

Matar, Ibrahim; Raudeliūnienė, Jurgita

## Article

# A road map for enhancing the entrepreneurial knowledge potential of the lebanese small and medium-sized enterprises

Open Economics

## Provided in Cooperation with:

De Gruyter

*Suggested Citation:* Matar, Ibrahim; Raudeliūnienė, Jurgita (2018) : A road map for enhancing the entrepreneurial knowledge potential of the lebanese small and medium-sized enterprises, Open Economics, ISSN 2451-3458, De Gruyter, Warsaw, Vol. 1, Iss. 1, pp. 131-141, <https://doi.org/10.1515/openec-2018-0007>

This Version is available at:

<https://hdl.handle.net/10419/236587>

### Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

### Terms of use:

*Documents in EconStor may be saved and copied for your personal and scholarly purposes.*

*You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.*

*If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.*



<https://creativecommons.org/licenses/by-nc-nd/4.0/>



## Research Article

Ibrahim Matar, Jurgita Raudeliūnienė\*

# A Road Map for Enhancing the Entrepreneurial Knowledge Potential of the Lebanese Small and Medium-sized Enterprises

<https://doi.org/10.1515/openec-2018-0007>

Received May 23, 2018; accepted August 17, 2018

**Abstract:** Small and medium-sized enterprises (SMEs) in Lebanon constitute 90% of the country's enterprises (Kheir 2017). The Lebanese SMEs' entrepreneurial knowledge potential is not systematically developed to leverage the country's SMEs with a competitive advantage. Thus, the purpose of this article is to analyse knowledge management processes and to show how their implementation can work as a road map for enhancing the entrepreneurial knowledge potential of the Lebanese SMEs. Using the comparative analysis method along with the scientific literature review, the article will highlight knowledge management implementation gaps that have to be considered by entrepreneurs while establishing their SMEs focusing on the positive outcomes after implementation.

**Keywords:** Knowledge Management, Knowledge Potential, Knowledge Management Cycle, Knowledge Management Process, Evaluation, Lebanese Small And Medium-Sized Enterprises

**JEL Classification:** M1, M16, D8, D83

## 1 Introduction

Lebanon has established a prominence for a vivacious entrepreneurial setting and a robust base of small and medium-sized enterprises (SMEs) that contributes considerably to its economy. Undoubtedly, the Lebanese ecosystem for entrepreneurs and SMEs has gone through a long way in the development process. Moreover, Lebanon is a developing country that faces a stagnation in which the overall growth of the GDP is below 2% and, as a result, job creation is almost absent with an unemployment rate of 51% (The Government of Lebanon and the United Nations 2018). Due to many other factors, ranging from social to economic, the Lebanese government has sponsored many initiatives in order to strengthen the environment of the Lebanese SMEs. How to efficiently manage Lebanese entrepreneurs knowledge potential in a dynamic environment under conditions of uncertainty will be explored by integrating various insights from the scientists related to the knowledge management process.

The organization's knowledge potential in this study is defined, as the organization's resources and market opportunities, generating its knowledge potential, complexity and efficient management of which create prerequisites for meeting the changing individual user needs for information and knowledge, creating reciprocal value, uniqueness and global or local leadership in the marketplace (Raudeliūnienė et al. 2018).

---

**Article note:** This article is a part of Topical Issue "Business and Management" edited by Viktorija Skvarciany.

---

**\*Corresponding author: Jurgita Raudeliūnienė**, Department of Business Technologies and Entrepreneurship, Vilnius Gediminas Technical University, Lithuania, E-mail: [jurgita.raudeliuniene@vgtu.lt](mailto:jurgita.raudeliuniene@vgtu.lt)

**Ibrahim Matar**, Department of Business Technologies and Entrepreneurship, Vilnius Gediminas Technical University, Lithuania

This study will provide benefits of knowledge management cycle implementation and recommendations that in turn will help entrepreneurs to overcome these challenges and to develop potential in creating, sharing, and applying knowledge for better organizational performance. For the accomplishment of the article's purpose, methods such as scientific literature analysis and comparative analysis were employed. The novelty of this study originates from the fact that there has been no previous research done on how knowledge management cycle can improve the entrepreneurial knowledge potential of the Lebanese small and medium-sized enterprises.

## 2 The benefits of knowledge management in small and medium-sized enterprises

In the context of transformations and the global shift to the knowledge economy, organizations started to admit the importance of the role that knowledge management plays in sustaining a uniqueness. It's agreed that knowledge potential is the most valuable resource that organizations possess; and thus, it should be well-managed and preserved (Lee, Wong 2015; Hasani, Sheikhesmaeili 2016; Martin et al. 2016; Raudeliūnienė et al. 2016, 2018; Ma et al. 2017; Marouf 2017; Nikolopoulos, Dana 2017).

Entrepreneurship is concerned with new venture creation and with the development of small firms (Tavassoli et al. 2017). Entrepreneurs are known as “dreamers who do”, self-made and independent (Cepeda-Carrion et al. 2017). Moreover, most entrepreneurs establish SMEs when they start a business that are usually solely owned and controlled by them. SMEs usually operate with resource constraints and need supporting activities to improve their performance. Owing to their supremacy in economic growth and the creation of job opportunities to the societies, SMEs are considered as important contributors for the economic growth of countries (Wibowo, Grandhi 2017). Thus, improving entrepreneurs' knowledge potential will have its positive effect on the country as a whole. Furthermore, entrepreneurs are considered to be the pioneers of innovative activities and the main source of innovation in SMEs.

The lack of awareness about their important role in knowledge management might make SMEs miss another vital source of innovation (Yan, Yan 2016), hence placing them in unfavorable economic situations in competition. Instead of neglecting the vital role of entrepreneurs, more research should be given on how to develop their knowledge potential.

The owner/manager phenomena exist in most of the Lebanese enterprises and most of them are family businesses (Building Markets 2016; The Government of Lebanon and the United Nations 2018). The attitude of the Lebanese SMEs owner is to keep the knowledge and transfer it only to family members. Hence, such environment would prevent knowledge sharing to other organizational members. Moreover, when control is held in by one person, it means that decision making and planning would be affected. Therefore, it's necessary to show to the owners the importance of knowledge management in their SMEs.

Knowledge management is defined, as an interdisciplinary approach (Brajer-Marczak 2016) and the management of processes (Mowery 2010; Zhang et al. 2012; Calvo-Mora et al. 2015; Raudeliūnienė et al. 2016, 2018; Dimitrova, Scarso 2017; Standing et al. 2018). Knowledge management is concerned with creating and innovating new forms of knowledge (Jensen, Webster 2009), concentrates on the utilization and development of the knowledge assets (Nevo et al. 2008), encompasses all practices of a business to generate, preserve, apply and share knowledge (Lindner, Wald 2011) (Table 1).

Knowledge management helps to provide the organization with the ability to acquire, transfer and reuse the knowledge for avoiding repeated mistakes (Javernick-Will 2013), to reach strategic objectives (Calvo-Mora et al. 2015) and achieve better collaboration through it collective intelligence (Dimitrova, Scarso 2017), drives competitive advantage (Ravindran, Iyer 2014) and creates uniqueness (Raudeliūnienė et al. 2018) for organizations (Table 1).

**Table 1:** Definitions of knowledge management (created by authors)

Author(s), year	Definition
Nevo et al. 2008	Knowledge management is concentrated on the utilization and development of the knowledge assets of a business.
Jensen, Webster 2009	Knowledge management is concerned with creating and innovating new forms of knowledge that can be shared and applied in the organization.
Mowery 2010	Knowledge management is the management of processes affecting the development, communication, dissemination, and use of knowledge related to business strategy, products and market-places, process technologies inside the organization.
Lindner, Wald 2011	Knowledge management encompasses all practices of a business to generate, preserve, apply and share knowledge.
Zhang et al. 2012	Knowledge management is the process of handling, codifying, distributing and implementing knowledge.
Javernick-Will 2013	Knowledge management is about providing the organization with the ability to acquire, transfer and reuse of knowledge for avoiding repeated mistakes.
Ravindran, Iyer 2014	Knowledge management deals with knowledge as an input that is processed to an output which drives competitive advantage for organizations.
Calvo-Mora et al. 2015	Knowledge management is a set of processes through which a corporation utilizes its individual and collective intelligence to reach its strategic objectives.
Brajer-Marczak 2016	Knowledge management is an interdisciplinary approach concerned with the use of information technologies, human resource management and aspects related to intellectual capital.
Dimitrova, Scarso 2017	Knowledge management is a set of processes that helps organizations achieve better collaboration through it collective intelligence.
Standing et al. 2018	Knowledge management is about the creation, sharing and storing of knowledge.

Summarizing different scientists opinions, knowledge management is defined as a targeted and systematic management of processes, methods and tools, making full use of the organization's knowledge potential for strategic goals, making efficiency decisions, implementing and creating its value (Raudeliūnienė et al. 2018). This is achieved mainly by motivating individuals inside of the organization to develop their knowledge potential and to stimulate their behavior and attitude towards entrepreneurship. Since entrepreneurship initiates from a nexus of people and opportunities, knowledge management can be used to make individuals more knowledgeable about how to grasp opportunities and avoid losses (Block et al. 2017).

Efficient organization knowledge potential management influences the entire SMEs knowledge creation value chain by creating the preconditions for finding out the changing needs of the customers and for the purposeful development of the organization's knowledge potential to meet the needs to create a reciprocal value. The perception of individual need of customers can form unique solutions, implementation of which creates value for the customer through satisfaction of needs and communication, for the organization loyalty, uniqueness and leadership (Raudeliūnienė et al. 2018).

### 3 Knowledge management cycle

Knowledge management processes can be defined as all the activities that are performed on knowledge by qualified specialists, as it comprises knowledge development, acquisition, dissemination, and preservation (Mohammed 2015).

The scientists distinguish different combinations of knowledge management processes (Raudeliūnienė et al. 2018): (1) knowledge distribution, dissemination, sharing, transfer, user achievement; (2) knowledge use, utilization, integration, embedding, enable reuse; (3) knowledge creation, development, generation; (4) knowledge acquisition; (5) knowledge preservation, capture, archiving.

In this study, four knowledge management processes composed of knowledge creation, acquisition, sharing, and preservation are selected for analysis due to their sequential effect in generating positive organizational outcomes; also, to show how they can work as guidelines for the Lebanese entrepreneurs.

Cantú et al. (2009) analysed knowledge creation and transfer of knowledge in IT-related SMEs and identified, that personal motivation, capabilities, and attitude are critical for knowledge generation.

Richtnér et al. (2010) analysed organizational slack and knowledge creation in product development projects and investigated, that reduced slack creates a focus on explicit knowledge rather than tacit knowledge, something that lessens the ability to create new knowledge.

Wang et al. (2011) analysed organizational culture and knowledge creation capability. Organizational culture has a vital role in knowledge creation capability. Power distance and uncertainty avoidance have negative effects.

Sundaresan and Zhang (2012) investigated the role of collaboration and incentives. The research results show that reward systems have a positive effect on knowledge creation. Collaboration among individuals helps in creating new forms of knowledge.

Purcarea et al. (2013) research object was innovation and knowledge creation in SMEs. Innovation is achieved through organizational practices and networking with external partners, as they are considered as internal sources for knowledge creation. The research results show that technology, market, and experts are important sources of external of knowledge.

According to Chang et al. (2014) knowledge creation denotes an emphasis on the content of the knowledge that initially exists in the organization and the knowledge that exists outside of its boundaries. It focuses on the different types of knowledge for the creation of new products and services.

Regnér and Zander (2014) analysed the advantage of foreignness and liability of concentration. The interaction between multinational organisations embeds knowledge sets that are needed for knowledge creation. More focus should be given to global capabilities rather than regional.

Sánchez-González and Herrera (2014) investigated how customer cooperation affects knowledge formation. The research results show that cooperation helps in creating new knowledge that positively affects the creation of new products and services that in turn helps the company in maintaining a competitive advantage.

Fuerst, Zetting (2015) analysed knowledge creation dynamics within the international new venture and underlined that entrepreneurs are the main creators of the international market knowledge.

Pérez-Luño et al. (2016) investigated entrepreneurial versus market orientation and the creation of tacit knowledge and indicated, that the entrepreneurial orientation highly affects the cultivation of tacit knowledge.

Akhvlediani, Ciešlik (2017) analysed knowledge creation and regional spillovers. The study shows that universities research centers are important sources of knowledge, and they highly contribute to knowledge creation.

Cannatelli et al. (2017) extended the understanding of distributed leadership in organizational knowledge creation, developed an expanded model of distributed leadership that identifies the antecedents, different forms, and enablers of distributed leadership in knowledge creation.

Summarizing scientists findings carried on knowledge creation, entrepreneurs should establish an organizational culture that fosters knowledge sharing and to introduce a reward system that compensates the creation of new forms of knowledge, as it has a positive effect on the new products (services). The

entrepreneurial orientation for knowledge creation should be directed towards external sources of knowledge such as market knowledge, consultants and experts. Cooperation with customers and networking with a business partner can also help entrepreneurs exploit new forms of knowledge.

Knowledge acquisition is the process where the knowledge seeker seeks information from external and internal sources of the corporation. Usually, when entrepreneurs establish their startups, they lack experience and historical knowledge about how to run their businesses efficiently (Cai et al. 2014).

According to Geneste and Galvin (2015), knowledge acquisition can be described as a knowledge inflow where the recipient – in this case, the SMEs owner/manager – acquires knowledge from a donor: the one-off, arm's-length client. Geneste and Galvin (2015) in his definition of knowledge acquisition stresses the importance of customers as the main source for knowledge acquisition. The idea is that entrepreneurs have financial constraints and they cannot incur the expenses of consultancy. Thus, acquiring knowledge from customers about how to improve their products and services can be considered the cheapest way to improve.

Summarizing scientists findings carried on knowledge acquisition, it is described as a process that takes place in the context of external and internal organizational interactions in order to formulate and decide on the elimination of knowledge gaps for implementing the knowledge strategy (Raudeliūnienė 2017).

Due to the fact that SMEs suffer in a dynamic and uncertain environment in the presence of limited organization resources for the sake of uniqueness and leadership in the global or local market, they are forced to develop knowledge potential from internal and external sources. Two types of external knowledge are highly stressed by researchers – the technological and the market knowledge (Beijerse 2000; Ma, Huang 2016). Market knowledge can be gathered from customers, competitors, suppliers, sales reports, etc. The technological knowledge can be acquired from engaging in research and development, staying up to date to new technological developments, and having advanced systems of information and communication technology.

Summarizing scientists findings carried on knowledge acquisition, Lebanese entrepreneurs should seek cooperation with partners, suppliers, customers in order to learn from them and to develop knowledge potential. Also, they should determine the knowledge needed and the existing knowledge in order to fill knowledge gaps.

*Knowledge sharing.* Scientists describe knowledge sharing process as a process transferring explicit and tacit knowledge to other individuals (Probst et al., 2000; Lin et al., 2005; Kamasak et al 2010; Rusly et al. 2012; Hosseini et al., 2017) in order to integrate the organizational and technical tools to efficiently manage and implement the process (Probst et al., 2000; Kianto et al. 2016), create new knowledge (García-Fernández 2015), which could allow the organization to remain competitive (Wee et al. 2013).

Knowledge sharing refers to behavior where individuals voluntarily share their ideas, expertise, knowledge, and know-how with other organizational members. According to Penrose (1959), the knowledge-based view of the organization proposes that interactions between different areas that span different knowledge fields can explain how organizations spread present activity sets, as such interactions lead to the creation of new knowledge (De Clercq et al. 2015). This knowledge is rooted in and passed through numerous entities including systems, organizational culture, strategies, practices, documents, and personnel. Thus, entrepreneurs should encourage knowledge sharing, and as well to share their knowledge to become organizational knowledge. This can be achieved by establishing a knowledge sharing culture.

SMEs usually have a simple and flat structure and it is easier for them than large enterprises that have complex structures to establish a knowledge sharing culture (Sulistiyani, Harwiki 2016).

*Knowledge preservation.* Scientists describe knowledge preservation process as the transformation of individual and expert knowledge into an organization's resource (Choo 1996; Davenport et al. 1998; Beazley et al. 2003), as the capture and packaging of knowledge (Edvardsson 2008), knowledge selection, accumulation and updating (Probst et al. 2000) using information technology tools (Mageswari et al., 2017) to protect the value of knowledge from loss (Probst et al., 2000; Durst et al. 2012; Shih et al., 2016) and access to knowledge for decision making (Martelo-Landroguez et al. 2014; Sangari et al. 2015).

According to Olander et al. (2015), the most valuable intellectual capital of organizations often lies in the reserves of its employees. Therefore, protective and proactive measures should be taken by

the organization in order to preserve and retain this valuable resource; in order to avoid the negative consequences of knowledge loss. Moreover, knowledge loss occurs when employees leave the organization. Preserving employees' knowledge should be a central concern for entrepreneurs (Olander et al. 2015). Thus, knowledge retention activities such as mentorship, periodical reports, exit interviews, meetings, and knowledge repositories are a must for entrepreneurs who are willing to preserve their knowledge.

In conclusion, knowledge management processes can work as guidelines to be followed by Lebanese entrepreneurs, because in the context of transformations, knowledge management appears to be an appropriate tool for increasing the efficiency of the activity of SMEs. Knowledge management cycle helps: to exploit the potential of knowledge for goal achievement, problem-solving, decision-making; to achieve uniqueness and leadership.

## 4 Knowledge management cycle implementation recommendations to the Lebanese SMEs

Lebanon is considered a developing country that hosts a huge number of Syrian refugees, in proportion to its population. Due to the geographical proximity of Syria and Lebanon, more than 1.2 million Syrian refugees have migrated to Lebanon creating more pressure on its economy (Hamdar et al. 2017) and it has affected the Lebanese SMEs. Lebanese SMEs encounter a lot of challenges that considerably impede their ability to progress, grow and to contribute to the economic prosperity of the country. Moreover, the Lebanese SMEs suffer from the obstacles of economic uncertainty, lack of innovation and development of knowledge potential. Also, other problems exist and affect SMEs including political instability, financial limitations, taxation problems, unemployment, and absence of information exchange mechanisms. In addition, many gaps exist on several levels in the Lebanese entrepreneurial ecosystem. These gaps are explained by entrepreneurial, enterprise, industrial, national levels (Table 2).

**Table 2:** The Lebanese entrepreneurial ecosystem gaps (created by authors according Building Markets 2016; Hamdar et al. 2017)

Level	Gap
Entrepreneurial	The Lebanese SMEs exhibit limited willingness for systemization of business and to switch for professional management. Also, they value unrestricted ownership control, blocking the way for outdoor investments, preferring to have a hereditary culture of proprietorship.
Enterprise	The Lebanese SMEs are restricted by a “Middle Management Gap” caused by high employee turnover due to immigration, something that causes insufficient knowledge and experience retention. This causes a lack of advancement in the progression of firms and fragile managerial hierarchies. Moreover, there is a noticeable lack of Lebanese skilled labor force due to immigration reasons. This is worsened by the absence of career-development programs.
Industrial	The Lebanese SMEs do not have the capability to face the complications of trading inefficiencies caused by the turbulent political environment. Also, there is a “cultural stigma” around shutting down a business. This is worsened by the time and exit costs. Hence, the Lebanese SMEs operate in an unhealthy ecosystem that permits entrepreneurs to benefit from the experience of their failures, close a business, and improve in restarting a business. Moreover, the Lebanese SMEs face difficulties in obtaining dependable and recent marketplace information. As an end result, SMEs and marketers broaden their techniques, construct their business plans and lengthen their markets primarily based on irregular and terrible market intelligence. This is partially pushed via the small budget allocations of Lebanese research and statistical institutions including the principal administration of statistics, central bank, public and private establishments, because of which in-depth market studies and analysis is not highlighted as an essential priority.
National	Insufficient infrastructure increases transaction prices to SMEs and their capacity to perform across the Lebanese territory. This consists of low-quality roads, expensive and subpar records and communications technology. Due to strong protectionist coverage, foreign employees are restricted in the kinds of jobs and industries in which they can seek job opportunities. As a consequence, there are no proactive measures for handling the surplus of foreign skilled experts and restrained encouragement for the exchange of their knowledge.

According to Building Markets (2016) survey results (the purpose of survey was to give a snapshot of Lebanese SMEs operating in Beirut and Mount Lebanon, as a first step towards understanding the Lebanese SMEs' needs, perceptions, constraints and challenges) were identified, that: 55% of businesses were family-owned; 41.4% of the family-owned businesses had a single manager; 51% of businesses were over 20 years' old; 75.9% of businesses said they hired foreign workers; 35% of the workforce was classified as unskilled labor; 72% of businesses reported that they did not have a formal business plan; 56% of businesses indicated that they looked for procurement opportunities due to the absence of data; 34.5% operated nationally – across the country; 34.5% indicated that they operated locally, within Beirut; 10% of businesses operate internationally; 55.2% of businesses said that they did not use employment contracts; 44% of businesses surveyed identified increased competition from other local businesses; 72% of businesses associated market research with product knowledge, rather than a practice connected with understanding; 32% of businesses were interested in mentorship programs, 28% who indicated they were somewhat interested, and 36% who indicated they were not very interested or not at all. Moreover, 75.9% of businesses reported they did not have a dedicated human resource and administration (Building Markets, 2016).

Summarizing the Lebanese entrepreneurial ecosystem gaps and Building Markets (2016) survey, the results show the problematic points related to lack of knowledge potential development, that can be filled through the implementation of knowledge management cycle, appropriate tools and techniques (Table 3).

**Table 3:** Recommendations for the implementation of the knowledge management cycle to Lebanese SMEs (created by Raudeliūnienė 2017)

Process	Knowledge management tools and techniques
Acquisition	<ul style="list-style-type: none"> <li>Training</li> <li>Search engines</li> <li>Tracking good practices in the global market</li> <li>Analysis and simulation of best practice</li> <li>Purchase and analysis of knowledge products (services)</li> <li>Reverse engineering</li> <li>Communication with external and internal stakeholders</li> </ul>
Sharing	<ul style="list-style-type: none"> <li>Project management techniques</li> <li>Active participation of members of the organization in ongoing activities</li> <li>Mentoring, supervision, socialization</li> <li>Involvement in learning processes</li> <li>Physical space layout according to ongoing processes</li> <li>Application mapping of knowledge maps</li> <li>Document management (procedural guides, studies)</li> <li>Dissemination of good practice, lessons learned</li> <li>Meetings for sharing ideas, knowledge</li> </ul>
Creation	<ul style="list-style-type: none"> <li>Specific training for innovation generation, internships</li> <li>Mentoring, supervisors, expert groups</li> <li>Interfunctional teams, rotation</li> <li>Documentation methods (project summaries, protocols, manuals, process manuals)</li> <li>Meetings, discussions</li> </ul>
Preservation	<ul style="list-style-type: none"> <li>Advanced training, courses, seminars</li> <li>Systematic transfer of competences (mentoring, supervisors, practice)</li> <li>Organization of membership rotation programs, phased retirement planning, implementation of the mandatory transfer process</li> <li>Document management planning and execution (project summaries, best practices, lessons learned)</li> </ul>

Knowledge creation is hindered by the fact that the Lebanese SMEs are finding difficulties in accessing market information, as 56% of businesses indicated an absence of data when they looked for procurement opportunities. Hence, there is a lack of centralized access for the explicit external type of knowledge that, in turn, is used for the creation of internal knowledge (Erickson, Rothberg 2013). This explains why



entrepreneurs are creating their business plans on irregular market intelligence. Moreover, as there is a hereditary culture of ownership for the Lebanese enterprises with 55% that are family owned, the owner's knowledge would only be transferred to family members and such behavior would impede the knowledge creation process, as other employees that are non family members would not be able to learn (De Clercq et al. 2015).

As for knowledge acquisition, the small budget allocations of Lebanese statistical institutions would impede the process of knowledge acquisition concerning the market knowledge (Roper et al. 2017). Furthermore, the restrictions concerning the jobs that the foreign workforce would impede the acquisition of the explicit and implicit type of knowledge possessed by this restricted labor force, as employers are not allowed to employ them and exploit their knowledge. Moreover, the insufficient infrastructure and expensive information technology increase transaction prices to SMEs and their capacity to perform across the Lebanese territory, something that affects their ability to cooperate with other businesses and acquire knowledge from other regions (Niebel 2018).

Knowledge sharing is also affected by the hereditary culture of ownership in the Lebanese SMEs (Intezari et al. 2017). Also, statistics with 32% indicated a need for mentorship which considered as one of the knowledge-sharing activities. Moreover, the surplus of the foreign workforce is not being used as those foreigners are not even allowed to apply for jobs. As a result, their knowledge that can be acquired through the process of socialization, would not be captured and shared among the Lebanese SMEs.

As for knowledge preservation, 55% do not use contracts with their employees. As a result, the employee would not have a written agreement with the organization and might switch easily to a competing organisation, taking knowledge along.

After highlighting those knowledge management cycle gaps, the following knowledge management recommendations, tools and techniques proposed (Table 3), that in turn can work as guidelines to be implemented by the Lebanese entrepreneurs for enhancing their knowledge potential.

## 5 Conclusions

In the context of transformations, the knowledge potential management is an effective tool for improving the efficiency of organizations. Efficient organization knowledge potential management influences the entire organization's knowledge creation value chain by creating the preconditions for finding out the changing needs of the customer and for the purposeful development of the organization's knowledge potential to meet the needs to create a reciprocal value, i. e. through the perception of individual needs of customers to form unique solutions, implementation of which creates value for the customer through satisfaction of them, for the organization loyalty, uniqueness and global or local leadership.

The Lebanese entrepreneurial ecosystem is a major challenge and a turbulent environment for new startups and established SMEs. The Lebanese SMEs have incorporate knowledge management to increase knowledge potential. This could be achieved by the implementation of knowledge management cycle which will focus on the achievement of goals and vision of the organization in such a manner that the SMEs will be able to hold themselves in the competitive markets.

The analysis of the survey carried by Building Markets (2016) revealed many knowledge management gaps that should be addressed. As a result, recommendations, tools and techniques for entrepreneurs and the Lebanese SMEs were developed for further implementation.

Further research areas could be related to the assessment of the relationship between knowledge management processes variables and their impact on the organization's performance.

## References

- Akhvlediani, T., & Cieřlik, A. (2017). Knowledge creation and regional spillovers: empirical evidence from Germany. *Miscellanea Geographica*, 21(4), 184–189. <http://doi.org/10.1515/mgrsd-2017-0033>

- Beazley, H., Boenisch, J., & Harden, D. (2003). Knowledge continuity: the new management function. *Journal of Organizational Excellence*, 22(3), 65–81.
- Beijerse, R. P. (2000). Knowledge management in small and medium-sized companies: knowledge management for entrepreneurs. *Journal of Knowledge Management*, 4(2), 162–179.
- Block, J. H., Fisch, C. O., & van Praag, M. (2017). The Schumpeterian entrepreneur: a review of the empirical evidence on the antecedents, behaviour and consequences of innovative entrepreneurship. *Industry and Innovation*, 24(1), 61–95. <http://doi.org/10.1080/13662716.2016.1216397>
- Brajer-Marczak, R. (2016). Elements of knowledge management in the improvement of business processes. *Management*, 20(2), 242–260. <http://doi.org/10.1515/manment-2015-0063>
- Building Markets. (2016). A report by building markets for the international rescue committee. Small & medium enterprises in Beirut & Mount Lebanon. Available from internet: [http://www.buildingmarkets.org/sites/default/files/irc\\_and\\_building\\_markets\\_sme\\_market\\_overview\\_february\\_2016.pdf](http://www.buildingmarkets.org/sites/default/files/irc_and_building_markets_sme_market_overview_february_2016.pdf)
- Cai, L., Hughes, M., & Yin, M. (2014). The Relationship between resource acquisition methods and firm performance in Chinese new ventures: the intermediate effect of learning capability. *Journal of Small Business Management*, 52(3), 365–389. <http://doi.org/10.1111/jsbm.12039>
- Calvo-Mora, A., Navarro-García, A., & Periañez-Cristobal, R. (2015). Project to improve knowledge management and key business results through the EFQM excellence model. *International Journal of Project Management*, 33(8), 1638–1651. <http://doi.org/10.1016/j.ijproman.2015.01.010>
- Cannatelli, B., Smith, B., Giudici, A., & Conger, M. (2017). An expanded model of distributed leadership in organizational knowledge creation. *Long Range Planning*, 50(5), 582–602. <https://doi.org/10.1016/j.lrp.2016.10.002>
- Cantú, L. Z., Criado, J. R., & Criado, A. R. (2009). Generation and transfer of knowledge in IT-related SMEs. *Journal of Knowledge Management*, 13(5), 243–256. <http://doi.org/10.1108/13673270910988088>
- Cepeda-Carrion, I., Martelo-Landroguez, S., Leal-Rodríguez, A. L., & Leal-Millán, A. (2017). Critical processes of knowledge management: an approach toward the creation of customer value. *European Research on Management and Business Economics*, 23(1), 1–7. <http://doi.org/10.1016/j.iedeen.2016.03.001>
- Chang, J.-J., Hung, K.-P., & Lin, M.-J. J. (2014). Knowledge creation and new product performance: the role of creativity. *R&D Management*, 44(2), 107–123. <http://doi.org/10.1111/radm.12043>
- Choo, C. W. (1996). The knowing organization: how organizations use information to construct meaning, create knowledge and make decisions. *International Journal of Information Management*, 16(5), 329–340.
- Davenport, T. H., De Long, D. W., & Beers, M. C. (1998). Successful knowledge management projects. *Sloan Management Review*, 39, 39–46.
- De Clercq, D., Dimov, D., & Thongpapanl, N. (2015). Structural and relational interdependence and entrepreneurial orientation in small and medium-sized enterprises: the mediating role of internal knowledge-sharing. *International Small Business Journal*, 33(5), 514–536. <http://doi.org/10.1177/0266242613502801>
- Dimitrova, S., & Scarso, E. (2017). The impact of crowdsourcing on the evolution of knowledge management: insights from a case study. *Knowledge and Process Management*, 24(4), 287–295. <http://doi.org/10.1002/kpm.1552>
- Durst, S., & Edvardsson, I. R. (2012). Knowledge management in SMEs: a literature review. *Journal of Knowledge Management*, 16(6), 879–903.
- Edvardsson, I. R. (2008). HRM and knowledge management. *Employee Relations*, 30(5), 553–561.
- Erickson, G. S., & Rothberg, H. N. (2013). A strategic approach to knowledge development and protection. *Service Industries Journal*, 33(13–14), 1402–1416. <http://doi.org/10.1080/02642069.2013.815740>
- Fuerst, S., & Zettinig, P. (2015). Knowledge creation dynamics within the international new venture. *European Business Review*, 27(2), 182–213. <http://doi.org/10.1108/EBR-03-2013-0036>
- García-Fernández, M. (2015). How to measure knowledge management: dimensions and model. *VINE*, 45(1), 107–125. <https://doi.org/10.1108/VINE-10-2013-0063>
- Geneste, L., & Galvin, P. (2015). Trust and knowledge acquisition by small and medium-sized firms in weak client–firm exchange relationships. *International Small Business Journal*, 33(3), 277–298. <http://doi.org/10.1177/0266242613497379>
- Hamdar, B. C., Najjar, R., & Karameh, K. (2017). The Lebanese perception of the impact of small & medium enterprises (SMEs) on the national economy. *Journal of Economics and Public Finance*, 3(3), 330–342. <http://doi.org/10.22158/jepf.v3n3p330>
- Hasani, K., & Sheikhesmaeli, S. (2016). Knowledge management and employee empowerment. *Kybernetes*, 45(2), 337–355. <http://doi.org/10.1108/K-04-2014-0077>
- Hosseini, S. M., & Akhavan, P. (2017). A model for project team formation in complex engineering projects under uncertainty: a knowledge-sharing approach. *Kybernetes*, 46(7), 1131–1157.
- Intezari, A., Taskin, N., & Pauleen, D. J. (2017). Looking beyond knowledge sharing: an integrative approach to knowledge management culture. *Journal of Knowledge Management*, 21(2), 492–515. <http://doi.org/10.1108/JKM-06-2016-0216>
- Javernick-Will, A. (2013). Local embeddedness and knowledge management strategies for project-based multi-national firms. *EMJ - Engineering Management Journal*, 25(3), 16–26. <http://doi.org/10.1080/10429247.2013.11431979>
- Jensen, P. H., & Webster, E. (2009). Knowledge management: does capture impede creation? *Industrial and Corporate Change*, 18(4), 701–727. <http://doi.org/10.1093/icc/dtp025>

- Kamasak, R., & Bulutlar, F. (2010). The influence of knowledge sharing on innovation. *European Business Review*, 22(3), 306–317.
- Kheir, M. (2017). Startups and SMEs are 90 pct of Lebanon's businesses, the dailystar. Available from internet: <http://www.dailystar.com.lb/Business/Local/2017/Dec-06/429045-startups-and-smes-are-90-pct-of-lebanons-businesses.ashx>
- Kianto, A., Vanhala, M., & Heilmann, P. (2016). The impact of knowledge management on job satisfaction. *Journal of Knowledge Management*, 20(4), 621–636. <https://doi.org/10.1108/JKM-10-2015-0398>
- Lee, C. S., & Wong, K. Y. (2015). Development and validation of knowledge management performance measurement constructs for small and medium enterprises. *Journal of Knowledge Management*, 19(4), 711–734. <http://doi.org/10.1108/JKM-10-2014-0398>
- Lin, H. F., & Lee, G. G. (2005). Impact of organizational learning and knowledge management factors on e-business adoption. *Management Decision*, 43(2), 171–188. <https://doi.org/10.1108/00251740510581902>
- Lindner, F., & Wald, A. (2011). Success factors of knowledge management in temporary organizations. *International Journal of Project Management*, 29(7), 877–888. <http://doi.org/10.1016/j.ijproman.2010.09.003>
- Ma, R., & Huang, Y. C. (2016). Opportunity-based strategic orientation, knowledge acquisition, and entrepreneurial alertness: the perspective of the global sourcing suppliers in China. *Journal of Small Business Management*, 54(3), 953–972. <http://doi.org/10.1111/jsbm.12222>
- Ma, Z., Long, L., Zhang, Y., Zhang, J., & Lam, C. K. (2017). Why do high-performance human resource practices matter for team creativity? The mediating role of collective efficacy and knowledge sharing. *Asia Pacific Journal of Management*, 34(3), 565–586. <http://doi.org/10.1007/s10490-017-9508-1>
- Mageswari, S. D. U., Sivasubramanian, R. C., & Dath, T. N. S. (2017). A comprehensive analysis of knowledge management in Indian manufacturing companies. *Journal of Manufacturing Technology Management*, 28(4), 506–530.
- Marouf, L. (2017). Are academic libraries ready for knowledge management? *The Electronic Library*, 35(1), 137–151. <http://doi.org/10.1108/EL-01-2016-0008>
- Martelo-Landroguez, S., & Cegarra-Navarro, J.-G. (2014). Linking knowledge corridors to customer value through knowledge processes. *Journal of Knowledge Management*, 18(2), 342–365.
- Martin, W. L., McKelvie, A., & Lumpkin, G. T. (2016). Centralization and delegation practices in family versus non-family SMEs: a rasch analysis. *Small Business Economics*, 47(3), 755–769. <http://doi.org/10.1007/s11187-016-9762-5>
- Mohammed, A. (2015). Knowledge management process in several organizations: analytical study of modeling and several processes. *Procedia Computer Science*, 65, 726–733. <http://doi.org/10.1016/j.procs.2015.09.017>
- Mowery, D. C. (2010). Alfred Chandler and knowledge management within the firm. *Industrial and Corporate Change*, 19(2), 483–507. <http://doi.org/10.1093/icc/dtq010>
- Nevo, D., Furneaux, B., & Wand, Y. (2008). Towards an evaluation framework for knowledge management systems. *Information Technology and Management*, 9(4), 233–249. <http://doi.org/10.1007/s10799-007-0023-9>
- Niebel, T. (2018). ICT and economic growth – comparing developing, emerging and developed countries. *World Development*, 104, 197–211. <http://doi.org/10.1016/j.worlddev.2017.11.024>
- Nikolopoulos, K. P., & Dana, L. P. (2017). Social capital formation in EU ICT SMEs: the role played by the mobility of knowledge workers. *European Management Review*, 14(4), 409–422. <http://doi.org/10.1111/emre.12113>
- Olander, H., Hurmelinna-Laukkanen, P., & Heilmann, P. (2015). Human resources – strength and weakness in protection of intellectual capital. *Journal of Intellectual Capital*, 16(4), 742–762. <http://doi.org/10.1108/JIC-03-2015-0027>
- Pérez-Luño, A., Saporito, P., & Gopalakrishnan, S. (2016). Small and medium-sized enterprise's entrepreneurial versus market orientation and the creation of tacit knowledge. *Journal of Small Business Management*, 54(1), 262–278. <http://doi.org/10.1111/jsbm.12144>
- Probst, G., Raub, S., & Romhardt, K. (2000). *Managing Knowledge: Building Blocks For Success*. John Wiley & Sons.
- Purcarea, I., del Mar Benavides Espinosa, M., & Apetrei, A. (2013). Innovation and knowledge creation: perspectives on the SMEs sector. *Management Decision*, 51(5), 1096–1107. <http://doi.org/10.1108/MD-08-2012-0590>
- Raudeliūnienė, J., Davidavičienė, V., & Jakubavičius, A. (2018). Knowledge management process model. *Entrepreneurship and Sustainability Issues*, 5(3), 542–554. [https://doi.org/10.9770/jesi.2018.5.3\(10\)](https://doi.org/10.9770/jesi.2018.5.3(10))
- Raudeliūnienė, J., & Meidutė-Kavaliauskienė, I. (2016). Editorial: Special issue on knowledge management: theory and practice in SMEs. *International Journal of Learning and Change*, 8(3/4), 193–197. Available from Internet: <http://www.inderscience.com/editorials/f121171346892510.pdf>
- Raudeliūnienė, J. (2017). Organizacijos žinių potencialo vertinimo aktualijos [Topicalities of the organization's knowledge potential assessment]. Vilnius: Technika. <https://doi.org/10.20334/2017-065-M>
- Ravindran, S., & Iyer, G. S. (2014). Organizational and knowledge management related antecedents of knowledge use: the moderating effect of ambiguity tolerance. *Information Technology and Management*, 15(4), 271–290. <http://doi.org/10.1007/s10799-014-0190-4>
- Regnér, P., & Zander, U. (2014). International strategy and knowledge creation: the advantage of foreignness and liability of concentration. *British Journal of Management*, 25(3), 551–569. <http://doi.org/10.1111/1467-8551.12054>
- Richtnér, A., & Åhlström, P. (2010). Organizational slack and knowledge creation in product development projects: the role of project deliverables. *Creativity and Innovation Management*, 19(4), 428–437. <http://doi.org/10.1111/j.1467-8691.2010.00576.x>

- Roper, S., Love, J. H., & Bonner, K. (2017). Firms' knowledge search and local knowledge externalities in innovation performance. *Research Policy*, 46(1), 43–56. <http://doi.org/10.1016/j.respol.2016.10.004>
- Rusly, F. H., Corner, J. L., & Sun, P. (2012). Positioning change readiness in knowledge management research. *Journal of Knowledge Management*, 16(2), 329–355.
- Sánchez-González, G., & Herrera, L. (2014). Effects of customer cooperation on knowledge generation activities and innovation results of firms. *BRQ Business Research Quarterly*, 17(4), 292–302. <http://doi.org/10.1016/j.brq.2013.11.002>
- Sangari, M. S., Hosnavi, R., & Zahedi, M. R. (2015). The impact of knowledge management processes on supply chain performance: an empirical study. *The International Journal of Logistics Management*, 26(3), 603–626.
- Shih, W.-L., & Tsai, C.-Y. (2016). The effects of knowledge management capabilities on perceived school effectiveness in career and technical education. *Journal of Knowledge Management*, 20(6), 1373–1392.
- Standing, C., Standing, S., Gururajan, R., Fulford, R., & Gengatharen, D. (2018). Coming to terms with knowledge management in Telehealth. *Systems Research and Behavioral Science*, 35(1), 102–113. <http://doi.org/10.1002/sres.2443>
- Sulistiyani, R., & Harwiki, W. (2016). How SMEs build innovation capability based on knowledge sharing behavior? Phenomenological Approach. *Procedia - Social and Behavioral Sciences*, 219, 741–747. <http://doi.org/10.1016/j.sbspro.2016.05.070>
- Sundaresan, S., & Zhang, Z. (2012). Parallel teams for knowledge creation: role of collaboration and incentives. *Decision Support Systems*, 54(1), 109–121. <http://doi.org/10.1016/j.dss.2012.04.008>
- Tavassoli, S., Bengtsson, L., & Karlsson, C. (2017). Strategic entrepreneurship and knowledge spillovers: spatial and aspatial perspectives. *International Entrepreneurship and Management Journal*, 13(1), 233–249. <http://doi.org/10.1007/s11365-016-0405-8>
- The Government of Lebanon and the United Nations. (2018). Lebanon crisis response plan 2017-2020. Available from internet: [https://reliefweb.int/sites/reliefweb.int/files/resources/LCRP2018\\_EN\\_Full\\_180122.pdf](https://reliefweb.int/sites/reliefweb.int/files/resources/LCRP2018_EN_Full_180122.pdf)
- Wang, D., Su, Z., & Yang, D. (2011). Organizational culture and knowledge creation capability. *Journal of Knowledge Management*, 15(3), 363–373. <http://doi.org/10.1108/13673271111137385>
- Wee, J. C. N., & Chua, A. Y. K. (2013). The peculiarities of knowledge management processes in SMEs: the case of Singapore. *Journal of Knowledge Management*, 17(6), 958–972. <https://doi.org/10.1108/JKM-04-2013-0163>
- Wibowo, S., & Grandhi, S. (2017). Benchmarking knowledge management practices in small and medium enterprises: a fuzzy multicriteria group decision making approach. *Benchmarking: An International Journal*, 24(5), 1215–1233. <http://doi.org/10.1108/BIJ-01-2016-0013>
- Yan, J., & Yan, L. (2016). Individual entrepreneurship, collective entrepreneurship and innovation in small business: an empirical study. *International Entrepreneurship and Management Journal*, 12(4), 1053–1077. <http://doi.org/10.1007/s11365-015-0380-5>
- Zhang, L., Wang, H., Cao, X., Wang, X., & Zhao, K. (2012). Knowledge management component in managing human resources for enterprises. *Information Technology and Management*, 13(4), 341–349. <http://doi.org/10.1007/s10799-012-0127-8>