Impact of Knowledge Management Process on Business Model Innovation: The Moderating Role of Wise Leadership

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Abstract: This research examines the impact of the knowledge management (KM) process on Business model innovation (BMI) via Leadership styles. The perspective of knowledge management suggests a knowledge process architecture of acquisition, conversion, application, and protection. This study also proposes to examine the moderating role of wise leadership in the relationship between the KM process and BMI. We empirically analyze a sample of 200 managers in Tunisian banks, the hypothesized relationships were tested through the maximum likelihood method (LISERL). The findings of the study reveal that wise leadership has a positive effect on the KM process. The authors encourage organizations to use this style to maximize the effect of leadership on KM. Moreover, wise leadership has been evidenced in this research as having part moderating effect between KM process and BMI. The authors also recommend financial companies increase their innovation activities through the BMI.

Keywords: Wise leadership, Knowledge management process, Business model Innovation performance, North African context

1. Introduction

The business world is becoming more complex due to innovation and the accelerating digital transformation. The best way to keep up with this constant change effectively is not by expecting training to upgrade the right tools, but to cope by improving our knowledge (Castro & Moreira, 2023). To do this, companies have to access effective innovations and acquire further knowledge. They also have to identify the required knowledge and effectively manage it to successfully achieve their goals in such a market (Qandah et al. 2020; Zheng et al. 2011). In this sense, Sreenevas et al. (2018) argue that successful firms are those that constantly create new knowledge, disseminate it widely throughout the organization, and rapidly incorporate it into new technologies and products.

To grow, firms have to further work on their resources in an innovative way (Kaur, 2019) by developing specific knowledge that ensures evolution and performance in an increasingly changing market. Therefore, the company needs to nurture its innovation potential (Lei et al. 2019; Sengphet et al. 2019). Innovation must be viewed in these different technical, social, and managerial dimensions to extend to business models as well. For this purpose, some enterprises have started to explore new strategies to gain competitive advantage (Schneider and Spieth, 2013), and this is achieved through business reconfiguration by either innovating one or more components of their business model (BM), or the whole model (Lambert and Davidson, 2013; Clauss et al., 2019). Thus, the new "Business Model Innovation (BMI)" approach has emerged which demonstrates the company's innovative actions by simultaneously considering all internal and external factors (Schneider and Spieth, 2013).

Leadership has been regarded as a key factor to impact innovation (Rosing et al. 2011; Ding et al. 2019). Earlier research has shown that successful innovation requires the leader's permission and support (Elenkov et al. 2005). While Phronesis ("wisdom practices") is a complex philosophical concept, management researchers have begun to restudy it (Küpers, 2016; Ding et al. 2019). Nonaka et al. (2011) have identified six capabilities of the Phronesis leader (wise leadership): 1) to make a judgment based on the organization's social value; 2) to have a keen perception; 3) to create the opportunity to share (create a context for sharing); 4) to have communication skills; 5) to exercise political power; and 6) to cultivate others. Therefore, this article would use these characteristics to test the impact of this wise leader type on the relationship between the KM process and BMI.

At the organizational level, some knowledge is useful for problem-solving (Leonard and Sensiper, 1998). Theoretical and empirical methods have revealed that knowledge management (KM) capabilities positively affect innovation (Chen and Huang, 2009; Du Plessis, 2007). Some researchers, however, argue that the lack of a sharing culture can impede the practice of knowledge management in organizations (Weir and Hutchings, 2005). Based on Nonaka’s theory, wise leadership has been illustrated to address the practical process of KM (Nonaka & Toyama, 2007).
Given that Ding et al. (2019) use empirical methods to prove that the KM process has a positive impact on innovation performance, according to the logic derivation, this study proposes the hypothesis that the wise leadership of organizational members has a significant relationship on organizational innovation performance and the KM process. Thus, this research will test the relationship between the KM process and BMI as well as the moderating role of the wise leader.

2. Theoretical Background

2.1 KM Process

To adapt to the ever-changing environment, the organization must develop dynamic capabilities allowing it to capture and reconfigure itself through transformational activities (Eriksson, 2013). Dynamic capabilities have been defined as "the ability to integrate, build, and reconfigure internal and external competencies to cope with rapidly changing environments" (Teece & al. 1997). According to Zheng et al. (2011), the term dynamic knowledge-based capabilities is used to provide organizations with the ability to acquire, generate, and combine knowledge resources to detect and explore changes in the environment and to cope with changes. Using this definition, dynamic knowledge-based capabilities have multiple dimensions which are knowledge acquisition capabilities, knowledge generation capabilities, knowledge sharing capabilities, and knowledge combination capabilities (Patrick & Dotsika, 2007; Zheng & al. 2011; Cao & Xiang, 2012). In other words, these capabilities allow the organization to acquire knowledge from the external environment (market, competitors, partners, etc.) create and share knowledge within the organization, based on the skills and experience of its employees and finally combine and apply external knowledge (Quintane & al. 2011; Zheng & al. 2011; Cao and Xiang, 2012; Al-Debei & al. 2013; Denford, 2013; Qandeh & al. 2020). In this research, we have opted to work with the categorization of Gold et al. (2001):

- Knowledge acquisition: this step can refer to knowledge creation, knowledge exploration, knowledge production, knowledge generation, knowledge derivation, knowledge construction, knowledge discovery, knowledge collaboration, knowledge storage, and knowledge brokerage (Ouyang 2015; Pavlou and El Sawy 2006; Wu and Hu 2012; kaur, 2019). Knowledge acquisition capability reflects an organization's ability to introduce new knowledge into the organization either by facilitating knowledge flow from outside to a firm's internal stocks (obtaining knowledge from various sources) or by using existing knowledge in innovative ways (Alrubaiee and al. 2015; Kaur and Mehta 2016a; Malikawi and Rumman 2016).
- Knowledge conversion: To truly use knowledge to capture innovative opportunities, firms need to further convert and apply acquired knowledge (Cohen and Levinthal, 1990). This processing step involves the filtering of new knowledge (Gold et al. 2001). The effectiveness of these conversion-oriented processes depends on a firm's internal management capabilities and the firm's ability to value new external knowledge (Lane and Lubatkin, 1998). The conversion of new knowledge into organizational knowledge terms and knowledge stores makes external knowledge use-ready (Lane and Lubatkin, 1998).
- Knowledge translation: The process is known by several names and also refers to various concepts: transfer, diffusion, sharing, dissemination, exchange, implementation, integration, knowledge mobilization, etc. (Dijkers & al. 2012; Oborn, 2012; Joseph, 2013; Ruest, 2019). It includes all the stages of knowledge production, synthesis, exchange, dissemination and sharing (Goyet, 2014; Davenport, 2019). It also refers to the firm's ability to use knowledge for problem-solving, monitoring decisions and directed actions (Waribugo, Ofoegbu, & Akpan, 2016; Maedche et al. 2019).
- Knowledge protection: this stage is designed to protect knowledge within an organization from illegal or inappropriate use or theft (Dehghani & al. 2014; Gold & al. 2001; Kaur and Mehta 2016a; Kimaiyo & al. 2015; Lai 2013; Nguyen 2010; Nguyen and Neck 2008; Patil and Bamnote 2015; Kaur, 2019). For a firm to generate and maintain a competitive advantage, its knowledge needs to be protected (Liebskind, 1996; Gold & al. 2001).

2.2 Business Model Innovation

The rapidly developing digital technologies have changed the business environment and have led to new means for firms to conduct innovation activities (Amit and Han, 2017; Paiola and al. 2021). Some new business models have significantly changed the rules of the game in various sectors (e.g. Uber in the cab industry,
Netflix in film, and Airbnb in lodging) (Teece, 2018). As a result, companies are compelled to regularly change and innovate their innovation strategies (Amit & Zott, 2015).

Generally, the term innovation is associated with products and services, technology, processes, and management (Visnjic Kastalli & al. 2016). Business model innovation (BMI) differs from the other forms of innovation owing to its multi-dimensionality (Christensen & al. 2016). In terms of breadth, BMI (Business Model Innovation) can be explained at both macro (i.e., the novelty of the innovation in the market or industry) and micro (i.e., the novelty of the innovation to the firm) levels (Taran & al. 2015). In terms of depth, BMI involves a transformational change in the company's business logic and organizational culture (Hock et al. 2015).

The BMI functions as a key driver to improve a firm’s innovation capability. However, it should be noted that, unlike product and service innovation, BMI is about the various innovative activities of a company such as processes, structure, delivery, and interaction performed to achieve sustainable competitive advantage and higher performance. Firms creating unique BMI can achieve higher returns four times than firms that focus innovation only on products and services (Anwar, 2018) since according to Bashir and Verma (2017) BMI is a significant predictor of competitive advantage. So BMI enables firms to create new activities that go beyond product and process innovation (Osievsksyy and Dewald, 2015) and has been identified as a source of sustainable competitive advantage (Tallman, Luo, and Buckley, 2018).

2.3 Wise Leadership

The leadership concept is one of the most studied concepts by management researchers (Al Amiri & al. 2020). Winston and Patterson (2006) propose an integrative leadership definition—"A leader is one or more people who select, equips, trains, and influences one or more follower(s) who have diverse gifts, abilities, and skills and focuses the follower(s) on the organization’s mission and objectives, causing the follower(s) to willingly and enthusiastically expend their spiritual, emotional, and physical energy in a concerted coordinated effort to achieve the organization’s mission and objectives."

Thus, leadership enables management teams to collaborate effectively to drive change and execute strategy, develop processes, skills, mindsets, and tools to jointly navigate change, trigger innovation throughout the organization, manage talent, and create the right culture. In 1978, Burns classified leadership into two types: transactional and transformational leadership (Elenkov & al. 2005). Kuhnert and Lewis (1987) simply explain that transactional leaders practice trading with workers based on their performance, and transformational leaders impact staff by changing their objectives. Additionally, transformational leadership approaches can guide followers to sacrifice personal profits for collective organizational advantages, and this method demonstrates high-performance achievement (Kuhnert & Lewis, 1987). Yet, some researchers suspend the roles of leaders in organizational outcomes, as outcomes may depend on several conditions that simply rely on leadership (Elenkov & al. 2005). Upper echelon theory argues that organizational outcomes sometimes depend on leaders’ level of discretion (Davies & Davies, 2004; Hambrick & Finkelstein, 1985). Modern researchers in the field of wisdom (e.g. Bachmann and al. 2018; Gibson 2008; Holliday and al. 2007; Jeannot 1989; Korac-Kakabadse and al. 2001; Küppers and Statler 2008; Sasse-Werhahn et al. 2020; Yang 2011) argue that wisdom practices can open up new paths of exploration for academics and practitioners, particularly in the field of leadership and management. Practically wise leadership refers to the optimal integration of the conflicting demands of ethics and effectiveness in organizations facing complexity and uncertainty (Holliday and al. 2007; Küppers and Statler 2008) and requires the ability to foster practical wisdom in others and inspire them into action (Rowley and Gibbs 2008).

In contrast to strategic leadership theory, which mainly focuses on the organization top managers (Vera & Crossan, 2004), the wise leadership is a type of leadership that comprises middle and senior managers (Nonaka, Hirose, & Takeda, 2016). Nonaka et al. (2016) point out that senior management cannot detect all the changes and opportunities that frontline workers can. Promoting employees’ managerial awareness strengthens the collective awareness of the individual to participate in organizational management and practice the concept of "management by all" (Adler and Hiromoto, 2012). Therefore, wise leadership is not limited to top management, with most focus on mid-level managers (Nonaka et al. 2016).
3. Research Hypotheses

3.1 KM Process and BMI

The BMI literature has been mainly related to the dynamic capabilities of KM (Yun & al. 2015; Teece, 2018; Rayees and Makhmoor, 2019; HockDoepgen & al. 2021). KM permits the identification, formalizing, sharing, enriching, and value of knowledge within the organization, especially critical and strategic knowledge. All this occurs to foster the capacity for innovation through better productivity of new knowledge (Boboughazala and Ermine, 2007; Christian Elongé, 2019). Indeed, the continuous acquisition of new knowledge is essential to identify innovative opportunities and to guide the strategic positioning of the company. In addition, the acquisition of external knowledge can be used to find new partners, suppliers, distribution channels, and new customer relationships (Zott and Amit, 2010; Miroshnychenko et al. 2021). The knowledge conversion process is also important for BMI (HockDoepgen et al. 2021). Indeed, firms with knowledge integration capability can link external and internal knowledge (Grant, 1996; Kleinschmidt & al. 2007). The more advanced this capability, the better firms are at coordinating and integrating knowledge from various sources into their BM (Kraaijenbrink, 2012; Subramaniam, 2006). In this sense, Makhmoor and Rayees (2019) find a positive link between the knowledge conversion process and BMI. For them, knowledge conversion is the main condition for innovative BMs.

The BMI also depends on the nature of the knowledge, i.e., on how tacit knowledge contributes to the construction of the BM and how explicit knowledge facilitates the creation of successful BMs. Each company should consider what type of knowledge assets would be essential to implement an innovative business model (Lee & al., 2004). In this sense, Malhotra (2001), state that companies operating in an ever-changing business environment must be able to apply new knowledge, and continuously renew existing archived knowledge to improve their BM and keep up with dynamic changes in the business environment (Makhmoor and Rayees, 2019). In other words, the application process implements and adjusts the operational and strategic activities of the current BM to solve problems and develop new technologies and innovations in the BM (Valentim & al. 2015).

The protection process guards against imitating innovations and inappropriate use of knowledge. In this regard, Schweizer (2005) explains that "dynamic capability can be seen as the ability to seize new opportunities and change the existing business model by reconfiguring the Value Chain constellation and protecting knowledge and skill assets". Based on these arguments we propose the following hypothesis:

Hypothesis 1: The KM process positively impacts BMI.

3.2 Wise Leadership and KM Process

Since the 1990s, KM has become an emerging discipline in business and academic fields (Donate & de Pablo, 2015). Leaders manage, practice organizational KM and monitor progress effectiveness (Donate and de Pablo, 2015; Nguyen and Mohamed, 2011). Dynamic capability acts as an innovative value for organizations to create a development plan (Nonaka et al. 2016).

Some scholars find that the lack of a sharing culture impedes knowledge sharing and transfer in organizations (Guaderrama, 2016; Weir & Hutchings, 2005). Connelly et al., (2012) indicate that the organizational knowledge dissimulation phenomenon is present, and they also show that interpersonal distrust is related to dissimulation behaviors. Wise leaders acquire contextual and universal knowledge via experience and training (Nonaka & Toyama, 2007). Wise (phronesis) leadership, in the distribution model, flexibly adapts the context to create a place for sharing and emphasizes that knowledge creation may require cooperation (Nonaka et al. 2016; Nonaka and Toyama, 2007). In other words, the distribution model of wise leadership emphasizes the sense of participation of organizational members, which can increase their opportunities for interaction. Therefore, after comparing the KM dilemma practice and the characteristic of wise leadership, this article assumes that wise leadership can have the positive function of creating a space for organizational knowledge sharing, encouraging employee participation, and increasing team spirit to improve the effectiveness of knowledge transfer. Thus, we propose this second sub-hypothesis:

Hypothesis 2: Wise leadership positively impacts the KM process.

3.3 Wise Leadership and BMI

Previous academic contributions summarize two types of organizational innovation, one is product innovation and another is business mechanism innovation (Elenkov et al. 2005; Huffman and Hegarty, 1993). While...
leaders are not required to manage all business details, innovative leaders can excel in creativity and discipline, and they could perfectly identify and seize opportunities (Bel, 2010; Shotter & Tsoukas, 2014). In the same vein, organizational theories have been widely discussed regarding firms' approaches to adapting to environmental and technological change (Fageberg, Mowery, & Nelson, 2004; Tushman & Nelson, 1990). Damanpour (1991) states that the use of innovation creates changes in organizational structure and function. Eco-innovation, similarly, addresses the sustainability of three types of changes such as social, institutional, and technological innovation (Rennings, 2000). To adapt to changes, if leadership is flexible, action would become fast and effective (Nonaka and Toyama, 2002). Considering comprehensively the benefit of wise leadership on organizational effectiveness, this research asserts that wise leadership can play a positive role in improving organizational innovation performance (Elenkov et al. 2005; Nonaka and Toyama, 2007). Accordingly, we propose the following hypothesis:

Hypothesis 3: Wise leadership positively impacts BMI.

3.4 The Moderator

The previous hypotheses present the links between the KM process, wise leadership and BMI. Hypothesis 1 proposes that the KM process has a positive effect on BMI. Hypotheses 2 and 3 state that wise leadership positively relates to the KM process and BMI. Specifically, wise leadership accelerates KM practice (Donate & de Pablo, 2015; Nguyen & Mohamed, 2011), and impacts organizational technical and administrative innovation (Chen & Huang, 2009). We argue that wise leadership has a moderating effect on the relationship between the KM process and BMI. Accordingly, we propose the following hypothesis:

Hypothesis 4: Wise leadership acts as a moderator between the KM process and the BMI.

Figure 1: Research Framework

4. Research Methodologies

4.1 Sampling

A questionnaire is utilized, and we examine the questions before issuing. After discussion and modification, the survey is distributed to the managers of Tunisian Bank. 283 people are requested and informed for the survey, while the total amount of respondents is 200.

4.2 Measures

The four KM dynamic capabilities constructs are knowledge acquisition capabilities (9 items), knowledge conversion capabilities (5 items), knowledge application capabilities (6 items) and knowledge protection capabilities (4 items). This dynamic KM capabilities construct is developed by Gold et al. (2001) and reused by Heisig, (2009), Liebowitz and Megbolugbe (2003), Smith (2006), Jasimuddin and Naqshbandi (2019) and Hock-Doepgen, et al. (2021).

The BMI measurement scale is derived from the work of these researchers George and Bock (2011), Karimi and Walter (2016), Anwar (2018), Anwar and Shah (2020), and Al-Nimer et al. (2021). It includes questions
about whether the firm focuses on existing or new activities in each of the eight components of the business model.

Wise leadership is considered the moderating variable in this research. Nonaka et al. (2016) state that there are 6 items on wise leadership (Nonaka et al. 2016; Nonaka & Takeuchi, 2011).

We use the five-point Likert-type scale because based on the literature review a five-point scale increases the response rates and the quality of responses, which makes it easier for respondents to complete the questionnaire (Guo et al. 2015; Suqin Liao et al. 2018; Anwar, 2018; Karimi and Walter, 2016; Al-Nimer et al. 2021). Table 1 illustrates the details of the question numbers, which are designed to measure the variables in this research.

Table 1: Reliability Statistics

<table>
<thead>
<tr>
<th>Items</th>
<th>N of Questions</th>
<th>Cronbach's Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge Acquisition</td>
<td>9</td>
<td>.896</td>
</tr>
<tr>
<td>Knowledge Conversion</td>
<td>5</td>
<td>.920</td>
</tr>
<tr>
<td>Knowledge Application</td>
<td>6</td>
<td>.915</td>
</tr>
<tr>
<td>Knowledge Protection</td>
<td>4</td>
<td>.869</td>
</tr>
<tr>
<td>BMI</td>
<td>8</td>
<td>.946</td>
</tr>
<tr>
<td>Judge goodness</td>
<td>2</td>
<td>.747</td>
</tr>
<tr>
<td>Create shared context</td>
<td>4</td>
<td>.862</td>
</tr>
<tr>
<td>Grasp the essence</td>
<td>2</td>
<td>.831</td>
</tr>
<tr>
<td>Communicate arts</td>
<td>2</td>
<td>.873</td>
</tr>
<tr>
<td>Exercise political power</td>
<td>3</td>
<td>.896</td>
</tr>
<tr>
<td>Foster phronesis</td>
<td>2</td>
<td>.855</td>
</tr>
</tbody>
</table>

4.3 Data Analysis and Results Presentation

51 questions are designed for the questionnaire, 4 of which deal with respondents' background information. The Cronbach's alpha value of the 47 residual subjective questions is above 0.8. In social science studies, 0.600 of Cronbach's alpha value is the acceptable line (Liao et al. 2007). Therefore, it means that the situation of data reliability is acceptable as the usual cases. Table 1 displays the results of the item tests. The minimum Cronbach's alpha value is 0.747, which is above the acceptable line (0.600), so the reliability of the data meets the requirement of general social science research.

This article uses the Kaiser-Meyer-Olkin and Bartlett test to examine the data set. The standard level of acceptance requires a KMO value of at least .600, and "Bartlett's test of sphericity" requires significant testimony (Ismail, Mohamad, Mohamed, Rafiuddin, & Zhen, 2010). The results of the KMO value are greater than 0.8 in this research, and "Bartlett's sphericity test" is significant (p <0.001). Thus, the data set in this study is also satisfactory for factor analysis.

5. Hypothesis Test

Our model is evaluated using structural equation modeling (SEM), which is a diverse set of algorithmic and statistical models and methods that allow for equivalences and relationships between concepts (latent or dependent variables) and quantitative data (observables or explanatory variables). This capacity to make concepts resemble data has made SEM modeling a privileged tool in the social sciences (sociology, psychology, marketing, etc.) (Steenkamp and Baumgartner, 2000).

Indeed, this tool can be used to analyze the effect of KM processes on BMI as it adjusts the types of factor analysis and regression, helping the researcher to examine the relationships between measured variables and latent variables as well as between latent variables simultaneously (Hair et al. 2014; Zhou et al. 2016). In this regard, two models constitute the structural equation model (SEM) according to Al-Emran et al. (2018): the MeasurementModel "refers to the outer measure of the model representing the relationship between the latent construct (i.e., variable or factor) and its relevant indicators (i.e., items or measures)" and the Structural Model "refers to the inner model specifically the assessment of the internal structure of the model where the
relationships between the constructs themselves are measured." To examine the causal relationships of the model, the measurement model and structural models can be used as descriptive or explanatory methods (Roussel et al. 2002). In our study, we identify only one type of measurement model, namely reflexive measurement, which means that all indicator items are caused by the same construct.

Table 2: Testing of Direct Effects

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Estimation</th>
<th>S.E</th>
<th>C.R</th>
<th>P</th>
<th>Signification</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1. The KM process has a positive impact on BMI.</td>
<td>.573</td>
<td>.074</td>
<td>7.789</td>
<td>0.000</td>
<td>Significant</td>
</tr>
<tr>
<td>H2. Wise leadership has a positive impact on the KM process</td>
<td>.648</td>
<td>.080</td>
<td>7.773</td>
<td>0.000</td>
<td>Significant</td>
</tr>
<tr>
<td>H3. Wise leadership has a positive impact on BMI.</td>
<td>.663</td>
<td>.067</td>
<td>7.743</td>
<td>0.000</td>
<td>Significant</td>
</tr>
</tbody>
</table>

This table reveals that all direct effects have a statistical value T (C.R) greater than the threshold of 2 and significant at a P error of 5% (Joreskog and Srbom, 1996). Thus, these results help to confirm the hypotheses (H1, H2, H3). In other words, if organizational members are endowed with a strong ability to create knowledge-sharing opportunities in a wise leadership context, this would significantly improve the organization's BM innovation performance.

Table 3: Testing of Indirect Effects

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Estimation</th>
<th>S.E</th>
<th>C.R</th>
<th>P</th>
<th>Signification</th>
</tr>
</thead>
<tbody>
<tr>
<td>H4. Wise leadership acts as a moderator between the KM process and BMI.</td>
<td>.558</td>
<td>-</td>
<td>-</td>
<td>0.003</td>
<td>Significant</td>
</tr>
</tbody>
</table>

Based on Tables 3 and 4, the moderation effect hypothesis is significant with a p<0.05. Therefore, wise leadership plays a moderating role in the relationship between the KM process and BMI.

Table 4: Confirmatory Factor Analysis

<table>
<thead>
<tr>
<th>Model</th>
<th>χ²</th>
<th>df</th>
<th>Δχ²</th>
<th>Δ df</th>
<th>RMSEA</th>
<th>CFI</th>
<th>SRMR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor Model</td>
<td>841.65</td>
<td>421</td>
<td>.074</td>
<td>-</td>
<td>0.05</td>
<td>0.92</td>
<td>0.06</td>
</tr>
<tr>
<td>Factor Model a</td>
<td>1487.98</td>
<td>433</td>
<td>.080</td>
<td>423.55*</td>
<td>0.1</td>
<td>0.82</td>
<td>0.09</td>
</tr>
</tbody>
</table>

aCombining all items
*p<0.001

6. Discussion

Based on our empirical study, the relationship between dynamic KM abilities and BMI is significant (H1). We find that knowledge application, conversion, application, and protection capabilities positively impact BMI. This found positive impact does not align with the results of Zott and Amit (2010) who note that the knowledge acquisition process identifies new KM opportunities that introduce new activities, connect partners in innovative ways, and change the governance of activities along the supply chain. That is, for these, new knowledge acquisition capabilities are critical for BMI (Von Delft et al. 2019; Hock-Doepgen et al. 2021; Miroshnychenko et al. 2021).

Our results also suggest that Tunisian banks have a process to convert knowledge into new product or service design, which promotes their ability to integrate important knowledge into WB innovation agreeing with...
Makhmoor and Rayees (2019) who find a positive link between the knowledge conversion process and BMI. In their view, knowledge conversion is the main condition for innovative BMs. For the knowledge application process, we also find a positive link between it and BMI. Indeed, the banks studied, use knowledge in the development of new products and services and the adjustments of their strategic orientation. This process also implements and adjusts the operational and strategic activities of the current WB to solve problems and develop new technologies and innovations in the WB (Valentim et al. 2015; Farooq, 2016; Makhmoor and Rayees 2019). The last dimension of dynamic KM capabilities is related to knowledge protection. According to our results, the knowledge protection process proved to have a positive effect on BMI. This result is reflected in the fact that banks provide good incentives for knowledge protection.

Additionally, this research proves that wise leadership has a positive relationship with BMI and according to the illustration by Nonaka et al. (2016), wise leadership has a positive relationship with organizational innovation performance. Wise leadership focuses on middle-level managers; hence the research results indicate that the middle managers’ leadership has positive relations with organizational performance. Both top managers and middle managers have formal positions in organizations, however, the employees’ status competition theory illustrates that some informal status corresponds to people’s prestige and reputation (Van Leeuwen & Täuber, 2011). Therefore, in future studies, if the researcher hopes to explore the human factors in innovation or knowledge management, both formal and informal organizational members’ status is suggested for further study.

7. Contributions, Limitations, and Suggestions for the Future Studies

Firstly, the findings indicate the relationship between wise leadership and BMI. While the empirical research results of this paper show the 6 abilities of the wise leadership of Nonaka’s theory, only the ability to create the sharing context has been proved to have a significant positive impact on BMI. Wise leaders encourage organizational members’ sharing and exchanging of their knowledge and experience via creating places and opportunities. According to our research results, this collective wisdom may promote the enterprise’s innovation ability.

Secondly, the research contributions indicate that the KM capabilities including knowledge acquiring, conversion, application and protection have been evidenced to have a significant positive function on BMI. In other words, these conclusions fully demonstrate the role of KM capability in the corporation’s innovation. Not only does the technical innovation require efficient KM to support the breakthrough of the existing technology, but also the organizational administration expects new ideas for sustainable development.

Thirdly, the existence of the moderating effect of wise leadership has been evidenced in this research, and the KM process may need to impact BMI via the leadership channel. If we metaphorize the wise leader as a warrior fighting and competing for organizational innovation and development, the ability of knowledge management would be their military hardware. Hence, the KM capability’s bridgework cannot be ignored.

However, several limitations cannot be ignored in this paper. First, our data are cross-sectional, and therefore causality cannot be guaranteed. Yet, our theoretical arguments support the ordering of our variables as shown in our theoretical model. Still, future research would benefit from the use of longitudinal and/or experimental study designs. Second, we tested our hypotheses with a specific sample of financial service employees, which limits the generalizability of our findings. Although we believe this sample is an interesting and important context to study wise leadership, future research would benefit from replicating our findings using a sample of participants from a variety of contexts. Third, same-source bias could be a concern in that our antecedent and moderator variables are rated by the same source. Finally, we encourage employees to participate in our research by offering incentives. Although past research suggests that financial incentives improve response rates, without biasing results (Singer and Ye 2013), this may not be true in all contexts. Future research could consider replicating our results within the financial services, without the use of incentives, to determine whether results vary.

References


