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AN INVESTIGATION OF INTRINSIC MOTIVATORS FOR
ORGANISATIONAL KNOWLEDGE SHARING

(Research in Progress)

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Abstract

Large investments into sophisticated knowledge management systems and repositories are not sufficient to transfer the knowledge held by individuals to organizational level. People are often reluctant to share their knowledge for various reasons, and a culture of knowledge hoarding is one of the largest obstacles to knowledge management. Since knowledge is personal, people cannot be forced to share their knowledge. Other ways have to be found to encourage people to voluntarily share their knowledge and support the systems in place. Prior research suggests that intrinsic motivators may be particularly important in encouraging voluntary behaviours such as knowledge sharing. This research-in-progress paper therefore proposes a conceptual model that brings together theoretical insights from motivational research, self-determination theory and the Theory of Reasoned Action to explain the influence of key intrinsic motivators (i.e. autonomy, self-efficacy, meaningfulness and impact) on knowledge sharing. The results are expected to indicate which of the motivators are most important in explaining knowledge sharing attitude, and behaviour.

Key words: knowledge sharing, intrinsic motivation, self-determination theory
1 INTRODUCTION

Although knowledge is considered one of the most important assets in organisations (Ipe, 2003; Levin & Cross, 2004) it is only in recent years that it has been acknowledged as a primary source of competitive advantage and as critical to long-term sustainability and success of organisations (Gagné, 2009; Ipe, 2003). Companies that are able to manage their collective expertise and knowledge effectively are therefore more likely to have a competitive edge by being more innovative, efficient and effective in the marketplace (Levin and Cross, 2004).

Practitioners claim that one of the largest hidden costs in organisations is underutilised knowledge (Sveiby & Simons, 2002). Organisations are therefore investing in knowledge management systems to more effectively manage the knowledge they have (Ipe, 2003). For example, an industry survey by KPMG (2000) reported that 62% of leading organisations in Europe and the USA were using or setting up some kind of knowledge management system. More recently, an AMR survey reported that demand for KM technologies had increased, with spending by US companies on KM software likely to hit $73b in 2007 rising by almost 16% in 2008 (McGeevy, 2007).

Knowledge management involves creating systems that enable organisations to tap into the knowledge, experiences and creativity of their staff to improve performance (Davidson & Voss, 2002). Many companies invest in knowledge repositories (Davenport & Prusak, 1998), which allow employees in an organisation to post documents that are accessible to all members of the group. Contributions to the knowledge repository are voluntary and include experiences, work methods, and improvement ideas. At the same time each member of the community is given free access to the contributions of others in order to maximise the distribution of new ideas (Cabrera et al., 2006). This process of creating organisational knowledge is therefore highly dependent on people’s willingness to share their knowledge and whether the knowledge held by individuals can move from the individual to the group and organisational level (Cabrera & Cabrera, 2005; Ipe, 2003). However, a key problem is that people are not always willing to share their knowledge (Gagné, 2009; Huber, 2001). Managers have identified “a culture of hoarding knowledge” as one of the largest obstacles to knowledge management (Sveiby & Simons, 2002, p. 421).

Research across different disciplines such as organizational behaviour and industrial psychology has emphasised the importance of motivation to address the problem of knowledge hoarding (Quigley et al., 2007; Bock et al., 2005). Such motivation can derive from different sources, such as external pressures or internal drivers (Calder & Staw, 1975; Osterloh & Frey, 2000; Ryan & Deci, 2000). In knowledge sharing, research has been done on the influence of external motivators such anticipated extrinsic rewards and anticipated reciprocal relationships on attitudes toward knowledge sharing (Bock et al., 2005). Since knowledge sharing behaviour is considered a voluntary and prosocial behaviour, intrinsic motivators are likely to be important also for knowledge sharing with some researchers suggesting that intrinsic motivation is the more important for knowledge sharing (Foss et al., 2009; Osterloh & Frey, 2000). This is still an emerging area of research with only a few studies considering the impact of one or two intrinsic motivators on knowledge sharing (Bock et al., 2002; Cabrera & Cabrera, 2005; Cabrera et al., 2006; Gagné, 2009; Lin, 2007). It is therefore the aim of this study to offer a more comprehensive view of the role of intrinsic motivation in knowledge sharing by identifying and assessing the role of key motivators in knowledge sharing.

2 KNOWLEDGE SHARING

Knowledge sharing is defined as “...the willingness of individuals in an organization to share with others the knowledge they have acquired or created” (Bock et al., 2005, p.88). “The willingness of individuals” implies a conscious and voluntary action to share. Since knowledge resides in people, only the owners of the knowledge know what knowledge objects they possess. Knowledge therefore remains personal until the knowledge owner decides to share it. Because it is impossible to enforce knowledge sharing, organisations are challenged to find ways to encourage employees to share their knowledge with each other and to foster employee motivation to share knowledge.
2.1 Motivation

Motivation is a central and recurring theme in psychology and organisational studies. Because motivation is at the core of activation and intention and has an outcome that produces certain kinds of behaviour, developing an understanding of motivation is essential to explaining individual and organisational behaviour (Grant, 2008b; Ryan & Deci, 2000).

Motivation refers to the psychological processes that give people the energy, direction, persistence and equifinality for action (Ryan and Deci, 2000). Although the term „motivation” is often used in a general sense, it can come from different sources, such as external pressures or internal drivers (Calder & Staw, 1975; Osterloh & Frey, 2000; Ryan & Deci, 2000). Extrinsically motivated individuals are more motivated engage in an activity to attain a positive or to avoid a negative external outcome; the underlying reason for behaviour in this case is that behaviour is instrumental in obtaining separate outcomes. In contrast, intrinsically motivated individuals engage in an activity for its own sake. The reason underlying the behaviour is inherent in the behaviour itself, because it is in line with their intrinsic interest and personal values (Ryan & Deci, 2000).

2.2 Intrinsic motivation and knowledge sharing

The behavioural view of organisations emphasises the importance of intrinsic motivation (Osterloh & Frey, 2000). Intrinsically motivated individuals are believed to have more interest, excitement and confidence (Ryan & Deci, 2000) which leads to highly valued behavioural outcomes such as creativity, innovation, and learning (Amabile, 1997; Vansteenkiste et al., 2004). Researchers have also argued that intrinsic motivation is likely to be particularly important for knowledge sharing (Cabrera et al., 2006; Foss et al., 2009; Osterloh & Frey, 2000).

Knowledge sharing behaviour is often compared to voluntary behaviours, such as helping and prosocial behaviours and it is therefore likely to be motivated in a similar way (Gagné, 2009). One motivation theory that has proven to be useful in predicting such behaviours is Self-Determination Theory (Gagné, 2009; Ryan & Deci, 2000). This theory states that the basis for increased intrinsic motivation is satisfaction of individuals’ basic psychological needs, specifically the need for autonomy (internal locus of control) and self-efficacy (feeling of competence) (Gagné & Deci, 2005; Ryan & Deci, 2000). Satisfaction of these needs contributes to self-determined motivation, which means that the behavioural goal is internalised by the individual. In this theory of intrinsic motivation the needs of autonomy and self-efficacy refer only to the activity itself. In the case of knowledge sharing, this theory can be used to explain knowledge sharing behaviour.

Other research enhances this view by suggesting that when it comes to motivation for prosocial behaviour, outcome focussed variables are important drivers in addition to process focussed variables (Grant, 2008b; Thomas & Velthouse, 1990). This is very relevant for this study since knowledge sharing behaviour is considered a prosocial behaviour (Gagné, 2009). From this perspective, meaningfulness and purpose may also be key intrinsic drivers of effort to engage in knowledge sharing behaviour. Particularly in the context of the work environment researchers have argued that job meaningfulness and impact are necessary psychological needs of intrinsic work motivation (Hackman & Oldham, 1976; Thomas & Velthouse, 1990).

Drawing on self-determination theory and the wider body of motivational literature four major factors are identified as key cognitive components of intrinsic motivation and therefore as important for motivating behaviour (Gagné, 2009; Hackman & Oldham, 1980; Ryan & Deci, 2000; Thomas & Velthouse, 1990). These factors are autonomy, self-efficacy, meaningfulness and impact. Their importance is also suggested in the knowledge management literature (Bock et al., 2005; Foss et al., 2009; Lin, 2007; Zhang et al., 2009). The next section presents a conceptual framework for investigating the role of intrinsic motivators in knowledge sharing.
3 THE RESEARCH MODEL

To develop an integrated view of the influence of intrinsic motivation on individuals’ willingness to share knowledge, this research proposes a conceptual model that brings together the theoretical insights provided by motivational research, self-determination theory (Ryan and Deci, 2000) and the Theory of Reasoned Action (Ajzen & Fishbein, 1980). The aim is to develop a framework for understanding the influence of key intrinsic motivators (i.e. autonomy, self-efficacy, meaningfulness and impact) on knowledge sharing.

The Theory of Reasoned Action (TRA) is a well-established theory in social psychology for explaining human behaviour (Ajzen & Fishbein, 1980). It has been used widely in IS research to explain various IS-related behaviours such as technology adoption (Venkatesh & Davis, 2000) and knowledge sharing (Bock et al., 2005; Lin, 2007). The theory suggests that an individual’s intention to engage in a voluntary behaviour is the immediate determinant of the action. Behavioural intention is, in turn, determined by the individual’s attitude toward performing the behaviour, and the subjective norms regarding the behaviour.

Attitude toward performing the behaviour is in turn determined by the individual’s salient beliefs that performing the behaviour will lead to certain consequences and the individual’s evaluation of those consequences. Subjective norm is determined by the individual’s beliefs about whether significant others think he or she should perform the behaviour and the individual’s motivation to comply with those significant others. However, the TRA does not specify the beliefs that influence behaviour through attitude and subjective norms. This enables the theory to be applied to virtually any human behaviour, and provides room for more context-relevant theories to be used to specify the beliefs that impact behaviour. The TRA is therefore a useful model for framing the links between intrinsic motivators and attitude towards knowledge sharing, and between attitude and willingness to share knowledge (Ajzen & Fishbein, 1980; Bock et al., 2005). In this study, self-determination theory is used to identify these salient beliefs (i.e. motivators).

Consistent with the TRA, attitude toward knowledge sharing is defined as the degree to which an individual positively evaluates sharing his or her knowledge, while intention to share knowledge is defined as the degree to which an individual believes that he or she will engage in knowledge sharing behaviour (Ajzen & Fishbein, 1980; Bock et al., 2005). The relationship between attitude toward knowledge sharing and intention to share knowledge is supported by the TRA (Ajzen & Fishbein, 1980) and other studies. For example, Bock et al. (2005) found positive relationships between favourable attitudes toward knowledge sharing and intentions to share knowledge. Lin (2007) also found that employees with the strongest knowledge sharing intentions also had more positive attitudes toward knowledge sharing behaviour. Hence it is suggested that:

Hypothesis 1: The more favourable the attitude toward knowledge sharing, the greater the intention to share knowledge.

Autonomy is defined as a sense of freedom in making choices about how to execute a particular behaviour, and the resulting feelings of personal responsibility for these choices (Gagné et al., 1997). When motivated by an internal drive and a sense of freedom and independence in performing a particular behaviour, one tends to associate such behaviour with positive feelings (Malhotra et al., 2008). For example, Malhotra et al. (2008) showed that perceived autonomy positively influenced attitudes. Foss et al. (2009) also found that having a sense of autonomy was positively related to positive feelings about knowledge sharing. Since attitude is determined by one’s positive or negative feelings about performing the behaviour, experienced autonomy is expected to be associated with a positive attitude toward knowledge sharing. Hence:

Hypothesis 2: The greater the sense of autonomy in relation to knowledge sharing the more favourable the attitude toward knowledge sharing.

Self-efficacy is defined as “the judgment an individual makes about his or her ability to execute a particular behaviour” (Bandura, 1978, p. 240). From an intrinsic motivational perspective, behaviour is also influenced by a person’s self-efficacy beliefs (Bandura, 1978). For example, Cabrera and
Cabrera (2005) and Gagné (2009) suggest that self-efficacy will encourage positive attitudes toward knowledge sharing. If individuals have positive feelings about their ability to provide valuable knowledge, they will be more likely to have positive feelings toward knowledge sharing and are more likely to believe that their knowledge can be helpful to others (Cabrera & Cabrera, 2005), and can help solve job-related problems and improve work efficacy (Lin, 2007). It is therefore expected that:

Hypothesis 3: The greater the sense of self-efficacy in relation to knowledge sharing the more favourable the attitude toward knowledge sharing.

Meanfulness is defined as the perceived value of a particular behaviour, judged in relation to the individual’s own ideals or standards (Gagné et al., 1997; Hackman & Oldham, 1980; Thomas and Velthouse, 1990). Individuals who regard a particular behaviour as worthwhile, useful and valuable are likely to experience meaningfulness and be motivated to engage in that behaviour (Zhang et al., 2009). For example, Zhang et al. (2009) found that meaningfulness has a significant and positive effect on knowledge sharing through increasing psychological engagement at work. Experienced meaningfulness is therefore likely to be associated with a positive attitude toward knowledge sharing.

Hypothesis 4: The greater the sense of meaningfulness in relation to knowledge sharing the more favourable the attitude toward knowledge sharing.

Impact is defined as the degree to which behaviour is seen as “making a difference” in terms of producing intended effects and having control over desired outcomes through one’s behaviour (Gagné et al., 1997; Thomas & Velthouse, 1990). To date there is little research that investigates the role of impact in relation to knowledge sharing. In other disciplines, for example, Grant (2007; 2008a) argue that when employees perceive that their behaviour has an impact, they are likely to engage in the pursuit of making a pro-social difference. Others have also examined the importance of knowledge of the results of one’s work efforts for gaining a sense of impact, which in turn increases motivation for “superior effort and performance” (Hackman & Oldham, 1976, p. 251). If an individual knows that their knowledge sharing efforts has actually made a difference (e.g. helped a colleague or contributed to improving a work process), it is more likely that the individual will develop positive feelings toward knowledge sharing. It is therefore expected that a sense of impact regarding knowledge sharing will positively influence an individual’s attitude toward knowledge sharing.

Hypothesis 5: The greater the sense of impact in relation to knowledge sharing the more favourable the attitude toward knowledge sharing.

Subjective norm describes an individual’s perception of social pressure to perform or not perform a particular behaviour (Ajzen and Fishbein (1980). There has been considerable support for the role of subjective norm as an important determinant of behavioural intention (Bock et al., 2005; Lin & Lee, 2004; Venkatesh & Davis, 2000). For example, Bock et al. (2005) found that the greater the influence of subjective norm the more likely it was for individuals to share their knowledge. It is therefore expected that:

Hypothesis 6: The greater the subjective norm to share knowledge, the greater the intention to share knowledge.
Figure 1 illustrates the research model.

![Research Model Diagram](image)

**Figure 1. Research Model**

### 4 PROPOSED RESEARCH METHOD

To test the proposed research model the survey method will be used for data collection, and the model assessed using the partial least squares (PLS) approach to structural equation modelling.

All constructs in the research model are measured using multi-item scales adapted from existing instruments. The scales measuring autonomy (4 items), self-efficacy (3 items), meaningfulness (3 items) and impact (3 items) are adapted from Spreitzer (1995). Items measuring attitude (4 items) and subjective norm (3 items) are adapted from Ajzen and Fishbein (1980) and, for intention to share knowledge (2 items) these are adapted from Ajzen and Fishbein (1980) and Bock et al. (2005). Altogether, the final survey instrument includes 22 items representing the 7 main constructs, as well as demographic items (e.g. gender, education level, organisational tenure).

In the next phase of this study, data is collected by surveying employees across various organisations using knowledge management systems. The measurement model and the structural model will then be assessed using the software package, PLS-Graph 3.00.

### 5 CONCLUSION

The aim of this study is to deepen our understanding of the intrinsic motivators that influence knowledge workers’ attitudes and intentions regarding knowledge sharing. By identifying important intrinsic motivators and providing empirical evidence of the influence of these motivators on knowledge sharing attitudes and intentions, this study is expected to contribute to a better understanding of employee willingness to share knowledge.

In this study a research model is developed that brings together the Theory of Reasoned Action and self-determination theory to explain knowledge sharing. The proposed model will then be assessed using survey data and the partial least squares (PLS) approach to structural equation modelling. The results are expected to demonstrate the importance of various intrinsic motivators on knowledge sharing attitude, and the impact of attitude and subjective norms on knowledge sharing intentions.

At the same time, it is expected that there will be some limitations with this work. For example, the study is the role of four intrinsic motivators in knowledge sharing. Although these motivators are widely acknowledged as central in the motivational literature (Hackman and Oldham, 1980; Ryan & Deci, 2000; Thomas & Velthouse, 1990) there may be other intrinsic motivators impacting knowledge sharing that have not been included in the research model. Research also suggests that some extrinsic motivators, such as extrinsic rewards, may undermine intrinsic motivation (Bock et al., 2005; Osterloh & Frey, 2000). Future research may therefore be needed to assess such impacts and the implications for developing a knowledge sharing culture in organisations.
As knowledge sharing within organisations becomes increasingly important, the findings of this study are also expected to be useful to management. For example, the results are expected to signal to knowledge management and other professionals which intrinsic motivators should be targeted to encourage knowledge sharing within organisations. For example, to enhance meaningfulness at work, Cartwright and Holmes (2006) emphasized the importance of developing work environments that are humane, challenging and rewarding, where people feel passionate and energized by their work. Particularly in the stress and well-being literature, the role of social interaction and socializing as a means of creating meaning is well recognised (Reis et al., 2000). This implies that if this study shows that meaningfulness is important for knowledge sharing then it could be important for management to foster interpersonal relationships and social support in organisations. If individuals have rewarding interpersonal interactions with their colleagues they should also experience a greater sense of meaningfulness from sharing their knowledge, and be more willing to share knowledge.

References


