Motivation and Privacy Role in Knowledge Sharing During Pandemic 2020: A Study of Enterprise Social System Use in Malaysian SMEs

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Abstract

Enhanced usage of digital approaches and Enterprise Social Systems (ESS) in SMEs due to Covid-19 has raised several unanswered questions related to motivation, concerns, and productivity of employees. This study aims to explore the underlying mechanism of knowledge sharing through ESS between motivations, concerns, and productivity. Using a quantitative survey approach this study analyzed 352 employees from Malaysian SMEs. The results revealed that utilitarian and hedonic motivation positively, while privacy concerns negatively influenced employee productivity. Additionally, the mediating role of knowledge sharing using ESS was also proved by study results. Several key policy insights and future research directions are suggested.

Keywords

Utilitarian motives; Hedonic Motives; Privacy Concerns; Knowledge sharing; Enterprise Social System; Employee Productivity; SMEs; Malaysia

1. Introduction

Social media has been bridging gaps between people from all over the world, bringing them closer together, diminishing the boundaries of time and distance, and connecting everyone in a virtual world. This enables the exchange of information, interactivity, and bonding (Leidner et al., 2018). Companies have long been realizing the benefits of ESN (enterprise social networks) that are aimed at connecting employees and organization members. It is powered by social media technology utilizing enterprise 2.0 (based on various social platforms) to encourage employees to share information regarding their activities, views, and provide updates regarding ongoing in the organization (Alghamdi, 2018). Enterprise social system is based upon social collaborations among employees and management to improve productivity. Various studies suggest that companies that work on the improvement of the quality of work-life of their employees can reduce production costs, increase employee loyalty and commitment, and decrease turnover (Schwade & Schubert, 2017; Scuotto et al., 2020). Companies are therefore applying technologies such as ESS and ESN's to increase interactivity and achieve a competitive edge and improve the organization's communication levels (Erazo et al., 2020).

Covid-19 has created critical reliance on technologies and social networking services for organizations to continue to operate shifting most of their operations to be carried via work from home (Islam et al., 2020). The pandemic brought a lot of challenges and restrictions due to lockdowns, forcing companies to suspend face-to-face interactions between employees and managers (Anwar & Clauß, 2021). Therefore, companies responded by implementing various strategies that would not hinder overall companies' growth and productivity. This paper focuses on how pandemic has transformed the workplace in organizations through ESS so that employees can be encouraged to exhibit knowledge sharing behavior to improve productivity based on hedonic and utilitarian motivations in SMEs.

This study also explores the impact of privacy concerns on knowledge sharing through ESS use in employees and how in turn that impacts their productivity. One of the critical issues faced by SMEs amid pandemic was to continue operations and achieve organizational goals and maintain a minimum level of productivity among employees (Ballestar et al., 2020). As they already face challenges to maintain company's expenses and generate profits. Productivity relates to an aggregate output towards a single input in the production process over a specific time (Cao & Leung, 2020). Various studies have focused on factors affecting productivity especially due to the challenges faced such as technological changes, anxiety, stress, and factors like human capital, work environment, etc. (Dresch et al., 2019; Nyanga & Zirima, 2020).

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Hence this study is incremental in exploring how ESS impacts productivity in SMEs based on hedonic and utilitarian motivations, privacy concerns, and knowledge sharing. This study is vital in pointing out how knowledge sharing is carried on through ESS use in organizations. Knowledge sharing through ESS is based on integrating human capital, social capital, and organizational capital to increase innovation and interactivity (Alghamdi, 2018). Knowledge sharing is considered to be an important ingredient in achieving competitive advantage and achieving organizational goals (Cheng et al., 2019). Interactivity between employees brings them closer, bridges cultural gaps, and overcomes stereotypes to bring harmony and a sense of belongingness. Knowledge sharing improves social identity among employees. Social media supports informal communication between employees as individuals and in groups (Musa, 2019). Platforms like wikis, blogs, Facebook, WhatsApp, and Instagram facilitate knowledge-sharing behavior in employees (Ballestar et al., 2020). Hence in this study, we will explore its mediating role in improving productivity amid pandemic in SMEs, which has not previously been explored in literature.

Motivations play a vital role in predicting knowledge-sharing behavior in employees (Novela et al., 2020). This study investigates the impact of utilitarian motivation in employees of SMEs for knowledge sharing through ESS use to increase productivity (Arul Rajan, 2020). It is defined as functional goal-oriented behavior, that is focused on achieving extrinsic benefits by the customer, and task-related value of a shopping experience (Scott et al., 2016). About employees usually is related to employees engaging in task-related performance for extrinsic rewards and benefits (Leidner et al., 2018). ESS can play a vital role in motivating employees for knowledge sharing by providing appraisal and rewards for user engagement. Whereas hedonic motivations are targeted more towards intrinsic benefits such as enjoyment, self-efficacy, and simulation (Siyal et al., 2020). Individuals exhibiting this trait usually require sensory experiences for affective engagement in knowledge-sharing behavior. ESS can increase the hedonic motivations of employees by utilizing audio, video, instant messaging, visuals, pop-ups, etc. Arousing excitement and interest in employees motivate them to interact frequently with others (Al-Azawei & Alowayr, 2020). Social media has been found to promote and empower self-love and positive self-image through the use of filters, check-ins, likes and comments to provide supportive interaction in individuals (Chin et al., 2015). Hence, in this study, we will explore how hedonic motivations can impact knowledge sharing through ESS in employees that in turn can impact their productivity.

Finally, this study explores the impact of privacy concerns on the knowledge-sharing behavior of employees through ESS. As social media is considered to be a platform for making friends and entertainment, most employees feel reluctant to share knowledge regarding official matters (Shojaifar, 2020). Also due to the increasing rate of cybercrime, and issues regarding cybersecurity SMEs are facing issues to promote knowledge sharing behavior in individuals (Alismaili et al., 2020). Therefore, in this study, we will explore how privacy concerns can impact knowledge sharing through ESS especially as Covid-19 requires continuous exchange of critical information through online medium.

This study is conducted in Malaysia, where data is collected from various SMEs operating in Kuala Lumpur and Selangor cities of Malaysia. Malaysia is one of the rising economies in today's world and is considered a backbone of Asian economic development (Dresch et al., 2019). There is a major sector of SMEs contributing to approximately 36.6% GDP operating in various industries (Musa, 2019). These SMEs are applying technologies to improve services and increase productivity, multiple SMEs have shifted to ESS and ESN to improve the interactivity between employees during covid-19. Hence, this study will explore how ESS can help improve productivity in Malaysian SMEs.

This study utilizes McClelland's theory of acquired needs, which focuses on the concept that people development needs through their experiences acquired during social interaction (Pelton et al., 2020). These needs are divided into achievement, affiliation, and power and determine major behaviors in employees such as knowledge sharing behavior (Winskell, 2021). In the context of this study employee, utilitarian motivations deal with extrinsic benefits such as influence and power, whereas hedonic motivations focused on social affiliations and interpersonal relationships developed through interaction over ESS. Which in turn promotes knowledge-sharing behavior and in turn leads to increase in overall productivity of organization.

This study is highly significant, for exploring knowledge sharing through ESS use in employees of SMEs, especially during Covid-19. Then this study contributes to the literature by utilizing the theory of acquired needs to explain how hedonic and utilitarian motivations impact knowledge sharing through ESS. This study is also vital in exploring the role of productivity in SMEs due to knowledge sharing which very few studies have previously explored. Also, a very critical factor that impacts knowledge sharing through technologies is the privacy concerns of employees.

Finally, most previous studies have explored utilitarian and hedonic motivations to customers and their shopping behavior but this study explored these motivations for knowledge sharing behavior in employees through ESS use which has rarely been done in previous studies.

2. Review of literature and framework development

2.1. Research theory

This study is supported by the theory of acquired needs which suggests that employee's performance is based on three needs that motivate them to put effort into their work such as knowledge sharing behavior. These three needs are categorized as achievement, affiliation, and power (Shimizu, 2007). Achievement-oriented employees are driven by the desire for mastery and prefer challenging tasks that can increase their sense of satisfaction (Jackler et al., 2015a). Hence in the context of this study, employees that are achievement-oriented follow hedonic motivation, because it enhances their self-worth while leading to an increase in their overall productivity through knowledge sharing. Secondly, employees that are affiliation-motivated, will require to maintain social relationships (Solomon, 1980). Hence software and networks that connect people and employees and bring them closer together increase their knowledge sharing, which in this study is investigated for enterprise social system. Finally, there is a need for power that is determined by the desire for position, authority, and status. The employees that are power-oriented enjoy work and place a high value on discipline (Pelton et al., 2020). Thus, they are motivated by job title, monetary rewards, recognition, etc that depicts utilitarian motivation in the context of this study. Although employees might exhibit more than one need at a time and could be driven by various motives at the same time, hence we will utilize this study to investigate in detail how productivity of employees is affected by knowledge-sharing behavior, and how different motivations and privacy concerns affect it.

2.2. *Hypothesis development*

2.2.1. Utilitarian motivation – Knowledge sharing through ESS use

ESS comprises various tools that are divergent based on organization needs, nature, and structure (Parsons et al., 2013). These include various telecommunication systems, location trackers, chatting tools, and web conferencing (Ridwan, 2018). The main aim of any of these tools and app is to promote knowledge sharing in employees. Previous studies indicate that utilitarian motives with technology use are derived from earning points, getting promoted, or earning a higher status in an organization (Uhlaner et al., 2013; Yeon et al., 2016). Literature suggests that utilitarian motivation encourages employees to engage in knowledge-sharing behavior since that earns them regard and recognition in eyes of supervisors and senior management (Pöyry et al., 2013). ESS also enables employees to share and exchange information with more ease and saves time and effort required to perform tasks alone, as a group sharing information benefits others and improves teamwork (Chun et al., 2012). Also, there is evidence from a theory of acquired needs that employees that are extroverted and possess a need for affiliation and recognition, require continuous feedback from their peers and supervisors (Chang et al., 2014). Hence, we can propose that utilitarian motivation positively impacts knowledge sharing through ESS use in SMEs.

H1a: Utilitarian motivation is positively associated with knowledge sharing through ESS use.

2.2.2. Hedonic motivation – Knowledge sharing through ESS use

Research shows that hedonic motivations for technology use come in the form of fun and joy experienced during social interaction on various SNS (Chang et al., 2014). Social media has been associated previously with feelings of happiness, excitement, and calmness, when users interact through messaging, exploring, and status updates (Baabdullah, 2018). Literature suggests that positive interactions on social media also help reduce feelings of stress, anxiety, and alienation (Kwahk & Park, 2016b). Hence users tend to express themselves more frequently because it gives the feeling of accomplishment and strengthens their self-worth. Hedonic motivation has been explored previously to be linked with pleasurable activity, additional enjoyment that comes from online consumption, and impulsive buying (Scott et al., 2016). Researchers also support that incorporation of social networks in the working environment increases the hedonic motivation of employees to participate actively and help others (Pöyry et al., 2013). Employees can freely express themselves and share their ideas and knowledge regarding various issues faced by the organization and co-workers (Siyal et al., 2020). This provides them with feelings of gratitude and satisfaction. Hence hedonic motivation improves knowledge sharing through ESS use, therefore we can say that;

H2a: Hedonic motivation is positively associated with knowledge sharing through ESS use.

2.2.3. Privacy concerns – Knowledge sharing through ESS use

Recent studies are highlighting user's privacy concerns with the frequent use of technology in organizations to record, share and exchange information (Kehr et al., 2015). As companies are continuously increasing the use of technology to monitor, access, and analyze how employees are utilizing and exchanging information with each other, employees fear for breach in privacy, as many conversations are informal between peers (Park, 2013). Studies suggest that companies are utilizing security strategies for knowledge management that include the policies and procedures that an organization sets in place for secure data

and information sharing as well as protecting intellectual property (Li, 2014; Mohamed & Ahmad, 2012). Employee's fear of breach of privacy, perceived insecurity about important ideas, or data being mishandled can hinder employee's knowledge sharing and promote knowledge hiding behavior (Xu et al., 2012). Employees that will have greater privacy concerns especially regarding how the information shared by them is analyzed, perceived, and accessed, can prevent them from sharing knowledge through ESS use (Wottrich et al., 2017). Hence based on this discussion we can propose that,

H3a: Privacy concerns are negatively associated with knowledge sharing through ESS use.

2.2.4. Knowledge sharing through ESS use – Employee productivity in SMEs

Employee productivity has been measured in various ways in literature in terms of the training time, the average productivity of each employee per hour, units produced in terms of inputs invested, items per unit sold, and targets achieved in terms of working hours invested (Dorward, 2013). Knowledge sharing through external collaboration between stakeholders, supervisors, subordinates, and employees improves the decision-making capability of an organization and in turn, helps enhances their productivity (Aboelmaged, 2018). Knowledge sharing has always been linked to lead towards innovation, creativity, and in turn a source of achieving competitive advantage (Liao et al., 2013). Since employees share various ideas and solutions to challenging tasks, future goals, and new trends presiding in the marketplace. Literature also indicates that knowledge sharing also helps improve the problem-solving skills of employees (Wuryaningrat, 2013). Previous research also indicates strong evidence that knowledge sharing is based on trust and loyalty towards the organization, which in turn increases employee productivity (Wang et al., 2014). Social networks such as ESN and ESS in organizations help improve employee's work synergy, improve job performance, and customer relationship management (Aboelmaged, 2018). Since increased interaction allows to resolve conflicts, come over personal grudges, and develop bonding with fellow workers to contribute towards organizational goals.

H4: Knowledge sharing through ESS use is positively associated with employee productivity in SMEs.

Mediation Analysis

2.2.5. Utilitarian motivation – Knowledge sharing through ESS use – Employee productivity

Research suggests that employee job performance is based upon various motivations to achieve organization set goals and objectives that are related to improving employee's productivity (Davis et al., 2012). Utilitarian motivation has been linked to positive collaborative consumption, job-specific, and cost-effective characteristics of product services (Gerow et al., 2013). The theory of acquired needs suggests that achievement-oriented employees highly focus on increasing their productivity levels to earn rewards and benefits from supervisors (Jackler et al., 2015b).

Hence utilitarian motivation helps encourage employees to polish their skills and abilities to increase their task performance (Chun et al., 2012). Studies also support that utilitarian motivation is focused on the achievement of useful outcomes, and hence is a strong predictor of individual work-related behavior (Kim & Hall, 2019; Meske et al., 2019). Employees that are motivated based on this aspect desire financial rewards that help them increase their productivity and the efforts directed towards increasing pay per performance (Wu & Ma, 2015). Also, previous studies support that utilitarian motivation has stronger predictability towards success in task completion compared to hedonic motivation (Deng, 2013). Hence we can propose that employees exhibiting utilitarian motivation can increase their productivity in SMEs.

Knowledge sharing through ESS enables companies to seamlessly adapt towards changes occurring in their intrinsic and extrinsic environment, through timely knowledge (Kosonen et al., 2019). Knowledge management system creates databases that can be utilized to formulate various contingency plans for what-if scenarios occurring in the organization to help them compete in evolving marketplace (Liao et al., 2013). Since ESS also utilizes web 2.0 and social media networks, that enable idea generation through blogs, posts, and web interface groups (Qin et al., 2008). This allows companies to increase productivity by saving costs and time related to traditional R&D by taking advantage of the information shared by employees (Kwahk & Park, 2016a). Systems that are technology-based and reward employees for their knowledge sharing in terms of monetary incentives, promotions, and leisure trips are better in improving the knowledge sharing behavior of employees (Meske et al., 2019). As these technology-based systems target the utilitarian motivation of their employees by rewarding their knowledge-sharing behavior they are better able to promote competition among employees and hence increase productivity (Nyanga & Zirima, 2020). Hence, we can propose that knowledge sharing through ESS use mediates between employee's utilitarian motivation and productivity.

H1b: Knowledge sharing through ESS use mediates the relationship between utilitarian motivation and employee productivity

in SMEs.

2.2.6. Hedonic motivation – Knowledge sharing through ESS use – Employee productivity

Studies relating to technology adaptation and consumer purchase decisions have often investigated hedonic and utilitarian motivations (Sharif & Raza, 2017). Most studies conducted analyzed them into intrinsic and extrinsic motivation for information systems and intentions to use computer tools for productivity gains (Knox et al., 2012). Hedonic motivation has been linked to user's experience related to using of specific technology, process, and job task that arouses positive feelings of fun and enjoyment (Tamilmani et al., 2019). As goal orientation and task achievement poises stress and creates anxiety for employees, hedonic motivation can help reduce it since individuals exhibiting this trait will derive positive experiences for achieving certain performance levels. Especially for today's challenging work environment in presence of the Covid-19 pandemic and most revolving work routines and process individuals that work based on achievement-oriented and gaining self-fulfillment can help improve their productivity (Galvani et al., 2020). Although previous research indicates that hedonic motivation plays a weaker part in employee goal achievement, individuals exhibiting hedonic traits seeking leisure can help show persistent work outcomes (Baabdullah, 2018; Siyal et al., 2020).

Hedonic motivations are based on a perceived sense of accomplishment due to finding interest and satisfaction in conducting a task (Ramkissoon & Uysal, 2011). Since social media networks are known for acting as a source of entertainment and relaxation for their users, whereas being truly formulated to function as information sharing platforms in an interesting and captivating way (Chu et al., 2020). Users share information regarding their activities, interests, aspirations, and accomplishments to gain positive feedback from others in the form of likes, posts, and shares (Kiani & Laroche, 2019). Also, with a single click, the user can collect information on various topics of interest, so in today's world, social media acts as an efficient tool for information sharing for politics, celebrities, sports, social and cultural issues, and plus technological advancements (Rihova et al., 2019).

Hence, the ESS system can help provide a source of leisure activities to provide a break to employees where they can exchange information with others based on their interests and motivations this, in turn, promotes their knowledge-sharing behavior (Kolar & Zabkar, 2010). Research also indicates that Hedonic motivation hence then helps increase employee productivity (Lehtomaa & Resnick, 2020). We can predict that,

H2b: Knowledge sharing through ESS use mediates the relationship between hedonic motivation and employee productivity in SMEs.

2.2.7. The mediating role of knowledge sharing through ESS use between privacy concerns and employee productivity

Privacy concerns are related to security issues faced by the employees, stakeholders, and the company in terms of behavior-related variables, in terms of willingness to disclose personal information, intention to transact, and information disclosure behavior (Kehr et al., 2015). Research has focused on how privacy assurance and company policy can help reduce employee's perception of insecurity and privacy concerns (Baillette & Barlette, 2017). Most of the researchers have found that privacy concerns are usually situation-specific than dispositional that are usually related to information disclosure (Sun et al., 2015). Whereas employee productivity is based upon fostering creativity, learning, and wellbeing of employees (Lawry et al., 2017). Privacy concerns arise due to a lack of transparency in the company's policies and practices about their knowledge management systems and how information is collected and utilized (Erazo et al., 2020). When employees have privacy concerns they will not be willing to share important information or participate in group-based activities that require sharing ideas and knowledge (Liao et al., 2013). Which in turn will affect their mental well-being and hence impact their task performance reducing overall productivity (Bano et al., 2019).

Recent studies show that software that is being utilized to monitor employee's productivity levels in assembly lines, work from home, and sales measures are increasing employee's work level stress (Jiang et al., 2019). Employees are being recorded through cameras, their online trafficking is being monitored to analyze how much time they are investing in achieving work-related objectives while surfing online (Stone & Logan, 2018). Also, ESN and other in-house networks are being monitored by companies to reduce non-work-related activities such as cyberloafing by employees (Capatina et al., 2020).

Research indicates that companies lose millions due to employees engaging in non-work-related activities, informal conversations, and social media use for personal entertainment (Ambrosini et al., 2019). Hence they are increasing employee monitoring to access their knowledge sharing behavior, this is causing an increase of privacy concerns in employees which in turn is leading to reduced productivity (Xue & Qiu, 2020). As employees are working under fear of breach of privacy and loss

of personal data (Ridwan, 2018). Cybercrimes are also one of the major reasons for increasing privacy concerns for employees and affecting their performance levels (Aizenkot & Kashy-Rosenbaum, 2019). Hence we can predict that,

H3b: Knowledge sharing through ESS use mediates the relationship between privacy concerns and employee productivity in SMEs.
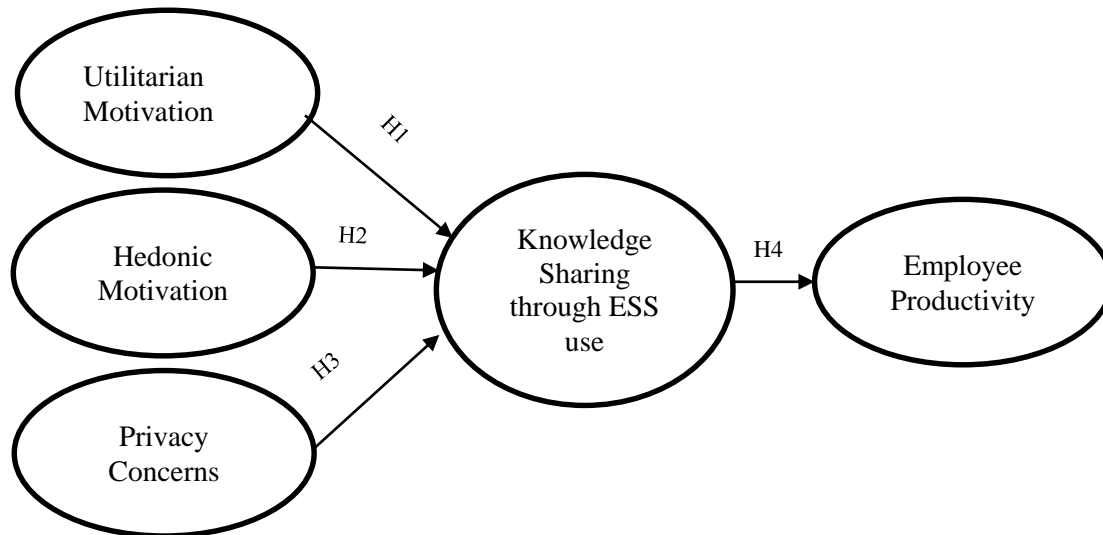
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                                    H1
   ╭─────────────╮
   │ Utilitarian │ ────────╮
   │ Motivation  │         │
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   ╭─────────────╮    │  Knowledge   │    H4    │              │
   │  Hedonic    │ ──▶│   Sharing    │ ───────▶ │  Employee    │
   │ Motivation  │ H2 │ through ESS  │          │ Productivity │
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   │  Privacy    │ ───╯ H3
   │  Concerns   │
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Figure 1: Proposed Research Framework

3. Methodology

3.1. Research setting

The data for this study was collected from Kuala Lumpur and Selangor, as they constitute the highest number of SMEs in Malaysia. Among these, the largest number of SMEs in Malaysia are from the service sector, although most of them are not registered under HRDF. SME employers have invested in 158 SME development programmers the amount of RM14.3 billion, for innovation and technology-related programmers in the year 2018 with the support of the Malaysian government in form of various short-term loans. The main source of information for the frame was from the companies' Commission of Malaysia (SSM). Apart from the SSM, information on the frame was also updated from other sources such as from Malaysian industrial development authority (MIDA), Ministry of agriculture and agro-based industry (MOA), construction industry development board, Malaysia (CIDB), minerals & geosciences department, Malaysia (JMG), department of electricity and gas supply, various businesses and trade associations, newspaper advertisements and websites.

3.2. Sampling

The study methodology was based on a quantitative survey, where data was collected from various employees of SMEs based in Kuala Lumpur and Selangor. The data collection was done based on those SME's that have incorporated some form of enterprise social system or network to collaborate with employees. Out of total SMEs in Malaysia, 19.8% reside in Selangor, and 14.7% in WP Kuala Lumpur. In the services sector, the majority of SMEs are predominantly in the distributive trade sub-sector (wholesale & retail trade services) including repair of motor vehicles & motorcycles, followed by food & beverages services and transportation & storages services. Since the service sector was the major sector occupied by SME's in Malaysia therefore it was chosen for data collection and out of this wholesale and retail trade service was chosen. There were a total of 6100 SME's doing wholesale and trade in Selangor and 5863 in WP Kuala Lumpur. Out of these 500, SME's were chosen for data collection, based on the condition that they were implementing web 2.0 utilizing Facebook, WhatsApp, Twitter, and Instagram for collaboration and knowledge sharing.

3.3. The procedure of data collection

In the first step, the consent of the administration was obtained to collect the data, and those that agreed were asked to provide a list of employees along with their email ids. Afterword's official consent forms were obtained from human resource departments and the objectives of the study were shared. The researcher personally visited the SME's strictly following all the SOP's, to obtain consent forms and permission to conduct the survey. Finally, 279 out of 500 firms agreed to provide data from their employees through an online survey form. The data was collected using random sampling, as each company provided a list of employees that were willing to participate in the survey after confidentiality was assured regarding the data provided. The survey was administered online by circulating the questionnaire through email of randomly selected employees from the company-provided list. This was done due to Covid-19 policies ensuring social distance and prohibiting face-to-face interaction with employees, and because there was a large number of respondents therefore online survey was easy to administer to save cost and time. The questionnaire was divided into two sections demographics and study constructs. The first part consisted of demographics that asked information about age, gender, type of industry, SME work experience, and the current ESS being used for collaboration and communication. Whereas the second part consisted of study items and constructs. The survey was distributed through email among 1000 employees of selected SMEs, 500 in Kuala Lumpur and 500 in Selangor, that were operating in the whole trade sector, that were randomly selected. Out of a total 470 responses were received. Out of which 352 were usable after screening for outliers and missing values. Therefore, receiving a response rate of 47% in total.

3.4. Measures and scales

The items were all measured on a Likert scale 1= strongly disagree to 5= strongly agree. The utilitarian motivation was measured using three items that reflect competency, rewarding, and obtaining an upgrade adapted from Kim et al. (2011) and Li and Mao (2015). Then hedonic motivations were investigated utilizing three items that reflect pleasure, fun, happiness, and enjoyment. The items are adapted from Chang et al. (2014) and Ozturk et al. (2016). Privacy concerns were measured using three items regarding concern about organization use of ESS for knowledge sharing and employee fear for privacy issues adapted from Fogel and Nehmad (2009). Knowledge sharing through ESS use is represented internally by three items involving coworkers, managers, and subordinates, and externally by an additional three items from Kuegler et al. (2015). The Productivity for SMEs was utilized to measure the role of ESS in improving job performance, work assignments, effectiveness, and efficiency from Thom-Santelli et al. (2011).

4. Results

4.1. Descriptive Statistics

Table 1 demonstrates that participants represent a wide variety of industries with the majority representing hotel/travel (37%), ICT (29%), construction, manufacturing, and retail (9%), and accounting & finance (3%). The majority are male (75%) and in the age group of 31 – 40 (45%, followed by 38% in the age group of 25 – 30. The great majority of respondents had over 4 – 6 (40%) years and over 2 – 4 years of experience in using ESS, making this a suitable example since respondents are typically aware of the enterprise social system. A number of respondents utilize conventional ESNs, such as Facebook (30%), LinkedIn (22%), Instagram (15%), WhatsApp (12%), and Twitter (9%). Fair representation of other professional ESN systems, such as SharePoint (6%), and Exo platform (4%) is also found.

Table 1: Descriptive Statistics

Measure	Group	Frequency	Percent
Gender	Female	89	25%
	Male	263	75%
Age	25-30	135	38%
	31-40	159	45%
	41-55	58	16%
Type of Industry	Manufacturing	30	9%
	ICT	101	29%
	Hotel/Travel	131	37%
	Retail	30	9%
	Acc. & Finance	10	3%

	Construction	30	9%
	Others	20	6%
	0 –2 year	49	14%
	2 –4 year	101	29%
ESS Experience	4 – 6 years	142	40%
	>6 years	60	17%
	Instagram	52	15%
	LinkedIn	78	22%
	Facebook	105	30%
	WhatsApp	42	12%
ESS Use	Twitter	30	9%
	SharePoint	20	6%
	eXo Platform	15	4%
	Others	10	3%

4.2. Analysis Methods

In this work, the proposed hypotheses were analyzed by structural equation modelling (SEM). To assess the reliability and validity of the constructs and items, SmartPLS 3.1 was also employed for confirmative factor analyses. This survey includes 352 respondents that comply with the preliminary research recommendations to employ more than 200 respondents for precise SEM (Anderson & Gerbing, 1988).

4.3. Reliability and Validity Analysis

To assess the reliability and validity of the measures, the values of Cronbach's alpha and composite construct reliability have been computed. Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy showed an acceptable value .836 higher than the suggested benchmark i.e. > .6 (Kaiser, 1974). In earlier investigations, values larger than .70 for Cronbach Alpha and factor loading values larger than 0.50 have been shown to imply internal and convergent confidence (Churchill, 1979). The values of average variance extracted (AVE) values are also greater than .50 that meets the suggested benchmark (Fornell & Larcker, 1981). The present study, therefore, fulfilled the necessary reliability values (Table 2).

Table 2: Reliability and Validity

Variables	Items	Cronbach's Alpha	Factor Loading	Composite Reliability	Average Variance Extracted
Utilitarian Motivation	UM1	.823	.88	.901	.752
	UM2		.83		
	UM3		.89		
Hedonic Motivation	HM1	.753	.76	.869	.689
	HM2		.85		
	HM3		.87		
Privacy Concerns	PC1	.786	.84	.800	.574
	PC2		.73		
	PC3		.68		
Knowledge Sharing	KS1	.892	.74	.878	.431
	KS2		.88		
	KS3		.89		
Productivity	Pro1	.812	.76	.863	.819
	Pro2		.71		
	Pro3		.78		
	Pro4		.87		

Discriminating validity is confirmed where the square root of the average extracted variance (AVE) of all constructs should be more than the correlation values between both constructs. The results have shown that all values fulfill these

discriminant validity recommendations (Table 3).

Table 3. Discriminant Validity

	1	2	3	4	5
Utilitarian Motivation	**.87**				
Hedonic Motivation	.461*	**.83**			
Privacy Concerns	.543*	.345**	**.76**		
Knowledge Sharing through ESS use	.243**	.234**	.342*	**.72**	
Productivity	.154**	.134*	.123**	.324*	**.91**

4.4. Hypothesis Testing

This study examined structural linkages by testing the assumptions contained in the research model. As presented in Table 4, the results statistically confirmed all postulated causal linkages. Utilitarian motivation had a significant impact on knowledge sharing through ESS use (H1a, β =.243, p = .05, t = 1.976). In comparison to the modest effects of H1a, a highly significant impact of Hedonic motivation on knowledge sharing through ESS use was found (H2a, β =.421, p = .000, t = 4.854). Similarly, privacy concerns had a significant negative effect on knowledge sharing through ESS use (H3a β = -.54, p = .000). Furthermore, knowledge sharing through ESS use significantly impacts employee productivity (H4, β =.612, p = .000, t = 6.51). The findings show that all hypotheses proposed for direct relationships in the original model were accepted.

Additionally, all postulated relationships involving mediating variables were also supported. Knowledge sharing through ESS use significantly mediate the relationship between utilitarian motivation and employee productivity (H1b, β =.314, p = .000, t = 4.232). Similarly, hedonic motivation and employee productivity also exhibited a substantial mediation of knowledge sharing through ESS use (H2b, β =.235, p = .001, t = 2.312). Lastly, significant mediation of knowledge sharing through ESS use between privacy concerns and employee productivity supports the H3b (H3b, β =.421, p = .000, t = 5.234).

By examining the variances of the suggested model's constructs, we discover that utilitarian motivation, hedonic motivation, and privacy concerns explained 42.1% of the variation in knowledge sharing through ESS use. Additionally, 35.4% of the variation in employee productivity was found by knowledge sharing through the ESS use construct.

Table 4. Hypotheses Results

Hypotheses	Standardized Coefficient	T – Statistics	P Values	Results
H1a. Utilitarian Motivation --> Knowledge Sharing through ESS use	.243	1.976	.05	Supported
H2a. Hedonic Motivation -> Knowledge Sharing through ESS use	.421	4.854	.000	Supported
H3a. Privacy Concerns -> Knowledge Sharing through ESS use	-.54	3.499	.000	Supported
H4. Knowledge Sharing through ESS use -> Productivity	.61	6.5	.000	Supported
H1a. Utilitarian Motivation -> Knowledge Sharing through ESS use -> Productivity	.314	4.232	.000	Supported
H2a. Hedonic Motivation -> Knowledge Sharing through ESS use -> Productivity	.235	2.312	.001	Supported
H3a. Privacy Concerns -> Knowledge Sharing through ESS use -> Productivity	.421	5.234	.000	Supported

5. Discussion

The main objective of this study was to investigate how knowledge sharing through ESS use is facilitating SMEs to increase their productivity based on hedonic, utilitarian, and privacy concerns. For this purpose, data were collected from SME's operating in the cities of Kuala Lumpur and Selangor in Malaysia. Malaysia is one of the rising and powerful economies of

Asia, and most of its business establishments that is 98.5% are SMEs (Musa, 2019). These SMEs contribute 6.12% of GDP and 3.43 % of exports of the country (Mohamed & Ahmad, 2012). These SMEs are also a major source for employing the country and constitute an increase of 0.73% per year in employment (Ramayah et al., 2020). These are categorized on business sales, turnover, and number of full-time employees. The highest concentration number among SMEs is in Selangor, followed by Kuala Lumpur, which is made up of more than one-third of the total SMEs. Based on HRDF database, computer industry (12.6%), freight forwarder (6.7%) and engineering support & maintenance (6.6%) are among the subsectors with the highest number of HRDF registered employers in Klan Valley (Yuen & Ng, 2021).

The main objective is knowledge sharing through a single platform where employees can interact for file sharing, collaborative planning, interactions through social profiles, calendars and schedules, content management systems, and Location trackers. Enterprise social system is aimed to increase collaboration between internal and external stakeholders of the organization (Islam et al., 2020). Since Malaysia business sector is highly formulated of SME's that are adopting technologies to increase their productivity and decrease costs, hence it was chosen for collecting data especially in the context of Covid-19 as it has brought many challenges for SME's, in the form of layoffs and work-from-home, lack of budgets, restricted operations, etc. (Anwar & Clauß, 2021). Therefore, the Malaysian government is providing incentives through BNM funds for SMEs for sustaining business operations and maintain productivity levels. Recent statistics show that 2019 recorded the highest increase in terms of percentage share of SMEs were Kuala Lumpur (+1.6 percentage points) and Pulau Pinang (+1.1 percentage points) (Ruan et al., 2021).

The study results show that there is a strong positive association between utilitarian motivation and knowledge sharing through ESS use in SMEs. As utilitarian motivation is based upon power-based needs that require constant feedback, rewards, and status in the organization. Hence ESS systems that support and encourage employee recognition based on knowledge contribution seem to increase the knowledge sharing behavior in employees and turn enhance their productivity (Meske et al., 2019). This is also supported through a theory of acquired needs that behaviors that are exhibited on certain needs will be reinforced in a positive manner provided that those needs are fulfilled (Pelton et al., 2020). Hence as the study results show that employees exhibiting utilitarian motivation will show a higher level of productivity, since they will be focused on goal achievement to earn the benefits of doing so for example getting a bonus, salary raise, paid holiday, and various other attractive incentives.

The study results show that there is a positive association between hedonic motivation and employee knowledge-sharing behavior through ESS use. As discussed earlier that collaboration through the ESS system enhances employee's supportive interaction with peers and external stakeholders which arouses a sense of pleasure and excitement (Saleh, 2019). Also, social updates, status updates, feedback in form of likes and shares, and videos and images help increase feelings of fun and enjoyment in the users (Leidner et al., 2018). Therefore, our study results confirm to previous studies that knowledge sharing through ESS use is positively linked with hedonic motivation (Chun et al., 2012; Li & Mao, 2015). Also, in line with previous literature, the study results show that there is a positive association between hedonic motivation and productivity in SME's employees, although not as strong as utilitarian motivation (Al-Azawei & Alowayr, 2020; Baabdullah, 2018). This is because hedonic motivation is based on a sense of pleasure and fun attained by doing a task, and since certain tasks require rigor, effort, and hard work some employees may not find it fun.

Then this study was very vital in exploring the role of privacy concerns, and their impact on employee knowledge sharing behavior through ESS use, and productivity. Covid-19 has created various challenges for companies including screening and monitoring of employees to keep in check for output and productivity (Nyanga & Zirima, 2020). For this purpose, companies are using cameras, software, and other technologies to monitor how employees are utilizing time and resources to achieve necessary targets(Anwar & Clauß, 2021). Such measures have been taken previously as well before the advent of the pandemic, as in measuring in various assembly lines and online checking through enterprise social systems to monitor activity etc. (Xue & Qiu, 2020). This puts stress on employees and many of them see it as an invasion of their privacy which makes them reluctant towards knowledge sharing through ESS use (Wottrich et al., 2017). Also due to negative feelings towards the organization based on privacy concerns employee productivity is affected in a negative way i.e., it is decreased.

6. Theoretical contributions

This study contributes to the literature in various ways, first of all, this study investigates the role of ESS for knowledge sharing in SMEs, which has hardly been explored in previous literature. Then this study investigates the impact of privacy concerns that is relevant to excessive use of technologies that are based on information sharing between employees, peers, subordinates, customers, and external party stakeholders for collaboration. The researchers can benefit a lot from this study by utilizing how privacy concerns in organizations can decrease their productivity and knowledge sharing. Then this study utilizes the theory of acquired needs which has not been used previously to explore utilitarian and hedonic motivations for employee's

knowledge sharing through ESS and their productivity. The researchers can make use of this study to further explore how affiliation, power, and achievement needs impact motivations and productivity, and growth in organizations. This study also explores the mediating role of knowledge sharing through ESS use for investigating the impact of motivations and privacy concerns on productivity. As very few studies previously explored this relationship in the context of SMEs. Finally, this study is vital in exploring how Covid-19 has altered work behaviors and routines in organizations and which measures can ensure sustainable growth and productivity in these challenging times. As the study points out that companies can utilize ESN and web 2.0 to enhance interaction and increase productivity in employees for smoothly carrying out work routine from home saving time and money.

7. Practical Implications

There are various practical implications of this study as this study is conducted in Malaysia which is a major hub for SMEs and is known for providing a supportive environment for them to conduct business operations. As mentioned in the study the major sector of these SMEs is the service sector and hence it was chosen for the study. Government and policymakers can utilize this study to understand how the wholesale and trade sector in SMEs are utilizing technology to improve business outputs, improve communication, and decision making in organizations. The government and business entrepreneurs can utilize this study to make an informed decision about which sectors to target and promote for technology incorporation to enhance a system of social enterprise where employees can interact, share, and derive information anywhere, anytime. Secondly, the human resource and other administrators can utilize this study to formulate policies that address the privacy concerns of their employees to minimize their knowledge hiding and increase transparency and trust among them to help improve the overall productivity. Finally, managers can utilize this study to incorporate ways that reward positive behavior in employees such as knowledge sharing, through providing content feedback, recognition, salary raise, and other financial benefits. Along with this, the managers need to ensure to introduce ways of collaboration that maximize the hedonic motivation and feelings of pleasure based on the need for affiliation through platforms such as Instagram, Facebook, WhatsApp, etc. As social media networks can help enhance interactivity, data sharing, and problem-solving at the same time while caring for supportive communities based on constant feedback.

8. Limitations and Future Directions

This study covered in detail the impact of utilitarian and hedonic motivations along with privacy concerns on knowledge sharing. However, there are a few limitations the first one is that the study focused on employee concerns, whereas the supervisors and managers might also face challenges regarding employee knowledge sharing which can be studied in the future. Secondly, this study investigated privacy concerns, the future studies however can investigate how transparency and trust impact privacy concerns and knowledge sharing behavior in employees. Finally, this study focused on service sector in SMEs the future studies can investigate how knowledge sharing through ESS can impact competitor and customer and does this behavior by employees work in favour or against the advantage of the company.

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