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In Search of A Possible the Missing Variable: The Relationship between Trust, Learning Involvement, and KMS Adoption

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Abstract

Research shows that trust has a direct bearing on information systems usage patterns in a variety of contexts. Discussing the context of Knowledge Management Systems (KMS) training, this study suggests placing trust in a more background role as the facilitator. According to the view suggested, user involvement through learning is a key reason why employees after training decide voluntarily to continue using an information system, with trust facilitating the conditions that boost this learning. The relationship between trust and involvement through learning has not been previously studied, and the results open a new perspective on how trust operates. Theory is suggested why this should be the case. Data collected from a newly installed KMS show that when users' involvement through learning is not included in the model, trust does directly affect continued use, but when involvement through learning is included in the model as a mediator between trust and continued use then trust does not directly affect continued use. Implications about the role of trust in systems implementation and especially in creating user involvement through learning are discussed.

Key words: Trust, involvement through learning, Knowledge Management Systems

1. INTRODUCTION

Much has been written about the importance of trust during the implementation of new information systems (IS), including KMS [41]. In that line of research, trust is consistently shown to have a direct effect on users' behavioral intentions. This direct effect of trust is explained theoretically in the context of trust as a social complexity reduction method [48] and subjective assessment that expected payoffs will be delivered [42, 58, 69]. In the context of IS adoption, trust often refers to trust in the company or vendor behind the IS [25]. The objective of this study is to present trust as more of a background facilitator rather than a direct antecedent. We do this based on an examination of the nature of trust in a social exchange, and argue accordingly that trust should play a more indirect role during IS adoption. A social exchange, much as an economic one, deals with a rational costs/benefits analysis as the antecedent of behavior, except that in a social exchange the costs and benefits are intangible and so cannot be enforced which is why trust is so crucial [17, 43, 66].

The context of this study is the continued use of a KMS after training, representing the successful deployment of the KMS. We argue that trust affects continued use of the KMS because it supports users' involvement through learning during the training period of the system, which is what in turn increases intentions to continued KMS use. Trust is conceptualized as not directly affecting this intention. This conceptualization of the role trust as an indirect contributor differs from past conceptualization of trust where it is often depicted as directly increasing behavioral intentions to use an IS [25, 40].

The proposition is tested and supported in the context of a knowledge management system (KMS) recently implemented at The National Insurance Institute of Israel (TNII). When users' involvement through learning is included in the model, trust increases this learning as well as the creation of a shared vision and more productive learning sessions with the training consultants, but trust does not directly affect behavioral intentions. However, in support of previous conceptualizations, when involvement through learning is removed from the model, trust in the vendor directly affects behavioral intentions. The study also shows that trust mediates the effects of the steps taken by the organization and by the vendor to facilitate the implementation of the new KMS, meaning that these facilitating steps may not directly be creating supportive conditions but rather create trust that creates these conditions.

The contributions of the study are in (1) suggesting that trust, at least in this context, may be a background aspect that supports other key constructs such as involvement through learning rather than being the actual cause of IS adoption, because (2) trust creates the necessary conditions for a social exchange and thereby encouraging users to want to be involved. These results are important also because they (3) may shed light on the user involvement literature [3, 5] as to what can be done to increase users' motivation to be involved, which in this case deals with their investment in the crucial learning aspect that perforce precedes the successful implementation of this type of IS. In this study we show how this is also the consequence of the creation of trust, and therefore imply the need to tie trust and its management into the literature on user involvement in IS adoption.

2. THEORETICAL BACKGROUND AND RESEARCH MODEL

2.1. TRUST AS CURRENTLY CONCEPTUALIZED

Trust is the willingness to rely on another person or people in situations where there is a risk that the trusted party may take advantage of you, a willingness that is based on the assumption that this trusted party will behave in a socially acceptable manner showing integrity, benevolence, and ability [25]. Benevolence in an IS implementation context is often portrayed as the vendor showing appropriate care

for the client as would be expected in a business transaction [22]. Trust is essential, explains Luhmann [48], because people need to understand their social environment. However, since this social environment is cognitively overwhelming considering each person is a free agent whose behavior cannot be controlled and in many cases may not even be rational, people need to simplify this social environment so they can understand what to expect of others. Trust serves this purpose of simplifying the social environment by allowing people to assume away many unwanted potential disruptive behaviors of others. Trusting therefore means assuming the other person or persons will behave in a socially acceptable manner thereby simplifying the interaction enough for people to understand what to expect of others [21, 48]. In doing so, trust also allows people to subjectively put aside their fears that this may not be the case [54], which is how trust has mostly been portrayed in IS adoption research.

Accordingly, trust is essential in many business contexts [12, 20, 45], especially considering it is impossible to fully regulate an agreement or verify that the other party will not take unfair advantage or engage in opportunistic behavior [14]. Taking this view, research on IS adoption typically shows that trust significantly and directly affects IS use and intentions to use. This applies to IS that are used as is, such as ecommerce [21, 25, 52] and online auctions [54], to those contracted out in outsourcing [57] and to those where a vendor customizes the IS to the particular needs of the client, such as ERP [23] and KMS [41].

2.2. TRUST AND USER BEHAVIOR IN A SOCIAL EXCHANGE

A somewhat alternative view of trust is that of trust as an enabler of a social exchange [6, 43, 66]. As a social enabler, trust is not theorized to directly affect behavioral intentions but rather to create the facilitating conditions that make rational decision making about whether to engage in the activity possible. In a social exchange people make this assessment based on their expected intangible social costs and benefits in the specific situation. This is pretty much as in an economic exchange, except that in an economic exchange the trade is in tangibles and can be enforced, while in a social exchange it is with intangibles and cannot be enforced and is therefore based on trust. Intangible costs in a social exchange include such costs as investment of effort, commitment, and emotions in a project as well as being associated with its potential failure. Intangible benefits include things such as appreciation and respect, and being able to help others. Trust comes into play here as a subjective belief that there is no need for an enforcer to make sure the other party will behave adequately [6].

If the other party can be trusted to behave in a socially acceptable manner then the trusting person can calculate his or her intangible costs/benefits ratio and rationally decide whether to engage in the activity. If the other party cannot be trusted then, given that intangibles cannot be enforced, there would be no basis to assume the other party will behave in a socially acceptable manner as expected. With no such basis, the trusting party would not be able to rationally assume what the benefits from its investment costs would be, and so the trusting party should, suggests theory, refrain from taking part in the interaction. To trust, in this conceptualization, means therefore to believe the other party will behave in a constructive social behavior showing honesty, caring, and ability [21]. As Sztompka puts it “trust is a bet about the future contingent of others” [63, p. 25] which allows one to behave as through the future behavior of others is actually known [48]. Trust, in this view, is a necessary but not sufficient condition for behavioral intentions [43].

2.3. TRUST AND USER INVOLVEMENT THROUGH LEARNING DURING KMS ADOPTION

This view of trust is applicable in the training that precedes the implementation of complex IS such as KMS in organizations. Successful user learning, and wanting to learn, of the intricacies of the system is in many cases a precondition for the successful use of such complex IS because the use of these systems requires more than applying predefined workflow procedures. It is beneficial to the successful implication of such complex IS to have the users actually want to be involved in the process [3]. This is especially the case with KMS because the successful implementation of such IS requires independent and

voluntary thought by the users. Learning the KMS should clearly support this type of independent thought. Therefore, having the users voluntarily want to learn the KMS should be an important step towards the successful implementation of such systems.

In the context of KMS implementation, having the users voluntarily choose to learn the KMS is indicative of their wish to be involved in the KMS implementation process. Most users are typically not involved in the analysis and design stages that precede the building of a KMS because it is not practical to have more than a few users actively involved with the software team. The only way most users can become really involved is in learning to use and trying out the KMS prior and during its implementation and sharing their thoughts with the IS team.

Arguably, it would be beneficial for increasing users' self-motivation to learn, and for the quality of this learning, if these users trust the vendor whose consultants are training them. Trust in the person teaching is a recognized facilitator of learning [29]. This would also be the case from a social exchange perspective because many of the users' expected rewards from using the KMS are intangible and therefore unenforceable. With unenforceable benefits, it is this trust that justifies their expected benefits from their investments in being involved. Therefore, applying the logic of a social exchange, users' self-motivation to invest and be involved by learning the KMS should increase with their increased trust in the vendor.

As an example, a KMS user may decide to actively be involved in learning the KMS because the expected intangible benefits involved in doing so justify the intangible costs of this involvement. These intangible benefits may include self-motivating issues such as recognition, status, and so on. The intangible costs may include the risk of wasting the emotional and energy investment in learning should the KMS be unsuccessful, the risk of being associated with a failed project, disappointment, and so on. Only if the ratio of expected benefits to expected costs justifies involvement, should the user in this view choose to use the KMS. And this is where trust is crucial because without trust that the consultants will provide proper training on the new KMS it is doubtful if these intangible benefits cannot be readily achieved, and therefore justify the intangible costs. Trust in such proper training would include, as in other MIS research [25], beliefs about the ability, integrity, and caring about the user of the vendor's consultants. (We are using the term caring instead of benevolence as is typically done in describing the dimensionality of trustworthiness because, this being a business environment, expecting the vendor to be benevolent is a tall order. However, within reason, the vendor can be expected to be at least caring.) These beliefs would, for example, relate to the training consultants, respectively, knowing the system they are teaching and how the client would be using it, be honest about what it can and cannot do and not hide problems, and really care that the KMS and the training that preceded its implementation would be a success. The vendor's consultants must be trusted if the expected benefits are to be achieved. Trust comes in to justify the assumption that the vendor and its consultants will play their role truthfully, because if they cannot be trusted to do so, then there is no justification for any cost/benefits analyses.

In this view, trust comes into play as an assessment of whether the vendor behave in a socially constructive manner of the type Blau [6] attributes to a long term social exchange. Notice that this is not the typical definition used in ecommerce research where trust is understood in the context of perceived risk [24]. Indeed, a long term relationship with the technical support of a KMS is not the same as a short term, and sometimes even only a one time, relationship with a vendor. A social exchange is where the users feel assured of the intangible returns from their investment in the relationship because the other party is trustworthy. This view differs from the more common view of trust as being about simplifying a complex social environment [48] or reducing perceived risk [39]. This distinction should bear itself out in the relationship between trust and behavioral intentions to continue using the KMS. If trust is mostly about enabling a social exchange environment, as envisioned here, then it should not have a direct effect on behavioral intentions. After all, one does not choose to invest in learning the KMS and then in using it only because one trusts its vendor. One might indeed choose to shirk away from learning it and later on

choose not use it because one does not trust the vendor, but trusting the vendor alone is not the reason users learn and the use a KMS. Rather, this trust in the vendor supports the decision to invest and be involved by learning the KMS, a learning that is crucial for its successful use by the users.

2.4. HYPOTHESES ABOUT TRUST

Treating the KMS training process through the lenses of a social exchange suggests therefore that users' decision to invest in learning the KMS should depend at least in part on their trust in the vendor. After all, without the vendor and its consultants playing their role trustworthily there is little reason for the users to assume that many of their hoped for benefit from involvement through learning will materialize. Having a trustworthy vendor should benefit the learning process also because an environment characterized by trust is an environment that fosters openness and sharing information [6] and expertise [57, 67], and these are crucial for successful learning of KMS. Indeed, trust supports knowledge transfer in the context of IS knowledge sharing [47, 53]. Certainly, the lack of such a trust creates an atmosphere of less knowledge sharing and openness and this should render the learning of such a KMS much harder and less effective, thus arguably decreasing user motivation to be involved and try it out. This proposed effect of trust on learning is pertinent in the case of TNIII because of the limited possibilities for material rewards to users who are involved, considering the TNIII is a public agency with a strong union.

H1: User trust in the vendor will be associated with increased user benefits from learning the KMS.

Although the logic in H1 suggests that trust in the KMS vendor should primarily apply through its effects on promoting users' motivation to learn the KMS, it cannot be ignored that previous research understood this relationship in the case of other complex IS to be a direct effect one. Indeed, viewing trust as creating or reflecting an environment that reduces perceived risk, as some previous IS research did, might apply in this context too. TNIII employees may perceive the KMS as bearing some undesired consequences to their relatively pleasant work environment such as increased differentiation between older, less KMS-oriented employees, and younger, better equipped employees. We are not using the term perceived risk here because there is no real risk to the employees from the KMS.

If trust operates by increasing the subjective assessment that the expected payoffs will be delivered [21] then it should also result directly in increased behavioral intentions to use the KMS. But, if trust operates mainly through the creation of a trusting environment alone then just because the users trust the vendor does not automatically mean they will use the KMS, and therefore there should not be a significant relationship between trust and behavioral intention to use. H1a could accordingly differentiate between the two conceptualizations of trust. If H1a is significant then it would be consistent with the conceptualization of trust operating also by reducing the assessment that there is some risk the expected payoffs may not be delivered. If, on the other hand, H1a is insignificant then it would be consistent with the conceptualization of trust as a pillar of a social exchange. To differentiate between these two conceptualizations we therefore propose that

H1a: User trust will be associated with increased intentions to continue using the KMS after its implementation.

Along the same logic as in H1, an environment characterized by trust should also foster information exchange and user learning [47, 53]. Moreover, as a trusting environment, users, as well as the KMS implementation team, should be more open about what is happening and why. At least this is the case with ERP [23]. Additionally, trust should support this because trust creates an environment that allows employees to address the stress of new systems better [59], a stress of the kind KMS implementation might introduce. This is especially pertinent in the case of TNIII because training and implementation were outsourced by TNIII to external contractors who directly trained TNIII employees. Such a trusting environment should contribute to a shared vision about the KMS and to a better learning process, i.e. more productive learning sessions with the training consultants.

H2: User trust will be associated with increased shared vision about the KMS.

H3: User trust will be associated with an increased better learning process about the KMS.

In the interest of brevity the other hypotheses are not brought here as they are not the core of the study. The research model is shown in Figure 1.

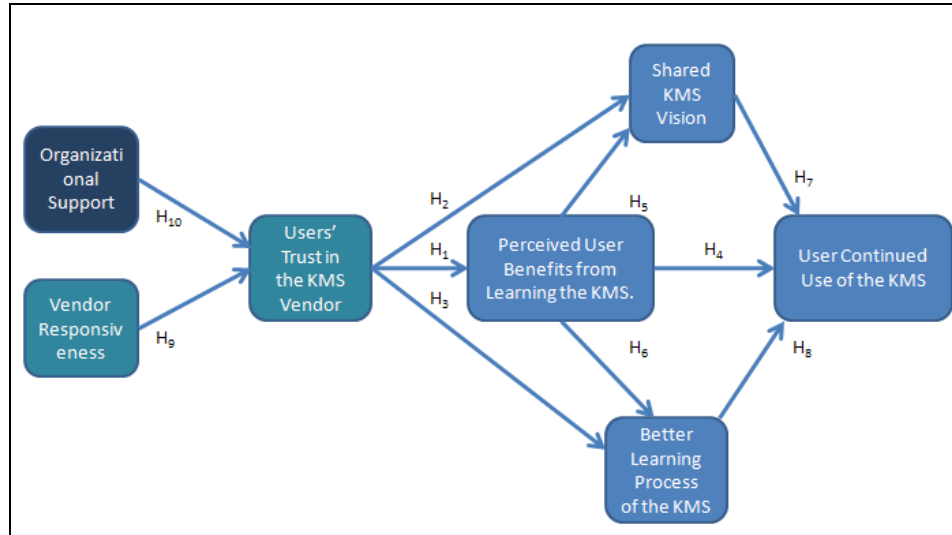


Figure 1. Research Model

3. DATA COLLECTION

The KMS was deployed in all major branches of TNIII (24 branches) and field branches (total of 78 branches). The KMS encompasses all aspects of TNIII activity, and enables fast, reliable, and secure communication between TNIII employees and the public they serve. The KMS allows for the submission and tracking of documents, requests, inquiries, elaboration of eligibilities, and provides various means of communication – personal service at the branches, self service points (94 posts), and call centers. To identify appropriate research participants, we focused on employees working with a newly implemented web-based interface to the KMS. The sample consisted of 300 full time employees (response rate 62.6%). The respondents were randomly selected as potential survey respondents from 22 branches of TNIII. The researchers collected data in a four month period, traveling country-wide between the various branches. Participants were told that all responses were confidential and only aggregate-level data would be reported back to their organization. All the surveys were returned directly to the researchers to reduce the likelihood of biased answers.

Organizational Support was based on items in [55] as they applied to this context. Vendor Responsiveness was adapted from [22] who examined equivalent reliance on a vendor in an ERP implementation setting. Trust in the Vendor items were adapted from [31] and [25]. Perceived User Benefits from Learning was a new scale. Better Learning Process was based on the measure of Knowledge Transfer developed by [44]. Shared KMS Vision represents the extent of shared vision about the objective of the KMS and the ability of the employees to achieve this vision. This scale was based on [27]. The User Continued Use items were created especially for this study and include both current self-

reported use and behavioral intentions to continue using the KMS. The items of use and behavioral intentions were inseparable statistically, which is not surprising considering the users were already using the KMS in their training. The items are available from the authors and excluded here because of page limits. To reduce possible language ambiguity in the way the items were phrased, three individuals, two from TNIII and one from academia, reviewed and recommended changes to the questionnaire before it was administered. The questionnaire used a five point Likert-type scale ranging from strongly disagree (1) to strongly agree (5) as anchors.

4. DATA ANALYSIS

190 complete questionnaires were returned. Data were analyzed with PLS-graph Version 3.00 build 1126. All items loaded significantly on their assigned latent constructs. PLS is a structured equation modeling tool that allows the analysis of the measurement model (item loadings on their scales) and structural model (how the latent constructs, i.e. scales, relate to each other) concurrently [10]. All the items loaded significantly on their assigned latent constructs. Convergent and discriminant validity was verified with a confirmatory factor analysis in PLS where all the items loaded high on their assigned values and low on all the others, with the loadings nicely within the accepted ranges [26]. Convergent and discriminant validity was also verified by showing that all the correlations among the pairs of the latent variables are lower than the square root of the AVE of any of the latent variable. This is shown in Table 1. Construct reliability, also shown in Table 1, are all above the recommended .80 threshold [26].

Table 1. Correlations of latent variables and square root of the AVE in the diagonal

	PLS Reliability	Reported Use and Behavioral Intentions to Use the KMS	Org. Supp	Vendor Resp.	Intrinsic Motivation	Trust in vendor	Quality of Learning of the KMS	Shared Vision
Reported Use and Behavioral Intentions to Use the KMS	.92	<i>0.857</i>						
Org. Supp	.96	0.154	<i>0.841</i>					
Vendor Resp.	.94	0.270	0.328	<i>0.920</i>				
Intrinsic Motivation	.90	0.463	0.193	0.447	<i>0.830</i>			
Trust in Vendor	.95	0.386	0.305	0.373	0.555	<i>0.845</i>		
Quality of Learning of the KMS	.93	0.376	0.328	0.525	0.429	0.425	<i>0.843</i>	
Shared Vision	.92	0.415	0.365	0.336	0.432	0.480	0.487	<i>0.756</i>

Common method bias was assessed with Harman's single factor test [56]. The results of the structural model testing the hypotheses are shown in Table 2. All the hypotheses were confirmed except the path from Better Learning Process to Continued Use of the KMS that was significant only at the .10 level and expect for H_{1a}. That H_{1a} was not supported is in accordance with the conceptualization of trust as a social exchange variable. To verify that the model does not exclude any significant paths, an alternative saturated model was then run in accordance with the methodology [8]. All these additional paths were insignificant and did not change the significance of the paths in Table 2.

What the data analysis show then is that continued use of the KMS depends perceived user benefit from learning the KMS, as well as a better learning process and a shared KMS vision. This accounts for about 29% R^2 . Trust does not directly affect continued use of the KMS, but rather contributes to these perceived user benefit from learning the KMS, a better learning process, and a shared KMS vision. To examine whether trust plays a significant direct role at all in this process, a post hoc analysis was run with the same model except that the path from Perceived User Benefits from Learning the KMS to Continued Use, H_4 , was dropped and instead a path from Trust in Vendor to Continued Use was added. In this case, both the path from Better Learning Process and from Trust in Vendor to Continued Use became significant and the R^2 of Continued Use stood at only 24%. In other words, had the model not included Perceived User Benefits from Learning, then, as in other research, Trust in Vendor would have determined use and H_{1a} would have been supported. Post hoc results are shown in Table 2 in parenthesis.

Table 2. Path Coefficients and R^2 (Post Hoc Model values shown in parenthesis)

From To	R^2	Org. Supp	Vendor Resp.	Perceived User Benefit from Learning the KMS.	Trust in Vendor	Better Learning Process of the KMS	Shared KMS Vision
Continued Use of the KMS	.29 (.24)			.31** (not included)	Insignificant (.20*)	.15 (.19*)	.21* (.23*)
Perceived User Benefit from Learning the KMS.	.31 (.31)				.56** (.56**)		
Trust in Vendor	.18 (.18)	.20** (.20**)	.31** (.31**)				
Better Learning Process of the KMS	.24 (.24)			.28** (.28**)	.27** (.27**)		
Shared KMS Vision	.27 (.27)			.24** (.24**)	.35** (.35**)		

* = significant at the .05 level ** = significant at the .01 level

5. DISCUSSION

5.1. SUMMARY OF RESULTS

The continued use of the KMS depended in these data on perceived user benefit from learning the KMS, as well as a better learning process and a shared KMS vision. Trust did not directly affect continued use of the KMS, but rather contributes to these perceived user benefit from learning the KMS, a better learning process, and a shared KMS vision. Thus, the data show that trust plays a central but rather indirect role in the training period that leads to the subsequent use of this KMS. This is not surprising given the central role trust has been shown to have in a variety of related contexts. The question this research set out to answer was whether this role is one of a direct effect on continued use of the KMS after training or perhaps one of an indirect facilitating role. This facilitating role was based on viewing trust through the lenses of a social exchange. The data support this facilitating role, showing that trust contributed to users' perceived benefits from learning as well as to a better learning process and the outcome of a shared vision about the KMS. Trust, however, did not directly affect intended continued use of the KMS after training unless learning was excluded from the model. The data also show that it is not so much organizational support or vendor responsiveness that counts in this process as much as the trust they engender.

5.2. LIMITATIONS

Before discussing the implications, the limitations of the study must be recognized. First, the sample, as common in MIS research, deals with only one company and one IS. Generalizing to other organizations, especially for profit ones, may require additional research. As such the results should be

treated as indicative of the applicability of the concepts rather than as concrete support for the hypotheses. Second, cultural differences cannot be ruled out, especially as trust and its roles may in theory differ across countries [15], although the little research to date on trust and IS adoption comparing the USA and Israel [24] shows mostly equivalent results between the two countries. Third, the data collection was constrained to surveys in one point in time. The analysis of such data can show correlations that are indicative of the assumed theoretical causation, but cannot actually show causation [11]. The model should be treated therefore as showing correlations that support the assumed causation, rather than showing causation. Fourth, the study relied on self-reported measures. This is common in research on trust in the context of IS adoption because it is impossible to trust as a belief in or attitude of reliance on others in any other way. Using such measures is in line with Spector's [61] conclusion that "it is difficult to get accurate information about internal states, such as attitudes or emotions with anything other than self report" (p. 229). Nonetheless, self-report bias cannot be ruled out.

5.3. THE THEORETICAL CONTEXT OF TRUST

In the conceptualization of trust in a social exchange people evaluate the situation and then decide whether to invest in the social exchange [17, 42]. The application of social exchange to these settings is arguably appropriate because the interaction these users had during their KMS training is more in tune with a social exchange than with an economic exchange. It was not an economic exchange because the users had no direct economic investment or gain from the KMS, and there were no explicit rules regulating it or ensuring the users will gain their expected benefits from their investment, i.e. their involvement in the KMS project through learning. There were, however, all the typical characteristics of a social exchange. Users did invest and gain intangibles in the relationship. And, as in other cases where social exchange has been applied to IS implementation processes [23], users invested intangibles by showing commitment, being associated with the new IS and its possible failure, investing time and effort in learning, and so on. Users could also expect to gain intangibles from this investment in the form of recognition for their investment by their organization and coworkers, through expertise that could and probably will enhance their social and operational position in the organization, and the knowledge that they were part of an important process. These are typical of other organizational settings where complex IS are implemented [4]. In the case of the KMS at TNIII there was the additional intangible reward of being in an organization they know is important and contributes to the social justice they believe in. As typical in a social exchange [6, 43], TNIII users chose to be part of the process, in this case by investing in learning, based on their trust in involved others.

In essence, this conceptualization of trust is slightly different from the more common conceptualization of trust as a direct antecedent of behavioral intentions in explicitly adding self involvement, in this case through investment in learning, as a mediator between trust and behavioral intentions. Trust in this view is as an enabler of an atmosphere that allows other pertinent variables of interest to come into play. The implications are interesting. If trust needs to be managed to support the social exchange, rather than subjectively alleviate concerns and reduce social complexity, then it places trust in a new ball game. Basically, it could be argued based on these data that there may be a case for saying that trust promotes involvement with important others in the process -- in this case through choosing to be actively involved in the learning process with them -- rather than behavior that requires one-way reliance on these important others as would have been the case had trust directly affected using the KMS. Indeed, lack of user motivation to be involved is a key reason knowledge transfer in organizations fails [64]. This adds another interesting aspect as to why managing trust is so important.

This also adds to the literature on user involvement. User involvement reflects personal importance and relevance [5] and as such results in increased acceptance of the new IS and realization of its importance [9, 18, 35, 36, 51] combined with positive attitude [7], less interpersonal conflict and negative emotions [5], less harmful organizational politics [50], and, importantly, it results in increased user satisfaction [4, 34, 38, 46, 51, 65]. Involvement also results in more realistic expectations [38]. Even

when users have no choice but to use the new IS, involvement increases their satisfaction and the success of the these IS [37]. Augmenting trust in the vendor, assuming of course that the vendor deserves this trust, should therefore be one extra tool organizations can utilize to increase user involvement. This is important because user involvement in organization-wide IS can no longer be easily achieved except through training.

Trust increases user involvement in view of social exchange because it assures the users of their expected intangible benefits. But trust is important in the context of IS implementation also because the atmosphere created by trust creates a special kind of relationship that goes beyond the economic exchange. This special relationship has social value in its own right [6, 19]. This type of relationship is different from an economic one in that its objective is long-term relationship, including, by the way, in the context of business relationships [20, 45]. A trust-based relationship is about more than a short-term profit [19]. It is about cooperative interactions [19, 20], about partnerships [32], and open spontaneous communications [28] – all those things that should make IS implementation more successful [23]. Certainly, convincing users to be involved when such an atmosphere does not exist would be harder.

5.4. IMPLICATIONS FOR PRACTICE

Companies create and use information daily. The problem is how to effectively discover the knowledge in this information, capture it, share it, and then use it to create competitive advantage. KMS serve this purpose [1, 16, 49, 60], but doing so requires user involvement and motivation to make the effort and devote the time needed to transfer knowledge [1, 2, 30, 33, 62, 64]. Recognizing this process as an instance of social exchange sheds some light on the process, and especially on how to encourage users to actively take part in it, at least in the imperative training part preceding KMS use. Organizations often struggle with incentives for knowledge sharing for users of KMS and the issue of motivating employees so they will choose to be involved has elicited heated debate about incentives for knowledge workers [13, 68]. Treating this as a trust building process in a social exchange context may be the answer. The way to increase KMS use may be through increased user involvement in the KMS implementation process through learning, and the way to do this may be by convincing the users of their intangible potential rewards and by building trust in the vendor.

5.5. CONCLUSIONS

KMS implementation is complex and risky, and assuring user involvement may be critical. At least in part this process resembles elements of a social exchange and as such trust in the vendor should play a role in creating an atmosphere that supports user involvement through learning. Viewing this process as a social exchange also suggests that trust plays an indirect role through promoting users' learning process rather than in directly affecting behavioral intentions.

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