



Bridging knowledge management and performance: The mediating role of organizational learning in public banks

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Abstract

This study investigates organizational learning as an intermediary factor connecting KM practices with organizational performance. The analysis employs structural equation modeling to analyze whether four KM functions—acquiring, converting, transferring, and applying knowledge—and their influences impact banking performance across the cultural eyes of an organizational culture within Nepal's public banking institutions. It is found that there are different mediation patterns. Knowledge application shows complementary mediation with high effects on both organizational learning and performance. Knowledge conversion shows competitive mediation with conflicting direct and indirect effects. Knowledge acquisition shows only direct non-mediation with no apparent indirect effects mediated by the organizational culture factor, and finally, knowledge transfer represents a case of no-effect non-mediation with no significant associations. These findings highlight that organizational culture was crucial in determining KM practice effectiveness. Data were obtained from 120 respondents from three public banks across Nepal using a stratified sampling and structured questionnaires. In fact, it emphasizes that a good organizational culture for effective KM development requires providing a facilitating culture to improve KM benefits along with performance outcomes. Moreover, the various dimensions of knowledge management influence performance differently, and strategies are needed to execute them efficiently.

Keywords: Knowledge acquisition, knowledge conversion, knowledge transfer, knowledge application, knowledge management, organizational learning

Introduction

Knowledge management is the judicious process of acquiring, forming, bolstering, disseminating, exchanging, and updating explicit and tacit knowledge to improve organizational performance and compliance, elevating the quality of existing services and products, and developing new knowledge-specific processes, products, and services (Migdadi, 2020). The field of knowledge management gives rise to an additional idea called the "knowledge society," which has become increasingly prevalent in the worldwide literature on knowledge management in recent years. This will assist the relevant management in conducting appropriate discussions on knowledge management and its practicality (Ling, 2019).

In an organizational context, organizational learning has become a significant concept that has gained momentum in recent decades. This concept revolves around the idea that organizations can learn independently, separate from the individuals within the organization where it originated (Kearns, 2014). A multitude of research endeavors have been undertaken within the organizational context, with an emphasis on the integration of learning into the decision-making process and the significance of organizational practices, rules, and actions in reaction to external influences; these endeavors are anticipated to yield favorable results for organizations (Wellman, 2009) [39]. In the modern era, organizational learning is characterized by several features that are considered vital for organizational performance. It involves organizational processes that adapt to environmental requirements, the idea that organizations learn from their experiences, and a fundamental distinction between double-loop and single-loop learning within organizations (Kirwan, 2013).

Regarding organizational learning, various models have been developed by different researchers over time, each with its own attributes. However, one of the most popular models of organizational learning focuses on three essential attributes: individual learning, team learning, and institutional learning (Abbey, 1999) [1]. These three levels of organizational learning are crucial as they encompass the entire learning process, starting from individual learning, progressing to team learning, and ultimately culminating in institutional learning. Organizations need to consider the learning process at each phase to successfully understand how to learn and effectively apply learning within the organization.

The importance of organizational learning to businesses stems from its influence on team, individual, and institutional learning (Smith & Lyles, 2003) [29]. The significance of these learning processes at every level lies in their applicability within the framework of learning organizations. The significance and ramifications of learning within an organizational setting are crucial, underscoring businesses' need to authentically include these processes (Minnema, 2000) [23].

The organizational learning framework within Nepalese banking institutions is an outcome of knowledge management closely linked to organizational procedures. These procedures are necessary for organizational success. Organizational learning within Nepalese financial institutions is a continuous undertaking that is motivated by the attitudes of personnel toward a forward-thinking and innovative learning environment. It entails the efficient use of organizational resources and expertise to harmonize the goals of individuals with those of the organization. For these institutions, activities related to organizational learning and knowledge management are crucial for gaining a

competitive edge (Parajuli, Mahad, & Lingden, 2022). In developing countries like Nepal, many banking institutions have faced challenges due to employees' resistance to adopting new approaches aligned with organizational objectives (Parajuli *et al.*, 2022). In contrast, learning institutions foster an environment where individuals continuously develop their skills to achieve their objectives. Innovative thinking patterns are nurtured in such institutions, and individuals share common goals while learning together, ultimately contributing to institutional survival and growth in the competitive contemporary era (Gautam, 2013).

The primary objective is to evaluate how effectively banking institutions in Nepal function as learning organizations to meet their learning needs and comprehensively address the requirements of various stakeholders. Based on what members of an organization have learnt from their institutions, companies may obtain a competitive edge via individuals' thinking, abilities, knowledge, and ingenuity (Nepal Rastra Bank, 2022). In its most recent iterations, organizational learning is vital for Nepalese financial institutions to address the needs of stakeholders and accomplish organizational objectives systematically.

Literature Review

1. Attributes of Knowledge Management

1.1. Knowledge acquisition

Knowledge acquisition, the fundamental characteristic of knowledge management, delineates how one obtains or acquires knowledge. Furthermore, it delineates the distinct facets via which knowledge may be acquired concerning particular objectives. This entails comprehending how personnel inside businesses are expected to get information from the diverse array of resources at their disposal and the optimal way to use this knowledge to benefit the firm (Darr, Argote & Epple, 1995).

1.2. Knowledge Transfer

Knowledge transfer is a critical component of knowledge management that facilitates the exchange of information inside an organization. Researchers have proposed and implemented diverse methodologies in pursuit of knowledge management techniques that are congruent with the goal and strategy of a business. These approaches comprise the cultivation of an appropriate atmosphere that fosters trust, complies with cultural conventions, facilitates the exchange of shared goals, and motivates continuous learning and adaptation throughout the whole organization (Wang, 2014)^[38].

1.3. Knowledge Conversion

Knowledge conversion is a social process where individuals with different knowledge interact and thereby produce new knowledge which cultivates the quality and quantity of both tacit and explicit knowledge (Sañchez & Palacios, 2008). A process model of knowledge creation presupposes that individuals and organizations create and enlarge knowledge through the conversion of tacit knowledge into explicit knowledge and vice versa. Through knowledge conversion, the whole organization can share the explicit knowledge created and alter it into tacit knowledge for individuals Tseng (2010)^[35]. Knowledge that is confined to different sources needs to be transferred to organizational knowledge

for valuable utilization within the business (Lee & Suh, 2003)^[18]. Nonaka (1991)^[24] postulated four stages of knowledge conversion, commonly known as SECI, involving socialization, externalization, combination, and internalization. Nonaka and Takeuchi (2004) asserted that the knowledge conversion process is a spiral that involves transformation from tacit into explicit knowledge and the subsequent re-transformation from explicit into tacit knowledge

1.4. Knowledge Application

Knowledge and information have been generally proposed to comprise a key part of the exclusive resources for every organization, and this has required the practice of knowledge management in modern-day businesses. Many companies are presently putting together methods that adapt tacit and implicit knowledge into explicit knowledge, in forms that can be coded, stored and transmitted, that way the knowledge can be used by others in related scenarios. In recent times, organizations have also begun to apply the knowledge management model at the strategic level by way of codification and personalization (Venkitachalam and Willmott, 2017)^[37]. However, most recent organizations are gradually evolving from codification (document-based knowledge management systems) towards personalization (people-based knowledge management systems). This may be due to the fact that some authors have identified organic knowledge management systems to have higher capacity to improve the configuration and alignment of knowledge management strategies (Chen and Fong, 2015)^[6]. Modern businesses also try to promote the effectiveness of their organic (people-based) knowledge management process through gamification as this has been proven to improve the level of flexibility, motivation, association and identification of appropriate ability locate among knowledge workers (Shpakova *et al.*, 2017).

2. Knowledge Management and Organizational Learning:

Knowledge management involves various innovative organizational activities aimed at improving knowledge and related practices, ultimately leading to organizational learning. It emphasizes elements such as the generation, refining, storage, application, and dissemination of information, all of which contribute to the current state of organizational learning (Eikeland, 2006)^[11]. These practices also support organizational behaviors, individual learning, innovation, collaborative decision-making, and collective learning, which collectively lead to improved products, decisions, relationships, processes, and services, ultimately enhancing overall organizational performance (Stokvik *et al.*, 2016). Knowledge management practices play a normative role in organizational learning, further boosting organizational performance (McElroy, 2000)^[21].

3. Organizational Learning and Organizational Performance

Organizational learning has emerged as a crucial concept in organizational and management literature, as it plays a pivotal role in enhancing organizational performance. It is considered one of the most significant issues in the modern managerial landscape (Migdadi, 2019)^[22]. Organizational learning influences the attitudes and behaviors of employees, ultimately leading to improved organizational

performance. Two essential constructs related to organizational learning are generative organizational learning and adaptive organizational learning. These constructs are associated with different performance measures, including strategic and financial performance (Azizi, 2017) [3]. Learning processes and procedures are essential for enhancing organizational performance, as they improve the knowledge and skills of individuals, giving organizations a competitive edge.

Hypothesis Development

1. Knowledge Acquisition

Martin (2012) [20] examined the knowledge acquisition strategies and company performance in Young High Technology Company in Germany, using quantitative and qualitative data. The study revealed four distinct knowledge acquisition strategies: low-key, mid-range, focus, and explorer, and showed that strategies differ in their relation to company performance due to their configuration of knowledge acquisition activities and the type of knowledge acquired.

H1: Knowledge Acquisition has a significant effect on the bank's Performance

2. Knowledge Conversion

Tseng (2010) [35] opined that knowledge conversion is made possible through the processes and activities of synthesis, refinement, integration, combination, coordination, distribution, and restructuring of knowledge. Ahmed, Fiaz and Shoaib (2015) examined the impact of knowledge management practices on organizational performance in the banking sector in Pakistan. The study found that knowledge conversion result in provision of quality services to customers, high customer satisfaction, efficiency in resource utilization, more profits and overall, improved organizational performance.

H2: Knowledge Conversion has a significant effect on the banks performance.

3. Knowledge Transfer

Knowledge transfer is the practice of developing or transmitting knowledge from a resource to a recipient. Knowledge sharing involves transferring key facts, thoughts, and theories gained by learning, survey, or experience from sources to receivers (Sandhu, Jain, & Ir Umi Kalthom, 2011) [28]. Knowledge Transfer helps organizations achieve competitive advantage by creating new knowledge that can speed up improvements in business processes and technology. Furthermore, knowledge transfer enables active discussion and engagement among employees as they discuss knows-what and know-how practices. As employees express their creative ideas, they contribute and direct the organization towards growth and sustainable development (Azudin, N., Ismail, M.N. & Taherali, Z, 2009).

H3: Knowledge Transfer has a significant effect on the performance of banks.

4. Knowledge Application

Payal, R., Ahmed, S., & Debnath, R. M. (2016) [26] examined the impact of knowledge management on the

performance of Indian Software companies. The findings revealed that there was a significant relationship between knowledge application and organizational performance. Kimaiyo, Kapkiyai and Sang (2015), examined the effect of knowledge management on firm performance in commercial banks. The study revealed that knowledge processes that include application had a positive and significant effect on performance of the firm.

H4: Knowledge Application has a significant effect on the performance of banks.

5. Knowledge Management and Organizational Performance

The core premise of knowledge management is that by finding and disseminating usable knowledge, organizational performance would increase (Davenport and Prusak, 1998) [10]. Tanriverdi (2005) [33] found a favorable correlation between knowledge management (KM) and financial performance metrics as well as non-financial performance measures including quality, innovation, and productivity. Al Saifi (2015) proved the relationship between knowledge management and organizational performance. This research is quite similar to that of Tseng (2010) [35], where they revealed that knowledge management and organizational performance are related.

H5: Knowledge Management has a significant effect on the performance of banks.

6. Knowledge Management, Organizational Learning and Performance of Organization

Organizational learning is a field of knowledge within organizational theory that studies models and theories about how an organization learns and adapts (Vasenska, 2013) [36]. Organizational learning exists, in essence, knowledge management and role effective in the organization's long-term performance. The researchers claim that achieving organizational knowledge and progress results from organizational learning (Song, 2009; Yang *et al.*, 2004), and they typically mention organizational learning as the key to improving organizational function (Spicer & Sadler-Smith, 2006) [32]. The results study by Liao & Wu (2009) also suggest that organizational learning is a knowledge management mechanism. This means organizational learning is an intermediary in a positive relationship between knowledge management and organizational performance.

H6: Organizational Learning mediates the relationship between knowledge management and the performance of banks.

Knowledge Management

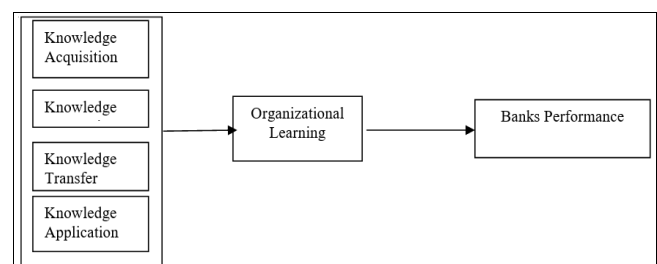


Fig 1: Research Model

Research Methodology

This research assumes a dual descriptive and explanatory nature, employing a combined descriptive cum survey design to scrutinize and assess the presence of knowledge management dimensions. The study investigates the influence of knowledge management practices on bank performance, considering the mediating influences of organizational culture within the context of Nepalese public banks. The selection of Nepalese commercial banks, encompassing both public banks, is conducted through a stratified sampling methodology. The criterion for inclusion in the study is predicated on the establishments' operational history, with a deliberate focus on institutions having tenure of 15 years or more. The research instruments employed in this study consist of a questionnaire opinion survey designed to elicit responses from potential participants.

The study encompasses three government-owned during the survey period spanning from September 2022 to January 2023. During the research, questionnaires were distributed, and officers and personnel of various ranks were individually visited at banks. 120 of 150 questionnaires were received and considered useable, corresponding to a response rate of 80 percent for the entire population. In stratified sampling, the value of the sample sizes in the respective strata is chosen by the researcher (Ardilly & Tillé, 2006) [2]. To attain the objective of this study, 40 respondents were selected from each bank. A pilot study was conducted using a sample of twenty-five employees from banks in neighboring districts (Rupandehi, District). Primary data were used for the study and obtained mainly

from the structured questionnaires. Researchers use questionnaires to gather information on study participants' thoughts, feelings, attitudes, beliefs, values, perceptions, personality, and behavioral intentions (Marrais & Lapan, 2004) [19]. A five-point semantic differential agreement/disagreement scale was utilized for this purpose, with 1 indicating significant disagreement and 5 indicating strong agreement.

Data analysis and Interpretation

1. Sample Descriptive

The descriptive statistics provide a detailed profile of the study's respondents. Out of the 120 individuals, 64.17% (n = 77) were male, while 35.83% (n = 43) were female, indicating a gender imbalance supporting male participants. In terms of educational achievement, a significant greater part, 76.67% (n = 92), held a Master's degree, whereas 23.33% (n = 28) have completed a Bachelor's degree, suggesting a primarily highly educated cohort. Regarding professional roles, 25.83% (n = 31) were categorized as managers, 24.17% (n = 29) as officers, and 50% (n = 60) as others, reflecting variety in professional designations. Work experience distribution is relatively balanced, with 35.83% (n = 43) reporting less than 5 years of experience, 37.50% (n = 45) having 6 to 10 years, and 26.67% (n = 32) having 11 years or more. This demographic and professional composition of the sample offers a different and fine distinction basis for analyzing the variables under the study.

2. Measurement Model: Reliability and Validity

Table 1: Measurement Items Assessment

Variables	Code	Outer Loading	VIF	Mean	SD	Remarks
Knowledge Acquisition	KA1	0.753	2.03	2.785	1.43	
	KA2	0.815	2.779	2.864	1.458	
	KA3	0.725	2.152	3.172	1.451	
	KA4	0.813	2.978	2.932	1.438	
	KA5	0.674	1.663	3.069	1.466	Dropped
	KA6	0.803	2.542	2.855	1.465	
	KA7	0.805	3.303	2.204	1.381	
	KA8	0.76	3.289	2.012	1.399	
	KA9	0.78	2.276	2.601	1.491	
	KA10	0.781	2.292	2.23	1.432	
Knowledge Conversion	KC1	0.766	3.279	2.235	1.401	
	KC2	0.781	3.55	2.214	1.388	
	KC3	0.77	3.19	2.266	1.379	
	KC4	0.673	1.842	2.742	1.459	Dropped
	KC5	0.827	2.823	2.525	1.524	
	KC6	0.749	2.77	3.16	1.501	
	KC7	0.773	3.185	3.235	1.474	
	KC8	0.814	3.321	2.806	1.535	
	KC9	0.699	1.908	3.306	1.471	Dropped
	KC10	0.809	3.161	2.904	1.485	
Knowledge Transfer	KT1	0.841	4.333	2.582	1.406	
	KT2	0.851	4.118	2.473	1.391	
	KT3	0.821	3.049	2.888	1.436	
	KT4	0.644	2.657	2.87	1.468	Dropped
	KT5	0.786	2.577	2.788	1.462	
	KT6	0.834	2.998	2.596	1.391	
	KT7	0.874	3.937	2.545	1.402	
	KT8	0.844	3.356	2.557	1.427	
	KT9	0.775	2.692	2.87	1.466	
	KT10	0.787	2.241	2.452	1.395	
Knowledge Application	KAP1	0.697	2.011	3.233	1.4	Dropped
	KAP2	0.678	2.394	3.011	1.476	Dropped

	KAP3	0.782	2.448	3.391	1.395		
	KAP4	0.775	2.603	3.475	1.387		
	KAP5	0.806	2.735	3.918	1.22		
	KAP6	0.783	2.814	3.913	1.284		
	KAP7	0.762	2.244	3.711	1.256		
	KAP8	0.793	3.416	3.743	1.386		
	KAP9	0.766	2.822	3.715	1.382		
	KAP10	0.814	2.674	3.646	1.35		
	Organizational Learning	OL1	0.757	2.006	2.814	1.422	
		OL2	0.838	2.981	2.923	1.465	
OL3		0.738	2.22	3.194	1.455		
OL4		0.831	3.179	2.948	1.435		
OL5		0.694	1.742	3.097	1.469	Dropped	
OL6		0.824	2.825	2.843	1.465		
OL7		0.79	2.397	2.818	1.498		
OL8		0.844	3.006	2.629	1.489		
OL9		0.817	3.268	2.292	1.437		
OL10		0.797	3.053	2.243	1.43		
Bank Performance	OP1	0.872	4.19	2.461	1.357		
	OP2	0.85	3.558	2.707	1.436		
	OP3	0.842	3.02	2.784	1.431		
	OP4	0.864	3.604	2.506	1.423		
	OP5	0.817	3.037	3.074	1.447		
	OP6	0.634	2.588	3.437	1.417	Dropped	
	OP7	0.783	2.734	3.163	1.417		
	OP8	0.838	3.255	2.671	1.483		
	OP9	0.796	2.793	2.913	1.479		
	OP10	0.819	2.732	2.494	1.426		

Table 1. represents the assessment of the measurement scale items used to measure the observed variables. Each variable was measured with the help of 10 measurement scale items. Out of 70 items that are used to measure the constructs of the research framework we found 59 items having outer loading values of more than 0.70 critical values and 11 items with less than 0.70 critical values. The standard critical value to retain measurement item scale is 0.70 (Hair *et al.*, 2021) ^[14]. So, the items which outer loading value is

less than 0.7 are dropped for further analysis. The variance inflation factors values of most of the items are between 1 to 5 which are considered a highly acceptable range. However, according to Hair *et al.* (2016) ^[15], VIF values below 5 are also acceptable. Hence, there is no state of multi-collinearity among measurement scale items. The mean and standard deviation values are also within the satisfactory range; therefore, the data is satisfactory for further analysis.

Table 2: Assessments of Reliability and Validity

Reliability Standards	KA	KC	KT	KAP	OL	OP
Cronbach's alpha	0.922	0.918	0.94	0.925	0.933	0.944
Composite reliability (rho_a)	0.923	0.919	0.942	0.93	0.935	0.945
Composite reliability (rho_c)	0.935	0.933	0.949	0.939	0.944	0.943
Average variance extracted (AVE)	0.616	0.635	0.676	0.657	0.653	0.692

The table indicates the internal consistency, reliability, and validity of the constructs. The Cronbach's Alpha value of all the constructs is above the critical value of 0.70. Further, the rho_A and composite reliability values of all the constructs are between 0.75 and 0.95 critical values (Hair *et al.*, 2021)

^[14]. Additionally, the average variance extracted value of all the constructs is more than 0.50 which denotes more than 50% variance among the constructs (Bagozzi, 1981) ^[4]. Hence, there convergent validity and reliability of all constructs are established.

Table 3: Discriminant Validity (HTMT Ratio Matrix)

	KA	KC	KT	OL	OP	KAP
KA						
KC	0.816					
KT	0.850	0.880				
OL	0.827	0.814	0.814			
OP	0.860	0.857	0.862	0.839		
KAP	0.223	0.381	0.255	0.222	0.215	

Table 3 indicates the Heterotrait-Monotrait Ratio of Correlations (HTMT) which indicates the discriminant validity of all constructs. HTMT ratio is used to measure the correlations between two latent variables (Chin *et al.*, 2003)

^[7]. The HTMT ratio values of all constructs are less than 0.90 critical values which indicate that the discriminant validity of all the constructs is established.

3. Structural Equation Model

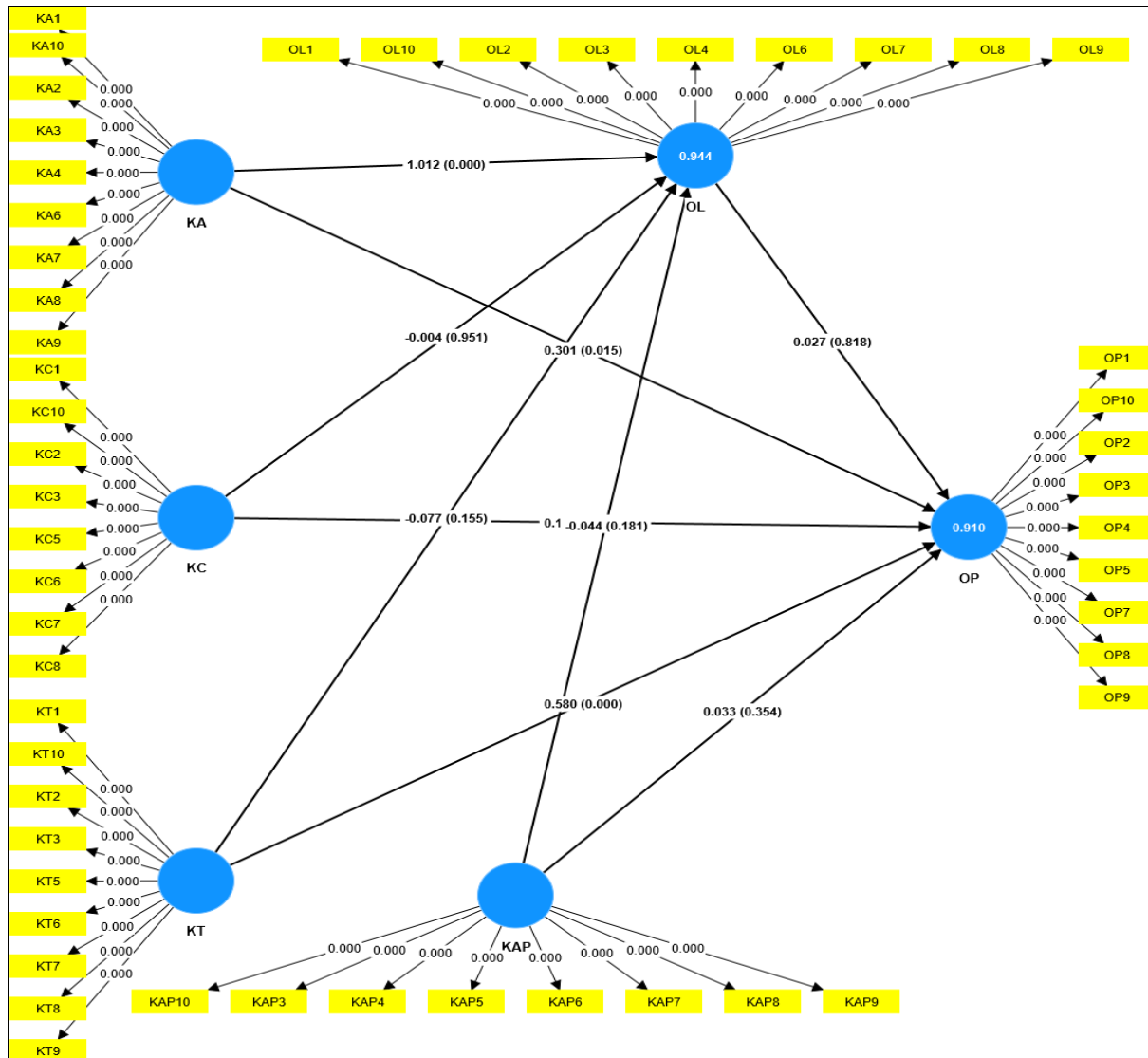


Fig 2: Path Relationship Diagram

The results reveal that out of four KM variables, three were positively and significantly associated with the performance of the public banks. Namely, knowledge acquisition, knowledge transfers, and knowledge application with organizational learning and bank performance have p values less than 0.05 and T statistics greater than 2.00. This confirms that there is significant and positive mediation between the variables, which is supported by the findings of Wahda (2017). However, it does not have the same impact on the knowledge conversion, indicating that organizational

learning has no effect on the knowledge conversion or the performance of the public bank. The p value and T statistics of the mediation between organizational learning on knowledge conversion and bank performance are greater than 0.05 and less than 2.00. This result says that there is an insignificant mediating effect of organizational learning on knowledge conversion and the performance of the public bank from this perspective. Chung *et al.* (2015) have also stated that there is an insignificant effect of one dimension of learning that is positively associated with the other.

Table 4: Mediating effect of organizational learning on knowledge management and performance of the public banks in Nepal

(a) Path Coefficient

Hypotheses	β	Mean	SD	T Stat.	P Values	Decision
KA -> OL	1.054	1.057	0.057	18.546	0.000	Reject null
KA -> OP	0.242	0.248	0.102	2.364	0.018	Reject null
KAP -> OL	-0.010	-0.012	0.031	0.312	0.755	Don't reject null
KAP -> OP	0.031	0.027	0.035	0.903	0.367	Don't reject null
KC -> OL	0.025	0.025	0.068	0.371	0.711	Don't reject null
KC -> OP	0.108	0.106	0.061	1.776	0.076	Reject null
KT -> OL	-0.147	-0.152	0.069	2.131	0.033	Reject null
KT -> OP	0.592	0.590	0.065	9.056	0.000	Reject null
OL -> OP	0.081	0.074	0.086	0.938	0.348	Don't reject null

(b) Total Indirect Effect

Hypotheses	β	Mean	SD	T Stat.	P Values	Decision
KA -> OP	0.0270	0.0230	0.1180	0.2300	0.8180	Don't reject null
KAP -> OP	-0.0010	0.0000	0.0060	0.1870	0.8520	Don't reject null
KC -> OP	0.0000	0.0010	0.0080	0.0130	0.9890	Don't reject null
KT -> OP	-0.0020	-0.0020	0.0110	0.1810	0.8560	Don't reject null

(c) Specific Indirect Effect

	Hypotheses	β	Mean	SD	T Stat.	P Values	Decision
H1	KA -> OL -> OP	0.03	0.02	0.12	0.23	0.82	Don't reject null
H2	KAP -> OL -> OP	0.00	0.00	0.01	0.19	0.85	Don't reject null
H3	KC -> OL -> OP	0.00	0.00	0.01	0.01	0.99	Don't reject null
H4	KT -> OL -> OP	0.00	0.00	0.01	0.18	0.86	Don't reject null

(d) Total Effect

Hypotheses	β	Mean	SD	T Stat.	P Values	Decision
KA -> OL	1.0120	1.0150	0.0480	21.1630	0.0000	Reject null
KA -> OP	0.3280	0.3260	0.0640	5.0900	0.0000	Reject null
KAP -> OL	-0.0440	-0.0470	0.0330	1.3380	0.1810	Don't reject null
KAP -> OP	0.0320	0.0290	0.0350	0.9190	0.3580	Don't reject null
KC -> OL	-0.0040	-0.0040	0.0610	0.0610	0.9510	Don't reject null
KC -> OP	0.1110	0.1110	0.0610	1.8170	0.0690	Don't reject null
KT -> OL	-0.0770	-0.0820	0.0540	1.4210	0.1550	Don't reject null
KT -> OP	0.5780	0.5770	0.0670	8.5720	0.0000	Reject null
OL -> OP	0.0270	0.0230	0.1170	0.2310	0.8180	Don't reject null

Table (a) reveals a significant direct relationship between knowledge acquisition and organizational learning ($\beta = 1.054, p < 0.001$) as well as between knowledge acquisition and bank performance ($\beta = 0.242, p = 0.018$). This suggests that knowledge acquisition has both a direct effect on organizational learning and a direct effect on bank performance. The path coefficient from knowledge application to organizational learning ($\beta = -0.010, p = 0.755$) is not significant, indicating no direct relationship between knowledge application and organizational learning. Similarly, knowledge application's direct path to bank performance ($\beta = 0.031, p = 0.367$) is not significant. For knowledge conversion, there is no significant direct relationship with organizational learning ($\beta = 0.025, p = 0.711$), while the direct path to bank performance ($\beta = 0.108, p = 0.076$) is marginally significant. In contrast, knowledge transfer exhibits a significant direct relationship with organizational learning ($\beta = -0.147, p = 0.033$) and a significant direct relationship with bank performance ($\beta = 0.592, p < 0.001$).

Notably, all total indirect effects for knowledge acquisition, knowledge application, knowledge conversion, and knowledge transfer on bank performance via organizational learning are not statistically significant ($p > 0.05$), suggesting the absence of significant mediation through organizational learning for these variables together.

Types of mediation

1. Knowledge acquisition appears to exhibit complementary mediation, as it significantly directly affects organizational learning and bank performance. This implies that knowledge application affects bank performance through both direct and indirect paths via organizational learning.
2. Knowledge transfer demonstrates indirect-only mediation, as it exhibits a significant direct effect on organizational learning but lacks a significant direct

path to bank performance. This suggests that knowledge transfer influences bank performance solely through the mediating variable of organizational learning.

3. Knowledge conversion appears to be of direct-only non-mediation. While it has a marginally significant direct path to bank performance, it does not have a significant indirect effect through organizational learning, indicating that the effect on bank performance is primarily direct.

Discussion on Findings

The study emphasizes the central role of knowledge management in affecting organizational learning and performance in the banking sector. Knowledge acquisition reveals complementary mediation, with significant direct effects on both organizational learning and performance but shows indirect effects through organizational learning. This indicates that acquiring new knowledge improves organizational learning and directly contributes to enhancing bank performance. These results are reliable with prior studies that emphasize the significance of knowledge acquisition in nurturing innovation, adaptability, and competitive advantage (Nonaka & Takeuchi, 1995; Grant, 1996; Gold, Malhotra, & Segars, 2001) [13, 25]. Conversely, the lack of important mediation effects through organizational learning for other knowledge management processes implies that the role of organizational learning as a mediator is not uniform across all processes. Knowledge application and conversion lack significant direct or indirect effects, reflecting their limited contribution in this context. This is repeated with studies highlighting the varying effectiveness of knowledge management practices based on organizational and industry-specific factors (Zahra & George, 2002; Jasimuddin, Klein, & Connell, 2005) [41]. Knowledge transfer, however, shows an indirect-only mediation effect, signifying that its influence on

performance is entirely mediated through organizational learning. This emphasizes the importance of establishing a robust knowledge-sharing and transfer system to boost learning capabilities, consequently compelling improved performance. These findings vibrate with the resource-based view, which recognizes knowledge as a key strategic asset that when effectively transferred and utilized, leads to sustained competitive advantage (Barney, 1991; Teece, Pisano, & Shuen, 1997) ^[5]. Furthermore, the role of knowledge transfer in permitting organizational learning supports the dynamic capabilities skeleton, which underlines the capability of organizations to incorporate and reconfigure internal resources to deal with speedily changing environments (Teece, 2007) ^[34]. These results advise that knowledge transfer is vital for creating a learning-oriented culture that can advance decision-making and operational outcomes.

In contrast, knowledge conversion shows direct-only non-mediation, signifying that its impact on performance avoids organizational learning. This suggests that knowledge conversion directly improves performance. The minor significance of its direct path to performance highlights the need for organizations to focus on refining their knowledge conversion practices to maximize their impact. These findings emphasize knowledge management, where specific processes are influenced based on their exclusive direct and indirect effects on organizational results (Choi & Lee, 2003; Tseng, 2010) ^[18, 35]. Finally, the study demonstrates that organizational learning plays a critical mediating role for specific processes like knowledge transfer, other processes, such as knowledge acquisition and conversion, apply significant direct effects, emphasizing the need for a nuanced understanding of knowledge management's role in performance enhancement.

Practical Implication

The study's findings emphasize the importance of knowledge management in powering organizational learning and performance in the banking sector. Knowledge acquisition exhibits both direct and complementary mediation effects, underscoring the need for banks to systematically invest in knowledge acquisition to strengthen organizational learning and performance. This can be achieved through structured employee training programs, comprehensive market intelligence initiatives, and a knowledge-sharing culture that facilitates continuous learning and adaptation. The indirect-only mediation effect of knowledge transfer emphasizes the need for structured knowledge-sharing mechanisms to aid organizational learning and boost performance. To optimize knowledge dissemination, banks should set up formalized systems, including mentorship programs, digital repositories, and cross-departmental collaboration. Strengthening these mechanisms ensures effective knowledge utilization, fostering sustained competitive advantage. The direct-only effect of knowledge conversion on performance implies that its impact is independent of organizational learning. Banks should enhance knowledge conversion by codifying tacit knowledge, developing best practice frameworks, and influencing technology to optimize performance. There is a need for a strategic knowledge management approach that can incorporate knowledge acquisition and transfer to improve learning and performance in public banks.

Conclusion

This study highlights the strategic role of knowledge management in enhancing organizational learning and bank performance. Knowledge acquisition directly influences learning and performance, while knowledge transfer impacts performance through organizational learning. In contrast, knowledge conversion contributes independently, and knowledge application shows no significant effect. Banks should invest in structured knowledge acquisition, transfer, and conversion processes. Strengthening training, market intelligence, and knowledge-sharing systems can enhance learning, innovation, and adaptability. A strategic knowledge management approach ensures effective resource utilization and fosters banks' sustainable competitive advantage.

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