



Impact of Knowledge Management on Industrial Performance: Evidence from Nepalese Industrial Estate

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Abstract

Background: Knowledge management is crucial for industrial success and continuity, playing a vital role in the management of industries. Effective knowledge management can lead to improved performance and competitive advantage.

Objective: This study aims to understand the impact of knowledge management on industrial performance in the Kathmandu Valley, Nepal, focusing on both tacit and explicit knowledge.

Method: The study is grounded in the Organizational Knowledge Creation Theory and follows an explanatory research design. A total of 173 managers from various industries within Kathmandu Valley were interviewed using a structured questionnaire facilitated by the Kobo Toolbox. The data were analyzed using Structural Equation Modeling (SEM) with SPSS and AMOS software to examine the relationship between knowledge management practices and industrial performance.

Result: The findings reveal that both tacit and explicit knowledge have a significant positive impact on organizational performance. The ability to rapidly gather, document, and share information within an organization enhances industrial performance.

Conclusion: The study concludes that effective knowledge management is essential for maximizing industrial performance in Nepalese industrial estates. The emphasis on a culture of information documentation and sharing within organizations can lead to substantial performance improvements.

Paper Types: Research Paper

Key Words: Knowledge management, organizational performance, industrial estates, SEM, Kathmandu Valley

JEL Classification: D83, L25, P27

Introduction

In the twenty-first century, the primary resource of any organization is not only its financial or technical resources, but also the knowledge contained in the minds of its personnel. Knowledge base resources are the path or way that follows in order to have a sustainable competitive edge to the organization (Biswakarma, 2018). However, the importance of knowledge management is growing every year. As the marketplace becomes ever more competitive, one of the best ways to stay ahead of the curve is to build organization in an intelligent, flexible manner (Latilla et al., 2018).

In order to produce and reflect the application of insights and experience, knowledge management (KM), a newly developed concept in management, uses a variety of tactics and approaches (Schniederjans et al., 2020). Additionally, as it leads to the greatest innovations and improved organizational performance, knowledge creation and management are particularly crucial for successful businesses (Singh et al., 2021); plays an important role in creating organizational value. In the current digital economy, knowledge, information, and skills are crucial, but a manager's unique set of abilities frequently gives them a competitive edge over competitors (Paudel et al., 2021, Kharel et al., 2021). Consequently, organizations must be able to see problems at a distance and be ready to act rapidly in response to new information and visionary (Wang & Meng, 2021).

Industries are an important part of modern economies (Devkota et al., 2020) because they create jobs, generate innovation, create wealth, reduce poverty, raise living standards, and contribute to the communities in which they operate (Devkota et al., 2020). However, industries face resource, finance, and skill shortages, and managers frequently lack managerial expertise and organizational capabilities, implying poor strategic business planning and human resource management (B.K et al., 2019). The main challenges hindering industrial development in the country include political instability, industrial insecurity, unfavorable labor relations, limited energy availability, weak industrial infrastructure, low productivity, inadequate adoption of new technology, insufficiently skilled workforce, ineffective supply management, and a lack of diversification in exportable items (B.K et al., 2019, Bhandari et al., 2021). Implementing knowledge management is said to be the best way to overcome these issues and improve industries' ability to innovate and perform organizationally (Saini, 2013). Industries are increasingly strengthening their internal knowledge management capacity (KMC) in order to manage inward and outward flows of knowledge while exploiting and exploring external opportunities in today's dynamic environment (Santoro et al., 2018). Wherefore, Akhavan et al. (2012) pointed KM is associated with significant benefits which can empower organizations to get more competitive advantages in their market; implementing knowledge management processes offers tangible benefits that drive value. Company behavior, and infrastructure based on knowledge management may all be used to improve knowledge management operations (Azeem et al., 2021). However, creating and sharing knowledge is essential for fostering innovation and is the key challenge of the knowledge-based economy (Dai et al., 2020). Therefore, KM could be the best tool to manage the operation and function of any institutions such as ministries, judiciary, universities, and hospitals and other industries. However, the continuous change in market expectations and the demands for new products have been gradually replacing the capital and labor-intensive firms by knowledge intensive firms, and routine work by knowledge worker. For practicing managers, there is a major gap between knowledge management theories and practice in Nepalese Organizations. It is therefore essential to gain a clear and comprehensive understanding of how knowledge works within the organization. Although knowledge management has been widely discussed by many academicians and practitioners, there is paucity of literature and information on knowledge management in Nepalese context (Khanal, 2017).

The nature of organizational activities due to lack of structure and procedure to implemente KM does somehow not seem to be efficient and effective which can boost existing performance. Human

manpower, system structure, innovation, and technology are far away from each other. Some of the immediate suggestions should be taken into consideration like the current KM strategy, policy, technology, and use of KM in Nepalese organization (Pandit & Kautish, 2020). Lack of knowledge sharing culture, unavailability of sufficient KM expertise, difficulty in maintaining budget and cost recovery, lacking appropriate technical skill for implementing KM are the challenges while applying KM system in organizations (Khanal & Mathur, 2020). The necessary training and required e-sources are not sufficient to link the knowledge management because of improper usage of information communication technology in the organizations of Nepal (Paudel, 2020).

There are a few studies on knowledge management in Nepal, it is necessary to examine the perceptions on the benefits, problems, challenges, responsibilities and managerial solutions that are entailed in managing the knowledge. Linking the field of knowledge management with the field of industrial activities, more empirical research on the organizational knowledge contest is needed in Nepalese organizations. In order to identify difficulties and offer managerial solutions to address them, this study's goal is to analyze the impact of knowledge management on industrial performance in Nepal.

Review of Literature

Knowledge Management in Nepal

For transnational businesses and associations to stay competitive in a worldwide market, intellectual assets are becoming increasingly crucial. In the telecommunications industry, knowledge management is seen as a competitive advantage that enables a corporation to endure and prosper in the knowledge-based economy. Though technology has recently made strides in the area of global knowledge management, more development is still required in areas like knowledge management systems and the usage of ICTs (Al-Mawali & Al-Busaidi, 2021; Chatterjee et al., 2021; Ponisciakova, 2020).

In the case of Nepal, Nepal Government had established organization like Nepal Administrative College, for the effective knowledge management in public enterprises and for Government of Nepal. The Nepal Administrative Staff College (NASC) was set up as a national level autonomous institution on 27th September, 1982. NASC is conducting and associate trainings with career development by improving development oriented knowledge and skills of employees of the Government of Nepal and Public Enterprises. NCP Strategy (2013-2017) under ADB knowledge management plan strategy lays out a knowledge management action plan that is helping ADB to leverage knowledge solutions to improve the efficiency of its operations in Nepal. Work on knowledge management is operating at several levels of this operating environment, as well as on many dimensions of ADB operations as envisioned in the new CPS(ADB, 2021). IFAD Knowledge Management Strategy (2007-2010) is developed to improve the effectiveness in knowledge management for alleviating poverty and food security in Nepal's rural area. Knowledge generation, knowledge use, and the creation of an enabling institutional framework for evidence-based learning and knowledge sharing are the three primary areas in which activities are being undertaken. IFAD is identifying the specific instruments needed to improve learning and knowledge-sharing at the country programmed level (IFAD, 2010). ICT policy 2015 is developed with a vision to developed Nepal into an information and knowledge bases society and economy. According to this vision, information and communication technology will be a vital driving force in converting Nepali society into a knowledge and information-based society, as well as enhancing Nepal's quest of equality and long-term progress (Ministry of Information and Communication, 2015). The Knowledge Management and Communication (KMC) unit of ICMOD is responsible for linking, organizing, coordinating, facilitating, creating, repackaging, storing, preserving, presenting, and distributing knowledge created as a result of its activities. It is working for continuous development in its internal knowledge management and communication processes and systems, which use to support

its internal colleagues and external partners. Internally and internationally, KMC unit is offering a variety of knowledge to guarantee that the correct information is delivered to the right people through the right channel (ICIMOD, 2022).

Nepalese public Banks are more concerned about manual KM strategy rather than Knowledge Management System (Pandit & Kautish, 2020). The level of KM awareness amongst Nepalese financial institutions is medium in which some companies understand the principles of KM but there are many challenges and difficulties in pursuing KM implementation (Khanal 2017). Managing knowledge is gaining incredible importance in banking industry to promote organizational survival and gaining and sustaining competitive edge in Nepal (Biswakarma 2018). Judiciary of Nepal is planning to integrate KM to its system integrate and link the policy document, past judgment, and other types of information to its stakeholder. The judiciary follows the approach of user collaborative experience and naturalness in using ICT are predicting for required information and knowledge Management (Paudel, 2020).

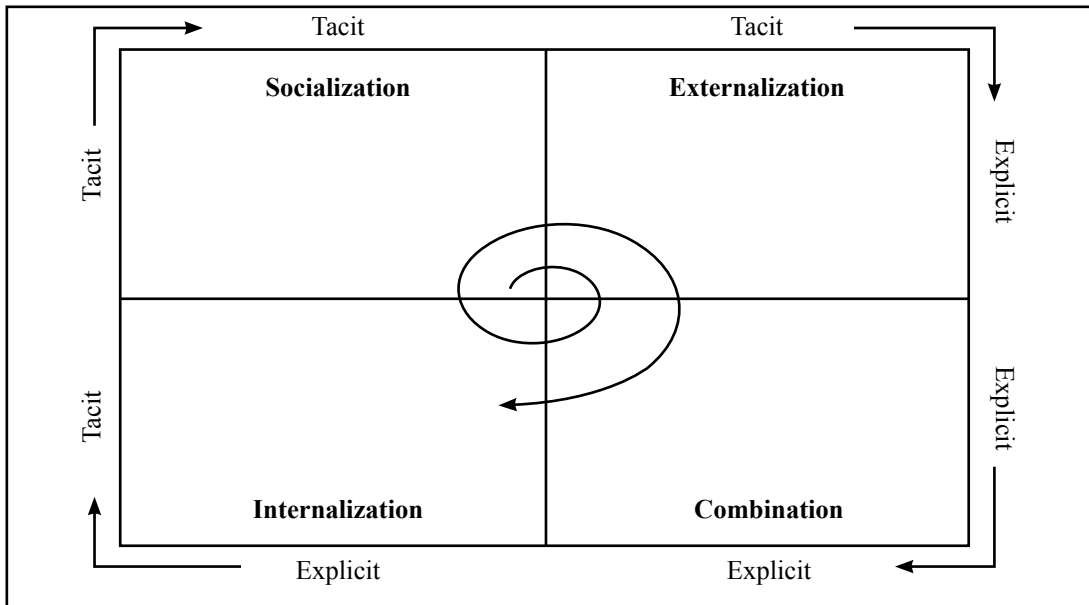
In Nepal, the practice of KM is slowly picking up. The majority of the Nepalese organizations in the survey acknowledge that knowledge management helps organizational learning. KM practice is an important aspect in their Nepalese organization, and that technology plays a key role in this area. Although the performance of the organizations is found to be affected by improper KM, most of the organization in Nepal hasn't realized its importance yet.

Research Method

Utilizing tried-and-true research techniques is essential while selecting the best research plan. In addition to allowing us to quantitatively characterize occurrences, statistically-based quantitative techniques also help us find connections between two or more variables. We used a quantitative approach for our investigation since the twenty-first century is a statistically advanced period (Stockemer et al., 2019). This study adopts explanatory research methodology as it shows the causal relationship between variables (Amatya et al., 2023). Different theories were reviewed such as the theory of planned behavior (Ajzen, 1991), knowledge creation theory (Nonaka, 1994), DIKW (data, information, knowledge, wisdom) theory (Rowley, 2007), Knowledge based theory of the firm (Sveiby, 2001), and Ducker worker productivity theory (Wong, 2012). But the paradigm of Organizational Knowledge Creation Theory best fits for this study.

Nonaka's (1994) dynamic theory of organizational knowledge creation holds that organizational knowledge is created through a continuous dialogue between tacit and explicit knowledge via four patterns of interactions, socialization, combination, internalization and externalization. Explicit knowledge is codified knowledge transmittable in formal, systematic language whereas tacit knowledge is personalized knowledge that is hard to formalize and communicate and deeply rooted in action, commitment and involvement in context (Songkram & Chootongchai, 2020; Cheng, 2019). Socialization represents the interaction between individuals through mechanisms such as observation, imitation or apprenticeships (Wang et al., 2020). Combination involves combining explicit knowledge through meeting and conversation or using information systems (Wang et al., 2020). Internalization converts explicit knowledge into tacit knowledge whereas externalization converts tacit knowledge into explicit knowledge (Nonaka, 1994). As in figure 1, knowledge is continuously converted and created as users practice, collaborate, interact, and learn; can be seen as a continuous, dynamic, swirl of knowledge for knowledge management. It is basically a visual representation of overlapping, continuous processes that take place or should take place in an organization.

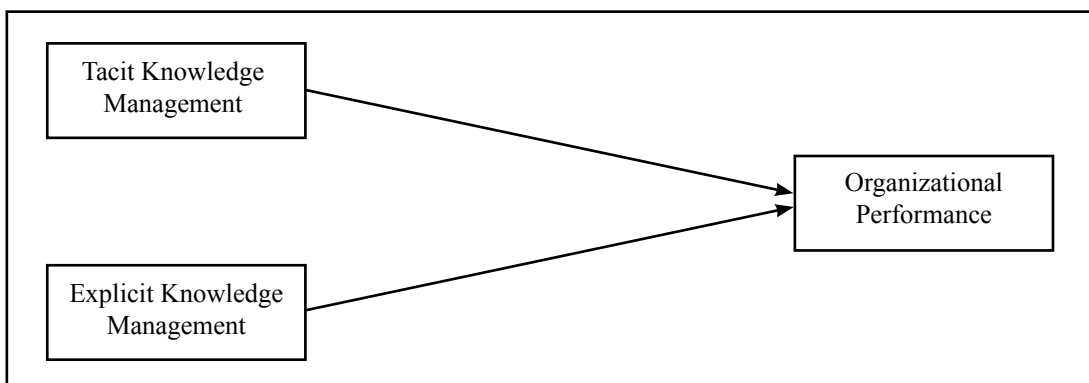
Figure 1: Modes of Knowledge Creation (SECI) Model



Source: Nonaka (1994)

As this paper is based on Organizational knowledge creation theory, several studies conducted under organizational knowledge creation theory are taken into consideration. Framework of Muthuveloo et al. (2017), Berraies et al. (2014), Akhavan et al. (2012), Yang et al. (2010) and Nonaka (1994) were reviewed. These models illustrate knowledge sharing and knowledge creation mechanism as well as strategies. The role of explicit and tacit knowledge on organizational performance is depicted in figure 2. It is made up of three variables: tacit knowledge management, explicit knowledge management and organizational performance. This framework defines tacit knowledge management and explicit knowledge management as an independent variable and organizational performance as a dependent variable.

Figure 2: Modes of Knowledge Creation (SECI) Model



Source: Adopted and modified from Muthuveloo et al. (2017)

Hypotheses Formulation

Tacit Knowledge management and Organizational Performance

Workers generate and apply tacit knowledge in their everyday tasks and activities, which are essential components of effective operations, making tacit knowledge a valuable resource for industries that play a large role in the working environment (Latilla et al., 2018). Through the sharing of tacit information that is inherent within them, individuals contribute significant knowledge and draw on what others know. For organizations to function better, tacit knowledge is essential (Obrenovic et al., 2015). Tacit knowledge is an organization's advantage in routine business operations and decision-making. It is also known as work-related practical information acquired informally on the job and is occasionally referred to as "know-how." It is crucial to take into account characteristics that affect the quality of tacit knowledge in addition to those that affect the quantity (Gamble, 2020). Thus, this study proposes the following hypothesis:

H1: Tacit Knowledge Management has a positive significant influence on Organizational Performance.

Explicit Knowledge Management and Organizational Performance

Explicit knowledge management, which involves a range of formal and systematic information that is archived, expressed, and shared, benefits individuals, groups, and organizations (Al-Mawali & Al-Busaidi, 2021). Information is made broadly available and simple to obtain by using knowledge platforms to create systems for managing explicit knowledge. Fast access to and use of explicit common knowledge reduces organizational time for seeking and generating, which improves organizational performance (Jasimuddin & Zhang, 2016). In light of this, the following hypothesis is proposed by this study.

H2: Explicit Knowledge management has a positive significant influence on organizational performance.

Variable Table and its definition

This section discusses the variables used in the study. The study's variables have been identified and defined. For this study, five measures of explicit knowledge management, four of tacit knowledge management, and five of organizational performance were taken (see table 1).

Table 1: Observed Variable and Description

Construct	Variable Id	Observed Variable	Explanation
Tacit Knowledge	TK_1*	Socialization	Employees are willing to share their emotions feelings and personal experiences with others
	TK_2	Externalization	Transferring knowledge by documentation, telephone or computer network to other employee.
	TK_3	Combination	Employee can categorize and combine the available knowledge in order to create new knowledge.
	TK_4	Internalization	Learning by observation

Construct	Variable Id	Observed Variable	Explanation
Explicit knowledge	EK_1	Sharing knowledge	Sharing the document with the member of the organization.
	EK_2	Encourage	Encourage to share their Knowledge
	EK_3	Training and development	Training and development program
	EK_4*	IT system	Facilitated the IT systems for knowledge management
	EK_5*	Collecting Report	Organization frequently collects report and official document from other.
Organizational Performance	OP_1	Team work	Employee and middle management always emphasize on teamwork activities for continual organizational performance
	OP_2	Information Sharing	For continual organizational performance and sustainability
	OP_3	Skills	To perform better in work
	OP_4	Strategic action plan	Enhancing business with lean activities
	OP_5*	Decision making	Competitor Comparison, Customer expectation and needful information for decision making

Note: * are the indicators that were discarded during the data analysis as their factor loading is less than 0.50

Research Instruments and Data Collection Technique

This study focuses on impact of knowledge management on the industrial performance in Kathmandu valley. Industrial managers were asked to respond to a structured questionnaire. A total of 173 industries from the Balaju Industrial Estate, Paten Industrial Estate, and Bhaktapur Industrial District were surveyed for data. We did a non-probability sampling and data were collected from 79 manufacturing, 18 agriculture, 16 textiles, 14 handicraft 13 forest based and 2 garments and 38 other industries. Here, the sample size is calculated by the statistical formula which is shown below:

$$n = \frac{N \times X}{(X + N - 1)} \quad (\text{Taherdoost, 2018})$$

Where,

$$X = \frac{(Z_{\alpha/2})^2 \times p \times (1-p)}{MOE^2}$$

And $Z_{\alpha/2}$ is the critical value of the traditional distribution at $\alpha/2$ (e.g., for a confidence level of 95%, α is 0.05 and also the critical value is 1.96), MOE is the margin of error, p is the sample proportion and N is that the population size. A finite population correction has been applied to the sample size formula. After the calculation the sample size is 165. However, this study added 5% non-response error. Thus, the final sample size required for this study is 173.

In the data analysis, this study uses both descriptive as well as inferential statistics to analyze the data. For descriptive analysis this study opted to use KOBO Toolbox, charts and diagram. Likewise, SEM was used for inferential analysis with the help of SPSS, AMOS and StatWiki. Inferential analysis section generally comprises of Summary statistics, Exploratory Factor Analysis (EFA), Common Method Bias, Component Analysis, Communalities, Confirmatory Factor Analysis (CFA), Measurement Model, Path Analysis and Hypothesis Testing of researcher's data analysis.

Data Analysis and Results

Socio-Demographic Characteristics

This section includes the Socio-Demographic details of the sample that was surveyed. A total of 173 industries from the Balaju Industrial Estate, Paten Industrial Estate, and Bhaktapur Industrial District were surveyed for data. Age, gender, education, work experience, industry type and scale, and managerial position of the respondent have all been tabulated in table 2.

Table 2: Socio-Demographic

Title	Category	Number	Percentage
Gender	Male	154	89.02
	Female	19	10.98
Age	30-40	81	46.82
	40-50	61	35.26
	20-30	14	8.09
	Above 50	16	9.25
Marital Status	Married	160	92.49
	Unmarried	13	7.51
Education	Up to SEE	3	1.73
	+2	13	7.51
	Bachelor	79	45.66
	Master	77	44.51
	Above Master	1	0.53
Position in the Industry (Manager)	General Manager	105	60.69%
	Assistant Manager	31	21.39%
	Brand Quality	5	2.89%
	Service Manager	2	1.16%
	Others	24	13.87%
Working Experience in industry (In years)	0-1	5	2.89
	1-3	7	4.08
	3-5	28	16.18
	5-10	64	36.18
	10 Years and More	69	39.88

Title	Category	Number	Percentage
Types of Industry	Manufacturing	79	45.82
	Agriculture	18	10.4
	Textiles	16	9.25
	Handicraft	14	8.12
	Forest Based	6	3.47
	Garments	2	1.16
	Others	38	22.04
Scale of Industry	Small	88	50.87
	Medium	72	41.62
	Large	13	7.51

Out of 173 respondents, men make up 89.02 percent of the sample; while female make up only 10.08 percent. It is abundantly clear from the gender distribution of the responses that, as is expected, men predominately hold managerial positions in industry. In similar to this study Tomal and Jones (2020) found that in the US manufacturing industries women comprise only 2.0% of the CEOs and 11% of the Executive Officer level. With women constituting such a small proportion of senior leadership, it is reasonable to assume that there is likely to be an imbalance between male and female at the management and supervisory levels. Regarding the age range of respondents the 30-40 age range receives the most responses (46.82%), followed by the 40-50 age brackets (35.26%), the 50+ age bracket (9.25%), and then 20-30 age brackets receives the least responses (8.09%) which is quite close to the research survey result conducted by Tirfe and Abraham (2022) on the age range of managers in the industry. When it comes to marital status, 92.49 percent of respondents are married, while 7.51 percent are not.

Manager education level is crucial for firm performance because managers are directly responsible for firm-level production technique, organizational, and strategic decisions (Correia et al., 2021). The results of surveys on managers' levels of education in industrial estates show that most respondents have bachelor's degrees, accounting for 45.66% of them, followed by master's degrees (44.51%), +2 degrees (7.51%), SEE degrees (1.73%), and 0.53% having higher than master degrees. This indicates that the industry managers have a high level of education.

Similarly, the general manager of the industry (60.69%) provided the majority of the responses where service manager (1.16 %) was least; they have 10 years or more of experience. In terms of categorization of industries, there are 79 manufacturing industries, 14 handicraft industries 18 agricultural industries, 16 textiles industries, 6 forest based industries, 2 garments industries and other remaining consists of 38 industries. The majority of the industries in industrial estate of Kathmandu valley are manufacturing industry. The study done by Anish et al. (2022) also shows that such as manufacturing textile, dairy products and handicrafts are the major industries operating in the industrial estates.

The scale of various industries is categorized according to their investments. The government of Nepal categorizes industries with investments under 5 crore as small scale, investments between 5 crore and 15 crore as medium scale industries, and large scale industries with investments beyond 15 crore (Government of Nepal, 2020). Based on the government's classification of industries, there are 88 small, 72 medium, and 13 large industries, which indicates that the majority of industries in the Kathmandu valley's industrial estates are small-scale industries.

General Understanding Regarding Knowledge Management

Knowledge management is the process of obtaining and disseminating pertinent knowledge that

is required by companies (Di Vaio et al., 2021). The respondents were questioned on this subject since timely information flow is crucial for a business's knowledge management system to function effectively. Given that so many managers stress the importance of having access to and sharing information in a timely manner, all industries show that organizations timely circulate the necessary information in accordance with their routines and needs. This finding by Abusweilem and Abualoush (2019) is supported by this information. Most survey participants answer questions within a day.

This suggests that meetings (84.97%), informal conversations and sharing (56.6%), formal training (56.07%), workshops (12.72%), conferences (9.25%), documentation (8.67%), and the least frequently reported (4.05%) responses from other methods all appear to be contributing to an organization's information flow moving quickly. Given that meetings and training are the most often utilized procedures for transferring decisions and information in an organization, the research by Mahrinasari et al. (2021) appears to share some similarities with this one. The poll also showed that workers firmly supported the managerial decision.

To ascertain if the employee has been operating in accordance with organizational decisions or not, observation is required (Ciesielska et al., 2017). More than two thirds of managers appreciate supervision for watching their employees' performance, according to the survey. Additionally, supervisors continuously monitor, assess, and evaluate employees' performance. Techniques are used extensively in large corporations such as Nebico, Agro-Thai Foods, and Automobiles. Additionally, a large percentage of respondents gave swift answers on the quick decision-making and information flow from the board of directors through the management team to the workforce, demonstrating that industries have a culture of speedy information sharing. Similar findings were made by Yang and Maxwell (2021), who discovered that rapid information exchange is regarded as a key strategy for boosting organizational effectiveness. In line with the report, 100% of the managers polled claimed that quick information exchange inside their firms had enhanced organizational performance.

Inferential Analysis

Summary Statistics

In this segment, variables are analyzed on the basis of their observation, mean, minimum and maximum value, and standard deviation. Mean and standard deviation lies in the range from 3.9133 to 4.353 and 0.5501 to 0.81367 respectively indicating that the responses have low dispersion. Skewness is a measure of the asymmetry of a distribution, or the extent to which the data is pushed to one side or the other while Kurtosis is a measure of how peaked or flat topped a distribution is compared to a normal distribution (Blanca et al., 2013). The data in this study has a negative skewness i.e. the left side of the distribution has a larger tail ranging from -2 to +2. Kurtosis measurements are in the range of -4 to 4, suggesting that the data is normal and is often acceptable

Exploratory Factor Analysis and Common Method Bias

The aim of EFA is to identify the factors that explain the order and structure of measured variables (Watkins, 2018). Factors are assumed to be unobservable characteristics of people in the social and behavioral sciences, manifested in differences in the scores attained by those people on the measured variables (Maskey et al., 2018). The applicability of the data has been checked using KMO and Bartlett's test before evaluating it. The KMO value in our study is 0.795, which meets the 0.70 minimum. Similarly, the data is significant since the Bartlett's Test result is 0.000, which is less than 0.05, suggesting that there is no problem with data dependability and validity as well as it indicates that the data is significant.

Common method bias can appear when both the independent and dependent variable is captured by the same response method. Harman's single-factor test is used to see if the first extracted component explains more than 50% of the variation (Fuller et al., 2016; Kock et al. 2021). Our data set is free of

Common Method Bias because the variation explained by a single component is 38.108%, which is less than 50%.

Confirmatory Factor Analysis (CFA)

Confirmatory factor analysis (CFA) is a multivariate statistical procedure for determining how well measured variables represent the number of constructs. Researchers can specify the number of factors required in the data and which measured variable is related to which latent variable in confirmatory factor analysis (CFA) (Marsh et al., 2020). To assess assessment reliability and validity, we used confirmatory factor analysis (Hox, 2021). The fitness indicators CMN/DF, RMR, RMSEA, GFI, IFT, TLI, and CFI are used to determine whether or not the model fit is acceptable. This study has an excellent fit because all of the indicators fall within the specified criteria i.e. CMIN ($1.417 < 3$), RMR ($0.033 < 0.08$), GFI ($0.954 > 0.90$), CFI ($0.981 > 0.95$), NFI ($0.938 > 0.90$), TLI ($0.973 > 0.95$) RFI ($0.915 > 0.90$), and RMSEA ($0.049 < 0.08$) which meets the requirement of excellent fitting and it proves that our model is more reliable and has better validity.

Validity and Reliability Test

The researcher used the measurement model described below to determine the reliability, and validity of the measures in this study. Convergent and discriminant validity are used to assess each variable's construct validity (Basnet et al., 2024). The dataset must meet three conditions in order to be verified for convergent validity. The conditions are $AVE > 0.5$, $CR > 0.7$ and $CR > AVE$ (Awale et al., 2023; Khadayat et al., 2024.) whereas for discriminant validity the conditions are $AVE > MSV/ASV$, $\sqrt{AVE} > R$ (correlation). When these conditions are compared to the results in the table 3 it is clear that the data meets all of the convergent and discriminant validity criteria. As a result, we can conclude that there is no validity concern, and all indicators successfully determine the construct to which they belong. Likewise, table 4 shows the inter-construct correlation matrix between variables taken for this study.

Table 3: Reliability and Validity

Construct	Indicator	Factor Loading	Cronbach's Alpha	CR	AVE	MSV
Tacit Knowledge	TK_2	0.734	0.751	0.756	0.509	0.104
	TK_3	0.682				
	TK_4	0.605				
Explicit Knowledge	EK_1	0.647	0.741	0.752	0.504	0.108
	EK_2	0.680				
	EK_3	0.689				
Organizational Performance	OP_1	0.782	0.905	0.906	0.706	0.108
	OP_2	0.819				
	OP_3	0.732				
	OP_4	0.793				

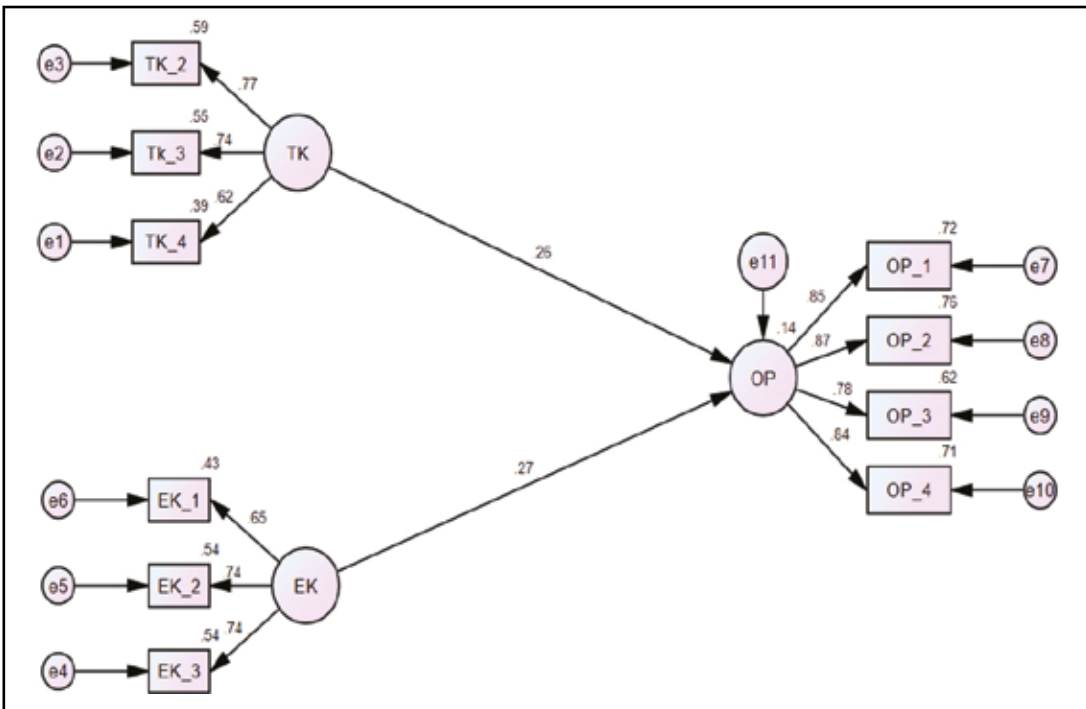
Table 4: Latent Construct Correlation

	EK	TK	OP
EK	0.710		
TK	0.318	0.713	
OP	0.329	0.322	0.840

Path Analysis and Hypothesis Testing

Path analysis is a kind of causal modeling that’s employed to look into how nodes interact in a network. However, path analysis and multiple regressions are closely related. Actually, academics use a regression model extension to look at how well a correlation matrix fits a causal model (Stage et al., 2004). It’s a method for assessing how well a multivariate collection of non-experimental data fits a causal model. It actually is an expansion of the regression model, which is what academics use to look at how well a correlation matrix matches a random model. The structural model was validated using path analysis, which was started by creating a path diagram on the graphical AMOS screen program (Warsono et al., 2020). Latent variables, observed variables, and error variables are the three factors that indicate the model. Figure 3 shows the structural model for this study which contains three latent variables (TK, EK and OP), eight observed variables (TK_2, TK_3, TK_4, EK_1, EK_2, EK_3, OP_1, OP_2, OP_3 and OP_4) and 11 error variables (e1,……, e11). Here, TK explains 26% to OP and EK explains 27% to OP. A significant correlation between latent and observable variables may be shown when the p value is less than 0.01. All of the study’s hypotheses are generally accepted if the p-value is less than or equal to 0.01, and if it is more than 0.01, all of the research’s hypotheses are rejected. All contingent factor hypotheses are accepted, indicating that all independent variables considered have a significant impact on each and every one of the hypotheses about contingent factors.

Figure 3: Structural Model



This study also examines the hypothesis statement to determine whether or not the study’s findings are statistically significant. The researcher was able to examine the hypothesized relationship between the variables as indicated in the suggested study model after constructing an identified path model. In the study CMIN/df has a value of 1.417. The results indicate that tacit knowledge significantly and positively impact organizational performance as indicated in table 5 p-value is less than 0.01 as a result hypothesis is supported as well as explicit knowledge has also significantly and positively impact on organizational performance which is H2 also shows the significant positive result as p-value is .003 which is significant at 0.01 (see table 5).

Table 5: Path Estimates for Structural Model

Hypothesis		Estimate	S.E.	C.R.	P	Hypothesis Results
Organizational Performance	← Tacit Knowledge	.448	.159	2.820	0.005	Significant
Organizational Performance	← Explicit Knowledge	.418	.141	2.960	0.003	Significant

Conclusion

This study has demonstrated that both tacit and explicit knowledge management significantly impact organizational performance in Kathmandu Valley's industrial sectors. The results highlight the importance of knowledge sharing, retention, and creation as key factors driving organizational success. Tacit knowledge, encompassing experience sharing and knowledge transfer, plays a crucial role, aligning with previous research. Similarly, explicit knowledge management, including document collection and training programs, also shows a positive influence on performance. However, challenges such as lack of skilled manpower, resistance to new learning, and insufficient resources were identified. Addressing these challenges through targeted managerial strategies like improved coordination, enhanced training, and development programs is essential. The findings underscore the need for industries to invest in knowledge management practices to optimize performance. This study contributes to the theoretical understanding of knowledge management and provides practical implications for improving industrial performance. Future research should expand the scope to include other industrial estates and explore additional variables influencing knowledge management.

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