An Empirical Study on the Information Formality Motivation, Social Influence, and Goal Commitment of Knowledge Workers

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ABSTRACT

A knowledge worker’s goal commitment is critical to the success of system implementation in the organization. This paper investigates an individual’s information formality motivation and social influence as important determinants in developing goal commitment in the system implementation based on the social psychology and information management literature. An empirical test of the proposed model was conducted in the field test (n = 148). PLS was used to analyze the model and supported the validity of the results. Social influence and information formality influence knowledge worker’s goal commitment (R² = 0.36) as expected. Social influence has a higher effect on goal commitment than information formality motivation. The results of this study will help us understand the antecedents of goal commitment in the system implementation based on the social influence theory and personal information management model. The paper includes implications for the designers and information system (IS) managers to effectively understand knowledge worker’s goal commitment in the organization.

KEYWORDS

Goal Commitment, Information Formality Motivation, Personal Information Management, Social Influence, System Implementation

1. INTRODUCTION

A knowledge worker’s goal commitment is critical to the success of system implementation in the organization. Based on insights into the social factors of knowledge workers’ behavior, the role of commitment for the proactive adoption of information systems (IS) has gained significant interest from IS and information management (IM) researchers (e.g., Venkatesh et al., 2003; Malhotra and Galletta, 2005; Alavi and Leidner, 2001a; Badilescu-Buga, 2013; Orso et al., 2017; Borlund and
Dreier, 2014; Tarigan et al., 2020; Kinory & Canada, 2020; Mahraz, et al., 2020; Malaquias et al, 2016; Malaquias et al, 2017; Naceur et al., 2021). Theoretically grounded in Kelman’s (1958) social influence theory that explains theoretical distinctions between the varied processes by which social influences change behavior, Malhotra and Galletta (2005) argue that a system user’s commitment development should be studied further in the IS and IM literature. Recent research has examined user commitment in different contexts such as knowledge management, consumer behavior, and online learning (e.g., Lin & Hwang, 2014; Kassim & Huruna, 2020; Alzoubi & Snider, 2020; Matias & Timosan, 2021; Namufleshi et al., 2021; Madi et al., 2021; Akrong et al., 2022; Bamufleh et al., 2021; Watjatrakul & Vatanapitukpong, 2021). Malhotra and Galletta (2003, 2005) discussed that previous IM literature focused on commitment by compliance (to gain extrinsic reward), which makes our understanding of social influence or personal predispositions on commitment incomplete. Thus, the research question of this paper investigates several psychological variables and incorporates them into the IS and IM literature to examine goal commitment, which enables us to more fully understand the important factors and dynamic relationships involved in goal commitment of the system implementation in the organization.

There has been limited research in the Information Systems (IS) area on knowledge workers’ motivation and commitment (Vera-Munoz et al., 2006; Curtis & Taylor, 2018; Duh, Knechel & Lin, 2020; Shiau et al., 2021). More research is needed to examine user perceptions from motivation and commitment perspectives. This study contributes to the IS literature by extending social influence theory and personal information management as a theoretical lens to investigate whether and how social influence and information formality motivation affect knowledge workers’ goal commitments. Information formality motivation is “a person’s willingness to use formal sources of information and communication” (Hwang et al., 2015; Hwang, 2017). We investigate an antecedent to the creation and implementation of effective knowledge sharing systems. That is, we seek to understand the effects of the information formality motivation on knowledge sharing systems. Hence, this study is a precursor to understanding when and why knowledge workers may make social and personal contributions to organizational knowledge sharing systems.

The goal commitment model advanced by Locke et al. (1988) argued that “authority” and social influence do have an effect on goal commitment. Furthermore, the findings of Klein and Kim (1998) support the premise that supervisor support does influence employees’ goal commitment and performance. Information formality motivation is an important aspect of personal information management motivation based on recent information management research (e.g. Hwang et al., 2015; Hwang, 2017). Given that goal commitment includes both social and personal aspects of behavior, the influence of personal information management motivation (such as information formality motivation in this study) would be an interesting and important research topic. Based on social influence theory (Kelman, 1958) and a personal information management model (Hwang et al., 2015; Hwang, 2017), social and personal aspects of goal commitment are important issues needed to fully understanding the knowledge worker’s goal commitment. Furthermore, given that knowledge workers’ roles in the IS implementation are important, the IM perspective of knowledge workers is a very important research topic.

A successful system Implementation requires the coordination and cooperation of the knowledge workers involved. Prior research has cited reasons such as expectation misalignment, organizational resistance, system misfit, cultural barriers, and erroneous project management approaches as the factors contributing to system failures (Dwivedi et al, 2015). Given that 25% of technology fails outright and 50% requires major rework by the time they are delivered (Gulla, 2012), it’s important to build upon previous research to understand how goal commitment and social influence can contribute to the success of system implementation.

The organization of this paper is as follows: Section 2 presents the theoretical foundations of this research model and the hypotheses. Section 3 outlines the research methodology and measures.
Section 4 describes the data analysis and results. Section 5 then discusses implications for researchers and practitioners. Section 6 and Section 7 discuss limitations and conclude the paper.

2. LITERATURE REVIEW AND HYPOTHESES

This study includes social influence and information formality motivation as additional antecedents to the goal commitment of knowledge workers in the system implementation. Figure 1 presents the proposed research model. The specific elements of the model and related hypotheses are further detailed below.

2.1 Social Influence Theory

Social influence theory (Kelman, 1958, 1961; Becker et al., 1995; Jiang et al., 2017) provides a well-established basis for understanding social behavior of individuals that relates to identities. Social influence theory distinguishes among a variety of types and levels of social commitment. Commitment is viewed as partisan, affective attachment to the goals and values of an organization, to one’s role in relation to goals and values, and to the organization for its own sake apart from its purely instrumental worth (Buchanan, 1974). This process of accepting organizational goals and values and integrating them into a system of personal goals and values is viewed as organizational commitment (Wiener, 1982). Kelman’s theory explains how the different commitment mechanisms change the target behavior. Based on Kelman’s (1958, 1961) social influence theory, Venkatesh and Davis (2000) suggest that social influence can operate by influencing perception about the technology through the psychological attachment mechanisms of affective commitment.

Social information processing theory (Salancik & Pfeffer, 1978; Park, 2014) came as a response to the lack of consideration for the social context’s role in affecting attitudes and behaviors in the workplace. Compared to other theories that viewed workplace behaviors and decisions as being rooted in contemplation and need-satisfaction models, this theory argues that employees spend more time dealing with the consequences of their actions than they spend thinking about future behaviors and beliefs. As such, they rely on cues from their social context as a means of guiding their behavior and shaping their attitudes. This research adopts the view that, as suggested by the social information processing theory, the complexity of the workplace warrants a closer look at the social context and its role in forming attitudes and influencing behaviors in workplace environments (Mahraz, et al., 2020).

Figure 1. Proposed Research Model
While people might behave in certain ways to achieve higher-level goals sometime in the future, one can argue that in a mandated adoption environment, such as the one this research attempts to study, social influence is expected to play an influential role (Kinory & Canada, 2020).

The goal commitment model advanced by Locke et al. (1988) argues that “authority” and social influence do have an effect on goal commitment. Furthermore, the findings of Klein and Kim (1998) support the premise that supervisor support does influence employees’ goal commitment and performance. Specifically, Klein and Kim found that employees who have high-quality relationships with their supervisor and have low goal commitment perform the worst. This finding suggests that the supervisor in such cases didn’t support the goals assigned by top management. Klein and Kim argued, “Managers apparently undermined the store’s incentive system by allowing or perhaps encouraging some employees to ignore the assigned performance standards.” (pp. 94)

As this is a multidisciplinary field, researchers have examined different aspects of knowledge management using a multitude of methodologies and theoretical underpinnings (e.g., Bock et al., 2009; Hwang, 2010; Hwang, 2016; Hwang and Kim, 2007; Vera-Munoz et al., 2006). Much of the existing research on knowledge management focuses on the factors that affect the usage of knowledge management systems in organizations (e.g., Halawi et al., 2007; Wu and Wang, 2006; Alpar et al., 2015; Gonzalez-Ibanez et al., 2013; Tarigan et al., 2020; Kinory & Canada, 2020; Mahraz, et al., 2020) and how to facilitate and encourage knowledge sharing among employees (e.g., He and Wei, 2009; Kankanhalli et al., 2005). Thus, this study tests the effect of social influence on knowledge workers’ goal commitment in the system implementation process of an organization. We hypothesize that:

**H1:** Social Influence will have a positive effect on Goal Commitment of Knowledge Workers.

### 2.2 Information Formality Motivation

Knowledge management research from the last decade emphasizes the crucial role of the “individual” aspect of knowledge management (Jones, 2007; Pauleen, 2009), as organizational knowledge is embedded in the creative minds of the individual employees. Organizational knowledge cannot exist without the collective knowledge of individual employees. Prior research has shown that individual beliefs and motivations are equally important factors to consider as system capabilities or technical functionalities of knowledge systems (Brazelton and Gorry, 2003; Ko et al., 2005; Smith et al., 2017; Al-Samarraie, 2017; Hwang, 2016; Hwang et al., 2016; Kassim & Huruna, 2020; Alzoubi & Snider, 2020; Matias & Timosan, 2021; Namufleshi et al., 2021; Madi et al., 2021).

We test the personal predisposition with information formality motivation based on the personal information management theory (Hwang et al, 2015; Hwang, 2017). Henderson et al. (2006) argue that the credibility of the source is an important determinant of goal commitment. Formal sources of information and communication often exist as official and tangible resources within an organization in the forms of policies, manuals, company reports, company websites, document archives, and enterprise systems. Formal sources of information and communication are generally considered more stable and predictable over time (Rogers & Agarwala-Rogers, 1976; Zhao et al., 2016). People who are willing to use more formal sources of information and communication are likely to achieve better efficiency in operations and process management, produce more consistent information flows, and deliver more predictable patterns of work. Also, formal sources of information and communication tend to provide more complete, high-quality information (Nonaka & Takeuchi, 1995; Keith et al., 2009; Kakol et al., 2017; Sanchiz et al., 2017), which would be beneficial to effective information management.

Henderson et al. (2006) argue that the credibility of the source is an important determinant of goal commitment. They add that leaders who provide clear and useful information regarding the rewards and purposes of the behavior and develop their employees’ sense of self-efficacy will likely improve goal commitment among them. Leaders can influence subordinates’ perceptions of self-efficacy in many ways, one of which is showing confidence in their subordinates’ ability to perform well and
paving their way by providing support (Locke & Latham 2002). On the other hand, if leaders are not viewed as credible sources of information, their influence’s effectiveness becomes questionable.

Knowledge workers use information as the main input in their job, and their major products are distillations of that information (Kelloway & Barling, 2000). A knowledge worker’s job largely relies on effectively managing information. Considering the central role of information management in their jobs, knowledge workers who are motivated to use information effectively for formality of information should have a higher goal commitment in the organization. Prior research has shown the positive influence that information management motivation has on users’ knowledge-sharing intentions (Hwang et al., 2018). Management control studies also show that information formality will positively influence job commitment (Johnson, 1992; Simons, 1995). Formal sources of information tend to be more accurate and complete. Individuals who use formal sources of information are likely to achieve better efficiency in their operations while delivering more predictable, consistent results. Thus, we hypothesize that:

H2: Information Formality Motivation will have a positive effect on Goal Commitment of Knowledge Workers.

3. METHOD AND MEASURES

To test the theoretical model and the study’s hypotheses, a search effort was initiated to find an institutional setting where a new system is being implemented. A university in the Chicago area in the United States was identified as a potential site for the study. The university was in the process of implementing a new content management system (CMS) at the institutional level. A CMS is basically a system that optimizes the acquisition, production, management, and deployment of content on a website. At the time, the project team believed that they had built enough experience with SharePoint but also examined two other platforms and compared the three products based on preset criteria. The team ultimately chose to continue using SharePoint. As soon as the IS team made the decision to go with SharePoint, they approached the marketing team, which implemented the migration project and presented SharePoint to them.

The SharePoint implementation team presented and kept pushing the idea that this project is a migration project. This was meant to manage the expectations and prevent scope creep and changing requirements. SharePoint was a departure from the existing model of “development” and a move toward a content creation environment where content is central. The additional capabilities to manage, create, and publish content in a more timely and consistent manner were a big selling point to top management at each site. From a project support perspective, the SharePoint implementation team had top support from university leadership. The mandate to implement SharePoint meant that the implementation team was able to focus on selling the migration project across the university. The implementation team approached selling the project from the perspective of positive influence. The team made an enormous effort early on and during the planning stage to educate people on the benefits of CMS and namely SharePoint. Additionally, many of the parties that were involved with the earlier Collage implementation were eager to have a new CMS. The experience with Collage gave many of them hands-on experience with the benefits of such systems. The team sensed that people had more acceptance, as prospective users were mainly asking about the implementation schedule and functionality issues and what they could do to harness the best of the CMS. Furthermore, the successful launch of some sites lead to early acceptance among the university entities.

A purposive sampling technique, which was followed by “snowball” sampling, was used to recruit participants who are the knowledge workers in the organization. Teams and committees were formed for the purposes of planning, implementing, governing, and providing input from the involved parties at the university. College/Department working groups were formed with the goal that they provide the necessary input on the development of the applications and the functionalities.
Additionally, a governance committee was formed to prioritize the university sites. Purposive sampling is mainly concerned with “selecting units (e.g., individuals, groups of individuals, institutions) based on specific purposes associated with answering a research study’s questions.” (Teddlie & Yu, 2007) The SharePoint implementation team, throughout the process of planning the project, has identified knowledge workers who are potential users for project training/communication purposes. Additionally, the training plan, which was based on input about the users of the system, was used to identify prospective participants for this study.

Once the lists for prospective users and knowledge workers were compiled, an introductory email was drafted by the researcher with the counsel of the SharePoint implementation team. The email invited prospective participants to take part in the survey and explained that it is for this study’s purposes only and that anonymity was ensured. The email recipients were given the option to opt out of further communications if they didn’t want to be part of the study. The introductory email was sent to around 220 prospective users. A final list of 200 willing participants was compiled based on the responses from the introductory email. The finalized list of participants was sent an email containing a link to an anonymous online survey.

This research was conducted at the individual level of analysis and used the survey method in an organizational setting as the means of collecting the data. This self-report method was used to measure the latent variables. Survey items measuring all the variables were adopted from previous studies where they had gone through multiple reliability and validity tests. All measurements used a 5-point Likert scale. The scale items were adopted from existing literature with an established reliability and validity (See Table 1 for the detailed items, citations and definitions in the model).

### Table 1. Survey Items

<table>
<thead>
<tr>
<th>Construct Items and Citations</th>
<th>Definitions of Constructs</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Information Formality</strong></td>
<td>A person’s willingness to use formal sources of information and communication</td>
</tr>
<tr>
<td>Motivation (Hwang et al., 2015):</td>
<td></td>
</tr>
<tr>
<td>- When the information provided by the organization is easily accessible, I will use it instead of my own informal information.</td>
<td></td>
</tr>
<tr>
<td>- When the organization’s formal information systems are good, I use them over my own informal sources.</td>
<td></td>
</tr>
<tr>
<td>- When I have a choice, I prefer using formal information over informal information for my job.</td>
<td></td>
</tr>
<tr>
<td>- When the organization’s information fits the need, I will definitely use it over my own informal sources.</td>
<td></td>
</tr>
<tr>
<td><strong>Social Influence</strong></td>
<td>Any change in an individual’s thoughts, feelings, or behaviors caused by other people, who may be actually present or whose presence is imagined, expected, or only implied.</td>
</tr>
<tr>
<td>(Thompson et al., 2006):</td>
<td></td>
</tr>
<tr>
<td>- My manager/supervisor is supportive of the use of SharePoint for my job upon its roll out.</td>
<td></td>
</tr>
<tr>
<td>- My supervisor would think that I should use SharePoint upon its roll out.</td>
<td></td>
</tr>
<tr>
<td>- I will have to use SharePoint in performing some of my tasks because my supervisor expects me to do so.</td>
<td></td>
</tr>
<tr>
<td><strong>Goal Commitment</strong></td>
<td>An individual’s determination to extend effort toward a goal over time in order to achieve it.</td>
</tr>
<tr>
<td>(Klein et al., 1999):</td>
<td></td>
</tr>
<tr>
<td>- Quite frankly, I don’t care if I achieve the goal of using the system upon its rollout or not.</td>
<td></td>
</tr>
<tr>
<td>- I am strongly committed to pursuing the goal of using the system upon its rollout.</td>
<td></td>
</tr>
<tr>
<td>- I think that using the system upon its rollout is a good goal to shoot for.</td>
<td></td>
</tr>
</tbody>
</table>
A finalized list of 200 willing participants was used to send the online survey link. The survey tool collected the data anonymously. Two days before sending the email link, the willing participants were sent an email notifying them that they would be receiving the survey link in two days. The email described the nature of the study, stated that no identifying information would be collected, and stated that the analysis of the data would be at the aggregate level. Once the email containing the survey link was sent, the recipients were given a one-week window to complete the survey. A reminder was sent three days later, and a final reminder was sent one day before the deadline. Of the 200 willing participants, 172 people participated in the survey. The data was screened for uncompleted surveys and any anomalies. A final list of 148 usable surveys was used in the data analysis.

To ensure the adequacy of the sample size, the researcher followed the recommendations of Hair et al. (2013). The authors, while not dismissing the “10 times rule” commonly used in studies using PLS-SEM, state that researchers should determine the required sample size based on a power analysis that takes into consideration the part of the model with the largest number of predictors. The “10 times rule” simply states that the sample size should be ten times the maximum number of arrowheads pointing at any latent variable in the research model. For example, if the latent variable with most arrowheads pointing at it has three predictors, then the minimum sample size would be 30. The sample size of 148 is more than satisfactory for PLS-SEM analysis purposes.

4. DATA ANALYSIS AND RESULTS

The Partial Least Squares (PLS) method was used to test the research model using the software SmartPLS 3.0. The PLS feature makes it more suitable for theory development and variance explanation, which is the case for this study. In contrast to covariance-based structural equation modeling (CB-SEM), PLS doesn’t have a goodness of fit criterion. As such, PLS depends on aspects related to a model’s predictive capabilities to evaluate the model’s quality (Hair et al., 2013). PLS applies an ordinary least squares-based method for the purposes of the estimation procedure and uses the data it is fed to estimate the path coefficients while minimizing the error terms of the dependent variables, thus maximizing $R^2$ values for those latent dependent variables (Hair et al., 2013). This PLS feature makes it more suitable for theory development and variance explanation.

Table 2 shows demographic variables of final samples of 148 survey participants. Data analysis with the final samples was completed in December 2020. The PLS specification process starts by specifying the structural model, which shows the relationships between the study’s variables. The PLS algorithm tests the significance of the relationships (i.e., paths) and produces the path coefficients with the $R^2$ values (i.e., the explained variance) of the model’s dependent variables.

The measurement model in PLS is assessed by examining internal consistency, convergent validity, and discriminant validity (Barclay et al., 1995). Internal consistencies (similar to Cronbach’s alpha) of .7 or higher are considered adequate (Agarwal and Karahanna, 2000; Barclay et al., 1995; Compeau et al., 1999; Fornell et al., 1982). Convergent and discriminant validities are assessed by applying the following criteria: (1) the square root of the average variance extracted (AVE) by a construct from its indicators should be at least .707 (i.e., AVE > .50); (2) it should be greater than that construct’s correlation with other constructs (Barclay et al., 1995, Chin, 1998; Fornell et al., 1982); and (3) an item should load more highly on the construct it is intended to measure than it does on another construct. The structural model and hypotheses are assessed by examining the significance of the path coefficients (similar to standardized beta weights in a regression analysis) and the variance accounted for by the antecedent constructs.

Table 3 shows the internal consistency reliabilities and correlations. As recommended (Yi and Davis, 2003; Hwang and Lee, 2012), the internal consistency reliabilities were, without exception, all higher than .7, and the diagonal elements (square root of the variance shared between the constructs and their measures) were, without exception, all higher than .707 and higher than correlations between target constructs and other constructs.
Table 2. Demographics Summary

<table>
<thead>
<tr>
<th>Category</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>70</td>
<td>47.3</td>
</tr>
<tr>
<td>Female</td>
<td>78</td>
<td>52.7</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20-29</td>
<td>20</td>
<td>13.5</td>
</tr>
<tr>
<td>30-39</td>
<td>60</td>
<td>41.2</td>
</tr>
<tr>
<td>40-49</td>
<td>40</td>
<td>26.4</td>
</tr>
<tr>
<td>&gt;50</td>
<td>28</td>
<td>18.9</td>
</tr>
<tr>
<td>Tenure</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0-2 yrs</td>
<td>21</td>
<td>14.2</td>
</tr>
<tr>
<td>2-5 yrs</td>
<td>41</td>
<td>27.7</td>
</tr>
<tr>
<td>5-10 yrs</td>
<td>36</td>
<td>24.3</td>
</tr>
<tr>
<td>&gt;10 yrs</td>
<td>50</td>
<td>33.8</td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High School</td>
<td>1</td>
<td>0.7</td>
</tr>
<tr>
<td>2 yr College</td>
<td>7</td>
<td>4.7</td>
</tr>
<tr>
<td>Bachelor</td>
<td>37</td>
<td>25</td>
</tr>
<tr>
<td>Master</td>
<td>88</td>
<td>59.5</td>
</tr>
<tr>
<td>Doctoral</td>
<td>15</td>
<td>10.1</td>
</tr>
<tr>
<td>Total</td>
<td>148</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 3. Reliability, Correlations and AVE

<table>
<thead>
<tr>
<th>Construct</th>
<th>ICR</th>
<th>Formality</th>
<th>Social Influence</th>
<th>Goal Commitment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information Formality</td>
<td>0.71</td>
<td>0.74</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Influence</td>
<td>0.85</td>
<td>0.15</td>
<td>0.87</td>
<td></td>
</tr>
<tr>
<td>Goal Commitment</td>
<td>0.85</td>
<td>0.23</td>
<td>0.58</td>
<td>0.89</td>
</tr>
</tbody>
</table>

Note: ICR: internal consistency reliabilities

Table 4 presents the factor structure matrix of the study variables of sub-samples. The factor structure matrix showed that all items exhibited high loadings (>0.707) on their respective constructs. No items loaded higher on constructs they were not intended to measure, demonstrating strong convergent and discriminant validity. Goal commitment and social influence showed higher factor loadings than information formality. Collectively, the psychometric properties of the constructs were considered more than adequate.

The PLS structural model and hypotheses were assessed by examining path coefficients and their significance levels. Following Chin (1998), bootstrapping (with 5000 resamples) was performed on the model to obtain estimates of standard errors for testing the statistical significance of path coefficients using a t-test. Figure 2 shows that the overall samples (n=148) support all hypotheses (R
Table 4. Factor Structure Matrix

<table>
<thead>
<tr>
<th></th>
<th>Information Formality</th>
<th>Goal Commitment</th>
<th>Social Influence</th>
</tr>
</thead>
<tbody>
<tr>
<td>InfoFormality1</td>
<td>0.73</td>
<td>0.11</td>
<td>0.11</td>
</tr>
<tr>
<td>InfoFormality2</td>
<td>0.87</td>
<td>0.22</td>
<td>0.18</td>
</tr>
<tr>
<td>InfoFormality3</td>
<td>0.77</td>
<td>0.21</td>
<td>0.05</td>
</tr>
<tr>
<td>InfoFormality4</td>
<td>0.72</td>
<td>0.11</td>
<td>0.11</td>
</tr>
<tr>
<td>GoalCmt1</td>
<td>0.20</td>
<td>0.86</td>
<td>0.48</td>
</tr>
<tr>
<td>GoalCmt2</td>
<td>0.21</td>
<td>0.90</td>
<td>0.54</td>
</tr>
<tr>
<td>GoalCmt3</td>
<td>0.20</td>
<td>0.91</td>
<td>0.52</td>
</tr>
<tr>
<td>SocialInf1</td>
<td>0.12</td>
<td>0.60</td>
<td>0.91</td>
</tr>
<tr>
<td>SocialInf2</td>
<td>0.18</td>
<td>0.53</td>
<td>0.88</td>
</tr>
<tr>
<td>SocialInf3</td>
<td>0.08</td>
<td>0.36</td>
<td>0.83</td>
</tr>
</tbody>
</table>

Note: Loadings on their respective constructs are highlighted (all greater than .70).

Figure 2. Data analysis results

Social Influence

.56***

Goal Commitment
(R² = .36)

.14**

Information Formality Motivation

square is 36 percent). The path of social influence is stronger than the path of information formality motivation in the model.

5. THEORETICAL IMPLICATIONS

This study has developed and tested a new model that theorizes two antecedents of goal commitment, social influence, and information formality motivation based on social influence theory (Kelman, 1958) and the personal information management model (Hwang et al., 2015; Hwang, 2017). This study also provides important insights into the IS literature in that knowledge workers’ goal commitment can be effectively improved by the social influence and information formality motivation in the systems implementation. Given that commitment is viewed as a normative motivational process (Wiener, 1982), the paths in the model would be important links to this important knowledge workers’ motivational process in the organization.
As theorized, social influence and information formality motivation had significant positive effects on knowledge workers’ goal commitment. With only two variables in the model, the paths explain 36% of goal commitment, which is a considerably high explanatory power for complex knowledge workers’ behavior in the organization. Both hypotheses were supported, justifying high confidence in the model. The impact of social influence on goal commitment was stronger than information formality motivation. Overall, the proposed model is well supported by the data and provides a new and theoretical explanation of how different factors contribute to a knowledge worker’s commitment in the organization.

There are several new findings in this study. First, social influence has a persistent and strong impact on goal commitment of knowledge workers. Although there are many previous studies that emphasized affective commitment of knowledge systems adoption (e.g., Hwang and Kim, 2007), this study shows that social influence, if implemented correctly through organizational intervention, can be an effective perspectives to improve goal commitment. Hwang (2010) also found that social (normative) influence is not a simple construct and other factors (such as gender and culture) should be investigated together to completely understand information systems adoption. Second, information formality motivation is a strong antecedent to knowledge workers’ goal commitment as the model suggested by Hwang et al. (2015). Furthermore, this study integrates a personal information management model and Kelman’s (1964) social influence theory in that personal information management motivation is an important aspect to understanding an individual’s commitment. A previous study (e.g., Malhotra and Galletta, 2005, Hwang and Kim, 2007) tested affective commitment in social influence theory but did not explain what the motivation of the knowledge worker is to build this affective commitment. This study suggests that personal information management is a useful theory to understanding this phenomenon based on the field study.

This research demonstrates important aspects knowledge workers’ goal commitment in the systems implementation, applying Kelman’s social influence theory (1958, 1961) and a personal information management model (Hwang et al., 2015; Hwang, 2016). The relationships among social influence, information formality motivation, and goal commitment, suggested and confirmed by this study, can be used to target activities needed to further improve knowledge workers’ effectiveness in the system implementation. It has been emphasized that further research in IS should attempt to bridge the gap between the information-based model of the organization and the knowledge-based view that recognizes diverse perspectives, values, and attitudes of system adopters (Zack, 2001).

6. PRACTICAL IMPLICATIONS

This study’s findings offer an opportunity to guide practitioners. Introducing a system like SharePoint—combined with an overall IT strategy shift (e.g., introducing Office 365) and often interlinked with procedural adjustments—can typically be a strategic decision and occasionally even coincide with organizational restructuring and alter some of the existing organizational-based relationships. Systems such as SharePoint offer non-technical staff the ability to author and publish content more easily than before, thus making them less dependent on IT staff. System designers can focus on satisfying group relationships among voluntary users to facilitate knowledge sharing by incorporating various approaches such as “knowledge repositories” or “communities of practice” (DeLone and McLean, 2003) to improve social influence. Commitment of knowledge contributors is the most important factor for system success, specifically when the contributors believe the group is important to themselves. This commitment of knowledge contributors is a more powerful factor for knowledge sharing than the other normative or mandate factors. Based on our empirical findings, our proposed model supports the overall understanding of these phenomena.

Hollenbeck and Klein’s (1987) expectancy theory model of the antecedents and consequences of goal commitment offers some insight into such processes. They argue that goal commitment is a function of both the attractiveness and the expectancy of goal attainment and that both attractiveness and expectancy of goal attainment are affected by a multitude of variables that can be classified as
situational personal factors. This, combined with the fact that both variables in our research model are dependent variables influenced by other variables, suggests that forming one’s attitude and commitment to a goal are subject to a more complex process influenced by variables other than supervisor influence. It also suggests that supervisor influence represents only one aspect of the overall social influence process, which is the product of influence by a multitude of relevant others, such as peers, top management, implementers, etc. This study provides a more complete view of the antecedents of goal commitment based on social influence theory and personal information management theory.

7. LIMITATIONS

Some limitations of the present study should be noted. First, the sample for this study was drawn from a single organization (Educational) and for one system (Content Management System). Additionally, the items measuring the study’s variables were modified to reflect both the nature of the project (i.e. the SharePoint system to be implemented) and its stage. As such, the results of the study may not be generalizable to other contexts. Future work is needed to understand how well the new model generalizes to knowledge workers or systems adopters with different backgrounds.

Second, we did not include other variables such as personal innovativeness, cultural orientation or other control variables. These additional variables can influence the knowledge worker’s goal commitment. However, we show that the current succinct, independent variables (social and personal factors) can explain the model very effectively based on the theoretical foundation. Future studies should investigate this dimension further to make our knowledge more complete.

8. CONCLUSION

Given that much of the current IS research focuses on knowledge sharing (e.g., Ko et al., 2005; Wasko & Faraj, 2005; Bock et al., 2005; Goo et al., 2007; Tarigan et al., 2020; Kinory & Canada, 2020; Mahraz, et al., 2020; Kassim & Huruna, 2020; Alzoubi & Snider, 2020; Matias & Timosan, 2021; Namufleshi et al., 2021; Madi et al., 2021), the present study shows that the effects of information formality motivation are crucial to improving the goal commitment in the system implementation. Further research is also needed to specifically examine the influences of other individual characteristic constructs on social identity, self-identity, and intrinsic motivation in the system implementation to improve goal commitment. Future research is needed to test the other interventions, such as financial incentives and other control mechanisms based on the IS literature (Cokerell et al., 2018; Vera-Munoz et al., 2006). The relationships among other constructs, such as culture, capability, extrinsic motivation, and different identities, also deserve exploration.

In conclusion, knowledge workers’ goal commitment is a fundamental driver of system implementation success. The present research establishes an empirical link among different factors to understand it, representing an important initial step toward understanding social and psychological interpretation of knowledge worker behavior. By integrating social influence theory and personal information management theory, this study explains how the knowledge worker develops goal commitment in using knowledge management systems. As expected, social and personal factors strongly influence goal commitment, and both aspects should be enhanced by the organizational intervention in the knowledge management systems implementation. Our model and findings should help systems designers and adopters understand how knowledge workers make their goal commitment and how information management and information systems areas can help based on the strong theoretical grounds.

CONFLICT OF INTEREST

The authors of this publication declare there is no conflict of interest.
REFERENCES


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