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Review of Factors Influencing Employees' Willingness to Share Knowledge

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ABSTRACT

Effective management of knowledge is currently recognised as the foundation of any organisation to maximise its abilities and achieve business targets. Organisations strive to leverage knowledge stocks – mostly held in the minds of their individual employees – in order to create value and drive success. For organisations to promote effective knowledge management, they have to develop innovative methods to encourage knowledge sharing practices. Knowledge sharing (KS) is a vital organisational process which empowers individuals to confront challenges of uncertainty and complexity, instils best practices, and enables the transfer of knowledge between different parts of the organisation. Given the fact that knowledge is always a valuable asset, individuals tend to hoard knowledge for different reasons. Therefore, sharing knowledge is predominantly a voluntary process and only subject to the willingness of the individual to engage in the process. Studies have demonstrated that KS cannot be forced or mandated rather than fostered by facilitative efforts in order to motivate employees to share their tacit knowledge. The aim of the study is to evaluate the collective factors supporting the willingness of employees to share knowledge. After which, providing a summarised generic list of the terms illustrated throughout the extant literature. Previous research has shown that influencers such as the *'perceptions'* of organisational culture, trust, infrastructure, and leadership, are among the most prominent determinants of KS within the corporate environment. There are other extrinsic motivators and social-psychological forces that can contribute to the increase of the behaviour of KS. Technology advances are also considered as an enabler because it can help in both direct and indirect transfer of knowledge. The findings provide researchers with an overall topology of the factors of KS, and equally offer useful insights for managers seeking to enhance willingness to share knowledge within their firms.

Key Words: Willingness, Factors, Knowledge Sharing.

Introduction

In an ever competitive environment, knowledge and how knowledge is managed has become considerable interest from both managers and researchers. Knowledge is no longer recognised as just a resource but rather the fundamental organisational resource in today's knowledge economy (Nonaka & Takeuchi 1995). The knowledge resource, however, is mostly possessed by individual employees and is unique, difficult to replicate or substitute and can give added value to the overall organisational processes (Lin & Tang 2016). The management of knowledge is hence undoubtedly seen as a critical means to provide sustainable competitive advantage (Wang & Noe 2010; Anantamula & Kanungo 2010; Lee et al. 2005) in knowledge intensive organisations (Swart et al. 2014). Despite the past decades highlighting the importance of knowledge within the work place, 'knowledge' has been discussed for millennia, from Socrates conceptualising knowledge as a true belief (Faucher et al. 2008), to the modern recognised concept of 'justified true belief' (Nonaka et al. 2000). Knowledge is gained implicitly through experience, values, contextual information and expert insight that aid in the interpretation and incorporation of new experiences and information (Al-Alawi et al. 2007). Many organisation have now initiated Knowledge Management (KM) projects aiming to identify and exploit their knowledge assets to foster innovation and drive performance within their firms. KM can be defined as "*[a] conscious strategy of getting the right knowledge to the right people at the right time and helping people share and put information into action in ways that strive to improve organisational performance*" (O'Dell et al. 1998). However, in order to accomplish this objective, employees must be willing to share knowledge, which is deeply embedded in their minds, with others through socialisation and codification processes, while they may not always be motivated to do so (O'Donohue et al. 2007). Therefore, the purpose of this paper is to highlight the diverse factors which influence the willingness to share knowledge within an organisational context and to provide a categorised overview of the antecedents of knowledge sharing reported in the extant KM literature.

Knowledge Sharing

Knowledge sharing (KS) has been defined throughout literature in numerous ways, but perhaps the most comprehensive definition comes from Lin (2007) who defines KS as *“a social interaction culture, involving the exchange of employee knowledge, experiences, and skills through the whole department or organisation.”* Knowledge sharing can be further simplified in that, it involves a set of behaviours that encourage the exchange of acquired knowledge between individuals and teams (Chow & Chan 2008). However, this exchange of knowledge can be described as being a personal act, which results in a mentally perceived value being attached to the leveraged knowledge (Swift et al. 2010; Davenport 1998). The perceived rewards attached to the motivational forces can be intrinsically based, being, for the pure enjoyment in helping others, or extrinsically based, relating to the expected organisational rewards and reciprocal benefits gained for a behaviour. (H.-F. Lin 2007; Ford & Staples 2010; Mansor et al. 2015). Thus, those who have the knowledge, recognise that their knowledge is a powerful resource (Jahani et al. 2011), which often creates a “knowledge is power” culture characterised by knowledge hoarding and competitive behaviour among individual’s (Plessis 2007). Organisations realise the power of knowledge and that the ‘exclusive ownership’ of this ‘power’ critically lies inside the individual (Nahapiet & Ghoshal 1998). As such, management have a need to leverage employees’ competitive advantage in order to strengthen organisational goals and objectives (Ling 2011). One theory which helps describe knowledge sharing behaviour is the Social Exchange Theory, (SET) which suggests that the *“wilful transfer of knowledge occurs where individuals interact under the expectation of reciprocal benefits in the future”* (Cabrera & Cabrera 2005; Casimir 2012). Knowledge sharing requires the individual to evaluate the opportunity cost and risk of the reciprocal exchange of knowledge (Ford & Staples 2010). Thus, KS requires an organisational climate in which the *knowers* are either intrinsically rewarded or extrinsically motivated to contribute to organisational knowledge flows (Osterloh & Frey 2000). Such environment ensures the sustainability of KS behaviour within the firm as SET also posits that *“the more often a particular action of a person is rewarded, the more likely the person is to perform that action”* (Emerson 1976).

Methodology – review of extant literature

To manage knowledge requires a multi-faceted approach, comprising of diverse components such as technology, human resource practices, organisational culture and culture (Plessis 2007). Therefore, journals’ from a wide variety of domains were examined. Based on the scope of peer-reviewed journals, articles relating to knowledge sharing within different organisational sectors were examined. This gave a cross dimensional view of the overall topic concerning the willingness to KS. Which in turn, allowed for a broad examination of previous literary research. A total of 112 articles were revised from 62 different journal sources. Of the 62 journals reviewed, 35 articles came from *“Journal of Knowledge Management”*. This journal was chosen as the main research source due to the assumption that it is grounded in human resources and organisational behaviour, information and knowledge management, which is specific to the knowledge management domain. Over a period of ten weeks, a theoretical examination of literatures relating to knowledge management, but specifically the willingness to KS was conducted. Terms involving or indicating factors which impact on, or influence the willingness to KS were highlighted and compiled into an Excel spread sheet. The examination of 112 articles identified a total of 512 terms pertaining to the sharing of knowledge. During the selection period of research, the 512 terms were then grouped into generic headings, which resulted in a total of 25 factors from the 512 terms. Each table is explained for the reader’s benefit of understanding, after which, the table may be viewed.

Table 1 lists all 25 factors in no specific order of importance. Each of the 25 factors has four columns: Column one, ‘Working Definition’, which is the understanding by the authors from all 112 articles examined. Column two, ‘Key Characteristics’, is a breakdown of the fundamental features of that factor. Column three, ‘Contributions to the Willingness to Share Knowledge’, is the affects that factor has on the willingness to share knowledge within an organisation. Finally, column four, ‘Example of Articles Reviewed’, are the key literature citations found throughout the research.

Table 1. 25 Categorized Factors.

Topology of Factors	Working Definition	Key Characteristics	Contributions to the Willingness to Share Knowledge	Example of Articles Reviewed
Organisational Culture	The norms, beliefs, values and practices adhered to by organisational members, in order to sustain and develop the firm's goals and objectives without adversely affecting the welfare of the organisation or its members. Within which, sub-cultures can develop.	Share philosophies, norms, beliefs, attitudes and business practices.	Consistency in behavioural approaches of KS initiatives which outlast the lifespan of employment.	(Davenport 1998; Al-Adaileh & Al-Atawi 2011; Luu 2016; Witherspoon et al. 2013; Wu & Lee 2016; Suppiah & Sandhu 2011)
Organisational Infrastructure	Coordinated approach by management to ensure that all members of staff continue the use of companywide programs, consisting of both the human factor and technological advancements	Coordination of work design. Working-procedural practices. Technological Tools.	Continuous improvements on existing and new working practices which enable KS and influence the willingness to share knowledge.	(Cabrera & Cabrera 2005; Gagné 2009; H.-F. Lin 2007; Mansor et al. 2015; Osterloh & Frey 2000)
National Culture	Deep rooted norms, beliefs, values, and customs developed over epoch within the population of a sovereign nation.	Uniqueness of cultured norms, beliefs, values, and customs. Group characteristics.	Added value to knowledge sharing techniques and protocol.	(Dulaimi 2007; Jiang et al. 2016; Lam & Lambermont-Ford 2010; Teng & Song 2011; Wang & Noe 2010)
Demographics	The state of a population based on the sex, age, race, socio-economic status, education, employment and income levels, among others.	Job tenure and job status within an organisation. Gender of employees. Turnover of staff members.	Master / apprentice knowledge sharing. Risk of losing knowledge due to retirement.	(Balogun & Adetula 2015; Cabrera & Cabrera 2005; Gagné 2009; Hoch 2014; Swart et al. 2014; Witherspoon et al. 2013)
Communication	The collaboration and reciprocation of ideas, experience, insight and know how through the interaction of two or more individuals be means of face-to-face or technological socialisation methods	Transparency between group members. Constructive criticism. Immediate flow of information and knowledge.	Ability to transfer knowledge which is identifiable to the knower and receiver. Increased reciprocal exchanges of tacit and explicit knowledge over time.	(Ford & Staples 2010; Amayah 2013; Nonaka et al. 2000; Goh & Sandhu 2013; Renzl 2008; van den Hooff & de Ridder 2004)
Leadership Traits	An individual, who influences, commands and monitors the development of employees' to fulfil and maintain a firm's goals and objectives. A leader's responsibilities encapsulate a firm's working philosophy.	Principal mentor and guide for organisational goals and objectives within the workplace through strong communication and participation skills.	Provide a safe and enjoyable working environment whereby the exchange of knowledge can occur with ease through empowering employees.	(Jahani et al. 2011; Lee et al. 2010; MacNeil 2003; Mittal & Dhar 2015; Wu & Lee 2016; Xue et al. 2011; Iske & Boersma 2005)
Reward	An intrinsic or extrinsic motivational catalyst which can influence a person's willingness to share their	A benefit which is intrinsic or extrinsic (or both) on reciprocal	Increases the motivation for employees' to be willing to part with	(Markova & Ford 2011; Liu & Fang 2010; O'Neill & Adya 2007; Šajeva 2014; Swift et

	skills, expertise and or knowledge with peer members within an organisation.	knowledge investment.	both their tacit and explicit knowledge.	al. 2010; Szulanski 1996; Tohidinia & Mosakhani 2010; Reychav & Weisberg 2010; Bloice & Burnett 2016; Hsiu Fen 2007)
Support	The ability for organisational leaders or co-workers to provide an environment, whereby individuals feel secure in the knowledge that their unique skills will not be adversely used against them.	Community wellbeing for all members of staff. Mutual care provided within a firm setting. Ongoing encouragement to fulfil daily tasks.	Reduces the fear of sharing unique knowledge. Increases social connections through supportive environments.	(Martins & Meyer 2012; C.-P. Lin 2007; Lilleoere & Hansen 2011; Paroutis & Al Saleh 2009)
Training	The ongoing development of individuals within an organisation to increase their skill set, to align with the firm's goals and objectives.	Sharing best practices within a group or towards an individual. Align working habits, routines and norms towards behaviour and rules.	Create a knowledge sharing culture through the use of ongoing training and mentoring initiatives. Influence an individual's scheme to leverage internal knowledge.	(Cabrera & Cabrera 2005; Chirawattanakij & Vathanophas 2016; De Long & Davenport 2003; van Dijk et al. 2016)
Transparency	A clear and open understanding of the objectives and aims of an organisation. Open and honest communication between individuals.	Honestly between groups of individuals. Free flowing communication between peer groups.	Allows for the building of trust which in turn may lead to increased willingness to KS. Aids in the building of relationships and networks.	(Casimir 2012; Lee et al. 2010; O'Neill & Adya 2007; Smith 2005)
Trust	The confidence that the reciprocal exchange between two parties will be met with a positive outcome for both. Trust that another individual will not do harm throughout a working lifespan.	Reliability of one person to another. Knowledge that fairness and honesty will be the resultant of exchanges.	Enables knowers of knowledge to share tacit as well as explicit knowledge more openly within both formal and informal social settings.	(Al-Adaileh & Al-Atawi 2011; Casimir 2012; Chow & Chan 2008; Holste & Fields 2010; Lee et al. 2010; Ling 2011; Rahman & Hussain 2014; Renzl 2008;
Social-Psychological Forces	External and internal forces which affect a group's or individual's view of themselves.	Human behaviour towards the self and peers. Positive and negative effects on the wellbeing of an individual or a group.	Positive social-psychological forces can encourage the willingness to KS. While negative social-psychological forces may cause perceived feelings of anxiety, vulnerability to an individual or group.	(Swift et al. 2010; Stenius et al. 2016; Cabrera & Cabrera 2005; Ford & Staples 2010; Gagné 2009)
Organisational Citizenship Behaviour	The behaviour of an individual which positively affects their peers and the organisation through a given behaviour.	Proactive approach to duties. Personal characteristics and values which may	Enables the smooth transfer of knowledge between individuals due to the individual aspect of the willingness to	(Barachini 2009; Martins & Meyer 2012; Hendriks 1999; Lotfi et al. 2016; Nonaka et al. 2000; Šajeva 2014)

		influence the outcome of a given task.	KS.	
Reciprocity	The mutual and social exchange of which the receiver is then indebted to the provider.	Perceived expectation of return benefits. Long term relationship bonding developed over time.	The continued cycle of knowledge sharing between peers which in turn will benefit the organisation.	(Barachini 2009; Bock et al. 2005; Tohidinia & Mosakhani 2010; Kuo 2013; Loebbecke et al. 2016; Cabrera & Cabrera 2005; Krok 2013; Heisig 2009)
Fairness	The perceived belief that equity is a key component of the organisation both from leaders and from peers.	Leniency in judgements brought on by strong relationships Heightened levels of trust. Increased levels of enjoyment in performing a task.	Positive perceptions of fairness increase the willingness to KS, while increasing the overall trust between those who share knowledge.	(Cabrera & Cabrera 2005; Holste & Fields 2010; Jiang et al. 2016; Lilleoere & Hansen 2011; MacNeil 2003; Amayah 2013)
Competence	The belief in the reliability of an outside source. The belief of a person's own capabilities to perform certain tasks successfully within an organisation.	Self-confident in a given task. Heightened self-efficacy in work surroundings.	The perception that the knowledge provided is from a competent and reliable source.	(Bock et al. 2005; Cabrera & Cabrera 2005; Chirawattanakij & Vathanophas 2016; Gagné 2009; Holste & Fields 2010;)
Reputation	The beliefs that other people or the individual hold about themselves, others and or an organisation.	Status within the organisation. Socially or organisationally assessed throughout the lifespan of an employee.	Improved reputation may lead to greater KS. By publicising KS contribution, increased KS activities may occur.	(Casimir 2012; Holste & Fields 2010; Witherspoon et al. 2013; O'Neill & Adya 2007; Liu & Fang 2010)
Perceptions	The way in which individuals or groups regard or interpret the actions and behaviour of themselves, another person/s, or an organisation.	Past or present experiences leading to the interpretation of the individual, person/s or the organisation.	Perceptions of KS activities can increase the willingness to KS between groups and amongst organisational settings.	(Connelly et al. 2014; Ford & Staples 2010; Garcia-perez & Ayres 2010; Mansor et al. 2015; Schauer et al. 2015; Šajeva 2014)
Psychological Contract	The belief of obligatory reciprocal actions between both the employee and the organisation.	Trust between both the individual and the organisation. A strong psychological contract has a strong influence on organisational citizenship behaviour.	Can lead to greater KS due to perceived membership to the organisation. Membership allows firms to leverage tacit knowledge	(Gagné 2009; Luu 2016; Šajeva 2014; Wu & Lee 2016; Lee & Ahn 2007; Nonaka et al. 2000; O'Donohue et al. 2007; O'Neill & Adya 2007)
Relationships	The development of shared values, norms and goals which create a common identity and clan like culture which is heightened by	Common identity and interests between two or more people. Long lasting	The social interaction developed through relationships can lead to improved story telling which	(Balogun & Adetula 2015; Bock et al. 2005; Nonaka et al. 2000; van Dijk et al. 2016; Xue et al. 2011; Vuori

	reciprocal endeavours. Which can facilitate the exchange of ideas and now how, to benefit both the individual and the organisation.	friendships which can solidify team cohesion and points of view.	can result in a smoother flow of knowledge due to common group identity.	& Okkonen 2012; Loebbecke et al. 2016)
Norms	The standards by which individuals or groups adhere to in their social cultural settings.	An understanding of how others behave in cultural settings. Develops planned behaviour which can influence future goals.	Norms within an organisation can influence the willingness to KS through standardised practices and intention.	(Bock et al. 2005; Pillet & Carillo 2016; O'Neill & Adya 2007; Teng & Song 2011; Amayah 2013; Witherspoon et al. 2013; Xue et al. 2011)
Beliefs	Trusting that something or someone is true without having definitive proof in the person, organisation or thing.	Trusting nature. Unconfirmed sureness in the ability of a person, organisation or thing (technology for example)	Having belief within an organisation can create commonality in the belief that KS is a recognised practice within the firm.	(Du et al. 2007; Martins & Meyer 2012; Evans 2012; H.-F. Lin 2007; Hsiu Fen 2007; Mansor et al. 2015)
Commitment	The dedication given by an individual or groups of individuals to a person, organisation or work practice.	Solidarity in goals and objectives. Participation within a group or with an individual.	May lead to KS since trust can be established and a feeling of care and attention is given to the knowledge knower.	(Al-Alawi et al. 2007; Du et al. 2012; Dulaimi 2007; Foos et al. 2006; Han et al. 2016; Peet 2012; Wu & Lee 2016)
Competition	The state in there is a perceived or real power struggle for reward or gains within an organisation.	Conflict and power plays within a group setting which can result in distrust. Perceived relative advantage for the knowledge knower.	In the context of KS, competition can be beneficial since conflict can create ideas through KS.	(Connelly et al. 2014; Goh & Sandhu 2013; Pillet & Carillo 2016; Lin & Lo 2015; Lilleoere & Hansen 2011; Nonaka et al. 2000; Osterloh & Frey 2000; Amayah 2013)
Information Communication Technology	Tools which enable the transfer of data, information and in some cases knowledge across space and time.	Reliable systems which create trust in the user and the receiver. Available access and retrieval points throughout the organisation Easy to use functionality.	Reduces time and space for the transfer of knowledge. Enables virtual communities to engage in KS activities.	(Du et al. 2007; Suppiah & Sandhu 2011; Witherspoon et al. 2013; H.-F. Lin 2007; Garcia-perez & Ayres 2010)

Source: Developed by Authors.

Conclusion

Fortune 500 are losing approximately \$31.5 billion per year due to employees failing to share knowledge (Myers 2015). Thus, the factors which influence employees' willingness to KS has given rise to increased interest within business. The paper has shown that while there is a plethora of factors, organisational competitiveness and innovation can only be achieved by recognising the importance of KS (Massa & Testa 2009). Through this recognition it can be argued that initiatives can be put in place to ensure that the right knowledge is shared by the right people at the right time (O'Dell & Grayson 1998) to limit the amount of knowledge loss accrued by employee disengagement or exiting the company.

The authors' also recognise that there is need for ongoing research within the area of the willingness to KS. However, this paper aids in the ongoing identification of factors influencing the willingness to KS, while providing a comprehensive corpus directory which can be used in future research. A total of 112 articles all relating to KS resulted in the taxonomy of 25 factors which will aid in the development of organisational strategies targeting knowledge holders. Creating more cost effective, and time reducing initiatives which can influence employees' willingness to share knowledge during their job life cycle. In effect, this will prevent organisations from 'reinventing the wheel', every time an employee leaves the company (Connelly et al. 2014). The extant literature indicates that there may be a cross-inter-relational dimension to the factors which may well compliment the varied knowledge management tools used for measuring and analysing knowledge throughout an organisation.

Limitations and future research

Given the nature of the research, the authors' recognise the extensive literature published within the domain of knowledge management and the willingness to KS. While the paper attempts to categorise as best as possible the factors which lead to the sharing of knowledge within an organisation, the paper also recognises that other peer reviewed works' may include new and differing research based results on the factors influencing employees' willingness to KS.

Future research will continue to cluster a comprehensive categorisation of the factors which influence the willingness to knowledge share. This will provide even further specific clarification on the factors which influence both the organisation and the individual within the organisation. This identification of germane themes will result in a framework which will clarify and highlight the crucial knowledge holders within the firm. Thus, identifying and recognising the factors which may be responsible for creating a knowledge hoarding culture. Finally, a full and comprehensive citation list of the 112 articles examined in this paper will follow in an upcoming as yet published article.

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