

Dynamic Capabilities and Knowledge Management in the Banking Sector of Karachi

Syeda Farah Shahid
Iqra University, Karachi, Pakistan

Syeda Wajiha Kazmi¹
Iqra University, Karachi, Pakistan

Abstract

The paper explores the impact of the dynamic capabilities on knowledge management in the banking sector of Karachi. The study uses responses from 385 commercial bank employees. The statistical results indicate that decision making, coordination, technological and innovative capabilities positively affect knowledge management. However, the idea generation capability did not have a significant effect on knowledge management. Overall, the results imply that dynamic capabilities play a vital role in strengthening knowledge management which may improve organizational performance. Future studies may examine how dynamic capabilities affect knowledge management in different industries operating in Pakistan.

Keywords: *Decision making capability, coordination capability, idea generation capability, technological capability, innovative capability, knowledge management.*

Introduction

Knowledge management refers to a firm capability to combine its knowledge based resources for meeting organizational goals and objectives (Eisenhardt & Martin, 2000). Awad & Ghaziri (2004) argue that organizations tend to give less importance to knowledge management which is essential for meeting the challenges in a dynamic environment. Knowledge management is a planned way of acquiring implicit and explicit information from both the internal and external environment in an organization. Knowledge management also helps firms to stay competitive in the prevailing global environment (Jarrar et al., 2010). It also motivates employees to acquire the required information for making decisions necessary for the success of an organization (Dietrich, Eskerod, Dalcher & Sandhawalia,

¹Corresponding Author: Syeda Wajiha Kazmi; Email: wajiha.kazmi@iuk.edu.pk

2010). Bano, Rehman & Khan (2010) have argued that just acquiring massive data is not considered as knowledge management. Rather knowledge management requires the collection of data scientifically for making rational decisions.

Past studies have used the concept of knowledge management and dynamic capability interchangeably (Eisenhardt & Santos, 2002). It is argued that knowledge management or dynamic capability plays a significant role in meeting the challenges of a changing environment and enhance organizational performance (Hamel, 1996; Tseng & Lee, 2014). Dynamic capability or knowledge management can be divided into three categories i.e. incremental capability, renewing capability and regenerative capability (Markides, 1999; Ambrosini, Bowman & Collier, 2009). Incremental capability relates to the continuous increase of a firm's resources. Renewing capability relates to the improvement in resource capability. Regenerative capability refers to the change in resource capability according to the demand of the changing environment. Easterby-Smith, Lyles & Peteraf (2009) argue that knowledge management and dynamic capabilities of a firm improve organizational efficiency. Past studies have measured the effect of knowledge management on organizational performance, organizational agility, environmental dynamism and competitive advantage (Lin & Wu, 2014; Teece, Peteraf & Leih, 2016). However, researchers have rarely focused on the antecedents of knowledge management in Pakistan. Therefore, the aim of this study is to measure the effect of decision making capability, coordination capability, idea generation capability, technological capability and innovation capability on knowledge management.

Literature Review

Knowledge Management

The term knowledge management refers to balancing organizational capabilities with the changing business and social environment (Teece, Pisano & Shuen, 1997). Past studies have found that knowledge management plays a significant role in increasing an organization's dynamic capability and performance (Wu & Chen, 2014). Meso, Troutt & Rudnicka (2002) argue that knowledge management requires problem solving, team building, decision making and cognitive task-analysis. Thus, knowledge management is a tool that requires experience and expertise for understanding complex problems and making strategies for improving organizational performance (Gordon & Gill, 1997; Zsombok, 1997).

Decision Making Capability and Knowledge Management

Decision making capability involves identifying the prevailing problems in a firm and making decisions for solving them (Gold, Malhotra & Segars, 2001). Past studies on decision making and knowledge management have found that decision making capability strongly

depends on an individual's experience, expertise and understanding for implementing correct decisions (Gordon & Gill, 1997; Zsombok, 1997; Hellriegel, Jackson & Slocum, 2008). Morris, Hammond & Snell (2014) examined the role of decision making capabilities for enhancing knowledge management of an organization. The study measured knowledge management based on human capital, social capital and organizational capital. The study concluded that decision making capability has a positive influence on knowledge management and helps in meeting global challenges. On the contrary, Wu & Chen (2014) found that knowledge management does not have a direct effect on business process capabilities, however, knowledge management mediates the relationship between decision making and business process capabilities.

Inglehart & Baker (2000) concluded that organizational learning is an important antecedent to knowledge management. However, the study suggests that organizational learning may get distorted through culture and the influence of leaders. On the contrary, Gold, Malhotra & Segars (2001) found that knowledge management can be enhanced through key capabilities such as idea generation capability, innovative capability and decision making capability. McKelvie & Davidsson (2009) developed a model of knowledge management based on a focus group. The study acquired responses from eight knowledge management practitioners and nineteen senior management personnel. It was found that although the parameters in decision making and knowledge management are similar for most organizations but the priorities were different for different organizations. In addition, Rantapuska & Ihaninen (2008) developed a model which found that both implicit knowledge and explicit knowledge play a significant role in decision making and knowledge management. Zoltay-Paprika, Wimmer & Szanto (2008) found that managerial decision making positively affects knowledge management which improves the association between a company and its stakeholders. Riege & Lindsay (2006) found a strong association between decision making capability and knowledge management. However, the study suggests that the association depends upon the age of knowledge management. Therefore, it can be hypothesized that:

H1: Decision making capability has a positive effect on knowledge management.

Coordination Capability and Knowledge Management

Coordination capability refers to a firm's ability to combine its resources to generate new skills for enhancing knowledge management (Amit & Schoemaker, 1993). Helfat & Raubitschek (2000) suggest that coordination capability helps in integrating implicit knowledge and practices of firms for accessing customer needs and catering to their demands. It has been argued that coordination capability plays a significant role in reducing transaction costs and improving the supply chain process (Gomes & Dahab, 2010). Prior

studies have found that the internal activities of an organization help in developing and launching new products effectively (Gordon & Gill, 1997; Zsombok, 1997).

Coordination capability also helps in integrating explicit and implicit knowledge of a firm which plays an important role in enhancing knowledge management (Helfat & Raubitschek, 2000). Consequently, it enables firms to access information about customer needs due to which they are in a better position to make rational decisions. Some researchers have defined coordination capability as a firm's ability to combine all the antecedents of knowledge management for improving organizational performance (Amit & Schoemaker, 2012). Grant (1996) argues that all the employees of a firm from shop floor staff to board members possess some distinctive knowledge. Firms can use this knowledge for improving organizational performance. Nieves & Haller (2014) ascertained the antecedents to knowledge management in the Spanish context. The scope of the study was limited to three star hotels in Spain. The study found that human capital, sensing capability, coordination capability, declarative knowledge, procedural knowledge capability, learning capability and integrating capability are important components of knowledge management. The study concludes that highly skilled employees have a more positive attitude towards change management as compared to less skilled employees. The study further added that effective knowledge management helps firms develop dynamic capabilities. Therefore, it can be hypothesized that:

H2: Coordination capability has a positive effect on knowledge management.

Idea Generation Capability and Knowledge Management

Idea generation capability is the ability of individuals or firms to generate innovative ideas and put them into action (Markides, 1999). Firms that have an innovative culture will always have a competitive edge over rivals (Hellriegel, Jackson & Slocum, 2007). It has also been argued that innovative ideas may be initially ambiguous and beyond the resources of the firm (Hellriegel, Jackson & Slocum, 2007; Grant, 1996). However, a dedicated knowledge management system has a built-in ability to support and nurture the right ideas and discard unrealistic ones (Zollo & Winter, 2002).

Birdi, Leach & Magadley (2014) found that employees' idea generation capability positively affects knowledge management provided employees get the required support from the organization. Thus, organizations must focus on creating an environment which is conducive to idea generation. On the contrary, Pesonen et al., (2001) did not find empirical evidence that idea generation affects knowledge management. The study concludes that creative strategies mediate the relationship between idea generation and knowledge management. Chandler, McKelvie & Davidsson (2009) suggests that different individuals

have different capabilities. Therefore, firms need to consider this aspect while promoting the idea generation culture. Therefore, it can be hypothesized that:

H3: Idea generation capability has a positive effect on knowledge management.

Technological Capability and Knowledge Management

Gold, Malhotra & Segars (2001) argued that technological capability plays a significant role in integrating information and communication within an organization. Prior research indicates that technological capability positively affects knowledge management (Zott, 2008). Nonaka & Teece (2010) suggests that technological capability is an essential tool for promoting knowledge management. A well-developed technological base enables employees to access the required information necessary for making the right decisions (Teece & Pisano, 1994). Kogut & Zander (1992) observed that technological assets help employees to add new information on knowledge management which is beneficial for firms in meeting future challenges. Tseng & Lee (2014) found a strong correlation between technological capability, organizational performance and knowledge management. Moreover, Camisón & Villar-López (2014) found that technological capability moderates the relationship between knowledge management and research & development. Thus, it can be hypothesized that:

H4: Technological capability has a positive effect on knowledge management.

Innovative Capability and Knowledge Management

Building knowledge through innovative capability has become a priority for many organizations (Alvesson & Kärreman, 2001). Innovative ideas also help a firm in achieving a sustainable competitive advantage (Becerra-Fernandez & Sabherwal, 2001). Birdi, Leach & Magadley (2014) argue that in the prevailing competitive global environment successful organizations must improve their knowledge base by investing in innovative capability and other components of knowledge management. These studies have found that innovative capability along with the appropriate use of technology helps firms in identifying opportunities for launching new products. In addition, Tortoriello (2015) suggests that the rapid transfer of knowledge promotes innovation and helps in gaining a competitive edge.

Innovative capability is crucial for knowledge management and adds value to both customers and suppliers (Bowman & Ambrosin, 2003). It is argued that innovative capability includes people, tools and technology (Prajogo, 2016). Meihami & Meihami (2014) suggest that innovative knowledge based firms are heavily dependent upon human capital, research and development, patents and information technology. Past studies have found that firms that invest in innovative capability will have enhanced knowledge capability and higher

firm value (Carlucci, Marr & Schiuma, 2004). Higher firm value will encourage firms to invest more in the firm's knowledge management system (Dayan, Heisig & Matos, 2017). Thus, it can be hypothesized that:

H5: Innovative capability has a positive effect on knowledge management.

Conceptual Framework

The conceptual framework presented in Figure 1 has been derived from the previous literature.

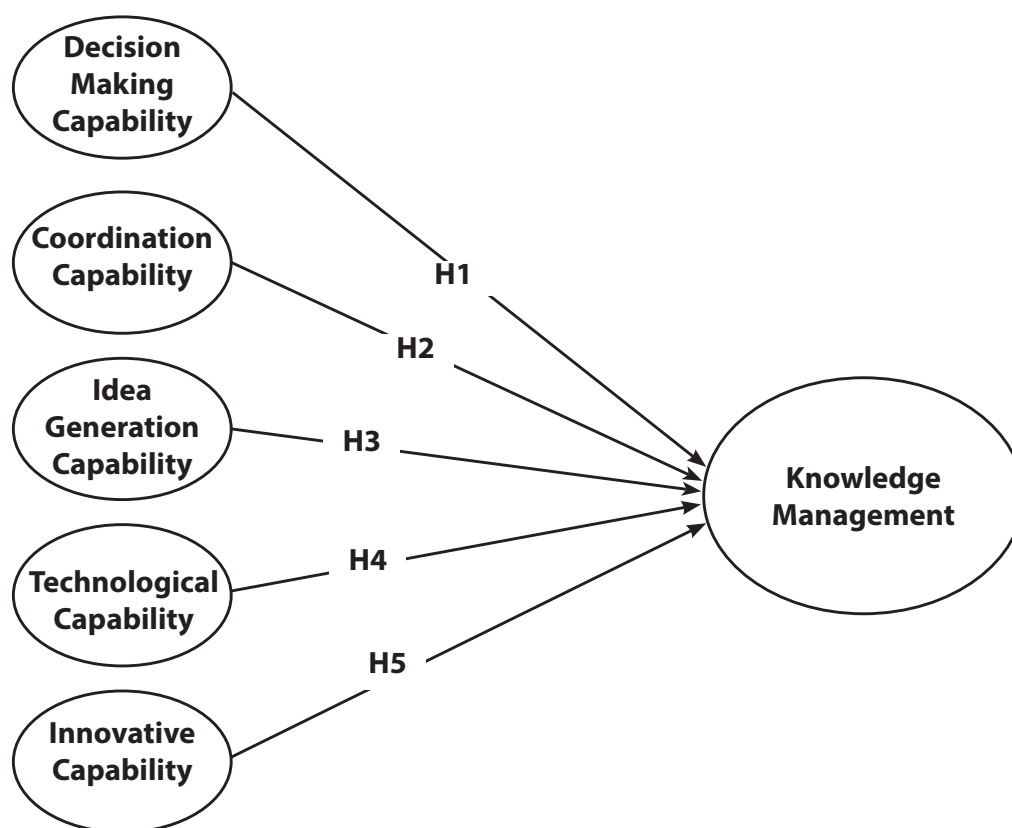


Figure 1: Conceptual Framework

Methodology

The study adopts a quantitative and deductive research approach. The sample was obtained from the banking sector of Karachi. Four hundred questionnaires were distributed non-randomly to supervisors, middle managers and senior managers. Three hundred and eighty five filled questionnaires were received with a response rate of 96%. The questionnaire used in this study was adapted from Gold, Malhotra & Segars (2001). It has six variables each containing four to seven items. The items used in the questionnaire are attached as Annexure 1. The dependent variable in the study was knowledge management. In addition, the independent variables were decision making capability, coordination capability, idea generation capability, technological capability and innovative capability.

The statistical model for the study is as follows:

$$KM = \alpha + \beta_1 DMC + \beta_2 CC + \beta_3 IGC + \beta_4 TC + \beta_5 IC + \epsilon$$

Where,

KM=knowledge management
DMC=decision making capability
CC= coordination capability
IGC= idea generation capability
TC=technological capability
IC=innovative capability.

Respondents Profile

A total of 385 useable responses were received from bank employees working in Karachi. The respondents comprise of 60% males and 40% females. The respondents include supervisors (56%), middle managers (39%) and senior managers (5%). In terms of age, 45% respondents were in the age group (25-30), 22% in the age group (31-35), 26% in the age group (36-40), and the remaining 7% were in the age group 40 plus. In terms of experience, 50% of the respondents had an experience of up to 5 years, 45% of the respondents had an experience between 5 to 10 years, and the remaining 5% of the respondents had an experience of more than 10 years.

Scale and Measures

All the constructs used in the questionnaire were adapted from the scales and measures developed by Gold, Malhotra & Segars (2001). It has six variables. Technological capability (6 items), knowledge management (6 items), idea generation capability (4 items), innovative

capability (4 items), coordination capability (4 items) and decision making capability (3 items). The final questionnaire after dropping items with low factor loadings is attached as Annexure 1.

Results

Preliminary Statistical Analysis

Prior to exploratory factor analysis, preliminary statistical analysis was performed. The adapted constructs fulfill the requirement of univariate normality as the results show that all the skewness and kurtosis values were between ± 3.5 (Hair Jr., et al., 2015). Similarly, all the Cronbach's alpha values on the present set of data were greater than 0.70 which suggests that the constructs are internally consistent. Additionally, the results suggest that all the constructs used in the study are distinct and unique.

Exploratory Factor Analysis

After analyzing the adequacy and significance through KMO Bartlett tests, exploratory factor analysis with varimax rotation was performed. Exploratory factor analysis was used to identify items that were not relevant to the study. The exploratory factor analysis results are presented in Table 1.

Table 1: Exploratory Factor Analysis

	Factor loadings
Technological Capability ($\alpha = 0.914$)	
My organization uses technology that allows us to search for new knowledge.	.837
Organization uses technology that allows people in multiple locations to learn as a group from a multiple source or at multiple points at a time.	.803
My organization generates new opportunities in aggregation with its partners.	.797
Technological changes provide big opportunities in our industry	.795
Our organization has fast speed in using new technology and equipment.	.712
Our organization has good performance in using new technology and equipment.	.647
Knowledge Management ($\alpha = 0.901$)	
My organization's Managers frequently examine knowledge for errors/mistakes.	.778
My organization Has clear rules for formatting or categorizing its	

process knowledge	.774
My organization designs processes to facilitate knowledge exchange across functional boundaries.	.765
Organization explicitly recognize knowledge as a key element in our strategic planning exercises	.738
My organization makes knowledge accessible to those who need it.	.733
Employees are valued for what they know.	.687
Idea Generation Capability ($\alpha = 0.874$)	
Different points of view are encouraged in group work/discussion.	.860
I emphasized creativity when generating the business ideas.	.831
Individuals generate many new insights.	.828
Individuals are able to break out of traditional mindsets to see things in new easy way.	.783
Innovative Capability ($\alpha = 0.854$)	
Company, managers support and lead the innovation process	.850
My company promotes experimentation and innovation as ways to enhance processes	.837
A common system of values, beliefs and objectives exists in my company, directed towards innovation	.798
Company encourages creativity, innovation and/or the development of new ideas	.624
Coordination Capability ($\alpha = 0.776$)	
We ensure an appropriate allocation of resources (e.g., information, time, reports) within our group.	.790
Group members are assigned to tasks which is according with their task-relevant knowledge, skills & ability.	.725
Coordination between organizational processes and employees' abilities	.700
We ensure that there is compatibility between group members expertise and work processes	.686
Decision Making Capability ($\alpha = 0.846$)	
Managers in this organization frequently involve employees in important decisions	.819
Our knowledge helps us to make timely decisions to deal with strategic problems	.709
I consider how best to carry out a decision.	.696

Market Forces College of Management Sciences					Volume 13, Issue 2 December 2018	
Eigenvalues	9.625	2.829	2.205	1.947	1.474	1.254
% of Variance	35.649	10.476	8.166	7.213	5.459	4.643
Cumulative %	35.649	46.125	54.290	61.503	66.962	71.606

The eigenvalues after EFA were greater than 1.0. Additionally, the factor loadings after dropping the irrelevant items were greater than 0.60. Some of the items that had a factor loading of less than 0.5 were dropped.

Regression Analysis

Multiple regression analysis was used to examine the influence of decision making capability, coordination capability, idea generation capability, technological capability and innovative capability on knowledge management. The results are presented in Table 2.

Table 2: Multiple Regression Results

	Beta	Sig.	VIF
Constant	.493	.013	
Decision Making Capability	.172	.000	1.697
Coordination Capability	.237	.000	1.253
Idea Generation Capability	.026	.515	1.212
Technology Capability	.296	.000	1.698
Innovative Capability	.170	.000	1.341

Dependent Variable: Knowledge Management ($R^2 = .458$, Adjusted $R^2 = .450$, $F = 57.786$, $p < 0.05$)

The results suggest that the predictors (i.e. decision making capability, coordination capability, idea generation capability, technology capability, and innovative capability) explain 45.80% of the variance in knowledge management. The results indicate that the first hypothesis (H1) examining the effect of decision making capability on knowledge management was accepted ($\beta = 0.172$, $p < .05$). The second hypothesis (H2) examining the effect of coordination capability on knowledge management was also accepted ($\beta = 0.237$, $p < .05$). On the contrary, the third hypothesis (H3) examining the effect of idea generation capability on knowledge management was not accepted ($\beta = 0.026$, $p > .05$). The fourth hypothesis (H4) examining the effect of technological capability on knowledge management was accepted ($\beta = 0.296$, $p < .05$). The fifth hypothesis (H5) examining the effect of innovative capability on knowledge management was also accepted ($\beta = 0.170$, $p < .05$).

Discussion

The discussion of results and their relevance to the earlier literature is presented in the following sections.

Decision Making Capability and Knowledge Management

The results suggest that decision making capability has a positive and significant impact on knowledge management. The results are presented in Table 2. The finding supports the first hypothesis and is consistent with the previous literature. Past studies on decision making and knowledge management have found that decision making capability strongly depends on an individual's experience, expertise and understanding for implementing correct decisions (Gordon & Gill, 1997; Zsombok, 1997; Hellriegel, Jackson & Slocum, 2007). Morris, Hammond & Snell (2014) concludes that the decision making capability has a positive influence on knowledge management and helps in meeting global challenges. On the contrary, Wu & Chen (2014) found that knowledge management does not have a direct effect on business process capabilities, however, knowledge management mediates the relationship between decision making and business process capabilities. Inglehart & Baker (2000) concluded that organizational learning is an important antecedent to knowledge management. However, the study suggests that organizational learning may get distorted through culture and the influence of leaders. On the contrary, Gold, Malhotra & Segars (2001) found that knowledge management can be enhanced through key capabilities such as idea generation capability, innovative capability and decision making capability. McKelvie & Davidsson (2009) developed a model of knowledge management based on a focus group. The study acquired responses from eight knowledge management practitioners and nineteen senior management personnel. It was found that although the parameters in decision making and knowledge management are similar for most organizations but the priorities were different for different organizations. In addition, Rantapuska & Ihaninen (2008) developed a model which found that both implicit knowledge and explicit knowledge play a significant role in decision making and knowledge management. Zoltay-Paprika, Wimmer & Szanto (2008) found that managerial decision making positively affects knowledge management which improves the association between a company and its stakeholders. Riege & Lindsay (2006) found a strong association between decision making and knowledge management. However, the study suggests that the association depends upon the age of knowledge management.

Coordination Capability and Knowledge Management

The results suggest that coordination capability has a positive and significant impact on knowledge management. The results are presented in Table 2. The finding supports the second hypothesis and is consistent with the previous literature. Helfat & Raubitschek (2000) suggest that coordination capability helps in integrating implicit knowledge and

practices of firms for accessing customer needs and catering to their demands. It has also been argued that coordination capability plays a significant role in reducing transaction costs and improving the supply chain process (Gomes & Dahab, 2010). Prior studies have found that the internal activity of an organization helps in developing and launching new products effectively (Gordon & Gill, 1997; Zsombok, 1997). Coordination capability helps in integrating explicit and implicit knowledge of a firm which plays an important role in enhancing knowledge management (Helfat & Raubitschek, 2000). Consequently, it enables firms to access information about customer needs due to which they are in a better position to make rational decisions. Some researchers have defined coordination capability as a firm's ability to combine all the antecedents of knowledge management for improving organizational performance (Amit & Schoemaker, 2012). Grant (1996) argues that all the employees of a firm from shop floor staff to board members possess some distinctive knowledge. Nieves & Haller (2014) found that human capital, sensing capability, coordinating capability, declarative knowledge, procedural knowledge capability, learning capability and integrating capability are important components of knowledge management. The study concluded that highly skilled employees had a more positive attitude towards change management as compared to less skilled employees. The study further added that effective knowledge management helps firms develop dynamic capabilities.

Idea Generation Capability and Knowledge Management

The results suggest that idea generation capability does not have a significant impact on knowledge management. The results are presented in Table 2. The finding does not support the third hypothesis and is not consistent with the previous literature. Idea generation capability is the ability of individuals or firms to generate innovative ideas and put them into action (Markides, 1999). Firms that have an innovative culture will always have a competitive edge over rivals (Hellriegel, Jackson & Slocum, 2007). It has also been argued that innovative ideas may be initially ambiguous and beyond the resources of the firm (Hellriegel, Jackson & Slocum, 2007; Grant, 1996). However, a dedicated knowledge management system has a built-in ability to support and nurture the right ideas and discard unrealistic ones (Zollo & Winter, 2002; Messo et al., 2002). Birdi, Leach & Magadley (2014) found that employees' idea generation capability positively affects knowledge management provided employees get the required support from the organization. Thus, organizations must focus on creating an environment which is conducive to idea generation. On the contrary, Pesonen et al., (2001) did not find empirical evidence that idea generation affects knowledge management. The study concludes that creative strategies mediate the relationship between idea generation and knowledge management.

Technological Capability and Knowledge Management

The results suggest that technological capability has a positive and significant impact

on knowledge management. The results are presented in Table 2. The finding supports the fourth hypothesis and is consistent with the previous literature. Gold, Malhotra & Segars (2001) argued that technological capability plays a significant role in integrating information and communication within an organization. Prior research indicates that technological capability positively affects knowledge management (Zott, 2008). Nonaka & Teece (2010) suggests that technological capability is an essential tool for promoting knowledge management. A well-developed technological base enables employees to access the required information necessary for making the right decisions (Teece & Pisano, 1994). Kogut & Zander (1992) observed that technological assets help employees to add new information on knowledge management which is beneficial for firms in meeting future challenges. Tseng & Lee (2014) found a strong correlation between technological capability, organizational performance and knowledge management. Moreover, Camisón & Villar-López (2014) found that technological capability moderates the relationship between knowledge management and research & development.

Innovative Capability and Knowledge Management

The results suggest that innovative capability has a positive and significant impact on knowledge management. The results are presented in Table 2. The finding supports the fifth hypothesis and is consistent with the previous literature. Building knowledge through innovation capability has become a priority for many organizations (Alvesson & Kärreman, 2001). Innovative ideas also help a firm in achieving a sustainable competitive advantage (Becerra-Fernandez & Sabherwal, 2001). Birdi, Leach & Magadley (2014) argue that in the prevailing competitive global environment successful organizations must improve their knowledge base by investing in innovative capability and other components of knowledge management. These studies found that innovative capability along with appropriate use of technology helps firms in identifying opportunities for launching new products. In addition, Tortoriello (2015) suggests that the rapid transfer of knowledge promotes innovation and helps in gaining a competitive edge. Innovative capability is crucial for knowledge management and adds value to both customers and suppliers (Bowman & Ambrosin, 2003). It is argued that innovative capability includes people, tools and technology (Prajogo, 2016). Meihami & Meihami (2014) suggest that innovative knowledge based firms are heavily dependent upon human capital, research and development, patents and information technology. Past studies have found that firms that invest in innovative capability will have enhanced knowledge capability and higher firm value (Carlucci, Marr & Schiuma, 2004). Higher firm value will also encourage firms to invest more in a firm's knowledge management system (Dayan, Heisig & Matos, 2017).

Conclusion

The main aim of the study was to measure how dynamic capabilities (i.e. decision making capability, coordination capability, idea generation capability, technological capability and innovative capability) affects knowledge management. The statistical results indicate that decision making, coordination, technological and innovative capabilities positively affect knowledge management. However, the idea generation capability did not have a significant effect on knowledge management. Overall, the results imply that dynamic capabilities play a vital role in strengthening knowledge management which may improve organizational performance. The study has a number of limitations. First, the study utilized data from only the banking sector of Karachi and did not focus on other sectors. Second, this study has examined only selected types of dynamic capabilities. Other types of dynamic capabilities include sensing capability and integrative capabilities have not been covered in this study. Future studies may explore how dynamic capabilities affect knowledge management in different industries operating in Pakistan.

Annexure-1

Constructs and Items used in the Questionnaire

Technological Capability

1. My organization uses technology that allows us to search for new knowledge.
2. Organization uses technology that allows people in multiple locations to learn as a group from a multiple source or at multiple points at a time.
3. My organization generates new opportunities in aggregation with its partners.
4. Technological changes provide big opportunities in our industry
5. Our organization has fast speed in using new technology and equipment.
6. Our organization has good performance in using new technology and equipment.

Knowledge Management

1. My organization's Managers frequently examine knowledge for errors/mistakes.
2. My organization Has clear rules for formatting or categorizing its process knowledge
3. My organization designs processes to facilitate knowledge exchange across functional boundaries.
4. Organization explicitly recognize knowledge as a key element in our strategic planning exercises
5. My organization makes knowledge accessible to those who need it.
6. Employees are valued for what they know.

Idea Generation Capability

1. Different points of view are encouraged in group work/discussion.
2. I emphasized creativity when generating the business ideas.
3. Individuals generate many new insights.
4. Individuals are able to break out of traditional mindsets to see things in new easy way.

Innovative Capability

1. Company, managers support and lead the innovation process
2. My company promotes experimentation and innovation as ways to enhance processes
3. A common system of values, beliefs and objectives exists in my company, directed towards innovation

4. Company encourages creativity, innovation and/or the development of new ideas

Coordination Capability

1. We ensure an appropriate allocation of resources (e.g., information, time, reports) within our group. .
2. Group members are assigned to tasks which is according with their task-relevant knowledge, skills & ability.
3. Coordination between organizational processes and employees' abilities
4. We ensure that there is compatibility between group members expertise and work processes

Decision Making Capability

1. Managers in this organization frequently involve employees in important decisions
 2. Our knowledge helps us to make timely decisions to deal with strategic problems
 3. I consider how best to carry out a decision.
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