



Organisational factors as determinants for online knowledge-sharing behaviour: a Kenyan case study

#### AUTHOR(S)

#### Paul Waititu

Legartment of Health Services
Kenya

ORCID: 0000-0001-7863-2719

#### Rachel Barker

Unisa

ORCID: 0000-0001-8816-9385

#### **PUBLISHED ONLINE**

Volume 41 (1) July 2022 Pages 77-89 Submitted August 2021 Accepted March 2022

#### **ISSN**

SSN 0259-0069

#### Abstract

Online knowledge-sharing (OKS) behaviour has become a critical and inevitable component in recognising knowledge as a valuable resource to enhance an organisation's competitive advantage. Hence, this study aimed to investigate the organisational factors that determine OKS behaviour in an online environment within the context of savings and loans cooperative organisations (SACCOs) in Kenya. A comprehensive literature review revealed that limited studies have been conducted to investigate the role of organisational factors in OKS behaviour from a knowledge-based perspective. The study used quantitative and qualitative research to collect and analyse data in a case study by means of three data collection instruments: online self-administered questionnaires, a moderator's guide and an interview schedule. The accessible population of the study comprised 485 employees in selected SACCOs in Nakuru city. A sample of 245 was selected for the survey and another sample of 72 employees who participated in the survey (eight from each SACCO) was selected to take part in the focus group discussions. In addition, eight senior managers took part in the in-depth interviews. An environment conducive to working and a friendly organisational culture were identified by employees as the key determinates of their OKS behaviour in the organisation. Hence, it is argued that it is critical for SACCOs to develop strategies capable of modifying the working environment and organisational culture to enhance employees' OKS behaviour through online internal communication (OIC) tools.

# **Keywords**

Online internal communication; online knowledge sharing; organisational culture; working environment; savings and credit co-operative societies (SACCOs)

# INTRODUCTION

The invention of the Internet and subsequent digital innovations have brought various changes that affected all aspects of human life – be it in the personal, social, educational, corporate or cultural sphere. Indeed, the recent popularity of the Internet is responsible for the prominent use of knowledge as a resource for enhancing an organisation's competitive advantage (Al Qeisi & Al Zagheer, 2015; lyer, Sharp, & Brush, 2017; Jain, 2020). In the last few decades, organisations have also experienced various changes that have altered all aspects of organisational behaviours and operations. Those changes have interrupted the status quo by altering how employees communicate in terms of hierarchical chains, geographical location, virtual distance and communication channels. The use of knowledge sharing through online integrated communication systems has also brought tremendous changes to

organisational communication (Davidavičieně, Al Majzoub, & Meidute-Kavaliauskiene, 2020; Stacho, Stachová, Papula, Papulová, & Kohnová, 2019). However, despite the high turnover of communication technologies, the bottom line is that they are all means of enhancing human interaction and knowledge sharing; hence, still maintaining human communication as the main agenda.

Knowledge is considered by various researchers (Attar, 2020; Iyer et al., 2017; Jarrah & Alkhazaleh, 2020; Khosravi, Safari, Esfandiari, Keshmiri & Danesh, 2019) as an important commodity in the current digital and knowledge-based economy, therefore OKS should be considered as a critical component in enhancing organisational survival and performance in SACCOs. In this regard, recent studies (Iyer et al., 2017; Waititu, 2020; Yu, Zhang Lin & Wu, 2017) have shown the need for SACCOs to embrace the latest innovations to enhance knowledge creation and sharing among employees as a catalyst for developing organisational knowledge.

The demand for improved online services by members and other stakeholders is forcing SACCOs in Kenya to heavily invest in modern technological innovations to enhance their competitive advantage (Maalu & Dosho, 2016; Ngure et al., 2017; Soi & Buigut, 2017). However, despite heightened innovation experienced in the cooperative sector in Africa over the years, most of the SACCOs have not abandoned their bureaucratic tendencies, with others trending cautiously toward innovation. This fact can be attributed to various factors such as employees' perceptions towards innovations, resistance to adopt change, the prevailing organisational culture and increased cases of ICT-related frauds in the recent years. A Central Bank of Kenya (CBK) (2015) report acknowledges the rise of cyber crime-related cases in Kenya.

Employees' knowledge-sharing behaviour in the cooperative societies sector are being influenced by their frequent use of new media technology (Awodoyin, Osisanwo, Adetoro & Adeyemo, 2016). However, Maalu and Dosho (2016) argue that there are no effective knowledge-sharing strategies and policies to guide the use of OIC for KS in most of the SACCOs in Kenya. To overcome this challenge, Mallasi and Ainin (2015) and Omotayo (2015) advocate suitable strategies and policies to promote OKS among employees. Therefore, OKS can be considered the foundation needed in promoting dynamic knowledge-based economies that are necessary to enhance the competitive advantage of SACCOs in Africa (Khosravi et al., 2019; Souteh, Esmaeili, Honari & Ghorbani, 2018).

Some scholars (Castaneda & Cuellar, 2020; Mehraban, Davoodi, Kamali & Foomani, 2018) have therefore acknowledged the need for SACCOs in Africa to identify various factors that may hinder employees from using new OIC tools in the process of online knowledge creation and sharing. Those factors have been classified into three categories, namely personal, organisational and motivational (Cakir & Adiguzel, 2020; Nadason, Saad & Ahmi 2017; Rohman, Eliyana, Purwana & Hamidah, 2020; Souteh et al., 2018). However, limited research has been conducted to identify organisational factors that are considered crucial by employees to enhance their OKS behaviour in SACCOs (Areekkuzhiyil, 2016; Rohman et al., 2020; Souteh et al., 2018). This study set out to address this gap, with the objective of identifying the main organisational factors that affect OKS behaviour through OIC tools among employees in the SACCOs. This was achieved by answering the following research question: What are the organisational factors affecting employee OKS behaviour in the savings and cooperative organisations in Kenya?

In this study, the terms behaviour, willingness, intention and perception are used to provide a comprehensive overview of OKS, but ultimately the focus of this paper is on OKS behaviour.

# LITERATURE REVIEW

This study is anchored in the contingency theory, the knowledge creation theory (SECI Model) and theory of planned behaviour.

# Contingency theory

According to the authors of the contingency theory (Hofer, 1975; Luthans & Stewart, 1977), this seminal theory describes how internal structures and functions within an organisation are dependent on

its milieu. This argument is reinforced by more recent studies (Abba, Yahaya & Suleiman, 2018; Mallasi & Ainin, 2015), which posit that an organisation must align its operation to both its internal and external environment for optimal performance. Moreover, the innovations being implemented should be consistent with the organisation's culture, processes and functions. The theory is suitable for this study, as it supports the assertion that the factors affecting OKS behaviour need to be observed within the organisation's context. Therefore, successful OKS using OIC tools is dependent on how well the organisation can adapt to both its internal and external environment (Waititu, 2020). Hence, the dynamics in the market, the everchanging innovations and other organisational factors are supported by the contingency theory, as they are likely to affect employees' OKS behaviour.

# Knowledge creation theory

Proponents of the knowledge creation theory (Attar, 2020; Mc Manus, 2016; Musnadi & Putra, 2020; Nadason, Saad & Ahmi, 2017) believe that the success of an organisation is dependent on how well it can obtain and utilise both tacit and explicit knowledge. The importance of both types of knowledge is further amplified by the SECI model (socialisation, externalisation, combination and internalisation) of the knowledge creation theory (Nonaka, 1991; Nonaka & Takeuchi, 1995). The SECI model was adopted for this study to help understand employees' OKS behaviour in the organisational context. OKS benefits organisations by transforming individual knowledge into organisational knowledge and vice versa through various online interactions. However, if the process is not well handled, knowledge is likely to be lost when employees exit the organisation (Asrar-ul-Haq & Anwar, 2016). To ensure a successful OKS process, the organisation needs to manage all tacit and explicit knowledge to prevent it from being lost. This can be achieved by linking together all the knowledge sources, practices and repositories. Further, the organisational context should support employees' OKS behaviour by promoting a positive culture and climate, communication channels, procedures and policies that are conducive to organisational learning (Jain, 2020; Khosravi et al., 2019).

# The theory of planned behaviour

The theory of planned behaviour, which was derived from the theory of reasoned action, is used to predict behaviour (Ajzen, 1991; Doll & Ajzen, 1992). The three branches of the theory of planned behaviour are the attitude towards behaviour, subjective norms and perceived behavioural control. According to the theory, employees' behaviour to willingly adopt OKS is predicted by their perceptions and attitude towards that behaviour and how they think other people would regard them if they embraced the behaviour. In other words, employees' behavioural intentions are dependent on their attitude to the behaviour, as well as subjective norms (Afshar-Jalili & Ghaleh, 2018; Wahyuni, Chariri & Yuyetta, 2021). This suggests that employees will only engage in OKS behaviour if there is an intention to engage (Ajzen, 1991). Moreover, employees with a perception of high control are more likely to be motivated to engage in OKS behaviour if they believe that they are likely to succeed while utilising the existing resources and opportunities. Successful OKS behaviour is dependent on sound relationships among employees and adequate management support (Cakir & Adiguzel, 2020; Davidavičieně et al., 2020; Kharabsheh, Bittel, Elnsour, Bettoni & Bernhard, 2016). The sharing of knowledge among employees, especially using OIC tools, have been attributed to increase employees' perceptions of the value of organisational knowledge in enhancing organisational success, thereby increasing the importance of OKS. For example, Rohman, et al. (2020) argue that employees' perceptions of OIC tools determine their willingness or intention to share knowledge in an online environment, subsequently altering their OKS behaviour. Nevertheless, other organisational factors, for example organisational culture, knowledge leadership and innovation, can act as impediments to virtual sharing, and strengthen the hoarding of explicit knowledge as indicated by the SECI model. Moreover, since knowledge is considered a source of power, some employees may hoard it selfishly for fear of losing it to other employees (Al Qeisi & Al Zagheer, 2015; Marouf, 2015). Hence this call for modification of employees' OKS behaviour, which is not that easy to achieve, because employees need to modify their interactions and communication behaviours to be able to share what

they know without reservation or fear of losing their jobs.

# Relevance of theories to online knowledge sharing in the organisation

Organisational communication is identified by some scholars as the central nervous system of an organisation, coordinating all its systems and functions (Ramadanty & Martinus, 2016; Stacho et al., 2019) and is divided into two categories, namely internal and external communication. Internal communication deals with internal stakeholders, whereas external communication focuses on external stakeholders (Sibanyoni, Tabit & Annan, 2018). Internal communication is defined by Waititu (2020:62) as "all formal and informal communications taking place internally at all levels of an organisation." Another definition of internal communication is given by Vora and Patra (2017:30), as "the communication flow among people within the boundaries of an organisation." As indicated by some authors (Ali, Nyambuga & Adams, 2018; Ganapathi, 2016; Vora & Aatra, 2017), effective internal communication motivates the employees of an organisation to give their best when undertaking their tasks. It is for this reason that the management needs to understand employees' perceptions of the available internal communication channels. Effective internal communication is also credited for promoting the creation and maintenance of sound relationships among employees, irrespective of their cadre and rank (Ganapathi, 2016; Waititu, 2020). It would also make them feel part of the organisation and subsequently enhance their knowledge-sharing behaviour.

Knowledge sharing is defined by Attar (2020:14) as "the activity of transferring knowledge in various forms of one person, group or organisation to another", while Ahmed, Khanb, Thitivesab, Siraphatthadab and Phumdarab (2020:593) consider knowledge-sharing behaviour as "a social process where employees are willing to share their experience, knowledge and valuable information with others". According to Ahmed et al. (2020), knowledge-sharing behaviour emanates from employees' habits, skills, experience, expertise and understanding that are learned from their various undertakings and through training. However, OKS behaviour, which depends on individual employees' intentions, can greatly be influenced by the complex context of the Internet, its networking ability and ensuing online relationships as regards the various platforms (Attar, 2020). According to Barker and Hanekom (2022), the use of digital platforms like the Internet for OKS thus comprises interactive digital tools permitting employees to share knowledge and co-create messages or influence information and content to facilitate interactivity. In the context of this study, OKS was considered as a set of behaviours that facilitates the sharing of explicit knowledge, experience, skills and information among employees through social interactions using OIC tools.

Due to the advancement in technology, innovations that can integrate various online tools and platforms that are suitable for OIC are being implemented (Davidavičieně et al., 2020; Ganapathi, 2016; Mishra, Mishra & Walker, 2019; Waititu, 2020). Recent studies by Jain (2020) and Waititu (2020) identified OIC tools as important channels for OKS among employees in organisations. Moreover, the use of modern OIC tools encourages employees to share their coveted knowledge without much hesitation, in line with the theory of planned behaviour. OKS can also be enhanced through numerous online interactions, though only when employees have accepted the use of OIC tools in their communication. However, every interaction should be considered a unique knowledge-sharing experience. In this regard, employees should be encouraged to adopt OIC in their daily activities and interactions within the organisation.

The working dynamics have also been changing, where employees can work away from their workplace, virtually (Davidavičieně et al., 2020). To enhance their efficiency and improve their competitive advantage, most organisations are now willing to implement modern OIC systems that can integrate numerous stand-alone OIC tools and platforms (Ganapathi, 2017; Stacho et al., 2019). However, some recent research (Nadason et al., 2017; Waititu, 2020) posits that those employees are faced with several barriers in their use of OIC tools for OKS. In this regard, as suggested by the theory of planned behaviour, organisations should attempt to mitigate those barriers by addressing organisational factors that may affect employees' perception of OKS behaviour (Ganapathi, 2016; Mishra et al. 2019; Rohman et al., 2020). Studies on the use of new media technologies in organisations have identified several organisational factors, including an environment conducive to working, management support, leadership, organisational culture and incentives and or rewards that play a critical role in determining the OKS behaviour of employees

(Areekkuzhiyil, 2016; Ganapathi, 2016; Rohman et al., 2020; Stacho et al., 2019). In addition, studies by Mehraban et al. (2018), Rohman et al. (2020), Souteh et al. (2018) and Stacho et al. (2019) indicate that there are some organisational factors such as leadership, management support, organisational structure, and organisational communication that pose managerial implications, thus affecting the organisation's ability to achieve its objectives. Because these factors affect the efficacy of OKS and have an impact on the use of OIC – which makes it necessary for the organisation to understand and address them – it was suggested that further insights into these organisational factors and their effect on OKS behaviour are crucial. For example, recent studies (Areekkuzhiyil, 2016; Mehraban et al., 2018; Rohman et al., 2020) suggest the need to identify the organisational factors that can be modified to achieve sound OKS behaviour. Various factors, including a conducive work environment, appropriate technologies for OKS, high organisational commitment, flexible hierarchical system, open communication, current innovations, complex organisational structure and acceptable norms for OKS were identified. Other factors found to be relevant are active organisational learning, proactive knowledge leadership, friendly organisational culture, appropriate strategies for promoting OKS, healthy power relationships, working teams with diverse composition, adequate knowledge security and timely change management.

Various authors highlighted the importance of creating an environment conducive to working in the place where employees carried out their duties (Edem, Akpan & Pepple, 2017; Massoudi & Hamdi, 2017). Some authors (e.g. Edem et al., 2017; Massoudi & Hamdi, 2017) declare that a supportive working environment act as a motivation to enhance employees' interactions and performance. In a supportive working environment, employees can perform optimally by prudently utilising the available resources and exploiting their knowledge and skills to the best of their ability. A supportive working environment may include organisational factors, for instance open communication, good working relationships and appropriate working hours, among other things. Moreover, as supported by the contingency theory, a working environment should respond to the market environment resulting from the dynamics and volatility of the Internet (Stacho et al., 2019), to attain what is referred to as "Society 5.0". According to the Hitachi-UTokyo Laboratory (2020: XI), Society 5.0 is "a vision of a future society guided by scientific and technological innovation". Its mechanism envisages the merging of cyberspace with the physical space the real world, in other words. Cyberspace, in this case, refers to the electronic world that is synonymous with computers and that is used for the exchange of massive volumes of data. These data are analysed into meaningful information and used to offer solutions in the real world. Consequently, the systems of Society 5.0 are expected to operate throughout society in an integrated manner to create a peoplecentric society. Narvaez, Alomia, Loaiza and Tavera (2021) argue that this can be achieved by leveraging ICT in all aspects of life with the view of creating a knowledge-intensive society through OKS. In order to achieve this, appropriate policies and technologies should play an important role in attaining what Society 5.0 envisages in the organisation. Therefore, organisational culture is seen by several researchers (Areekkuzhiyil, 2016; Attar, 2020; Kharabsheh et al., 2016; Marouf, 2015; Mc Manus, 2016; Souteh et al., 2018) as a critical element in enhancing the OKS initiatives for attaining Society 5.0 in the organisation in future.

Another important factor identified is the organisational culture that encompasses the total sum of norms, beliefs, values and customs, all of which determine how employees behave in the organisation (Areekkuzhiyil, 2016; Marouf, 2015). As suggested by Areekkuzhiyil (2016) and Mc Manus (2016), organisational culture determines employees' willingness to share knowledge when using OIC tools to a considerable extent. It is therefore important to understand organisational culture as it greatly influences OKS behaviour, thus affecting employees' beliefs and values. The characteristics of organisational culture that have been pointed out by Areekkuzhiyil (2016), Mc Manus (2016) and Attar (2020) as being influential in the establishment of knowledge-sharing behaviour within an organisation include openness to change and being innovative. As advocated by the contingency theory, organisational survival is dependent on its culture and how well employees can share knowledge through the various online social interactions (Mc Manus, 2016). Organisational culture is therefore determined by the vibrant interaction among employees, based on their norms, values, perceptions and attitudes, which in turn help them to enhance

OKS behaviours (Kharabsheh et al., 2016). However, other researchers (e.g. Davidavičieně et al., 2020; Nadason et al., 2017) indicate that organisational culture can also act as a barrier to OKS – hence the need to understand its diversity and how it affects the organisation and its employees. In this regard, organisational culture should be considered an enabler for motivating employees, that can help them to modify their perceptions on sharing knowledge in the online environment. However, due to its dynamics, Mc Manus (2016) argues that various sub-cultures can co-exist within a unitary organisational culture.

Based on the above discussion, the authors categorised the different factors identified in the literature which were regarded as most relevant to measure the use of OIC for OKS behaviour into four main criteria with sub-criteria, namely: an environment conducive to work, adequate knowledge security, change management, and organisational culture.

#### **METHODOLOGY**

In order to meet the objective of the study, a systematic research methodology was applied in the collection, analysis and interpretation of data in an attempt to answer the research question. The researchers selected suitable research scientific procedures that were deemed appropriate for solving the research problem. An exploratory research design with a mixed methods approach, combining both quantitative and qualitative research methods, was employed to collect, analyse and interpret data on the organisational factors affecting OKS behaviour. The quantitative research was conducted through a survey and the qualitative research included in-depth interviews and focus group discussions. The mixed methods approach was used to help the researchers overcome the limitations typically posed by the application of only one methodological approach. This approach further helps to enhance synegy, complementarity and rigor of data, providing better results than when a single method is used. The main focus of the study was on deposit-taking SACCOs operating in Kenya. Samples were drawn from the accessible population of 482 employees in the eight selected deposit-taking SACCOs in Nakuru County.

The accessible population for the study was the eight small, medium and large SACCOs with a similar number of employees in the selected branches (between 41-104) listed below:

- Cosmopolitan SACCO, which is a medium organisation operating only in Nakuru city, with an average annual turnover of about 4.8 billion Kenyan Shillings, and 104 employees.
- b. Vision Africa, which is a small local organisation with an annual turnover of around 790 million Kenyan Shillings and a workforce of 57 employees.
- c. Egerton SACCO is a large local organisation with an annual turnover of about 1.7 billion Kenyan Shillings and 97 employees, all based in Nakuru City.
- d. Uni-county SACCO, a small local organisation with an annual turnover of around 330 million Kenyan Shillings and 33 employees.
- e. Boresha SACCO is large regional organisation with an annual turnover of about 4.4 billion Kenyan Shillings, and 67 employees in its Nakuru branch.
- f. Wananchi SACCO, a medium regional organisation, with an annual turnover of 149 million Kenyan Shillings, and 38 employees in its Nakuru branch.
- g. Tower SACCO is a large regional organisation with an annual turnover of about 7 billion Kenyan Shillings, and 48 employees in the Nakuru branch.
- h. Stima SACCO is a large national organisation with an annual turnover of about 5.9 billion Kenyan Shillings and staff of 41 employees in its Nakuru branch.

Firstly, purposive sampling (a non-probability sampling method) was used to select eight deposit-taking SACCOs out of the 178 registered in Kenya. Cochran's sample size formula was used to determine the desired sample size. A total of 245 middle level employees were selected from the eight deposit-taking SACCOs in the study area to participate in the survey, using the probability proportional to size (PPS) formula from the accessible population of 482 for the survey.

A further sample of 72 employees (eight from each deposit-taking SACCO) was randomly selected to

take part in the focus group discussions. The employees selected were from those who had taken part in the survey. Eight senior managers, one from each deposit-taking SACCO and who had not participated in the survey, were purposely selected for the in-depth interviews. A Likert scale online self-administered questionnaire on a Google docs platform was used in the survey to collect quantitative data, while a moderator's guide and interviews schedule were applied in the focus groups and in-depth interviews to collect the qualitative data.

The quantitative data were analysed using the Statistical Package for the Social Sciences software. Descriptive statistics and inferential statistics were used to help understand the details of the sample, using the mean and standard deviation. On the other hand, inferential statistics were used to make inferences about the study population. The inferential statistical methods used included t-tests, ANOVA, correlation and regression analysis. Thematic coding was used to analyse the qualitative data. Firstly, the data were transcribed, reviewed and explored several times for familiarity and insight. Then initial codes were created from the data. Those codes were reviewed, revised and combined into themes, in line with the various themes that emerged. These themes then were presented in an organised manner.

#### **RESULTS**

The collected quantitative and qualitative data were analysed in line with the research question and were linked to the literature review that is elucidated below.

# Quantitative data on organisational factors

# Demographic information

The survey achieved a response rate of 76%, where 187 online self-administered questionnaires were completed and returned from a total of 245 which was electronically dispatched. Computer software (SPSS version 25.0) was used to verify and analyse quantitative data. The quantitative analysis showed that there were slightly more females (51.9%) than males (48.1%), with most respondents having attained secondary education and above. Most of the respondents (82%) were in the age brackets of 20–29, 30-39 and 40-49 years with only 1% being between 50 and 60 years. Moreover, the respondents with computer experience of five years and more formed the majority, at 77.5%. Based on these findings, it can be construed that there was gender parity in the SACCOs and that all employees were literate, with most of them having vast experience in computer usage.

# Kaiser-Meyer-Olkin (KMO) and Bartlett's Test of Sphericity on organisational factors as determinants for OKS

This section intended to measure employees' perceptions of the various organisational factors suggested in the literature that affect OKS behaviour and to establish its relevance to the use of OIC tools in enhancing OKS behaviour. Two tests, namely the Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy and Bartlett's Test of Sphericity were performed to test whether the data collected were adequate and suitable for statistical analysis. The KMO tested whether the criteria of acceptable minimum were based on a factor-loading cut-off value of 0.6. The criteria of measure was based on the significant value, where if the significant value was above 0.05 when tested at 95 percent confidence level, then there existed an identity matrix which was not accepted in factor analysis. Factor analysis was conducted and the statistical test for the KMO was 0.851, while the Bartlett's Test for an identity matrix had a significant value of 0.000.

Following the factor analysis of sixteen determinants, four main items were extracted: *Conducive work environment* (0.834); *Adequate knowledge security* (0.674); *Timely change management* (0.639) and *Friendly organisational culture* (0.431). These four items exhibit the highest variance by ranking. As for total variance for organisational factors, the four items explained 76.217% of variance in the study. A descriptive statistic of the shortlisted items under variable organisational factors revealed that the variables were

oscillating between 2.76 and 3.11, where 2.0 to 2.99 was represented by Relevant and 3.0 to 3.99 was represented by Somewhat relevant.

Regression analysis was done using analysis of variance (ANOVA) and the findings of the study on organisational factors for OKS revealed the following, as indicated in Table 1

Table 1: ANOVA table for organisational determinants of OKS

Mode	I Summary	b							
Mod- el	R	R Square	Adjusted R Square 0.078		Std. Error of the Estimate  0.819			Durbin- Watson 2.285	
1	.383a	0.147							
ANO	/A <sup>a</sup>								
Model		Sum of Squares		Df		Mean Square F			Sig.
	Regres- sion	5.772		4		1.443		149	0.008b
	Residual	33.573		50		0.671			
	Total	39.345		54					

The model of OKS and organisational factors turned out to be significant, with an F value of 2.149 and a significant value of 0.008, as shown in Table 1. The multiple correlations were positive, with a coefficient of 0.383. The organisational factors that were significant accounted for 7.8% of variation in the dependent variable OKS behaviour. It was also established that the value of Durbin Watson at 2.285 confirms that the coefficients were statistically different from zero. The study also indicated that there was no serial correlation. The study findings established that a unit increase in the item *Conducive work environment* would lead to 0.285 unit decreases in negative OKS behaviour. The possible reason for this negative relationship is that when the work environment is counter-productive, employees may tend to have unpredictable OKS behaviour. It was also found that *Friendly organisational culture* had a positive influence, though not statistically significant when tested at 95 percent confidence level, but the items *Adequate knowledge security and Timely change management* did not disclose significant results, as indicated in Table 2.

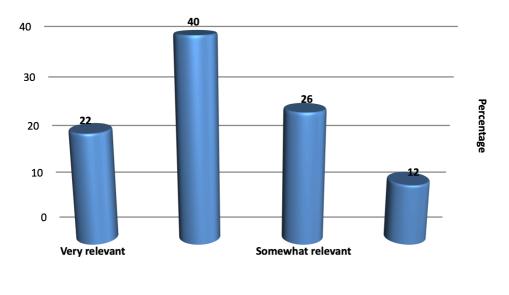
Table 2: Coefficients table for organisational determinates for OKS behaviour

		Unstandard		Standardised Coefficients		
Model		В	Std. Er- ror	Beta	t	Sig.
1	(Constant)	3.199	0.584		5.477	0.000
	[Conducive work envi- ronment]	-0.285	0.149	-0.263	-1.922	0.050
	[Friendly organisational culture]	0.045	0.127	0.057	0.356	0.724
	[Adequate knowledge se- curity]	0.196	0.272	0.200	0.723	0.473
	[Timely change manage- ment]	-0.025	0.220	-0.029	-0.113	0.910

# Descriptive analysis of the main organisational determinants of OKS behaviour

Two main organisational determinants of OKS behaviour were identified as more significant. Firstly, as indicated in Figure 1, 22% and 40% of the respondents considered an environment conducive to work as very relevant and relevant respectively towards enhancing their OKS behaviour.

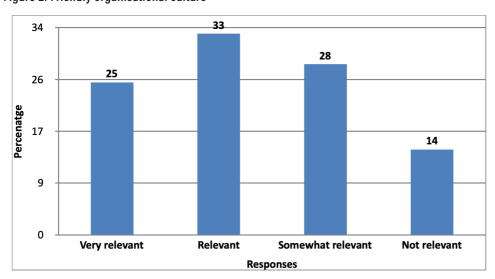
Figure 1: Conducive work environment



Another pertinent issue was whether Friendly organisational culture was considered relevant by employees in promoting their OKS behaviour. As seen in Figure 2, more than 50% of the respondents considered a friendly organisational culture as being relevant to enhancing their willingness to adopt OKS in their OKS behaviour, with 25% saying it was very relevant and another 38% terming it relevant.

Responses

Figure 2: Friendly organisational culture



# Qualitative findings

The quantitative results indicating that an environment conducive to work was an important organisational factor were supported by the qualitative findings from the focus group discussions, which were analysed using thematic analysis. Most participants felt that for any meaningful innovation to succeed, a conducive working environment was necessary. The participants also recognised the need to improve the infrastructure to support OKS. One participant commented that: "A favourable working environment is crucial for online sharing and for employees to accept to use online tools willingly." Another participant acknowledged that: "[...] modern infrastructures are needed to support the existing working environment and to give employees more options for online interactions." Some managers also held similar views, indicating that management support in the workplace for OKS purposes was necessary. One manager remarked that: "Most employees are not enthused in [sic] adopting OKS and this situation should be addressed." Based on the findings, it can be construed that the current working environment was not conducive to implementing OKS. This meant that despite being considered relevant, most employees perceived their current working environment to be discouraging to their OKS behaviour. This implies that an unfavourable working environment would be likely to affect OKS among employees. Hence, there was a need to improve the current working conditions in order to accommodate and promote OKS behaviour. Overall, the findings agreed with earlier studies (Mallasi & Ainin, 2015; Omotayo, 2015), which had indicated that most organisations face challenges in providing a working environment favourable to supporting OKS behaviour, especially with the focus on enabling their employees. Therefore, the need to provide a working environment conducive to promoting OKS among employees should be considered as a necessity by SACCOs, allowing them to enhance their competitive advantage.

The quantitative results indicating the importance of a friendly organisational culture to enhance OKS behaviour were also echoed by responses from the focus group discussions. A friendly organisational culture was considered by several the employees as an important factor, especially in promoting the online communication behaviours needed for OKS. Most participants recognised the role played by existing cultures in determining how employees interact, thus affecting their OKS behaviour in the workplace. One participant commented: "I really feel that the existing culture is not capable of fully supporting our online communication [...] The existing culture should be improved to allow free access and sharing of knowledge and to directly communicate even with our senior most [sic] bosses." Another one remarked that: "New technology is changing how we do things in our organisation, though slowly. The emerging technologies ought to improve how we behave and interact online with each other in the organisation."

Some top managers also expressed similar opinions that organisational culture plays a significant role in promoting OKS behaviour, using new technologies. One manager commented: "I must say that the way things are done in the organisation at the moment somehow hinder employees' willing [sic] to interact with each other online..."

The results were in agreement with findings by Areekkuzhiyil (2016) and Mc Manus (2016), who argue that employees' willingness to share knowledge in an online environment is dependent on the existing organisational culture, among other factors in the organisation. Based on those sentiments, it can be deduced that the existing culture in SACCOs does not fully support OKS and that employees emphasised the need for a vibrant and dynamic organisational culture for them to successfully adapt their OKS behaviour. These findings are also in line with the results of earlier studies (Attar, 2020; Mc Manus, 2016) that suggested that organisational culture, especially where open communication and innovation are supported, is capable of modifying employees' OKS behaviour within an organisation.

#### DISCUSSION

In a developing country like Kenya, the use of technological innovations is on the rise in a bid to meet the surging demand for online communication and services. This has resulted in huge investments to support online communication and services, especially in the SACCOs context.

The results and findings of this study confirmed that there are organisational factors that are considered

by employees as determinants of their OKS behaviour, especially when using modern technological innovation as demanded by the current digital market. The findings implied that a conducive working environment is crucial to adjusting OKS behaviour among employees, which is in line with recent studies (Edem, et al., 2017; Massoudi & Hamdi, 2017) which stated that a supportive working environment acts as an impetus for enhancing employees' online engagement. The findings further suggested that a friendly organisational culture was also considered necessary for employees to modify their OKS behaviour. This finding concurred with previous studies (Attar, 2020; Mc Manus, 2016) positing that a responsive organisation culture is capable of assimilating new innovations, besides being able to modify employees' knowledge-sharing behaviour to accept changes.

In answering the research question, it is argued that a positive working environment and a friendly organisational culture were identified as the two most important organisational factors that affect OKS behaviour among employees and hence needed to be addressed strategically. These findings revealed that OKS behaviour was indeed affected by these organisational factors and that further measures should be put in place in organisations in an attempt to enhance OKS behaviour among employees in the SACCOs.

Although this study's main limitation was in terms of the generalisability of the results because it was limited to a specific sector, it does suggest some potential avenues for future research in which similar studies could be conducted with a larger sample and/or carried out in different organisations in other sectors and domains.

#### CONCLUSION

The study set out to determine the main organisational factors that affect knowledge-sharing behaviour among employees while using OIC tools in the SACCOs within the Kenyan context. This was achieved by assessing both employees and managers' perceptions of OKS behavior. In conclusion, the findings identified a conducive work environment and a friendly organisational culture as the two main determinants to enhance OKS behaviour among employees in SACCOs and improve their competitive advantage. In this regard, it is recommended that management implements strategies to address the current organisational culture and working environment to enhance employees' OKS behaviour. This can be achieved by motivating employees to use OIC for online relationships and for promoting open communication in the workplace. It is also argued that this study contributed to an emerging body of research that specifically focuses on OKS behaviour in organisations. However, the ability of organisations to realise the full potential of these OIC tools in enhancing OKS behaviour is limited by the attention that their employees choose to devote to providing solutions to each other's problems, which adds to the current debates on how knowledge is shared within organisations, particularly within the increasingly imperative online context.

#### **REFERENCES**

- Abba, M., Yahaya, L. & Suleiman, N. (2018). Explored and critique of contingency theory for management accounting research. *Journal of Accounting and Financial Management* 4(5): 40–50.
- Afshar-Jalili, Y. & Ghaleh, S. (2018). Predicting knowledge sharing behavior based on people's early core beliefs. *The IUP Journal of Knowledge Management*, 16 (4): 29–50.
- Ahmed, T., Khanb, M.S., Thitivesab, D., Siraphatthadab. Y. & Phumdarab, T. (2020). Impact of employee's engagement and knowledge sharing on organizational performance: Study of HR challenges in COVID-19 pandemic. *Human Systems Management*, 39 (2020): 589–601. DOI 10.3233/ HSM-201052
- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2): 179–211. https://doi.org/10.1016/0749-5978(91)90020-T
- Al Qeisi, K.I.A. & Al Zagheer, H.M.A. (2015). Determinants of knowledge sharing behaviour among personnel in banking industry. *International Journal of Business and Management*, 10(4): 49–59.
- Ali, M.A., Nyambuga, C. & Adams, Y. (2018). Establishing internal communication channels preferred by the employees of public universities in western Kenya during unrest. *International Journal of Journalism and Mass* Communication, 4(1): 061–066.
- Areekkuzhiyil, S. (2016). Impact of organisational factors on the knowledge sharing practice of teachers working in higher education sector. *Intercontinental Journal of Human Resource Research Review*, 4(8): 23–33.
- Asrar-ul-Haq, M. & Anwar, S. (2016). A systematic review of knowledge management and knowledge sharing: Trends, issues, and challenges. Cogent Business and Management, 3: 1–17
- Attar, M.M. (2020). Organisational culture, knowledge sharing, and intellectual capital: Directions for future research. *International Journal of Business and Economics Research*. 9(1): 11–20. http://doi: 10.11648/j.ijber.20200901.12
- Awodoyin, A., Osisanwo, T. Adetoro, A. & Adeyemo, I. (2016). Knowledge sharing behaviour pattern: Analysis of academic librarians in Nigeria. *Journal of Balkan Libraries Union*, 4(1):12–19.
- Barker, R. & Hanekom, J. 2022. A theoretical framework for knowledge sharing and co-creation of messages on digital platforms: A consumer knowledge management perspective, Consumer Behaviour Review, 6(1): e-252642. https://doi.org/10.51359/2526-7884.2022.252642
- Cakir, F.S. & Adiguzel, Z. (2020). Analysis of leader effectiveness in organization and knowledge sharing behavior on employees and organization. SAGE Open, (2020): 1–14 https://doi.org/10.1177/2158244020914634
- Castaneda, D.I. & Cuellar, S. (2020) Knowledge sharing and innovation: A systematic review. Knowledge Process Management, 27: 159–173.
- Central Bank of Kenya. (2015). Bank Supervision Annual Report 2015. Nairobi: Central Bank of Kenya.
- Davidavičieně, V.A.L., Majzoub, K. & Meidute-Kavaliauskiene, L. (2020). Factors affecting knowledge sharing in virtual teams. Sustainability, 12(6917): 1–15. http://doi:10.3390/ su12176917
- Doll, J. & Ajzen, I. (1992). Accessibility and stability of predictors in the theory of planned behavior. *Journal of Personality* and Social Psychology, 63(5): 754–765. https://doi. org/10.1037/0022-3514.63.5.754

- Edem, M.J., Akpan, E.U. & Pepple, N.M. (2017). Impact of workplace environment on health workers. *Occupational Medicine & Health Affairs*, 5(2): 1–5.
- Ganapathi, N. (2016). Internal communication in the international organisations the influence of technology. *International Journal of Advanced Research in Management and Social Sciences*, 5(5): 52–58.
- Hitachi-UTokyo Laboratory. (2020). Society 5.0: A People-centric Super-smart Society. Singapore: Springer Nature, (eBook). http://oer.unair.ac.id/items/show/589
- Hofer, C.W. (1975). Toward a contingency theory of business strategy. Academy of Management Journal, 18(4): 784–810.
- Iyer, D.N., Sharp, B.M. & Brush, T.H. (2017). Knowledge creation and innovation performance: an exploration of competing perspectives on organisational systems. *Universal Journal of Management*, 5(6): 261–70.
- Jain, S. (2020). Impact of ICT on enhancing knowledge sharing of employees. *International Journal of Advanced Science* and Technology, 29(3): 262–280.
- Jarrah, H.Y. & Alkhazaleh, M.S. (2020). Knowledge sharing behavior in the curricula of United Arab Emirates universities and educational organisations. *International Journal of Instruction*, 13(3): 1-16. https://doi.org/10.2933/ iji.2020.1331a
- Kharabsheh, R., Bittel, N., Elnsour, W., Bettoni, M. & Bernhard, W. (2016). A comprehensive model of knowledge sharing. In *Proceedings of the 17th European Conference on Knowledge Management*, Ulster University, Northern Ireland, UK, (pp 455–461). Edited by Sandra Moffett & Brendan Galbraith. Available from: http://www.weknow.ch/marco/A2016/ ECKM/Kharabsheh%20Bittel%20et%20al%20a1%202016%20 ECKM\_Proceedinsgs.pdf. Accessed on 2018/08/19.
- Khattak, P., Shah, M.W. & Shah, M.H. (2020). Impact of knowledge sharing and teamwork on team performance with the moderating role of supervisor support. *British Journal of Research*, 7(2:57): 1–8.
- Khosravi, A., Safari, N., Esfandiari, A., Keshmiri, S. & Danesh, F. (2019). Bushehr University of Medical Sciences Physicians: Role of individual, organisational and technical factors affecting knowledge sharing. African Journal of Business Management, 13(11): 384–395.
- Luthans, F. & Stewart, T.I. (1977). A general contingency theory of management. *Academy of Management Review,* (1977): 183–195.
- Maalu, J.K. & Dosho, S.M. 2016. Knowledge management strategy and organisational change in commercial banks in Kenya. *Review of Social Sciences*, 01(07):32–43.
- Mallasi, H. & Ainin, S. (2015). Investigating knowledge sharing behaviour in academic environment. *Journal of Organisational Knowledge Management*, 1: 1–10.
- Marouf, L. (2015). Employee perception of the knowledge sharing culture in Kuwaiti companies: effect of demographic characteristics. *Ibres*, 25(2): 103–118.
- Massoudi, A.H. & Hamdi, S.S.A. (2017). The consequence of work environment on employee's productivity. *Journal of Business and Management*, 19(1): 35–42.
- Mc Manus, P. (2016) Examining the factors to knowledge sharing within an organisational context. Irish Academy of Management (IAM) - Doctoral Colloquium, Dublin 2016.
- Mehraban, M., Davoodi, R., Kamali, N. & Foomani, G.E. (2018). A model for knowledge sharing among the faculty members of Islamic Azad University. *Iranian Journal of Educational Sociology*, 1(10): 94–105.

- Mishra, K., Mishra, A.K. & Walker, K. (2019). Advances in Human Resources Management and Organisational Development (AHRMOD). In *Using Innovative Internal Communication* to Enhance Employee Engagement, 82 Volumes (pp 445). Edited by Patricia Ordóñez de Pablos. Pennsylvania: IGI Global Hershey.
- Musnadi, H.S. & Putra, T.R.I. (2020). The effect of knowledge sharing and knowledge management on performance of STAIN Gajah Putih mediated by job satisfaction. International Journal of Scientific and Management Research. 3(3): 35–47.
- Nadason, S., Saad, R. A. & Ahmi, A. (2017). Knowledge sharing and barriers in organizations: A conceptual paper on knowledge-management strategy. *Indian-Pacific Journal of Accounting and Finance*, 1(4): 32–41.
- Narvaez, R.C., Alomia, P.G.A., Loaiza, B.D.F. & Tavera, R.C.A. (2021). Society 5.0: A Japanese concept for a superintelligent society. *Sustainability*, 13:(6567). https://doi. org/10.3390/su13126567
- Ngure, F.K., Maina, K.E. & Kariuki, S. (2017). Product innovations and financial performance of savings and credit co-operatives societies in Kirinyaga County, Kenya. *International Academic Journal of Human Resource and Business Administration*, 2(3):166–178.
- Nonaka, I. (1991). The knowledge-creating company. *Harvard Business Review*, 69(6): 96–104.
- Nonaka, I. & Takeuchi. K. (1995). *The Knowledge Creating Company*. New York: Oxford University Press.
- Omotayo, F.O. (2015). Knowledge management as an important tool in Organisational Management: A review of literature. Library Philosophy and Practice (e-journal), 1238: 1–23.
- Ramadanty, S. & Martinus, H. (2016). Organisational communication: Communication and motivation in the workplace. *Humaniora* 7(1): 77–86.
- Rohman, A., Eliyana, A., Purwana, D. & Hamidah. (2020). Individual and organizational factors' effect on knowledge sharing behavior. *Entrepreneurship and Sustainability Issues*, 8(1): 38-48. http://doi.org/10.9770/jesi.2020.8.1(3)
- Sibanyoni, J.J., Tabit, F.T. & Annan, C.Y. (2018). An exploration of the internal communication practices in hotels of Gauteng province, South Africa. *African Journal of Hospitality*, *Tourism and Leisure*, 7(4): 1–20.
- Soi, N. & Buigut, K. (2017). Effect of mobile financial innovation on performance of dairy cooperative societies in Ainabkoi Sub County, UasinGishu County, Kenya. *International Journal of Economics, Commerce and Management*, 5(4): 367–378.
- Souteh, R.G., Esmaeili, M.R., Honari, H. & Ghorbani, M.H. (2018). The factors affecting knowledge sharing at the Iranian Ministry of Sports. *Annals of Applied Sport Science*, 6(1): 87–94.
- Stacho. Z., Stachová, K., Papula, J., Papulová, Z. & Kohnová, L. (2019). Effective communication in organisations increases their competitiveness. *Polish Journal of Management Studies*, 19(1): 391-403. DOI: 10.17512/pjms.2019.19.1.30
- Vora, N. & Patra, R.K. (2017). Importance of internal communication: impact on employee engagement in organisations, *Symbiosis Pune*, 8(2): 29–38. DOI:10.15655/mw/2017/v8i1A/48933
- Wahyuni, L., Chariri, A. & Yuyetta, E.A. (2021). Whistleblowing intention: Theory of planned behavior perspectives. *Journal* of Asian Finance, Economics, and Business, 8(1): 335–341. https://doi.org/10.13106/jafeb.2021.vol8.no1.335
- Waititu, P. (2020) Adopting online internal communication within public organisations in Kenya: An overview. Malaysian Journal of Media Studies, 22(2): 61–75.

Yu, C., Zhang Z., Lin, C. & Wu, Y.J. (2017). Knowledge creation process and sustainable competitive advantage: The role of technological innovation capabilities. Sustainability, 9(2280): 1–16.