Research Article

Factors Determining Knowledge Sharing Behaviour among Employees by Mediating Role of Knowledge Sharing Intention: Evidence from Bank of Abyssinia

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Abstract

This study aims at assessing the factors determining knowledge sharing behaviour among employees by mediating role of knowledge sharing intention with the evidence from Bank of Abyssinia. The data for study was generated from both primary and secondary data so as to address the overall objective of the study and research questions. A quantitative research approach was used to translate the underlying concepts into measurable forms to facilitate the testing of the formulated hypotheses and employed to empirically determine the relationship between the variables of interest by applying appropriate statistical data analysis techniques. An explanatory design was conducted with the intension of establishing direction and significance of the relationship between variables under investigation. A series of hypotheses are posited to explore the relationships of the variables and to test the effects of mediator. A field survey conducted among the employees of Bank of Abyssinia was used to gather the data. Out of the 381 surveys sent, hypotheses were empirically tested using structural equation modelling software to analysis regression and confirmatory factors of variables on a data set of participants. Moreover, in order to test the relationships between various variables of knowledge sharing attitude, subject norm and perceived behaviour control, regression analysis and structural equation modelling was used. The major finding show that attitude and perceived behaviour factors have significant effect on knowledge sharing activities. The study concludes that knowledge sharing intention has significant positive effect on knowledge sharing behaviour among employees and the factors knowledge sharing attitude, subject norm and perceived behaviour control have direct effect on the on knowledge sharing among employee of banks. Therefore, the study recommended that banks promote Knowledge Sharing by establishing an appropriate environment that helps employees to encounter and communicate ideas effectively. When knowledge is transferred, it helps banks to generates a new knowledge base which in turn enhances innovative activities

Keywords: Knowledge sharing, Bank of Abyssinia, Employees, Individual factors, Organizational factors

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1. Introduction

In a global economy, knowledge may be a company's greatest competitive advantage (Davenport & Prusak 2000). Vast literatures discussed knowledge sharing at various levels of the organization and from different points of view including individual perspective (Ipe, 2003) and organizational perspective (Argote, & Ingram, 2000; Giroud, 2000), department or group perspective (Hansen & Haas, 2001; Kane, Argote & Levine, 2004; Koskinen, Pihlanto & Vanharanta, 2003).Studies on knowledge sharing from the organizational perspective commonly focused on 'knowledge transfer (Huang, C.C. 2009) or 'technology transfer' (Gottschalk, P. 2005). Technology transfer is basically the transfer of technology and know-how from one firm to another or any possible benefit through their long-term relationship and the exchange of information (Caimo and Lomi, 2015).

Global, studies on know-how transfer are mainly interested on how much knowledge is being transferred from one organization to the other, and what are the factors that contribute to this process. Similarly, studies from the group perspective are looking at factors that ease the transfer of knowledge from one group to another. Finally, studies from the individual perspective, which is the main interest of this study, simply relate to the behaviours of individuals. Specifically, these studies examined the factors that make individuals share or hoard knowledge, and seek to identify what motivates individuals to share knowledge Solihin & Ratmono (2013).

The present-day knowledge is still considered as power and the understanding has changed considerably, particularly from the perspective of an organization, knowledge must be shared (Mothe et al., 2000). Both types of knowledge can be produced as a result of interactions in the environment or innovations by the individuals themselves. It has been shown that the organizations that share knowledge among its management and employees could grow stronger and becomes more competitive (Jakarta and Ratulangi, 2008). Besides, knowledge sharing practice can be influenced by several different factors. Among the many factors, individual behaviours of employees, organizational cultures, the existence of adequate Information Technology infrastructures and employee communication are the major ones that have the power to influence knowledge sharing practices in the banking sectors (Seyyed et al., 2012).

The factors overdue knowledge-sharing behaviour have been extensively investigated with different designs and contexts by scientists worldwide, such as in the United States, United Kingdom, Europe, Africa, and Asia (Caniels et al., 2017; Ding et al., 2017; Fullwood & Rowley, 2017; Mafabi et al., 2017; Mahyarni et al., 2012; Wang & Noe, 2010). Scholars have predicted that this direction of studies only continues to grow in popularity over the next two decades (Tea & Sun, 2012; Ding et al., 2017; Fullwood & Rowley, 2017; Mafabi et al., 2017). This prediction proves the increasing attention of scholars on knowledge-sharing

research in the world today. Any practitioners and academics assume that since knowledge sharing is crucial for achieving the collective outcome, people will share knowledge as part of their work requirements. However, many companies and institutions have experienced that knowledge sharing does not always happen in practice, regardless of whether a person-to person or a person-to-document strategy is followed (Edwards, J.S. 2017).

Several studies have successfully explained the prediction of intention and knowledge-sharing behaviour using theory of planned behaviour (TPB) (Chatzoglou & Vraimaki, 2009; Chennamaneni et al., 2012; Jolaee et al., 2014; Lin & Lee, 2004; Mafabi et al., 2017). The TPB model was introduced by Ajzen (1991). According to this theory, personal attitude, subjective norm, and perceived behavioural control are used to predict the behaviour of individuals to participate in a certain activity (Hsu et al., 2016). However, some other studies have failed to predict knowledge-sharing behaviour using TPB. Mahyarni et al. (2012) found that perceived behavioural controls have no effect on knowledge-sharing intention, whereas Mafabi et al. (2017) and Al Qeisi and Al Zagheer (2015) indicated that they have no direct effect on knowledge-sharing behaviour. Al Qeisi and Al Zagheer (2015) reported that subjective norms do not influence knowledge sharing intention, whereas according to Ajzen (1991), behaviour control can directly predict certain behaviours, such as knowledge-sharing Mafabi et al. (2017).

Now a day, a number of private and government owned banking sectors are functional in all over the country. However, unlike the enormous expansion of banking industry in the country, the nature of knowledge sharing practices in the banking diligence are not given due attention by domestic researchers. So that this research work was initiated to investigate the factors affecting knowledge sharing among employees of Ethiopian banking industry with the mediating role of knowledge sharing intention. Specifically, this research focused on privately owned banking sector in Ethiopia i.e. Bank of Abyssinia. Knowledge sharing is critical to both the creation and application of organizational knowledge (Hendriks, 2004; Huysman & De Wit, 2002), which are essential processes in organizational innovation and knowledge management. At the same time, organizations worldwide have been trying to undertake initiatives in introducing effective knowledge management by adding Knowledge Sharing practices in their daily work processes to achieve organizational performance Liew, A. (2013).

Keeping this in view, this study aims to examine the factors affecting Knowledge Sharing practice in banking sector and there is the tendency of relying on few experts of the bank that don't share their expertise. Therefore, the study has contributed to managerial practice by showing the benefits of knowledge sharing and providing a basic framework to shape the knowledge sharing practice in banking sector.

Based on the potential factors identified from previous studies which were deemed /believed important in the specific context of the study, researcher provides the following specific research questions

1. What is the relationship between attitude towards knowledge sharing and among knowledge sharing intention?
2. What is the relationship between subject norm and knowledge sharing intention?
3. What is the relationship between perceived behavioural control and among knowledge sharing intention?
4. What is the relationship between high level of intention and among knowledge sharing behaviour?

The general objective of the study is to assess the factors determining knowledge sharing behaviour among employees of Ethiopian banking industry with the mediating role of knowledge sharing intention evidence from bank of Abyssinia. The specific objectives are:

1. To analyse the relationship between attitude towards knowledge sharing and knowledge sharing intention?
2. To assess the relationship between subject norm and knowledge sharing intention?
3. To determine the relationship between perceived behavioural control and knowledge sharing intention?
4. To examine the relationship between high level of intention and knowledge sharing behaviour?

2. Literature Review and Hypothesis Development

2.1. Empirical Review

Industries are nowadays living in the world of expanding knowledge with more and more people being described as knowledge workers, and knowledge being widely accepted as the only true business asset. Global organizations have started using knowledge management technologies to amplify their competitiveness in ways that were impossible a few years ago Antezana Erick (2009). For a successful start to knowledge management, an organization should engage in a clear understanding of how, and where, knowledge resides, and is developed, in the industry.

Krstic (2007) argued that knowledge building is dependent upon information technology. In order to build knowledge sharing capabilities, the organization must develop a comprehensive infrastructure that facilitates the various types of knowledge and communication.

Gan (2006) articulated that the structure of the industry, impacts the ways in which industries conduct their operations and in doing so, affects how knowledge is created and shared amongst employees. The hierarchical structure of an organization affects the people with whom individuals frequently interact, and to or from whom they are consequently likely to transfer knowledge. Wei (2006) articulated that people are the heart

of creating organizational knowledge as it is people who create and shared knowledge. People are said to be true agents in the industry where all tangible and intangible assets are the result of human action and depend ultimately on people for their continued existence (Antezana Erick 2009).

Various researchers found that organizational culture, peoples' resistance to change, organizational structure and top management in the organization are the factors that affect implementation of knowledge management system. This study supports the idea provided by the early researchers; however, the priority setting for each factor and the degree to which the factor can influence the organization was different. In the meantime, that, this study was done in the case of a developing country in the Ethiopian context. And various studies simply have assessed the different factors for the implementation of knowledge management; but the present research is all about what were the factors for the implementation of knowledge management systems rather than knowledge management itself (Serrat, 2008).

Explicit or tacit knowledge is communicated to other individuals through writing research papers, delivering lecture, in dialogue and participating in community practice (Khoualdi & Saleh., 2015). The sharing and utilization of tacit knowledge requires high degrees of involvement of both knowledge holder and learner (Law and Chan, 2016). The goal of knowledge sharing in a firm is to facilitate knowledge transfer, retain knowledge, and to speed the knowledge adoption (R. Du. et al., 2007). The author evidenced that expenditure on collaborative R&D (research performed by team) has better contributions to performance. Employees' intention to share and consequently sharing of tacit knowledge has direct positive impacts on productivity also employees' innovative contributions increased as a result of exposure to others' knowledge, expertise, and experiences (Torabi & El-Den, 2017).

Increased job performance and satisfaction as well as proper compensation are crucial in improving knowledge sharing (Vincent, 2017). Knowledge sharing improve work performance through creativity is apparently one of the most important parts (Lee, 2018). Ngoc-Tan and Gregar (2018) established inverse relationship between knowledge dissemination and administrative innovation in academic setting. A key enabler of KM is Knowledge Sharing which many organizations declare as crucial to developing core competencies and to achieve a sustained competitive advantage (Kim and Lee. 2004). Knowledge sharing has been defined differently by different authors. KS is defined as "a set of practices that involve the exchange of information or assistance to other" Mathi, A. (2004). Equating knowledge sharing to knowledge flows theorize that knowledge flows comprise of five elements Antezana Erick (2009) value of the source knowledge, source willingness to share knowledge, media richness of the communication channel, willingness to acquire knowledge, and absorptive capacity of the recipient. Later in 2001, knowledge sharing was associated to knowledge transfer and defined it as the process of disseminating knowledge throughout the organization. A number of studies have demonstrated that Knowledge Sharing (KS) is essential because it enables organizations to enhance innovation performance and reduce redundant learning efforts (Pual, 2013).

2.2. Hypotheses Formulation

2.2.1. Attitude toward knowledge-sharing and knowledge-sharing intention

Among the factors affecting knowledge sharing practice, the attitude factor has been tested and proven to be a significant predictor of the intention of a particular behaviour (Chatzoglou & Vraimaki, 2009; Lin & Lee, 2004). Several studies have revealed that attitude has a positive effect toward knowledge-sharing intention (Chatzoglou & Vraimaki, 2009; Chennamaneni et al., 2012; Fulwood & Rowley, 2017; Jolaee et al., 2014; Lin & Lee, 2004; Luturmas & Indarti, 2016; Teh & Sun, 2011; Mafabi et al., 2017; Rahab & Wahyuni, 2013; Ryu et al., 2003).

Attitude is an evaluative response that arises when a person faces a stimulus that requires a reaction (Azwar, 2013). The evaluative response is based on the evaluation process (assessment) within the individual that provides a stimulus with a conclusion in the form of a good-bad, positive-negative, and unpleasant-unpleasant object (Chennamaneni, et al., 2012). In this study, attitudes toward knowledge-sharing refer to the degree to which a person has a positive or negative evaluation of knowledge-sharing behaviour (Al Qeisi & Al Zagheer, 2015; Chatzoglou & Vraimaki, 2009; Lin & Lee, 2004). A positive response of employee toward knowledge-sharing behaviour determines the intention of the employee to perform knowledge-sharing. An employee's negative response to knowledge-sharing behaviour leads to employees' reluctance to share knowledge (Chatzoglou & Vraimaki, 2009; Chennamaneni et al., 2012; Jolaee et al., 2014; Lin & Lee, 2004; Luturmas & Indarti, 2016; Teh & Sun, 2011; Tsai et al., 2012; Mafabi et al., 2017; Rahab & Wahyuni, 2013; Ryu et al., 2003). Thus, based on the above discussion, this study investigates the following hypothesis:

2.2.2 Perceived Behavioural Control, Intention and Knowledge-Sharing Behaviour

Perceived behavioural control refers to "a person's beliefs about the presence or absence of factors that facilitate impede the performance of the behaviour" (Ajzen, 2005). The perceived behaviour control is a person's ability to predict certain behaviours (Mafabi et al., 2017). This ability includes information that a person has about behaviour, along with the skills, abilities, emotion, and compulsions that one has to perform such behaviour (Lin & Lee, 2004).In TPB, Ajzen (1991) explained that in addition to intention; behaviour control could also directly predict knowledge-sharing behaviour. Several studies have revealed that perceived behavioural control to knowledge-sharing has a positive effect on knowledge-sharing behaviour (Chatzoglou & Vraimaki, 2009; Chennamaneni et al., 2012; Lee & Hong, 2014). Perceived experience by an employee regarding the ease of doing knowledge-sharing tends to directly cause the employee to perform a knowledge-sharing behaviour. Perceived negative experiences (such as the difficulties in sharing knowledge) tend to prevent an employee inform engaging in a knowledge-sharing behaviour. Thus, based on the above discussion, this study investigates the following hypothesis:

2.2.3. Organizational Culture Factors

Past research-based approaches showed great interest towards organizational operational factors that sustain triumphant Knowledge sharing and business process (Abualoush et al., 2018). The reconciliation of Knowledge sharing and business process is a multifaceted procedure and incorporate factor that be capable of conceivably impact productive combination of business in sequence forms. Furthermore, these variables can positively affect business-procedures and learning sharing incorporation venture results, though the absence of these components can make difficulties amid or after business-procedures and information sharing combination. The research gives distinctive alternatives with respect to the issues which are serious for the effective mix of business process and learning distribution incorporation, accountable for dissatisfaction (Chan and Chau, 2005).

2.2.4. Individual Factors and Knowledge Sharing Activities

Within the system of knowledge sharing, individuals contribute as a knowledge creator and knowledge acceptor. Individuals create knowledge by communicating their ideas and enjoy via socialization. As an acceptor of knowledge people search for and infer the knowledge earlier than it's shared to any database (Takeuchi, 2006). In this situation, it implies that creation and sharing of knowledge relies upon at the ultimate work of a person who has to set the ball rolling for knowledge to be shared or horde. For example, an employee is made recognized of a work problem confronted with the aid of friends. The employee has the answer to the problem encountered. Employees are highly dependent on their motivations to share or not to share their knowledge to their peers. It depends on the intention of the individuals to share their knowledge to their immediate colleagues. Most of the time individuals' intentions to share knowledge are highly impacted by their personal characters and attitudes. The example indicates that people doing a pivotal function in the manner of knowledge sharing. The knowledge of human beings is created and multiplied via social interplay among people and their innovative practices (Takeuchi, 2006).

2.2.5. Social Relations and Knowledge Sharing Activities

Social exchange theory is frequently carried out to provide an explanation for the social mechanisms in knowledge sharing among individuals (Cabrera & Cabrera, 2015). In brief, social relations concept is primarily based on the notion that conditions in which the activities of one individual offer the prizes or penalties for the activities of some other individual characters and vice versa (Emerson, 1976). To make it more specific, social exchange principle considers rewards and the avoidance of punishments as simple motivating incentives for interaction between human beings – primarily based on reciprocity. Basically, interpersonal trust and learning

commitment manages the social relations view on interactions of individual members and result in shared reliance (Harvey et al., 2006) Interactions create dependence between people relying at the depth of relation of that specific pair. Generally, social relations are an activity provide a hint to the interaction opportunities that a specific employee has.

2.2.6. Technological Factors and Knowledge Sharing Activities

Information technology as essential enabler in knowledge sharing activities is the ultimate targets for a number of studies in knowledge management fields (Kim & Lee, 2006). Literatures supported empirical studies for the impact of IT infrastructure is given (Syed-Ikhsan & Rowland, 2004) and (Kim & Lee, 2006). (Yang & Chen, 2007) see technical knowledge skills of an organization as essential and the necessary skill, now not an essential situation, in a knowledge organization. In addition to different organizational contextual elements, the organizations knowledge capabilities did no longer significantly fluctuate between firms with applied knowledge management projects and those without. Yet, the mean score in their study indicated the capabilities of organizations in different technical aspects. This implied that technological factors are one of the enablers of knowledge sharing activities.

Finally, based on the above discussion, this study investigates the following hypothesis:

Ha1 - A high level of intention toward knowledge sharing leads to great knowledge sharing behaviour.

Ha2 - A high level of behavioural control toward knowledge sharing leads to great knowledge sharing.

Ha3 - A favourable attitude toward knowledge sharing increases the intention to share knowledge.

Ha4 - A high level of subjective norm that supports knowledge sharing leads to the increased intention to share knowledge.

Ha5 - A high level of behavioural control toward knowledge sharing intensifies the intention to share knowledge.

Ha6 - High education level positively affects the knowledge owners' attitude toward knowledge sharing.

Ha7 - Perceived reciprocal benefits positively affect a knowledge worker's attitude toward knowledge sharing

Ha8 - Perceived loss of knowledge power negatively affects a knowledge worker's attitude toward knowledge sharing.

Ha9 - A perceived improvement in reputation positively affects a knowledge worker's attitude toward knowledge sharing.

Ha10 - Perceived ease of use positively affects the attitude of stakeholders toward knowledge sharing.

Ha11 - Leadership support has a significant positive effect on the subjective norm to share knowledge.

Ha12 - Organizational cultures have a significant relationship with knowledge sharing behaviour.

Ha13 - High service availability positively influences a knowledge worker's Perceived Behavioural Control toward knowledge sharing.

Ha14 - Awareness positively influences Perceived Behavioural Control toward knowledge sharing.

3. Material and methods

3.1. Description of the Study Unit

BOA Established in 1996, Bank of Abyssinia is currently the largest privately held bank in Ethiopia and plans to become the leading commercial bank in East Africa by 2030. To reach this milestone, the bank is on a mission to grow its customer base**,** boosting financial inclusion in the country and beyond.

In an era where commercial banking services were in an inchoate stage and striding towards transforming different sectors of the economy, Bank of Abyssinia's founders believed in the need for a bank that gives comprehensive commercial banking services. Thus, the Bank of Abyssinia (BoA) was open for business in 1996 with enthused initiation and determination.

The name Abyssinia resembles bravery and character which are the core attributes of Bank of Abyssinia (BoA). Its identity is demarcated with a sense of hope, optimism, and belief as it is perfectly displayed in its logo, the Adey Abeba. Adey Abeba brings the promise of a new beginning. BoA brings that very sense to all the customers it engages with. Working with and through BoA brings sustained success with the help of a bank that is a symbol of determination and hard work.

Bank of Abyssinia is a share company of private individuals who amass experience and success in different areas including business, entertainment and education. Such diverse ownership not only reflects the company's determination and willingness to succeed in the sector it operates in, but also signify its ability to work together towards building a successful business venture and commercial bank service.

As one of our core values, the Bank of Abyssinia promotes corporate social responsibility. It believes the well-being and improved living conditions of our community will benefit us all. As such, BoA participates in various national projects and other social and economic initiatives. These include the construction of the Ethiopian Grand Renaissance Dam, the establishment of the Ethiopian Cardiac Centre, Ethiopia Rotary Club, and the establishment of Ethiopian Women Traders' Associations.

Through its 855 branches in the country, BoA serves over 10.2 million customers. BoA's well-structured financial service system is connected through the T-24 core banking system. This coupled with the 1277 ATM machines, 18 virtual banking canters, and more than 1232 POS placed in different locations to afford customers to access their accounts from anywhere at any time. This also allowed BoA to increase its capital from ETB50 million to ETB 18.59 billion. The total asset of Bank of Abyssinia has reached ETB 188.55 Billon.

3.2. Research Design, Sources of Data, and Target population, Sample and Sampling Technique

This study was used explanatory quantitative design, because of quantitative data was collected and analysed in a way that tells existence and significance of the relationship between variables under consideration and tactic was established with the help of advanced statistical tools such correlation and regression talking about existence of relationship between dependent variable and independent variables.

There are two types of sources when collecting data; primary and secondary data sources. The data for study was generated from both primary and secondary data so as to address the overall objective of the study and research questions. As to primary sources, information was collected through the use of questionnaire, interview, field observation and focus of the overall investigation. Secondary data are also gathered through reviewing relevant materials such as Reports**,** Archive documents, books, journals, bulletins, magazines and web sites**.**

The study included the whole employees of Bank of Abyssinia staff which was categorized from 10 Districts and Head office. According to the bank of Abyssinia annual report 2022/2023 the numbers of employees are 8,146 at end of fiscal year. Therefore, target population number was 8,146 staff from the study area. The target population included the senior level managers, middle-level managers, operation level managers and even the general staff members across the following departments: HR, Operations, accounting and finance, IT, public relations and marketing and sales.

The sample size was computed using Cooper and Schindler's formula provided below, where N was the size of the population, n was the sample size, and e was the error at 95% confidence level and 5% level of significance. In this regard, 381 employees from bank of Abyssinia constituted the sample population from a target population of 8,146 employees.

Formula:

$$n = \frac{N}{(1 + N\,(e)_2}$$

$$= \frac{8{,}146}{(1 + 8{,}146(0.05)_2} = 381$$

Therefore, the study has considered a sample size of 381 respondents.

To conduct the research, the target population has been defined as whole employees of Bank of Abyssinia staff which was categorized from 10 Districts and Head office. Therefore, in order to accomplish the above, the researcher was used convenience purposive sampling method to identify and approach those employees of Bank of Abyssinia who are readily available or were close to hand. Because, as Anol (2012) stated convenience sampling techniques was a technique in which a sample is drawn from that part of the population that is close to hand, readily available, or convenient. In this study proportional allocation was used so that each District will contribute to the sample a number that was proportional to its size in the population. Thus, to determine the sample size for each selected District the following formula was used:

$$\mathbf{n_k = \left(\frac{n}{N}\right) N_k}$$

Where: n_k = the sample size for k^{th} District

N_k= the population size of k^{th} District

N = the total population size,

n = the total sample size

Table1, shows the number of respondents allocated to each of the ten Districts and head office selected

Table 1: Sampling frame

No	District Name	Population	% in Sample Size	Sample Size
1	Head Office	456	5.60	21
2	East Addis District	1,197	14.69	56
3	West Addis District	1,079	13.25	50
4	Central Addis District	930	11.42	43
5	Adama District	580	7.12	27
6	Hawassa District	720	8.84	34
7	Dire Dawa District	550	6.75	26
8	Dessie District	570	7.00	27
9	Jimma District	514	6.31	24
10	Bahir Dar District	840	10.31	39
11	Mekele District	710	8.72	33
	Total	8,146	100	381

Source: Bank of Abyssinia Oracle database, June 2023

3.3 Data Collection

The main data collection instrument utilized in this study was questionnaire collected through mail survey which research can get from Outlook of Bank of Abyssinia. According to Leary (2004), Questionnaire is usually inexpensive, easy to administer a large number of employees and less time-consuming and normally gets more consistent and reliable results than other instruments. The questionnaires employ in this research was contained Demographic characteristics of respondents. The questions on the second part are mainly close-ended by which the respondents are asked to indicate their level of agreement using a five Likert rating scale measurement where: Strongly disagree (SD) = 1; disagree (D) = 2; Neutral (N) =3, agree (A) = 4; and strongly agree (SA) = 5. Which was designed by Rensis Likert, **Likert scale** is a very popular rating scale for measuring ordinal data in social science research. This scale includes Likert items that are simply-worded statements to which respondents can indicate their extent of agreement or disagreement on a five or seven-point scale ranging from "strongly disagree" to "strongly agree" (Bhattacherjee, 2012).

In administering the mail survey, the total design method for survey research was followed (Dillman 1978). The single-informant method was used for data collection. Although the use of single informants has several important limitations (as was discussed in chapter 3), it is a cost-efficient approach that is common practice in bank (e.g., Gatignon and Xuereb 1997, Moorman 1995). Ten districts and head office were contacted through phone calls to gain commitment to participate and to identify the most suitable informant. Key-informants were responsible for and had been involved in the sharing of information through outlook. The questionnaire asked respondents to select the most factors affecting knowledge sharing behaviour among them. For example, in this research individuals are asked to report on their perceptions of an organization's culture.

These responses may not capture the collective properties of organizational climate. Furthermore, respondents may not be eager to share their opinion about certain (negative) characteristics of knowledge sharing behaviour among them. While developing the survey research instrument, several attempts was made to reduce problems with multi-level variables. For example, all knowledge sharing behaviour among employees variables were grouped together and their items were phrased so that they reflected on the factors affecting knowledge sharing behaviour among employees. In addition, the research instrument emphasized that the confidentiality of respondents' answers was guaranteed and that the responses was obtained explicitly for research purposes.

3.8. Methods of Data Analysis

Data collected from the respondents through mailed questionnaire, are entered in to computer for analysis using Statistical Packages for Social Science (SPSS) version 26 which is the latest version. To test the relationships

between various variables of Knowledge sharing attitude, subject norm and perceived behaviour control, statistical technique for hypothesis testing specifically, regression analysis and structural equation modelling (SEM) was used. Structural Equation Modelling (SEM) is the one of the prominent methods to fulfil the requirement of the necessary for most of the researchers nowadays. This method is performed to overcome the limitation of the previous method whereby are old version that initially are false assumption. According to (Afthanorhan et al.; 2014) this application is the integrating of regression analysis and exploratory factor analysis to ascertain scholar provide surveys in a factual assumption.

After confirmatory analysis has been completed, model was built. Model showing all latent variables and the link between independent and dependent variable was formulated. In the model mediating relationship between variables was also considered. Formulated model was on the basis of total effect which is the sum of the direct effect and indirect effect. Prior to development, attention was given to model specification, model identification and analysis of the mediation effect.

4. Result and Discussion

4.1. Exploratory Factor Analysis

Results of Principal Components Analysis of Knowledge sharing behaviour

Table 2 Correlation Matrix

Correlation Matrix[a]									
		EDU	PRB	PLKP	PIR	PEU	LEAD	OC	SA	PA
Correlation	EDU	1.000								
	PRB	.841	1.000							
	PLKP	.796	.857	1.000						
	PIR	.581	.611	.601	1.000					
	PEU	.622	.556	.612	.725	1.000				
	LEAD	.566	.562	.525	.745	.719	1.000			
	OC	.435	.385	.357	.421	.524	.559	1.000		
	SA	.433	.368	.343	.383	.378	.462	.508	1.000	
	PA	.295	.331	.319	.328	.308	.314	.422	.464	1.000
a. Determinant = .002										

Source: Survey, 2023

Principal Component analysis was done to analyze the relationship between knowledge sharing behaviour and nine independent variables such as (Education level, Perceived reciprocal Benefits, Perceived loss of knowledge power, Perceived improvement in reputation, Perceived ease of use) and Under Subjective norm (Leadership and Organizational cultures) Under Perceived behavioural control (Service availability and Perceived awareness). According to Juile (2005) and Field (2013), the correlation of items to each other if greater than 0.3 is acceptable.

The results as depicted in Table 2 shows that, all the nine variables are acceptable (r>0. 3) that shows almost the variables are appropriate for factor analysis and but still needs further test to improve the reliability of data.

Table 3 KMO and Bartlett's Test

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.864
Bartlett's Test of Sphericity	Approx. Chi-Square	2369.717
	Df	36
	Sig.	.000

Source: Survey 2023

Kaiser Meyer Olkin *(*KMO): Measure of sampling adequacy the value greater than 0.5 is Acceptable for sample is adequate (Kaiser 1974, Hair et al., 2007; *Pallant, 2011; Field, 2005;* Field, 2013) for the *factor analysis to be considered appropriate*. Therefore, for current study, (see table above 3) the KMO test values for this factor is 0.864, which is good. And also, the Bartlett's test is significant (p=0.000) this indicated that the data were reliable and *suitable for factor analysis.*

Table 4: Communalities

Communalities		
	Initial	Extraction
EDU	1.000	.796
PRB	1.000	.822
PLKP	1.000	.816
PIR	1.000	.670
PEU	1.000	.675

LEAD	1.000	.669
OC	1.000	.651
SA	1.000	.645
PA	1.000	.574
Extraction Method: Principal Component Analysis.		

Source: Survey 2023

For further Communalities of constructs are calculated to check reliabilities of data, *Communalities indicate the amount of variance in each variable that is accounted for* as per this table 4 *all items are greater than 0.5 thus, no items* dropped.

Table 5: Total Variance Explained

Total Variance Explained									
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	5.151	57.233	57.233	5.151	57.233	57.233	3.959	23.994	23.994
2	1.166	12.954	70.187	1.166	12.954	70.187	2.357	26.193	70.187
3	.824	9.160	79.347						
4	.563	6.260	85.607						
5	.480	5.333	90.940						
6	.292	3.245	94.185						
7	.225	2.504	96.689						
8	.186	2.064	98.753						
9	.112	1.247	100.000						
Extraction Method: Principal Component Analysis.									

Source: Survey 2023

The next item shows all the factors extractable from the analysis along with their eigenvalues, the percent of variance attributable to each factor, and the cumulative variance of the factor and the previous factors. The first factor account 43.994, the second factors account 70.187 and totally, 94.185 variance of variable (Knowledge sharing Behaviour) were explained by these 9 items.

Table 6: Components extracted

Rotated Component Matrix[a]		
	Component	
	1	2
Education	.865	
PRB	.891	
PLKP	.893	
PIR	.733	
PEU	.717	
LEAD	.645	.502
OC		.750
SA		.772
PA		.747
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.[a]		
a. Rotation converged in 3 iterations.		

Source: Survey 2023

The study also shows the loadings of the variables on the two factors extracted (Grouping the similar factors together). The higher the absolute value of the loading, the more the factor contributes to the variable and Loadings (λ) that are greater than 0.5, highly correlated/good for factor analysis. Thus, factor loading of all items are greater than 0.5. So, it is **accepted** for factor analysis.

4.2. Confirmatory Factor Analysis

Model Fitness Evaluation

The main task of model fit is to provide the information about the degree to which the model fits the data. To investigate model fitness to data collected, in this study both exploratory and confirmatory factor analysis was used.

Table 7: Fit indices for the performance model

Fit index	Recommended value	Source
x2 (p-value)	≥0.05	Byrne (2016)
CMIN/df	≤3	Gefen et al .(200)
GFI	≥ 0.9	Kehman et al (20150
IFI	≥ 0.9	Koroppet et al. (2014)
CFI	≥ 0.9	Lei and Wu (2007)
RMSEA	≤0.06	HU and Bentler (1999)

Source: Adopted from Pervan, Pervan, Curak, and Kramaric, 2018

4.2.1. Factor Analysis of Attitude of Knowledge sharing

At first, the researcher checked the model fit for **Attitude of Knowledge sharing** by using Factor Analysis. Commonly used model fitness indicators and associated cut points: As it can be seen on the table above, goodness of the model fit has been obtained prior to the modification. Thus, all latent variables and its indicators (average value of items) under consideration can be used for SEM purpose.

Table 8: Model Fit Summary for Attitude of Knowledge sharing

Indicators	**Rule**	**Vale obtained**	goodness of the model fit
x2 (p-value)	≥0.05	0.60	**Well fit**
CMIN/df	≤3	0.851	**Well fit**
GFI	≥ 0.9	0.997	**Well fit**
IFI	≥ 0.9	1	**Well fit**
CFI	≥ 0.9	1	**Well fit**
RMSEA	≤0.06	0.000	**Well fit**

Source: Survey 2023

All factor loadings before modification are greater than 0.5and as per existing rule all items are acceptable for further processing. Therefore, all the 5 items are **accepted and will be used for SEM analysis.** According to the above data, goodness of the model fit is well fit.

Table 9 Model Fit Summary for subject norm

Indicators	Rule	Vale obtained	goodness of the model fit
x2 (p-value)	≥0.05	0.238	**Well fit**
CMIN/df	≤3	1.356	**Well fit**
GFI	≥ 0.9	0.996	**Well fit**
IFI	≥ 0.9	0.999	**Well fit**
CFI	≥ 0.9	0.999	**Well fit**
RMSEA	≤0.06	0.031	**Well fit**

Source: Survey 2023

All factor loadings before modification are greater than 0.5and as per existing rule all items are acceptable for further processing. Therefore, all the 3 items are **accepted and will be used for SEM analysis.** According to the above data, goodness of the model fit is well fit.

Table 10: Model Fit Summary for perceived behavioural control

Indicators	Rule	Vale obtained	goodness of the model fit
x2 (p-value)	≥0.05	0.05	**Well fit**
CMIN/df	≤3	1.073	**Well fit**
GFI	≥ 0.9	0.997	**Well fit**
IFI	≥ 0.9	0.999	**Well fit**
CFI	≥ 0.9	0.999	**Well fit**
RMSEA	≤0.06	0.02	**Well fit**

Source: Survey 2023

All factor loadings before modification are greater than 0.5and as per existing rule all items are acceptable for further processing. Therefore, all the 3 items are **accepted and will be used for SEM analysis.** According to the above data, goodness of the model fit is well fit.

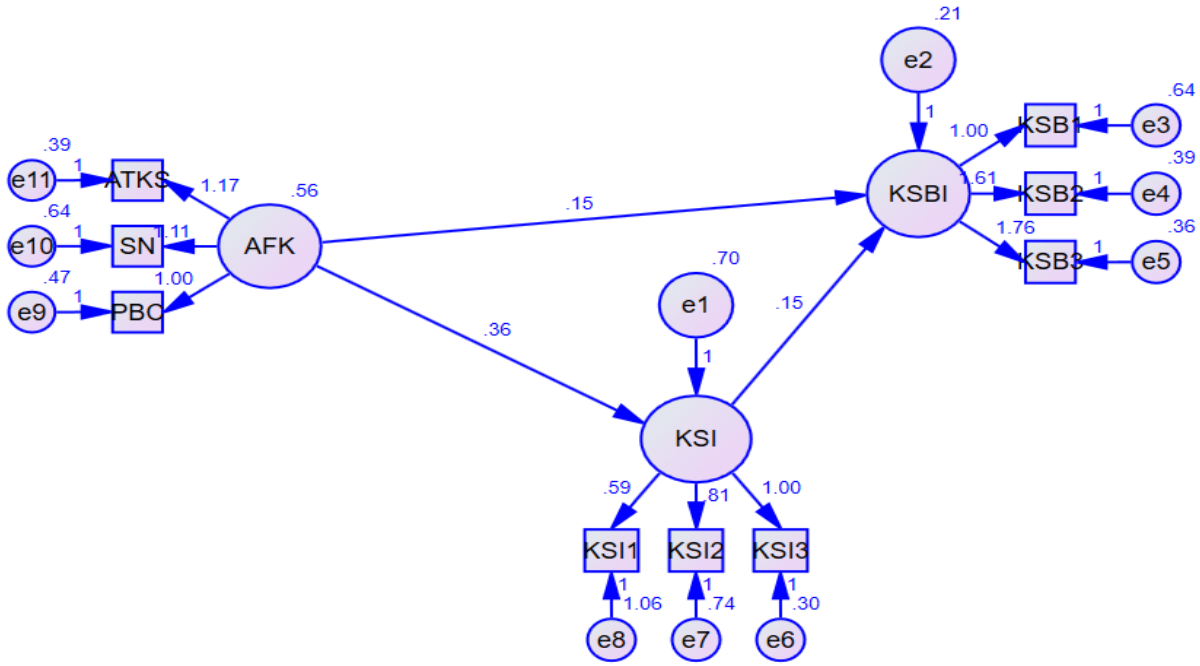

Table 11: Regression Weights: (Group number 1 - Default model)

			Estimate	S.E.	C.R.	P	Label
KSI	<---	AFK	.363	.077	4.698	***	par_1
KSBI	<---	KSI	.151	.042	3.589	***	par_2
KSBI	<---	AFK	.152	.046	3.294	***	par_3
KSB1	<---	KSBI	1.000				
KSB2	<---	KSBI	1.611	.174	9.263	***	par_4
KSB3	<---	KSBI	1.755	.191	9.171	***	par_5
KSI3	<---	KSI	1.000				

			Estimate	S.E.	C.R.	P	Label
KSI2	<---	KSI	.807	.103	7.861	***	par_6
KSI1	<---	KSI	.586	.088	6.688	***	par_7
PBC	<---	AFK	1.000				
SN	<---	AFK	1.111	.092	12.056	***	par_8

Source: Survey 2023

From the above table it can concluded that all variable have positive relationship and P Value is zero which is acceptable.

4.3 Hypothesis testing

To test hypothesis Confirmatory factor analysis was conducted. In this type of analysis, the researcher starts out with a hypothesis about their data that they are looking to prove or disprove. Factor analysis was confirmed – or not – where the latent variables are and how much variance they account for. Correlation analysis is used to describe the strength and direction of the relationship between two variables. The size of the absolute value provides information on the strength of the relationship. Therefore, to analysis hypotheses (H1 and H14) correlation was applied while multiple regression analysis was carried to ascertain the joint effects on the variables for hypothesis.

Table 12: Summary of Hypothesis Test

No	Null hypothesis statements	Test	Decision on Null hypothesis
1	Ha1 - A high level of intention toward knowledge sharing leads to great knowledge sharing behaviour.	P>0.05	Reject Ho Accept Ha
2	Ha2 - A high level of behavioural control toward knowledge sharing leads to great knowledge sharing.	P<0.05	Reject Ho Accept Ha
3	Ha3 - A favourable attitude toward knowledge sharing increases the intention to share knowledge.	P<0.05	Reject Ho Accept Ha

4	Ha4 - A high level of subjective norm that supports knowledge sharing leads to the increased intention to share knowledge.	P>0.05	Reject Ho Accept Ha
5	Ha5 - A high level of behavioural control toward knowledge sharing intensifies the intention to share knowledge.	P<0.05	Reject Ho Accept Ha
6	Ha6 - High education level positively affects the knowledge owners' attitude toward knowledge sharing.	P<0.05	Reject Ho Accept Ha
7	Ha7 - Perceived reciprocal benefits positively affect a knowledge worker's attitude toward knowledge sharing	P>0.05	Reject Ho Accept Ha
8	Ha8 - Perceived loss of knowledge power negatively affects a knowledge worker's attitude toward knowledge sharing.	P<0.05	Reject Ho Accept Ha
9	Ha9 - A perceived improvement in reputation positively affects a knowledge worker's attitude toward knowledge sharing.	P<0.05	Reject Ho Accept Ha
10	Ha10 - Perceived ease of use positively affects the attitude of stakeholders toward knowledge sharing.	P>0.05	Reject Ho Accept Ha
11	Ha11 - Leadership support has a significant positive effect on the subjective norm to share knowledge.	P<0.05	Reject Ho Accept Ha
12	Ha12 - Organizational cultures have a significant relationship with knowledge sharing behaviour.	P<0.05	Reject Ho Accept Ha
13	Ha13 - High service availability positively influences a knowledge worker's Perceived Behavioural Control toward knowledge sharing.	P>0.05	Reject Ho Accept Ha
14	Ha14 - Awareness positively influences Perceived Behavioural Control toward knowledge sharing	P<0.05	Reject Ho Accept Ha

Source: Survey data, 2023

4.4. Discussion

The research results support Hypothesis 1. The research results confirmed the positive relationship between intention toward knowledge sharing and knowledge sharing behaviour statistically with the coefficient path = 0.361 and t-value = 9.753 at $p < 0.01$ significance level. The result is consistent with those of Bock and Kim (2001) and of Wu and Zhu (2012). However, intention toward knowledge sharing explains only 1.6 percent and 41 percent of the variance in knowledge sharing behaviour in Brock and Kim (2001) and Wu and Zhu (2012) respectively, whereas this factor explains approximately 56 percent of the same variance in this study. The result also supported Hypothesis 2 with the path coefficient, coefficient path = 0.650 and t-value = 15.962 at $p < 0.01$ indicating that the Higher level of behavioural control leads to enhance the knowledge

sharing behaviour. The study concludes that knowledge sharing is not largely under volitional control. Stakeholders tend to engage in knowledge sharing if they have the time, resources, and opportunities to perform such activity.

Hypotheses 3, 4 and 5 are supported by the data results. The statistical results indicate that attitude toward knowledge sharing, subjective norm, and perceived behavioural control positively affect the intention of knowledge sharing. The study results support Hypotheses 3, 4 and 5 with the coefficient path = 0.205 and t-value = 4.073 at $p < 0.01$ level; with the coefficient path = 0.203 and t-value = 3.928 at $p < 0.01$ level; and with the coefficient path = 0.489 and t-value = 10.276 at $p < 0.01$ level, respectively. This finding is consistent with those of previous TPB-related research. These three factors collectively explain approximately 45 percent of the variance in the behavioural intention to share knowledge.

The study has also examined the education level, perceived reciprocal benefits, perceived loss of knowledge power, perceived reputation enhancement, and ease of using tools and technology, as antecedents of attitude. Only four of these antecedents, namely, education level (Hypothesis 6, with coefficient path = 0.216 and t-value = 4.299 at $p < 0.01$), perceived reciprocal benefits (Hypothesis 7, with coefficient path = 0.280 and t-value = 5.238 at $p < 0.01$), perceived loss of knowledge power (Hypothesis 8, with coefficient path = -0.266 and t-value = 6.066 at $p < 0.01$), and ease of using tools and technology (Hypothesis 10, with coefficient path = 0.139 and t-value = 2.66 at $p < 0.01$), are identified as significant predictors of the knowledge sharing attitude of knowledge workers. This finding is consistent with those of A. M. Lange (2014). Besides, perceived reputation enhancement (Hypothesis 9) is not supported because coefficient path = 0.079, t-value = 1.39, and $p > 0.10$. It does not produce a substantial effect on knowledge sharing when all the above-mentioned motivators are included in the analysis. This finding neither agrees with social exchange theory nor is consistent with those of P. J. Hinds and J. Pfeffer (2019) who all identify perceived reputation enhancement as an important motivator for participating in knowledge sharing. However, this finding is consistent with those of S. S. Alam, Z. Abdullah, N. A. Ishak, and Z. M. Zain (2018). Likewise, the study results supported Hypothesis 11 but did not support Hypothesis 12, which measure the effect of leadership and organizational culture on subjective norm. Only leadership is found to produce an effect on knowledge sharing with coefficient path = 0.298 and t value = 6.469 at $p < 0.01$.

This finding is consistent with those of Babalhavaeji and Kerman (2017). Organizational culture is not supported despite t-value = 1.849 and $p < 0.10$. Meanwhile, the coefficient path value positively affects the stakeholder's behaviour toward knowledge sharing, a result that is contrary to what has been postulated, which is, and 0.080. This finding is consistent with those of Babalhavaeji and Kerman (2017). These findings underscore the important of leadership on enhancing the knowledge sharing behaviour among stakeholders in Jordanian hospitals using social networks. Our research results support Hypothesis 13 and 14. The path

coefficients and t-statistics for Hypotheses 13 and 14 are statistically significant. Because the coefficient path = 0.484 and t-value = 13.687 at $p < 0.01$ for Hypothesis 13.

As well as for Hypothesis 14 the coefficient path = 0.228 and t-value = 6.852 at $p < 0.01$. This finding is consistent with Babalhavaeji and Kerman (2017). These findings assert that the availability of social networks reduces the barriers to knowledge sharing and encourages the stakeholders in Jordanian hospitals to share their knowledge. Additionally, the study suggests that the awareness plays an important role in encouraging stakeholders to consider the usefulness and the benefits of knowledge that they provide to their co-workers.

5. Conclusions and Recommendations

In other words, organizations must focus on the organizational core values and support in order to create a harmonious working environment which will facilitate the knowledge sharing culture. To keep in mind also is that for individuals to actively participate in the knowledge sharing activities, there must be some support and motivations for the individuals which will triggers to acquire new knowledge in their background education, to innovate new ideas and concepts and also helps to advance in their future careers. Thus, unless there is an environment of work where these influential factors are eased, the organizations' culture of knowledge sharing could not be improved to the extent it is expected to be. Especially, the organization has to supply itself with the necessary IT infrastructures so that its employees could access it whenever they require sharing knowledge among themselves. Even though the implementation of the combination mode of knowledge sharing is appreciated, being reluctant to availing the socialization, internalization and externalization modes has a detrimental effect**.**

This study provides some useful insight for Bank of Abyssinia (BOA) managements and stakeholders who often need to take affirmative actions on promoting knowledge sharing activities among employees in the work place. The study also serves as a benchmark for practitioners who are interested to examine the relationships of the factors influencing knowledge sharing activities in the work place. This study has also a significant contribution for those who are interested to design a knowledge management system for Bank of Abyssinia (BOA). This can be achieved by taking the theoretical framework of this study under consideration. The organizations should also look back again and check how knowledge is shared among their employees. The organizations should also look back again and check how knowledge is shared among their employees. The result of this study shows that the combination is the only mode better implemented in the bank. Even though the implementation of the combination mode of knowledge sharing is appreciated, being reluctant to availing the socialization, internalization and externalization modes has a detrimental effect

Suggestions for Future Research

Although this research provides new insights and draws valuable lessons with regard to knowledge sharing practices, there are some limitations which are worth noting as they open up paths for future research. Firstly, this study considered only four of the commercial banks in Ethiopia as research participants. In addition to this, the sample size taken to conduct the study was a total of 381 respondents. This implied that the above-mentioned factors have its own negative impact on the result of the current study. Future researches will get a better result, if they include large number of participant banks and also considering of large number of sample sizes in their studies. Secondly, this study is conducted on banking sector. Future research conducted in different sectors would verify the findings of this study and may yield additional insights. Conducting future study in different sectors would enable researchers to obtain an overall picture of the phenomenon or perform a comparison between commercial banks and other organizations. Finally, this study might be extended by investigating the impact of the moderating effects of the factors in the research model.

Implications of the Study

The study, being of an exploratory and interpretive nature, raises a number of opportunities for future research, both in terms of theory development and concept validation. More research will in fact be necessary to refine and further elaborate our novel findings. The research needed to approach the new science of assessment envisioned by the committee needs to focus on those issues that lie at the intersection of cognitive and measurement science. The significance of this study is to bring about a possible solution for these challenging problems to share the knowledge. The government: may show the way to improve employees' knowledge sharing skill in different Organizations. Policy makers: It helps the government and other responsible officials to get necessary information as an input for their decisions. Library: The findings of the research were served the students, other researchers and community as a reference material being shelved in the library. The researcher: The researcher also gains necessary know-how on how to solve problems using research methodology.

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