

# **INFLUENCE OF DEMOGRAPHIC CHARACTERISTICS ON KNOWLEDGE MANAGEMENT ENABLERS IN NEPALESE HOSPITALITY INDUSTRY**

**Pushpa Maharjan**

Asst. Professor, Public Youth Campus,  
Tribhuvan University, NEPAL

## **Article History**

Received 3 Oct 2021;  
Reviewed 25 Nov 2021;  
Revised 12 Dec 2021;  
Accepted 5 January 2022

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**Keywords:** *Collaboration, Trust, Learning, Centralisation, IT Support, Hospitality Industry, Formalisation*

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## **ABSTRACT**

*This paper examines the influence of demographic characteristics on knowledge management enablers in the hospitality industry such as hotel, travel, and trekking agencies in Nepal. The study is based on primary data with 382 responses. The self-administered questionnaires were used to collect the perceptive opinions from the respondents. The study concludes that all age groups and number of years work experience groups of employees' perception concerning collaboration, trust, learning, centralisation, formalisation, and information technology are similar. Different educational groups of employees have different opinions regarding collaboration, centralisation, and formalisation but their perception is similar to trust, learning and information technology.*

*Nepalese Journal of Hospitality  
and Tourism Management  
Vol.3, No. 1*

## **I. INTRODUCTION**

Many researchers have defined knowledge management enablers. An important component of knowledge management research is to identify enablers of knowledge management. Knowledge management enablers (or influencing factors) are organisational mechanisms for fostering knowledge consistently (Ichijo, Krogh & Nonaka, 1998). They can stimulate knowledge creation, protect knowledge and facilitate the sharing of knowledge in an organisation. They are also the necessary building blocks in the improvement of the effectiveness of activities for knowledge management (Ichijo et al. 1998; Stonehouse & Pemberton, 1999). Enabler factors should be clear in an organisation, because not only do they create knowledge, but they also prompt people to share their knowledge and experiences with others (Yeh, Lai & Ho, 2006). They concluded that it is considered crucial to identify the factors that influence the success of knowledge management initiatives. Knowledge management enablers are the mechanism for the organisation to develop its knowledge and stimulate the creation of knowledge within the organisation as well as the sharing and protection of it.

Anderson and APQC (1996) stressed organisational culture, information technology, strategy, knowledge management process, knowledge evaluation and leadership. Little (1998) emphasised organisational culture, information technology, strategy, knowledge management process, and knowledge content. Delphi (1998) emphasised organisational culture, information technology,

strategy, and knowledge management process. Demarest (1997) divided enablers into culture infrastructure, operational infrastructure, and technical infrastructure. Ernst and Young (1998) emphasised organisational culture, information technology, strategy, knowledge management process, and knowledge content.

In addition, at the same year (Mathi, 2004) pointed out that factors such as people, process and technology should be taken under consideration in knowledge management implementation, focusing mainly in people and then following process and technology. According to this research knowledge management enabler are the key factors that determine the effectiveness of knowledge management within an organisation.

Similarly, Liebowitz (1999) proposed six key ingredients for making knowledge management successful in organisations. He pointed the need for knowledge management strategy with support of senior management, a chief knowledge officer or equivalent and a knowledge management infrastructure, knowledge ontologies and repositories, knowledge management systems and tools, incentives to encourage knowledge sharing and supportive culture. His propositions were implemented by the first adopters of knowledge management.

A different approach was carried out by Holsapple and Joshi (2000). Firstly, they investigate the factors, which derived from various literature sources, and probably influence the success of knowledge management. Secondly, they conducted a Delphi study in order to assess the appropriateness for the factors they evaluated and explored earlier. They suggest three types of influences, managerial, resource, and environmental, containing different factors each one. Hasanali (2002) claimed that the success of knowledge management depends on many different factors. The study success factors are leadership, culture, structure, roles and responsibilities, IT infrastructure, and measurement. Likewise, Chourides, Longbottom and Murphy (2003) highlighted five categories of factors namely, strategy, human resource management, information technology, quality, and marketing (Wong, 2005). Another empirical study conducted by Davenport and Probst (2002) suggested a more extensive list of success factors for the implementation of knowledge management. This list included leadership, performance measurement, organisational policy, knowledge sharing and acquisition, information-systems structure, benchmarking and training.

The four pillars were leadership, organisation, technology and learning (Mathi, 2004). In addition, Stankosky and Baldanza (2000) developed a conceptual framework for knowledge management in which the four pillars were organisation, technology, leadership, and learning. Moreover, Mathi (2004) proposed that the factors which determine knowledge management success in an organisation are culture, knowledge management organisation, systems and information technology infrastructure, effective and systematic processes and measures (Akhavan, Jafari, & Fathian, 2006).

Another knowledge management model that could be mentioned is the one developed by the American Productivity and Quality Center (1999). In this model four catalytic factors are emphasised for successful knowledge management: Leadership, organisational culture, measurement and technology. It is important each factor to be designed and managed in alliance with the others for the support of the knowledge management process. KPMG (1998) emphasised organisational culture, information technology, strategy, and knowledge management process.

Lee and Kim (2001) proposed knowledge, knowledge workers, knowledge management processes, and information technology. Leonard-Barton (1995) suggested strategic intent, core capability, signature skill, creative abrasion, continuous experimentation, information-porous boundaries, and cognitive variety as influencing factors. Nevis, Anthony and Gould (1995) proposed ten facilitating enablers which are made up of scanning imperative, performance gap, concern for measurement, experiential mind-set, climate of openness, continuous education, operational variety, multiple advocates, involved leadership, and system perspective. Nonaka and Takeuchi (1995) proposed organisational intention, autonomy, fluctuation and creative chaos, information redundancy, and requisite variety. Pan and Scarbrough (1998) identified six enablers which are composed of culture, strategy and leadership, technology, organisational learning, measurement and performance, and knowledge entrepreneurship. Pentland (1995) emphasised of social interaction for knowledge enablers.

A variety of knowledge management enablers have been addressed in the literature (Ichijo et al., 1998; Leonard-Barton, 1995; Sawhney & Prandelli, 2000). Probst (1998) proposed three influencing factors such as top management support, organisational structure, and culture. Szulanski (1996) emphasised knowledge content, source and recipient, and context as influencing factors. Spek and Spijkervet (1997) identified four influencing factors which are composed of organisation and personnel, information technology, management, and culture and motivation. Walsh and Ungson (1991) considered knowledge management influencing factors as individual, culture, transformation, structure, ecology, and external archives. Wiig (1995) identified impact list for influencing factors which are consisted of tasks/processes, people, structure, and power. Wijnhoven (1998) proposed individual, culture, transformation, structure, ecology, external archives, and system as knowledge bin and influencing factors. They suggested various factors for knowledge management enablers, among these enablers, organisational culture, structure, and information technology are incorporated into the research model.

Al-Gharibeh (2011) evaluated that there is a positive effect of knowledge enablers on knowledge transfer in Zain Company. He found that knowledge enablers as organisational culture enabler and information technology supported knowledge transfer; however, knowledge enablers as knowledge strategy and knowledge leadership did not support knowledge transfer.

Finally, Theriou, Maditinos and Theriou (2010) proved that key enabler factors such as leadership, culture, strategy, technology and people do influence positively knowledge management effectiveness. However, they indicated that only leadership and culture are statistically supported. They evaluated enablers such as technology, strategy, and people are not significantly related to the knowledge management effectiveness.

This study deals with the research issues regarding the knowledge management enablers in hospitality industry, so that what factors and components of demographic variables influence on knowledge management enablers in the hospitality industry?

The objective of the study is to evaluate the influence of demographic variables on knowledge management enablers in the hospitality industry such as hotel, travel and trekking agencies in Nepal. Remaining part of the paper has been divided in four sections. Second section presents the review of literature, third section reveals research method, fourth section discusses results, and the final section presents the conclusion of the study.

## **II. REVIEW OF LITERATURE**

Doval (2020) stated that today the whole society is facing the problem of performance assurance for organisations, especially obtaining success in an increasingly competitive market. The concept of knowledge has been and still is in the attention of the researchers to offer practical solutions to the companies' management that will lead to efficient strategies and superior performances. The paper is aiming to analyse these two concepts briefly, i.e., knowledge and performance, and to illustrate the intrinsic connection between them. Moreover, the paper offers a conceptual model of a process of creating knowledge and using it to increase the organisational performance. The proposed conceptual model regarding the process of knowledge creation management for organisational performance is an instrument for facilitating the development of strategic intent in creating and implementing knowledge with a focus on the company's performance.

Davenport and Prusak (1998) conducted a study to explore the practices of 31 knowledge management projects in 24 companies, with the aim of determining the factors associated with the effectiveness. The result identified 18 successful projects with eight success factors. These factors were linking knowledge management to economic performance or industry value, a clear purpose and language, a standard and flexible knowledge structure, multiple channels for knowledge transfer, culture, technical and organisational infrastructure, change in motivational practices, and senior management support (Wong, 2005).

Rusland, Jaafar and Sumintono (2020) analysed the Royal Malaysian Navy (RMN) fleet personnel's responses to survey questionnaire items on the knowledge creation processes, in order to identify the current extent of processes within the fleet. Through knowledge creation, new knowledge is created, starting with the discovery of knowledge and eventually, new and additional knowledge creation.

Mehralian, Nazari and Ghasemzadeh (2018) opined that in whatever ways KM is defined in previous studies, knowledge creation process is seen to be the most vital and important in KM activities. The main reason why KM seems to trigger the great interest of many managers was largely due to knowledge creation potential that is very important in providing the means of innovative culture within the organisations (Mehralian et al., 2018). Mehralian et al. (2018) further added that knowledge creation is so critical that most of the organisations are trying their best to be competitive by creating knowledge that will assist them to achieve their objectives.

Zhang and Zhang (2018) provided a theoretical frame and practical experience for understanding and improving knowledge creation in the RIC. The paper proved through an empirical study that knowledge transfer, knowledge assimilation and knowledge sharing between firms in a resource-based industry chain (RIC) have positive influence on knowledge creation.

Collaboration is defined as the degree to which people in a group actively support and help each other in their work (Gupta & Govindarajan, 2000). Collaborative culture is necessary for effective knowledge management (Hansen, Nohria & Tierney, 1999; Ein-Dor & Segev, 1982). Collaborative interactions such as open discussion, social interaction, and joint activity can help to create organisational knowledge (Hedlund, 1994). They suggested that a successful knowledge creation, exchanging knowledge amongst people is a prerequisite. This type of exchange can be fostered by collaborative interactions to reduce fear and increase openness to other members. The study by Zucker, Darby, Brewer and Peng (1996) confirmed the significance of collaborative interactions

for successful knowledge creation in the biotechnology industry. They showed that collaborative interactions should be encouraged, both formally and informally, among different members of organisation. It also reduces individual differences between organisational members (Damanpour, 1991).

Fahey and Prusak (1998) defined that collaboration between team members also tightens individual differences which can help shape a shared understanding about the organisation's environments through supportive and reflective communication. Without shared understanding among team members, very few knowledge creation activities are conducted (Fahey & Prusak, 1998; Lee & Choi, 2003). From a knowledge governance perspective, work arrangements that allow people to work in groups serve as a potent facilitator of knowledge sharing.

Following Cook and Brown's (1999) line of reasoning, group-based work affords sharing of knowledge among organisational members. Be it story telling among members of communities of practice (Brown & Duguid, 2000) or group discussion among members based on brainstorming or brain-writing (Paulus & Yang, 2000), the outcome is the sharing of knowledge. In communities of practice, less experienced members learn from experts in the field (Ardichvili, Maurer, Wentling & Stuedemann, 2006) and personal experiences of individual community members merge to form a comprehensive understanding of the business problem at hand (Wenger & Snyder, 2000).

Hauptman and Hirji (1999) argued that collaboration is needed to overcome the negative attitudes and behaviours that result from differentiation and specialisation and to support cooperation and productive conflict resolution. Co-ordination is also needed to ensure timely sequencing, scheduling and synchronisation of interdependent activities. However, Jassawalla and Sashittal (1998) proposed that cross-functional collaboration goes beyond integration. Choi (2002), Saeed, Tayyab, Anis-UI-Haque, Ahmad and Chaudhry (2010), Lee and Choi (2000) and Migdadi (2005) concluded that collaboration is positively significant predictor of knowledge creation processes.

Another fundamental aspect of knowledge management is trust. Davenport and Prusak (1998) believed that without trust, knowledge initiatives will fail, regardless of how thoroughly they are supported by technology and rhetoric. The absence of mutual trust will lead people to be sceptical about the intentions and behaviours of others and therefore they will possibly withhold their knowledge. Building a trust relationship among individuals and groups will facilitate knowledge sharing process; however, the lack of trust can undoubtedly hinder the sharing of knowledge. Without trust, the knowledge management programme will fail. The creation of new, useful, and lucrative knowledge is impossible without trust. They stated that companies should make sure that their initiatives are harmonised with organisational culture. If the situation is different than the company should take actions so as to induce matching. They also highlighted that effective knowledge management cannot be accomplished without extensive behavioural, cultural, and organisational change.

Mutual trust exists in an organisation when its members believe in the integrity, character and ability of each other (Robbins, 1998; Robbins, Millet, Cacioppe & Water-Marsh, 2001). When knowledge exchange activities can be increased via mutual trust, knowledge creation occurs (Lee & Choi, 2003; Takeuchi & Nonaka, 2004). Trust encourages an environment that promotes knowledge creation as it reduces the fear of risk. Hence, high levels of trust can reduce this risk in teams (Lee & Choi, 2003). When team members trust one another, they are less apprehensive

to share ideas and thoughts with each other, sparking off a spiral of knowledge creation through the SECI process (Takeuchi & Nonaka, 2004). However, Robbins (1998) concluded that although trust may take a long time to build, it can be easily destroyed and would therefore require careful attention by management.

Choi (2002), Saeed et al. (2010), Paul (2011), Lee and Choi (2000), Berraies, Chaher and Yahia (2014) and Migdadi (2005), they found that trust is significantly related to the knowledge creation processes. Chen, Elnaghi and Hatzakis (2011) found that trust among organisational members has positive significant effect on KM. When the relationships of those knowledge workers are high in trust, they are more willing to participate in knowledge exchange and social interactions (Nahapiet & Ghoshal, 1998). They concluded that trust is a significant predictor of knowledge creation process.

Learning can be defined as the degree to which it is encouraged in organisations (Hurley & Hult, 1998). The emphasis on individual learning infuses an organisation with new knowledge (Damanpour, 1991; Hurley & Hult, 1998). Learning is the acquisition of new knowledge by people who are able and willing to apply that knowledge in making decisions or influencing others (Miller, 1996). They concluded that the emphasis on learning and development, organisations can help individuals play a more active role in learning and discover something new about problems. Kanevsky and Housel (1998) insisted that the amount of time spent learning is positively related with the amount of knowledge.

Migdadi (2005) stated that organisational learning is imperative and managers should continuously pay careful attention to it and make sure it is effective, because learning can be referred to as a cyclic process in at least two major ways: firstly, by bringing tacit knowledge of individuals into explicit organisational knowledge and secondly, by transferring knowledge to others in their daily work. Both these cyclic processes are a matter of learning and transferring knowledge and so should be included in the process of managing knowledge.

The capacity of knowledge creation can be increased by various learning means such as education, training, and mentoring. Krogh (1998) proposed training programs as a means of knowledge creation. Swap, Leonard, Shields and Abrams (2001) highlighted mentoring as a key means in creating organisational knowledge. Intense mentoring enables professionals to obtain a higher level of knowledge. For the organisations to be successful in knowledge creation, traditional training and development activities may no longer suffice; they need to nurture an environment with continuous and persisting learning (Lubit, 2001; Eppler & Sukowski, 2000).

Choi (2002), Lee and Choi (2000), Soon and Zainol (2011), Chen et al. (2011), Berraies et al. (2014) and Migdadi (2005) who found that learning has a significant positive effect on the knowledge creation processes. However, Saeed et al. (2010) found that learning has not shown significant impact on knowledge creation processes. Lee, Kim and Kim (2012) found that the effects of collaboration, learning culture, top management support, and IT support on knowledge process capabilities are significant.

### **Demographic Characteristics**

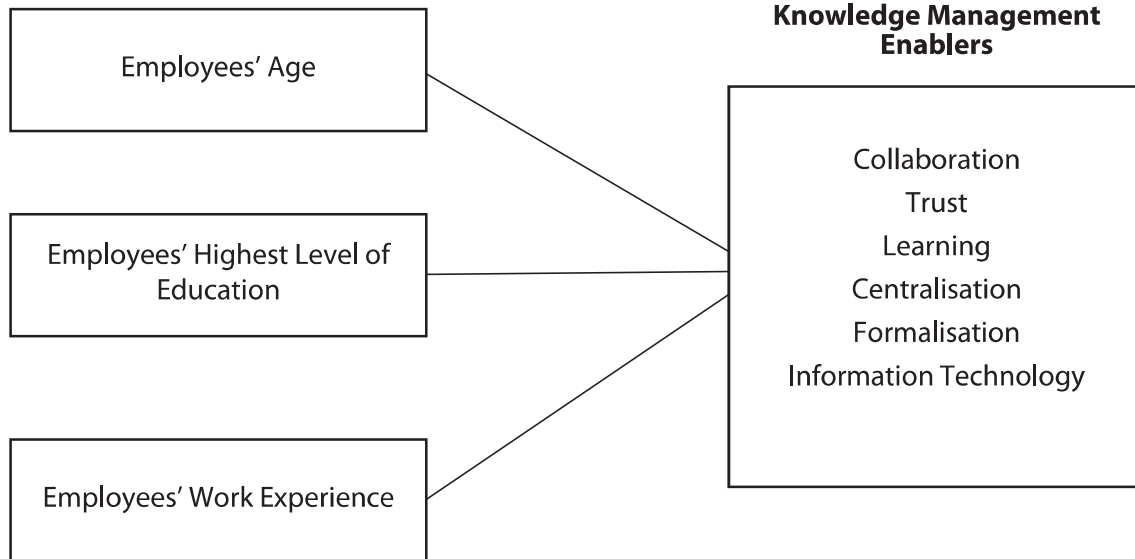


Fig 1: Influence of Demographic Characteristics on Knowledge Management Enablers

### **III. RESEARCH METHOD**

To examine the influence of demographic characteristics on knowledge management enablers in Nepalese hospitality industry, the study used the descriptive research design based on the survey. The quantitative research design is applied to develop an understanding of the research issue.

The study has used primary data collected from executives, managers, department heads, sales officers, marketing officers, finance officers, guest relation officers, public relation officers and human resource managers in the hospitality industry. In the process of gathering information, a structured questionnaire was used as the main instrument. The primary data were collected by 'delivery and collection' methods.

The total of 458 responses was collected from 97 firms. Due to incomplete data, 76 responses were eliminated. Consequently, 382 responses from 97 firms were taken for further analysis. The total response rate was 83 per cent. Self-administered questionnaires were used to collect the perceptive opinions from the respondents.

Items featured a seven-point Likert scale, with response options ranging 1 to 7 where, 1 for "strongly disagree" and 7 for "strongly agree". Questionnaire items developed included a list of 46 items to measure the different constructs in the study: collaboration, trust, learning, centralisation, formalisation and information technology. The development of the items was done by re-evaluating intensively the literature review related to the concepts and constructs stated in the integrative view. The aim of this empirical research is to test whether the dimensions proposed in the above-mentioned integrative view support a significant distinction between different kinds of knowledge management enablers.

To validate the proposed research model, this study conducted a pre-test. The pre-test was conducted in the month of November 2014. For the pre-test survey, this study developed questionnaire and collected data from 36 potential respondents of the selected samples: both hotels (20) and travel/trekking agencies of 16 respondents. Based on the findings of the pre-test survey, research questionnaire was modified to improve reliability and validity of the study. After the pre-test, the questionnaire was finalised, and the main study was conducted.

The study used mean difference test analysis to test the influence of demographic characteristics on knowledge management enablers. The application of mean difference test analysis to the present study is desirable as they significantly help researchers evaluate the mean difference test of one variable on other variables.

#### **IV. DATA ANALYSIS AND DISCUSSIONS**

Table 1 presents the analysis of variance for significance of independent variable results of five different age groups as below 20 years, 20-35 years, 36-50 years, 51-65 years and above 65 years, regarding the six variables of collaboration, trust, learning, centralisation, formalisation and information technology. Table 2 also presents the analysis of variance for significance of independent variable results of four educational groups as Higher Secondary Level, Bachelor's Degree, Master's Degree and Ph.D. of the employees regarding the six variables of collaboration, trust, learning, centralisation, formalisation, and information technology. Similarly, the analysis of variance for significance of independent variable results of five work experience groups as 0-5 years, 6-10 years, 11-15 years, 16-20 years and above 20 years of industry regarding the six variables of collaboration, trust, learning, centralisation, formalisation and information technology are presented in Table 3.

**Table 1. Mean Difference F-Test of Independent Variable (Age)**

Table 1 reports mean difference F-Test results of five different age groups as below 20 yrs, 20-35 yrs, 36-50 yrs, 51-65 yrs and above 65 yrs of firms about six variables collaboration, trust, leaning, centralisation, formalisation and information technology are presented as well.

<b>Models</b>	<b>Variable</b>	<b>F-value</b>	<b>P-value</b>
1	Collaboration	0.066	0.992
2	Trust	0.778	0.540
3	Learning	0.806	0.522
4	Centralisation	1.412	0.229
5	Formalisation	0.939	0.441
6	Information Technology	1.326	0.260

Notes: From survey, 2015

Notes: \* and \*\* denote that the results are significant at 1 percent and 5 percent level of significance respectively



Based on the ANOVA test Table 1, there is no significant difference between response of the five different age groups as below 20years, 20-35years, 36-50years, 51-65years and above 65years of the Nepalese Hospitality Industry in the context of collaboration, trust, learning, centralisation, formalisation and information technology. It indicates that all age groups of employees' perceptions of the hospitality industry concerning people in a group help one another, maintaining mutual faith, learning, centralisation, formalisation and information technology are similar. It shows that all age group of the employees are collaborative because organisations help to make team spirit for best services. Employees help each other for the best service and equally trust each other for sharing new ideas because industry provide regular seminar, meeting and presentation programmes for all employees. All of the young or mature employees have to follow same rules and process as well as get the similar decision-making authority and IT support for knowledge creation because management of the hospitality industry determine the same rules, authority and IT facility to their employees.

**Table 2. Mean Difference F-Test of Independent Variable (Education level)**

Table 2 reports mean difference F-Test results of four educational groups as higher secondary level, bachelor's degree, master's degree and Ph. D. of firms about six variables collaboration, trust, learning, centralisation, formalisation and information technology are presented as well.

<b>Models</b>	<b>Variable</b>	<b>F-value</b>	<b>P-value</b>
1	Collaboration	2.699	0.046**
2	Trust	2.235	0.084
3	Learning	1.715	0.164
4	Centralisation	3.399	0.018**
5	Formalisation	4.592	0.004*
6	Information Technology	2.521	0.058

Notes: From survey, 2015

Notes: \* and \*\* denote that the results are significant at 1 percent and 5 percent level of significance respectively

The ANOVA test results are presented in Table 2, in model 1, there is a significant difference between response of four educational groups as Higher Secondary Level, bachelor's degree, master's degree and Ph. D. of hospitality industry in the context of collaboration. It indicates that the different educational groups have different opinions regarding people in a team helping one another because highly educated employees do not need consult with juniors for new development. However, there is no significant difference between responses of four educational groups of industry regard to trust and learning in models 2 and 3 respectively. It shows that different education level employees' perception is a similar to trust and learning because all employees trust each other and want to learn new ideas.

In model 4, there is a (5 percent level) significant difference between opinions of different educational groups of the firms about centralisation. It indicates that the Higher Secondary Level, bachelor's degree, master's degree and Ph. D. have diverse views observe of people locus of decision authorities because highly educated employees are appointed in top level and vested more decision-making authority rather than middle and operational level.

Similarly, there is a significant difference between views of various educational groups of hospitality industry about formalisation in model 5. It indicates that the different educational groups have different perception regarding formal rules, procedures and standard policies because organisations determine different procedures and policies to various levels. There is no significant difference between opinions of them of hospitality industry about information technology supports in model 6. It indicates that the different educational groups' people have a similar view towards IT facility because organisations equally provide databases, intranets, knowledge platforms and networks services to all employees.

The ANOVA test results of different years of work experience groups are presented in Table 3. There is no significant difference between opinions of respondents of five work experience.

**Table 3. Mean Difference F-Test of Independent Variable (Work experience)**

Table 3 reports mean difference F-Test results of five work experience groups as 0-5yrs, 6-10yrs, 11-15yrs, 16-20yrs and above 20yrs of firms about six variables collaboration, trust, learning, centralisation, formalisation and information technology are presented as well.

Models	Variable	F-value	P-value
1	Collaboration	0.835	0.503
2	Trust	1.605	0.172
3	Learning	1.228	0.298
4	Centralisation	0.476	0.753
5	Formalisation	0.710	0.585
6	Information Technology	0.370	0.830

Notes: From survey, 2015

Notes: \* and \*\* denote that the results are significant at 1 percent and 5 percent level of significance respectively

Based on ANOVA test Table 3, there is no significant difference between opinions of respondents of five work experience groups as 0-5 years, 6-10 years, 11-15 years, 16-20 years and above 20 years of Nepalese hospitality industry in the context of all six variables as collaboration, trust, learning, centralisation, formalisation, and information technology. It indicates that different years of work experience groups perception of the employees of the hospitality industry regarding collaboration, trust, learning, centralisation, formalisation, and information technology are similar because senior with experienced and new employees have similar perception to cultural factors, structural and information technology for knowledge creation.

#### **IV. CONCLUSION**

This study shows that all age groups and number of years work experience groups of employees' perception concerning collaboration, trust, learning, centralisation, formalisation, and information technology are similar. Different educational groups of employees have different opinions regarding collaboration, centralisation and formalisation but their perception is similar to trust, learning and information technology.

In addition, the study results have revealed that all age groups of the employees are collaborative, mutual faith, learn together harmoniously in self-guiding teams, organisations determine similar rules and sufficient IT support on the job. The different educational groups have different opinions regarding people in a team helping one another because highly educated employees do not need to consult with juniors for new development. Preceding and newcomer employees have similar perception to team culture. It indicates that different years of work experience groups perception of the employees of the hospitality industry regarding collaboration, trust, learning, centralisation, formalisation, and information technology are similar because senior with experienced and new employees have similar perception to cultural factors, structural and information technology for knowledge creation.

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### **Acknowledgment**

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### **Funding**

The author(s) received funding or financial support from ..... in carrying out the research.

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### **Conflict of interest**

The author(s) has/have no???? .....conflict of interest in the research work.

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