(1), 67-83.

Wang, C. L., & Ahmed, P. K. (2004). The development & validation of the organizational innovativeness construct using confirmatory factor analysis. *European journal of innovation management*, 7(4), 303- 313.

Wang, C. L., Senaratne, C., & Rafiq, M. (2015). Success traps, dynamic capabilities and firm performance. *British Journal of Management, 26*(1), 26-44.

Wang, Z., & Kim, H. G. (2017). Can social media marketing improve customer relationship capabilities and firm performance? Dynamic capability perspective. *Journal of Interactive Marketing*, *39*, 15-26.

Warren, L. (2016). An institutional perspective on entrepreneurship in a conflict environment.

Weerawardena, J., Mort, G. S., Liesch, P. W., & Knight, G. (2007). Conceptualizing accelerated internationalization in the born global firm: A dynamic capabilities perspective. *Journal of world business*, *42*(3), 294-306.

Wheelen, T. L., Hunger, J. D., Hoffman, A. N., & Bamford, C. E. (2017). *Strategic management and business policy*. pearson.

Whittington, R. (2014). Corporate Strategies in Recession and Recovery (Routledge Revivals): Social Structure and Strategic Choice. Routledge.

Wilden, R., & Gudergan, S. P. (2015). The impact of dynamic capabilities on operational marketing and technological capabilities: investigating the role of environmental turbulence. *Journal of the Academy of Marketing Science, 43*(2), 181-199.

Wilden, R., Devinney, T. M., & Dowling, G. R. (2016). The architecture of dynamic capability research identifying the building blocks of a configurational approach. *The Academy of Management Annals*, *10*(1), 997-1076.

Wilkins, A. L., & Ouchi, W. G. (1983). Efficient cultures: Exploring the relationship between culture & organizational performance. *Administrative science quarterly*, 468-481.

Winter, S. G. (2003), 'Understanding dynamic capabilities,' *Strategic Management Journal*, 24(10), 991– 995.

Wolff, J. A., Pett, T. L., & Ring, J. K. (2015). Small firm growth as a function of both learning orientation and entrepreneurial orientation: An empirical analysis. *International Journal of Entrepreneurial Behavior & Research*, *21*(5), 709-730.

Wu, F., Yeniyurt, S., Kim, D., & Cavusgil, S. T. (2006). The impact of information technology on supply chain capabilities and firm performance: A resource-based view. *Industrial Marketing Management*, *35*(4), 493-504.

Wu, L. Y. (2007). Entrepreneurial resources, dynamic capabilities and start-up performance of Taiwan's high-tech firms. *Journal of Business research*, *60*(5), 549-555.

Wu, T. J., Tsai, H. T., & Yeh, S. P. (2014). The role of manager's locus of control between perceived guanxi and leadership behavior in family business. *Revista Internacional de Sociologia, 72*(2), 87-104.

Yan, Z., & Yanni, W. (2016, December). Firm Role, Innovation Capability and Alliance Network: An Empirical Analysis Based on Chinese Communication Equipment Industry. In *Computational Intelligence and Design (ISCID), 2016 9th International Symposium on* (Vol. 2, pp. 244-247). IEEE.

Zahra, S. A., Sapienza, H. J., & Davidsson, P. (2006). Entrepreneurship and dynamic capabilities: A review, model and research agenda. *Journal of Management studies, 43*(4), 917-955.

Zahra, S., Sapienza, H., & Davidson, P. (2006). Entrepreneurship and dynamic capabilities: a review, and research agenda. *Journal of Research Studies*, *43*(4).

Zawislak, P. A., Fracasso, E. M., & Tello-Gamarra, J. (2018). Technological intensity and innovation capability in industrial firms. *Innovation & Management Review*, *15*(2), 189-207.

Zhai, Y. M., Sun, W. Q., Tsai, S. B., Wang, Z., Zhao, Y., & Chen, Q. (2018). An Empirical Study on Entrepreneurial Orientation, Absorptive Capability, and SMEs' Innovation Performance: A Sustainable Perspective. *Sustainability*, *10*(2), 314.

Zhou, K. Z., & Li, C. B. (2007). How does strategic orientation matter in Chinese firms?. *Asia Pacific Journal of Management*, *24*(4), 447-466.

Zhou, W., Hu, H., & Shi, X. (2015). Does organizational learning lead to higher firm performance? An investigation of Chinese listing companies. *The Learning Organization*, *22*(5), 271-288.

Zollo, M., & Winter, S. G. (2002). Deliberate learning and the evolution of dynamic capabilities. *Organization science*, *13*(3), 339-351.

Zott, C. (2003). Dynamic capabilities & the emergence of intraindustry differential firm performance: insights from a simulation study. *Strategic management journal*, 24(2), 97-125.

Zulu-Chisanga, S., Boso, N., Adeola, O., & Oghazi, P. (2016). Investigating the path from firm innovativeness to financial performance: The roles of new product success, market responsiveness, and environment turbulence. *Journal of Small Business Strategy*, *26*(1), 51-68.

Annexure-A

RESEARCH QUESTIONNAIRE

Dear Fellow,

Your help is required to complete this questionnaire for my dissertation on dynamic capability on firm performance mediating role learning orientation, entrepreneurial orientation & organizational culture. The information provided by you will be confidential & will be used only for research purpose. **Thank you for your precious time**

1: Name (Optional)…….

2: Designation…….

3: Organization……..

4: Department……

5: Gender 1: Male 2: Female

6: Qualification (1) Matric (2) FA/F.Sc/Diploma (3) BA/B.Sc (4) MA/M.Sc/MBA (5) M.Phil (6) PhD

7: Age (1) 21-30 (2) 31-40 (3) 41-50 (4) 51-60

Code	Variables	SDA	DA	N	A	SA
DC-1	We frequently scan the environment to identify new business opportunities.	1	2	3	4	5
DC-2	We periodically review the likely effect of changes in our business environment on customers.	1	2	3	4	5
DC-3	We often review our product development efforts to ensure they are in line with what the customers want.	1	2	3	4	5
DC-4	We devote a lot of time implementing ideas for new products & improving our existing products.	1	2	3	4	5
DC-5	We have effective routines to identify, value, & impart new information & knowledge.	1	2	3	4	5
DC-6	We have adequate routines to assimilate new information & knowledge.	1	2	3	4	5

DC-7	We are effective in transforming existing information into new knowledge.	1	2	3	4	5
DC-8	We are effective in utilizing knowledge into new products.	1	2	3	4	5
DC-9	We are effective in developing new knowledge that has the potential to influence product development	1	2	3	4	5
DC-10	We are forthcoming in contributing our individual input to the group.	1	2	3	4	5
DC-11	We have a global understanding of each other's tasks & responsibilities.	1	2	3	4	5
DC-12	We carefully inter-relate our actions to each other to meet changing conditions.	1	2	3	4	5
DC-13	Group members manage to successfully interconnect their activities.	1	2	3	4	5
DC-14	We ensure that the output of our work is synchronized with the work of others.	1	2	3	4	5
DC-15	We ensure an appropriate allocation of resources (e.g., information, time, reports) within our group.	1	2	3	4	5
DC-16	Group members are assigned to tasks commensurate with their task-relevant knowledge & skills.	1	2	3	4	5
DC-17	Overall, our group is well coordinated.	1	2	3	4	5
LO-1	Managers basically agree that our organization's ability to learn is the key to our competitive advantage	1	2	3	4	5
LO-2	The basic values of this organization include learning as key to improvement	1	2	3	4	5
LO-3	The sense around here is that employee learning is an investment, not an expense	1	2	3	4	5
LO-4	Learning in my organization is seen as a key commodity necessary to guarantee organizational survival	1	2	3	4	5
LO-5	There is a commonality of purpose in my organization	1	2	3	4	5

LO-6	There is total agreement on our organizational vision across all levels, functions, & divisions	1	2	3	4	5
LO-7	All employees are committed to the goals of this organization	1	2	3	4	5
LO-8	Employees view themselves as partners in charting the direction of the organization	1	2	3	4	5
LO-9	We are not afraid to reflect critically on the shared assumptions we have made about our customers	1	2	3	4	5
LO-10	Personnel in this enterprise realize that the very way they perceive the marketplace must be continually questioned	1	2	3	4	5
LO-11	We rarely collectively question our own bias about the way we interpret customer information	1	2	3	4	5
LO-12	We continually judge the quality of our decisions & activities taken over time	1	2	3	4	5
LO-13	There is a good deal of organizational conversation that keeps alive the lessons learned from history	1	2	3	4	5
LO-14	We always analyze unsuccessful organizational endeavors & communicate the lessons learned widely	1	2	3	4	5
LO-15	We have specific mechanisms for sharing lessons learned in organizational activities from department to department (unit to unit, team to team)	1	2	3	4	5
LO-16	Top management repeatedly emphasizes the importance of knowledge sharing in our company	1	2	3	4	5
LO-17	We put little effort in sharing lessons & experiences	1	2	3	4	5
OC-1	Our decisions are made at the level where the best information is available.	1	2	3	4	5
OC-2	Information is widely shared & easily accessible to employees when they need it.	1	2	3	4	5
OC-3	Our employees believe that they can have a positive impact.	1	2	3	4	5
OC-4	Working in our organization is like being part of a team.	1	2	3	4	5

OC-5	Our organization relies on horizontal control & coordination to get work done, rather than a hierarchy.	1	2	3	4	5
OC-6	Teams are the primary building blocks of our organization.	1	2	3	4	5
OC-7	Our organization is constantly improving compared with our competitors.	1	2	3	4	5
OC-8	Our organization continuously invests in the skills of employees.	1	2	3	4	5
OC-9	The capability of our employees is viewed as an important source of competitive advantage.	1	2	3	4	5
OC-10	The leaders & managers in our organization follow the guidelines that they set for the rest of the organization.	1	2	3	4	5
OC-11	There is a clear & consistent set of values in our organization that governs the way we do business.	1	2	3	4	5
OC-12	Our organization has an ethical code that guides our behavior & assists us in distinguishing right from wrong.	1	2	3	4	5
OC-13	When disagreements occur, our organization works hard to achieve solutions that benefit both parties in the disagreement.	1	2	3	4	5
OC-14	It is easy to reach consensus, even on difficult issues.	1	2	3	4	5
OC-15	We often have trouble reaching agreement on key issues.	1	2	3	4	5
OC-16	Employees from different divisions of our organization share a common perspective.	1	2	3	4	5
OC-17	It is easy to coordinate projects across functional divisions in our organization.	1	2	3	4	5
OC-18	There is good alignment of goals across levels of our organization.	1	2	3	4	5

ET-1	In my firm, individuals &/or teams pursuing business opportunities make decisions on their own without constantly referring to their supervisors (instead of having to obtain approval from their supervisors before making decisions)	1	2	3	4	5
ET-2	My firm supports the efforts of individuals &/or teams that work autonomously as compared with requiring individuals &/or teams to rely on senior managers to guide their work	1	2	3	4	5
ET-3	The managers of my firm believe that the best results occur when individuals &/or teams decide for themselves what business opportunities to pursue (rather than when the CEO & top managers provide the primary impetus for pursuing business opportunities)	1	2	3	4	5
ET-4	In my firm, the CEO & top management team (rather than employee initiatives & input) play a major role in identifying & selecting the entrepreneurial opportunities my firm pursues ®	1	2	3	4	5
ET-5	My firm knows when it is in danger of acting overly aggressive & avoid such actions which can lead to erosion of firm reputation & retaliation by competitors	1	2	3	4	5
ET-6	My firm effectively uses an aggressive posture to combat industry trends that may threaten our survival or competitive position	1	2	3	4	5
ET-7	My firm enhances its competitive position by entering markets with drastically lower prices, copying the business practices or techniques of successful competitors, or making timely announcements of new products or technologies	1	2	3	4	5
ET-8	In the last five years, my firm has marketed no new lines of products or services as compared with very many new product lines or services	1	2	3	4	5
ET-9	In my firm, changes in product or service lines have been mostly of a minor nature as compared with being quite dramatic ®	1	2	3	4	5

ET-10	In general, top managers of my firm favor a strong emphasis on the marketing of tried & true products & services as compared with an emphasis on R & D, technological leadership, & innovations	1	2	3	4	5
ET-11	The top managers of my firm believe that, owing to the nature of the environment, it is best to explore the environment gradually via careful, incremental behavior (rather than bold, wide-ranging acts necessary to achieve the firm's objectives) ®	1	2	3	4	5
ET-12	When confronted with decision-making situations involving uncertainty, my firm typically adopts a cautious, "wait-&-see" posture in order to minimize the probability of making costly decisions (as compared with a bold, aggressive posture to maximize the probability of exploiting potential	1	2	3	4	5
ET-13	The top managers of my firm have a strong proclivity for low risk projects (with normal & certain rates of return) rather than high risk projects (with chances of very high return) ®	1	2	3	4	5
ET-14	In general, the top managers of my firm have a strong tendency to be ahead of other competitors in introducing novel ideas or products	1	2	3	4	5
ET-15	In dealing with competition, my firm is very seldom the first business to introduce new products/services, administrative techniques & operating technologies ®	1	2	3	4	5
ET-16	In dealing with competition, my firm typically responds to action which competitors initiate as compared with initiating action which the competition then responds to	1	2	3	4	5
FP-1	Our organization is more profitable than our competitors.	1	2	3	4	5
FP-2	The Return on Investment (ROI) of our organization is higher than that of our competitors.	1	2	3	4	5
FP-3	Our organization's cash flow from operations is higher than that of our competitors.	1	2	3	4	5
FP-4	Our sales growth is better than that of our competitors.	1	2	3	4	5

FP-5	Our organization has higher market share than our competitors.	1	2	3	4	5
FP-6	Our organization develops new markets better & faster than our competitors.	1	2	3	4	5
FP-7	Our organization develops new products better & faster than our competitors.	1	2	3	4	5
ED-1	in our field of business the life cycle of products is typically long (reversed)	1	2	3	4	5
ED-2	in our field of business customers' preferences are quite stable (reversed)	1	2	3	4	5
ED-3	our operational environment changes slowly (reversed)	1	2	3	4	5
ED-4	in our field one cannot succeed if one is not able to launch new products continuously	1	2	3	4	5
ED-5	the ability to operate quickly is crucial for success in our field of business	1	2	3	4	5
ED-6	technological development offers remarkable possibilities in our field of business	1	2	3	4	5
ED-7	technological development is rapid in our field of business	1	2	3	4	5