Innovation for Banking in the Covid-19 Era: The Role of Transformational Leadership and Knowledge Sharing

Sherine Al-Ahmad Chaar¹ and Nasser Fathi Easa²¹University of Kurdistan Hewler, Kurdistan, Erbil²American University in the Emirates- UAE and Alexandria University,Egypt Sherine.khaled@ukh.edu.krd
nasser.easa@aue.ae

Abstract: The consequences of the Covid-19 pandemic have brought many challenges for the financial sector. Banks are strongly required to introduce stimulus financial, business, and operational implications to prove their value to society. Therefore, this paper aims to discuss the role of transformational leadership and knowledge sharing in boosting banking on innovation in the Covid-19 era. Thirty-two in-depth interviews were conducted with bankers working in 15 leading banks in Lebanon. Content analysis was used to investigate the research aims. The findings highlight that developing a knowledge-sharing culture by leaders exhibiting transformational behavior have a powerful and reinforcing influence on generating new ideas, products, and processes. Leaders allow knowledge sharing on improving and expanding online and digital banking services to further streamline banking operations during the pandemic. Research implications and directions for future research are presented.

Keywords, Innovation, Transformational leadership, Knowledge sharing, Covid-19 pandemic, Banking

1. Introduction

The Covid-19 pandemic has become one of the crucial threats to the global economy (Brem et al., 2020). It has embarked the world into recession and made economic recoveries a difficult task (Baicu et al., 2020). According to the International Monetary Fund report (2020b), the global economy activity falls 4.4% in 2020. Most governments across the globe have taken immediate measures to mitigate the impact on their economies and businesses (Wakode, 2020).

While the pandemic has severely affected various sectors around the world (Marcu, 2020), it unpredictably brings opportunities for the banking sector (Baicu et al., 2020). Covid-19 crisis has induced rise in online banking activity and a decline in traditional banking services (Demirgüç-Kunt et al., 2021). Similarly, Marcu (2020) noticed that banks' consumers shift towards digital or electronic banking during the pandemic times. Globally, Statista in 2020 reported that the global growth in finance app usage during Covid-19 rise by 49%.

In developing countries such as Lebanon, the banking sector also witnessed significant transformation from traditional face-to-face transactions to digital transactions during the pandemic (Association of Banks in Lebanon, 2018). Since 2014, the Lebanese banking sector had embarked on a digital transformation. The initial objective of launching new digital services is to be competitive in this market (Sarji, 2017). However, the Covid-19 crisis becomes the game changer, forcing banks to re-evaluate how digital channels can be used to support business sustainability through the crisis and beyond (Abdo and Edgar, 2021).

Although, the Lebanese banks experienced continual digital service transformation (Association of Banks in Lebanon, 2018); however, delivering the services in an effective manner is still challenging, particularly in facilitating collaborative climate needed for innovation during the Covid-19 crisis (Duan et al., 2021; Berger and Demirgüç-Kunt, 2021). Transformational leadership (TL) and Knowledge sharing (KS) holds great importance in collaborative and innovation environments (Alnesr and Ramzani, 2019; Jia et al., 2018). In pandemic situation, this innovation importance amplifies significantly as they play a key role in handling the crisis (Acharya and Steffen, 2021), by accelerating digital innovation that guarantees business continuity and meet customers' changing needs (Brem et al., 2020).

Transformational leadership style develops a team attitude and spirit among members, which enhances the generation of new ideas (Zheng et al., 2016). Additionally, knowledge sharing has been widely recommended to sustain innovation. Encouraging collaboration and mutual interaction between employee-customer prompt the sharing of more valuable knowledge and continuously improves innovative capacity (Singh et al., 2016).

With the ongoing Covid-19 crisis, both new knowledge and leaders' insights are required to enable banks to reassess their relationship with customers and come up with innovative solutions (Abdo and Edgar, 2020). Despite this fact, a lack of research on the role of knowledge sharing and transformational leadership on innovation has been identified (Foumany, et al., 2015; Ramezani et al., 2017), and scant studies have assessed these relationships in the banking sector under a pandemic situation (Marcu, 2021). Additionally, most of the literature that highlights the potential Covid-19 implication for banks had focused on developed countries (Brem, Viardot and Nylund, 2020; Baicu et al., 2020). However, there is a recognized lack of research regarding exploring the role of TL and KS in facing the challenges posed by the Covid- 19 pandemic in developing countries. Therefore, this study aims to explore the link between knowledge sharing (KS), transformational leadership (TL) and innovation in banking sector and its role in cultivating collaborative climate needed to accelerate creation of innovative ideas during the Covid-19 pandemic and beyond, using Lebanon as the case study.

2. Literature Review

2.1 Transformational leadership and innovation

Transformational Leaders raise individuals and groups above self-interests through mainly four different behaviors: idealized influence (ID), inspirational motivation (IM), intellectual stimulation (IM),, and individualized consideration(IC) emphasizes that transformational leaders behave as role models for their subordinates (Bass and Riggio, 2012; Yukl, 2013).

Plessis (2007) clarified innovation as the creation of new knowledge and ideas to facilitate new business outcomes. Similarly, Andreeva and Kianto (2011) claimed that innovation is the uncovering of novel thoughts, processes and products. Previous studies have highlighted different forms of innovation. For instance, Tidd and Bessant (2011) distinguished between incremental and radical innovations. Damanpour and Aravind (2012) focused on product and process innovations. Schilling (2010) embraced technical and administrative innovation. Despite the various forms of innovations, however, each type of innovation is commonly related to a process or product (Chaar and Easa, 2020). Accordingly, this research will focus on products and processes innovations that are commonly recommended and studied empirically in the innovation literature (Liao and Wu, 2010). Product innovation within the banking environment is defined as accepting, developing, and implementing new products. It is referred to the degree to which employees seek advanced solutions; develop new service and adopt latest technologies to meet clients need (Liao et al., 2017). Regarding process innovation, Gunday et al. (2011) considered it as the application of new, considerably changed production methods and distribution means by making technical, equipment or software changes. It focused on the adopt of novel ways of service, achieved by developing and using latest technology, and introducing changes in management structures, practices and techniques (Obeidat et al., 2016).

Regarding investigating the relationship between TL and innovation, several studies have reported that TL is a critical enabler for product and process innovations. In particular, the relationships between the four components of TL, namely, ID, IM, IS and IC in relation to innovation have been investigated.

Regarding ID, leaders determine high standards for moral and spiritual behavior. Suifan and Al-Janini (2017) found that emphasizing the prominence of having a collective sense of the organization's mission may encourage subordinates to generate new ideas. Providing employees with a purpose that transcends their self-interest may increase their desire to generate innovative ideas (Jia et al., 2018).

By practicing IM, leaders inspire their followers through motivation so as a shared vision insight is facilitated (Frazier and Bowler, 2015). Nusair et al. (2012) indicated that articulating a shared vision plays an important role in enhancing initiation and implementation of new ideas. Meanwhile, Overstreet et al.'s (2013) findings suggested that giving encouragement and recognition to staff inspires them to be highly competent and innovative. Similarly, Zheng et al. (2016) claimed that developing a team attitude and spirit among team members enhances the generation of new ideas.

By providing IS, transformational leaders stimulate followers to find out new solutions and rethink about solving organizational problems in an innovative way (Yukl, 2013). In this aspect, the leaders arouse their followers through precise questions and re-explaining the problems with new ones. Transformational leaders with IS motivate their followers to rethink traditional practices in a creative way (Weib and Sub, 2016). Through the behavior of IS, leaders can promote employees' creativity by questioning their assumptions and the status quo

(Slatten et al., 2011). According to Suifan and Al-Janini (2017), leaders who prevent their employees from thinking outside the box can hinder their employees' capability to create innovations.

2.2 Knowledge Sharing and Transformational Leadership-Innovation Relationship

Various scholars have reported various kinds of knowledge sharing processes such as knowledge seeking and knowledge contribution (Wei et al., 2013); knowledge transmission and knowledge absorption (Ipe, 2003). Because of the variety of diverse kinds of KS, this research will adopt Hooff and Weenen's (2004) definition, who classified KS processes as involving two main dimensions: knowledge donation and knowledge collection. This definition is supported and is the most widely adopted by several scholars (Ritala et al., 2015).

Transformational leadership received increased attention from scholars and practitioners in terms of its relationship with innovation and knowledge sharing (Tellis et al., 2009). The relationship between the three concepts has been examined. Leaders who encouraged employees to integrate new knowledge with existing knowledge and supported them to utilize this combined knowledge into internal processes enabled them to implement changes that significantly influenced product and process innovation (Birasnav et al., 2013). According to Ratih et al. (2016), establishing a knowledge supportive culture can increase the willingness of colleagues to donate and collect knowledge, which in turn influences the speed and quality of a company's innovation capability. Besides, imparting skills, expertise, and knowledge to the organizational members, enables them to employ it to obtain, apply, convert and adopt a novel practice (García -Morales et al., 2012).

The collaborative and empowering approaches of leaders help to integrate the tacit knowledge in all the members, resulting in the addition of newness into products and processes (Foumany et al., 2015). Providing knowledge management paths to reach organizational goals are essential for an innovative climate (Ramezani et al., 2017). Similarly, inspiring the creativity of staffs through communicating the vision will boost KS among them (Haase et al., 2015). Leaders, through its support, may encourage the alliance and creation of cohesive work teams that stimulate KS for further organizational innovation (Bettis-Outland, 2012). These studies have underlined the influence of the mediating role of KS in the TL to innovation relationship.

To explore the theme being highlighted in this research, the following research questions are proposed.

RQ1 How Transformational leaders could enhance innovation process during Covid-19?

RQ2 What role knowledge sharing plays in boosting the influence of transformational leadership on innovation during Covid-19.

3. Methodology

A qualitative method was used to elicit bankers' experiences regarding of TL and KS in enhancing innovation. This research used semi-structured face-to-face interviews. A total of 32 interviews with bankers from 15 Lebanese banks.

The sample population in the interviews were non-managerial employees from different departments and positions who work in banks branches and headquarters, such as: Credit, Treasury, Cards Service, IT, Marketing, Product Development, Operations, and Customer Service departments (Table 1). These employees were selected through purposive sampling technique as they can provide in depth information regarding the product and process innovation, TL and KS process. A total of 32 interviewees (17 men and 15 women) participated in this research. Their experiences in banking were diverse. Twenty-three of the interviewees (72%) had a minimum five years of banking experience while nine of them (28%) had less than five years. The interviewees current positions reflected this diversity; the largest group being senior bankers (fifteen), followed by junior bankers (eleven) and then heads of units (six).

Table 1: Interviewees' Attributes

Banks Name	No. of	Position	Gender	Years of	Code
	interviewees			Experience	
Al-Mawared Bank	3	Senior*	Male	10	AMB2
		Junior	Female	8	AMB3
		Junior	Female	5	AMB4
Bank Audi	3	Head of Unit*	Female	16	AUD1
		Senior*	Female	12	AUD2
		Junior	Male	4	AUD3

Banks Name	No. of	Position	Gender	Years of	Code	
	interviewees			Experience		
Saradar Bank	2	Head of Unit*	Female	11	SB1	
		Senior	Male	8	SB2	
BLOM Bank	2	Senior Branch	Male	13	BB1	
		Junior	Male	4	BB2	
Credit Libanais	2	Senior Branch	Male	9	CR1	
		Junior*	Female	4	CR2	
Intercontinental Bank	1	Head of Unit*	Male	8	IBL1	
Societe General Bank	1	Junior	Male	2	SGBL1	
Banque de Mediteranne	2	Senior Branch	Male	6	MED1	
		Senior	Male	3	MED2	
Fransabank	2	Head of Unit*	Male	13	FSB1	
		Junior	Male	3	FSB3	
Lebanese Swiss Bank	3	Senior Branch	Female	8	LSB1	
		Senior	Male	7	LSB2	
		Junior	Female	3	LSB3	
Bank Libano Francaise	2	Senior Branch	Male	9	BLF1	
		Senior	Female	7	BLF2	
Bank of Beirut	2	Senior	Female	9	BOB1	
		Senior	Female	8	BOB2	
Lebanon and Gulf Bank	2	Senior	Male	7	LGB1	
		Junior	Female	3	LGB2	
Byblos Bank	2	Head of Unit*	Female	12	BYB1	
		Senior	Male	9	BYB2	
First National Bank	3	Head of Unit*	Female	16	FNB1	
		Junior	Female	10	FNB2	
		Junior	Male	4	FNB3	
Total	32	* Staff working in Headquarters				

Content analysis is employed to evaluate the selected aspects of meaning that are related to TL, innovation, and KS (Sekaran and Bougie, 2016). Prior to the qualitative analysis process, validity and reliability was checked. The validity was established during the interviews using several validation tools such as rephrasing questions and repeating what the interviewees said to verify the answers. On the other hand, in qualitative research, reliability related to whether alternative researchers could present similar information (Sekaran and Bougie, 2016). Therefore, to enhance the reliability of the interviews, in this research, the researcher asked similar respondents, according to their years of experience and current job positions about the same subjects of TL practice, innovation and KS activities to examine the reliability and consistency of the responses provided through the interviews.

Content analysis is an interpretive method that is employed to evaluate the symbolic content of all forms of recorded communication (Sekaran and Bougie, 2016). This technique helps to focus on selected aspects of meaning that are related to TL, innovation, and KS. The 32 interviews were analyzed by searching for phrases/sentences and words that could be connected to different dimensions: idealized influence, individualized consideration, inspirational motivation, intellectual stimulation, process and product innovation, and knowledge donation and collection. Based on an extensive review of the literature, each of these dimensions was pre-identified to related aspects such as idealized influence referred to values, respect, and pride; intellectual stimulation referred to suggesting new ways, rethinking ideas; product innovation referred to new ideas and new solutions; process innovation is concerned with the use of novel approaches to services and production; knowledge collection referred to shared training, experience, skills, and work topics.

4. Findings and Discussion

4.1 Transformational Leadership and Innovation

The interviewees have highlighted the role played by idealized influence leaders in promoting innovation during Covid-19 crisis. Interviewees declared that respecting their opinions allowed them to provide further inputs, comments and suggestions to generate digital friendly use services that suits customer needs. "My supervisor shows respect and values our opinion about how to digitalize services and tarin customers to be familiar with them" (SGBL2). Interviewees highlighted that sustaining standard during Covid-19 pandemic motivated them to

work hard and try new things: "the main concern as a developer in research and development department, is not just to provide digital services that meets customers' needs but also to benefits from these novel digital services to face any coming challenges" (LSB3).

In the context of Covid-19 crisis, interviewees considered that specifying the scope of the bank's vison Inspirational motivational leaders allowed them to suggest innovative and non-traditional banking practices: "I feel amazed, tireless, and always upbeat about my work and my career future prospects. Since my supervisor always motivated me to adopt new methods and ideas and this was accelerated during pandemic" (CR2).

Intellectual stimulation leadership generate a positive climate for individual innovation. In term of the 'stimulating to rethink ideas' aspect, interviewees suggested that allowing limitless critical thinking and participating in decision-making processes enable them to apply new methods: "My supervisor is limitless in his thinking; he lets us use our brain to think out of the box. I find myself goes beyond procedures and think of remotely digital services especially during complex crisis like Covid-19" (IBL1).

During Covid-19 pandemic context, the interviewees highlighted that individualized consideration exhibited by the leaders are vital for product and process innovation. As to one interviewee explained that being reminded about their objectives and goals, being guided and their work progress monitored to reach their maximum potential, helped them to come up with novel ideas: "...... spends time with us develop our negotiation skills to persuade customers and win a deal. Thus, this support strengthens our capabilities, to absorb Covid-19 shock to come up with novel ideas for advanced online payments and transfers systems" (CR1).

4.2 Knowledge Sharing and the Transformational Leadership-Innovation Relationship

Innovation is considered one of the important sources for modernisation and sustainability (Nguyen and Khanh, 2021). Hence, the interviewees in this research have highlighted the role of leaders and KS as a powerful tool in stimulating innovation during complexity and uncertainty, especially Covid-19 crisis. In this context, pointed out that, due to Covid-19 and the resource scarcity, they have to develop new plans that triggers employee's creativity to respond to the crisis since relying on old plan is no longer efficient: "the preventive measures taken by the government during Covid-19 crisis, restricted us to operate with a capacity 50% workforce, also restricted the working office hours, and limited the cash withdraws per day, while at the same time our clients were highly in need to perform their financial transactions. Therefore, we started to think beyond our predetermined plans to come up with novel ideas, and creative solutions" (BYB1).

Abdo and Edgar (2021) had pointed out that leaders, through developing a climate supportive to creativity a will enable sharing of new knowledge. To establish how leaders can contribute to KS and innovation during Covid-19 pandemic, interviewees' opinions were sought. Some of the respondents mentioned that shortage in workforce manpower forced them to utilize the available know-how, knowledge and experience gained by employees to implement the needed changes effectively: "In response to employees' shortage due to Covid-19 restrictions, my supervisor set a new strategic plan to benefit from the limited number of employees attending work" (LGB2). Other respondents stressed that sharing experience and skills helped them to respond quickly and with agility to Covid-19 crisis by innovating remotely banking services that simplify banking operations: "My supervisor shares with us his ideas to innovate new remotely banking services that fulfil client's needs and simplify banking operations" (AUD2).

Interviewees' observations on innovation and financial services during Covid-19 crisis indicated that leaders fuel KS by challenge employees to find innovative solutions. According to one of the interviewees, working in a collaborating climate during Covid-19 crisis encouraged them to come up with new ways of doing tasks such as increase cash withdraw from ATM to achieve sustainability: "The Lebanese central bank provided new guidelines for banks to apply during Covid-19, as banking industry based on competitive advantage, my supervisor stimulates us to generates creative and innovative idea to serve clients' needs. By sharing ideas, he motivated us to practice new ways of doing tasks, for instance, a free transfers fees are permitted, amount of money holds in ATMs (automated teller machines) are increased, to achieve sustainability and competitive advantage." (BLF1)

To overcome the challenge of social distancing due to Covid-19, it was suggested that digital communication application be used as a mean of KS activities in banks. According to an interviewee, having a digital communication platform with the help of quality support team had assisted in communicating knowledge effectively among them, which in turn assisted in generating ideas that cope with Covid-19 crisis in term of

facilitating online shopping: ".... My supervisor motivates us to look outside the box due to Covid-19, as a result, we established advanced digital communication platform to facilitate sharing knowledge and we added a new service for the existing debt/credit cards to perform online shopping with open cash limit and free of charge" (MED2). Some interviewees also stressed that sharing experience through digital communication application enabled them to learn from them and develop new financial market services: "My supervisor believes that without creativity business cannot survive especially during crisis. Working at treasury department, this triggers us to build on his experience and learn more about financial market fluctuation in order to develop creative services. We offer our clients a new service, to withdraw cash against their assets to increase their benefits and have liquidity in hand to manage the impact of Covid-19 crisis" (FSB2).

As a suggestion on how transformational leader and KS boost the innovation process during Covid-19 pandemic, some interviewees explained that leaders' support assisted them in converting challenges to innovation which helped them generate new way of providing innovative digital services and products continuously to clients: "In facing the challenges brought by Covid-19, my supervisor motivated us to convert constrains into innovation, we started to gather information on services provided by our competitors and try to outperform them by applying new knowledge and provide them with innovative digital services and products continuously" (FNB1)." During Covid-19 pandemic, we are encouraged to learn new things from our clients, colleagues, and competitors, to remain cautious with our services to achieve sustainability and avoid market outperformed" (AUD3).

Given the need to seek out the role of KS plays in enhancing innovation and sustaining banking operation during the pandemic, some interviewees mentioned that to overcome employee shortage caused by Covid-19 pandemic, existing employees need to share their know-how and perform multi-tasks to serve clients' transactions: "To overcome the manpower shortage caused by Covid-19 crisis, by sharing his know-how and skills my supervisor emphasizes the need to allocate our potentials and capabilities to carry on diverse tasks and to be ready to act in many job positions to meet our clients' financial transactions and liquidity in hand" (AMB2). Moreover, the interviewees also believed that Covid-19 pandemic triggers knowledge-sharing practices by stimulating our thoughts to offer clients an electronic wallet on their mobile phones to pay for goods and services: During pandemic two days' workshop were held for 6 hours a day, to discuss various digital model for effective adaptation of electronic wallet on customers mobile phones in order to carry out P2P (peer-to-peer) payments and pay for goods and services, while enabling withdrawals and cash feeds for electronic wallets all at the same time" (FNB1).

The financial sector, particularly banks, played a vital role in absorbing Covid-19 shock, by supplying funds to the corporate sector and households (Acharya and Steffen, 2020). To establish how banker can contribute to innovative services under pandemic circumstances, interviewees' opinions were pursued. Some of the respondents mentioned that measure taken by central bank forced us to offer a package of new services to clients: "In response to central bank measures, our bank established online community of practice platform which enable us to receive updates, comments, address problems, and provide solutions that best serve our clients for instance, our bank offers package of financial facilities to their clients such interest-free loans, simplified programs for non-performing loans, liquidity support for domestic and foreign currency based on swap agreements" (BYB1). Another respondent stressed that to contribute to the resilience of individuals and organizations, we allowed delay settlement of the loans: ".... to adapt to the challenges brought by the Covid-19 pandemic, our bank permit delay payments of loans for individual and organizations alike, this rescheduling process come up from the suggestions and feedback of our customers" (FSB1).

5. Theoretical and practical implications

This research adds to the extant literature regarding the role of KS on TL— innovation relationship within the Covid-19 setting. The findings of this research empirically strengthen the role KS plays in boosting the TL influence on innovation in Lebanese banks during the pandemic of Covid-19. Foremost, the findings of this research provide better understanding how the 4l's within TL influence on innovation. Moreover, the use of KS in the context of TL, along with product and process innovations, represents another contribution, since this research provides a better understanding of how KS during the pandemic of Covid-19 impacts the relationship between TL styles and product and process innovations. This research also confirms the universality of the effects of KS across cultures. By confirming the relationship between TL, KS and innovation in Lebanon, the findings indicate that, regardless of whether the context is Western or Eastern, TL plays a vital role in stimulating a KS culture and strengthening both product and process innovations in the banking sector. From a

methodological view, the reliability and validity of TL, innovation and KS constructs are evaluated in a new geographical setting. This provides researchers and academics with a model to track the effects of TL and KS on innovation in another similarly research.

In Covid-19 period, in a highly complicated environment, innovation in banking sector becomes very challenging. This research makes a significant contribution to the practice of KS to tackle difficulties of innovation in banking sector. The result indicates KS practices is crucial for banks' ability to generate new processes and products during the pandemic of Covid-19. Therefore, management at banks should develop knowledge-sharing platform that encourage their experienced staffs to communicate their expertise to deliver innovative digital services that serves their customers' needs. Moreover, promoting online meetings and digital blogs can build virtual communities for optimal KS among bankers during Covid-19 crisis. Additionally, management should motivate employees to enhance their knowledge about digital-technological change through workshops, in the contest of Covid crisis, banks can adapt online course to educate their employees.

In this research, knowledge sharing has influence on TL-innovation relationship among bankers during Covid-19. It was found that sharing new knowledge among employees is vital for innovation. Therefore, to enhance the knowledge-sharing culture among bankers, bank leaders should create a knowledge-friendly environment to take advantage of sharing experiences and knowledge, such as encouraging and facilitating virtual teamwork, communities of practice and videoconferencing. Besides, this research found that TL is the critical enabler for a KS mechanism among the staff in the Lebanese banking sector during the pandemic of Covid-19. This shows that building successful KS climate depends on the presence of TL. Therefore, for sustainability, bank leaders should utilize new technologies to develop value-added customer relationship that cannot be effectively provided with their current infrastructure. New technologies such as biometry, video, chatbots or artificial intelligence may help banks to create sophisticated capacities for maintaining a value-added remote customer relationship, while securing transactions and mitigating fraud and risks. Banks may also be prone to offer partially or totally automated robo-advisor services, digital wealth management tools for customers with the intention of maintaining a competitive position in the banking market and sustain business operations.

6. Research limitations and further research

Although this research provides several insights regarding the role of KS on TL-innovation relationships in the banking sector in Lebanon, it has its own limitations that should be identified. The sample of this research is constrained to the banking sector; hence, the findings drawn from it cannot be generalized to other sectors. Thus, it is recommended to replicate this research in other sectors, e.g. industrial, educational and health and also conduct comparative studies between the industrial and service sectors, as industrialized firms could pursue various phases of innovation than their service counterparts. This research is limited to developing countries, specifically Lebanon, as one of the smallest Arab countries; therefore, it is recommended to replicate and extend this research to other Arab countries to confirm the results, since it is acknowledged that cultural differences may reach dissimilar results. Another limitation is that this research investigates qualitatively the impact of KS on TL-innovation relationship among non-managerial employees. Considering different managerial levels may provide a better understanding of the research topic. A comparative study can thus be drawn from interviews with employees and leaders which might provide a greater understanding in regard to which TL practices foster KS and innovation. Finally, the study was restricted by focusing on KS variable in the TL-innovation relationship. It is suggested that future studies incorporate other potential variables that could influence this relationship.

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