

## **Trust, motivation and Knowledge sharing**

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### **Résumé :**

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Cette étude examine la relation quantitative entre la confiance en connaissances, la motivation à partager et le partage des connaissances. Le partage des connaissances est un processus dans lequel les individus partagent leurs connaissances et créent de nouvelles connaissances ensemble. La connaissance est une source illimitée, inépuisable et précieuse pour les organisations qui veulent survivre dans un environnement concurrentiel. Les connaissances peuvent être utilisées pour acquérir un avantage concurrentiel. Nous pouvons dire que le pouvoir de survie des organisations aujourd'hui repose sur leur utilisation des connaissances. Les connaissances peuvent être disponibles pour les individus et les organisations, par conséquent, doivent sortir de l'organisation des conditions pour que les gens puissent partager leurs connaissances avec les autres. Dans une telle situation, les organisations peuvent améliorer les performances des employés et la performance des organisations.

**Mots-clés :** Confiance, motivation, partage des connaissances

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## **Trust, motivation and Knowledge sharing**

### **INTRODUCTION**

Recent literature of management is rich in terms of work on the concept of knowledge management; these studies have helped to clarify all the highlights of the KM. However little research has focused on exploring the relationship between trust in knowledge, motivation to share and knowledge sharing.

Despite the importance of this subject, the number of studies devoted to the analysis of relations between these concepts in the context of emerging countries is very limited. In addition, the scarcity of work on this topic in the Tunisian context represents one of the arguments justifying the need to address this issue.

These two observations have provided a good opportunity to answer the central question: What is the connection between trust in knowledge, motivation to share and knowledge sharing? To do this, we use the work of several authors such as Siemsen, Enno. Roth, Alenda V., & Balasubramanian, Sridhar. (2014) and Hsiu-Fen Lin, Taipei, Taiwan, and Gwo-Guang Lee. (2006).

In the context of this article, we propose to study both theoretically and empirically the relationship between the variables : trust in knowledge, motivation to share and knowledge sharing. This objective leads to the following questions :

1. What are the key variables that could be affected by knowledge-sharing activities?
2. What is the relationship between variables: Trust in knowledge, motivation to share and knowledge sharing?

To answer these questions, this hypothetical-deductive research has set three main objectives:

- Extricate the link between trust in knowledge, motivation to share knowledge and knowledge sharing.
- Develop a conceptual model that illustrates the relationships between the variables mentioned above.

- To test this model in the context of Tunisian companies.

In this context, we will follow a quantitative approach based on a questionnaire with 312 Tunisian companies in various sectors.

## **1. KNOWLEDGE**

It is important to clarify that the definitions that will be proposed in the following, refer to the knowledge in the company, and the way is organized within the company. This means that the objective is to identify, model (or create), store, share, use and manage knowledge within the company.

### **✓ WHAT IS KNOWLEDGE ?**

According to the Knowledge Management Research Center (Santosus, Mr. and Surmacz, J., 2001) there is no consensus to provide a definition of knowledge. Because of this, terms such as data, information and knowledge are often used as synonyms, but their nature allows discriminating. The following definitions are trying to offer a perspective on these three elements, will be presented by following the chain: Data → Information → knowledge.

- Data is a discrete element, a result as numbers, symbols, figures and diagrams, without context or interpretation.

Information is produced by applying an interpretation model on a set of data. It facilitates understanding of any subject in a specific context and is the basis for acquiring knowledge (European Committee for Standardization, 2004). Therefore, the information (item stored in a knowledge system) is the factor, the element or the means to discover and produce knowledge. That is to say, information that can reactivate, stimulate or recreate knowledge.

According to Nonaka and Takeuchi (1997), knowledge is distinguished from information because "... information is a message flow while knowledge is created by this flow information and is rooted in the beliefs and memberships of the person who holds. »(Nonaka & Takeuchi, 1995, p. 58f).

This understanding emphasizes the fact that knowledge is an essential way connected to human action. This relationship that occurs in a specific application environment, allows the achievement of the generation of a concept or idea through an integration process (Grunstein, Michel, 2000). This process encompasses the skills, knowledge, emotions, values, beliefs, intuition, curiosity, attitude and aptitude, etc ... To produce the capacity to act and take decisions.

## **1. KNOWLEDGE SHARING**

The effective management of knowledge is a valuable source of competitive advantage in contemporary organizations (Kogut and Zander, 1992). Researchers Knowledge Based View believe that companies should foster routines to efficiently capture, store, analyze, retrieve, share and disseminate knowledge held within their operations. Only by harnessing and exploitation of the collective wisdom and knowledge of their employees, companies can adapt and develop innovative processes, products, tactics and strategies. In the same vein, Rosenthal and Michael Grunstein-Sabroux Camille (2001) define knowledge sharing as the process of "evolve tacit knowledge of each and build a common explicit knowledge during an interaction between two or several people "(M. Grundestein, Resenthal Sabroux C-2001). This concept refers to, as if in passing, individual intelligence collective intelligence. Often associated with the day or feedback, knowledge sharing can energize groups working toward a common goal by strengthening team spirit, promoting the exchange of ideas and the establishment of common references.

The increase of its capital and that of the entity means acquiring new items. It is therefore obvious that to have access to non-acquired knowledge, it is necessary that these elements are first grouped, categorized, sorted and thus accessible to the share. Knowledge sharing refers to the provision of information about tasks and skills to help others and to work with others to solve problems develop new ideas or implement policies or procedures (Cummings, 2004; Pulakos, Dorsey & Borman, 2003). Sharing knowledge can occur through written correspondence or communication face-to-face through networking with other experts, or documentation, organization and knowledge input for other (Cummings 2004 ; Pulakos, Dorsey & Borman 2003).

### **1. THE CONCEPTUAL REALITY OF VARIABLES : CONFIDENCE IN KNOWLEDGE, MOTIVATION TO SHARE AND KNOWLEDGE SHARING**

In the era of knowledge, wealth is based on the ownership of knowledge and skills in the use of knowledge for the production. The factors influence the knowledge sharing are trust in knowledge and motivation to share.

#### **1.1. TRUST IN KNOWLEDGE**

There is a lack of consensus among theorists and researchers about a definition of trust, but they all stressed its importance. Rotter (1967) indicated that trust is an expectation held by

one person or a group of words, promises, verbal or written statements of another individual or group. Lewis and Weigert (1985) expressed this trust as a feeling of faith and security in the sympathetic responses of the partner and the strength of the relationship. Zucker (1986) indicated that trust includes a set of shared expectations among individuals who are involved in the interaction. Many researchers have considered various aspects in the definition of trust, but many of these elements are similar, with different labels were observed (Baker, 2006). Mayer and al. (1995) represented the three elements of the definition of trust: ability, benevolence and trusteeship.

The ability is a set of knowledge, skills and characteristics that allows a group to influence a particular area. Benevolence is the extent that a reliable person wants to do good things to entrust another person (the person who trusts) with no profit motivation. Moreover, trusteeship means the collection of reliable confident person, how much it means is attached to the principles accepted by the confident person. However, organizations still have no mechanism to encourage employees to share knowledge, knowledge is valuable and knowledge sharing behavior is a type of social interaction at work (Davenport and Prusak, 1998).

A financial reward system is not enough to encourage staff to exchange knowledge, as the main determinant interactive social relationships is confidence (Wasco and Faraj 2005). Thus, trust between individuals, when an employee decides to share his knowledge, is considered the main factor. Many studies have shown that trust is a key variable for the sharing of knowledge and the latter can occur when people confidence each other. Managers and other members share their knowledge only with people they trust them. When relationships are based on confidence, people are more willing to provide useful knowledge. In addition, people are more willing to listen and absorb knowledge of the staff (Mayer et al, 1995). A human factor as the confidence is an important element for effective knowledge, and an attribute to improve performance.

### **1.1. MOTIVATION TO SHARE**

Knowledge sharing is important for the creation of a competitive advantage. Arguments claiming the relationship between organizational variables such as the activities of human resources, organizational results, and sharing levels of organizational knowledge must examine the mechanisms at the individual level, which includes motivation, perception, behavior and interaction between individuals. Sharing knowledge often involves a mutual

interaction between individuals, which covers the transmission and receives knowledge. Why personal dislike sharing their knowledge, may be due to the lack of incentives, they can see or share knowledge more difficult than others share, or they may know that the probability of success is low or may even feel that their colleagues do not want to learn something from them. (Siemsen et al, 2007).

In organizations based on knowledge, ability, experience and personal skills are essential factors that add value to the organization. Therefore, how to share these capabilities with organizational objectives can determine the real value of the person. Therefore, systems of rewards and remuneration of such organizations should be awarded based on individual skills and abilities and his relationship with the group and organizational goals. Lack of attention to this issue in organizations based on knowledge of the individual with the fundamental challenge and persuaded him to find another or better position if the problem does not disappear, it will lead to the abandonment ultimately.

Alwani (2005) stated that knowledge management in innovation organizations in Bahrain are so low because they have increased the use of technology, while the issues of organizational culture and development are ignored. In addition, the success of knowledge sharing in many government projects is due to a combination of internal and external factors and the use of networks in an organization is a key factor for knowledge sharing (Barnard, 2005). Organizations who like to be able to turn knowledge, their implementation objectives and development strategies must create a knowledge sharing culture that includes the three following criteria: motivation, persuasion, and stimulation of workers to obtain, distribute and transmit new useful knowledge and the application of it. Finally, advanced technology that provides knowledge necessary for all people who need to provide an appropriate field.

It is now necessary to clarify the relationship between the variables of our research.

#### **4. LINK BETWEEN VARIABLES**

As we have already said, we will show the link between confidence in the knowledge, motivation to share and knowledge sharing.

##### **4.1. TRUST AND KNOWLEDGE SHARING**

For most processes related to knowledge, trust is important in the proceedings for seamless knowledge creation, sharing and use of knowledge (Gilbert et al, 2000). With having no good reason, most people will not share knowledge if they do not have a good feeling and trust (Ellis, 2001). With having no trust, the maximum potential of the brain will not be met by the

firm (Geoffrey, 1997). According to Arid de Geus and the examinations of the Harvard Business on long life organizations: inside these companies, money is not the positive motivator. If that is not enough then individuals are not satisfied, but also with money, more than the threshold also will not encourage them to give their knowledge to the company. The important factor is mutual trust (Ann Walmsley 1993). In the knowledge economy, it is very important to provide trust between employer and employee to retain knowledge and motivate donors. One of the approaches indicates that employee ideas are important is that the company consultants for problems and questions. This issue should be both substantive and lends itself to the impact (Frances, 1999). Through this approach, employee response will be faster and surprising. The reason is that employees enjoy being requested and related to their thoughts, and if they simply believe that the contribution from them must be assumed seriously (Asgharian et al. 2013).

Each knowledge management will not be successful if companies consider existing knowledge within the company, and as individuals are concerned, so that sharing of knowledge is done effectively. Therefore, individuals must explain their feelings in order to provide much useful information and knowledge. It should be mentioned that the involvement and experience of each person should act as a partner in the implementation and knowledge sharing within the company. In fact, learners are aware of what they are and how to achieve what they want to become (Asgharian et al, 2013). To support this, we should encourage and provide necessary assistance and all this must be done to motivate people to continue their cooperation in the context of knowledge.

Good knowledge management initiatives create trust, which helps break down cultural barriers and change the way individuals and groups to share their knowledge. In addition, this allows us to formulate the following hypothesis:

Hypothesis 1: An increase in the trust of an employee in his knowledge increases his motivation to share this knowledge with a colleague.

#### **4.2. MOTIVATION AND KNOWLEDGE SHARING**

Knowledge sharing involves at least two people: a knowledge provider (ie, employees) who tries to communicate his knowledge and the recipient of knowledge (ie, the colleague), can learn the provider of knowledge. The variable, employee motivation to share his knowledge with his colleague, is an antecedent of the actual behavior of knowledge sharing (Siemsen et al. 2008). Autonomous motivation is increasing attention to share, and that autonomous

motivation negotiate the link between the needs and intend to share. Very few studies have examined this hypothesis. Mitchell et al. (2008) found that autonomous motivation towards the use of new information technology has been linked to the use of more advanced system features. In line with this study, Osterloh and Frey (2000) suggested that intrinsic motivation is especially important when sharing tacit knowledge, which is harder to share than explicit knowledge.

Lin (2007) found a positive relationship between knowledge sharing and affective organizational commitment, which develops at least in part by autonomous motivation for work (Gagné, Chemolli Forest & Koestner, 2009). More recently, Malhotra, Galleta and Kirsch (2008) found that autonomous motivation to use a web-based educational platform was positively related to positive attitudes towards it and greater intentions to use, while controlled motivation was negatively related to these variables.

The research on motivation has adopted a behavior presocial offered and contributing to some initial evidence for this hypothesis. For example, Cabrera and Cabrera (2002) compared the knowledge sharing situation with the dilemma of public goods in which individuals have to decide to contribute to a pool of resources, Their framework does not consider the quality of people's motivations to share or not to share their resources, because they use a part of the expectancy value to explain the considerations motivating to predict people's knowledge sharing behavior. These considerations include the beliefs of efficacy and instrumentality considerations (What will I gain and lose to do?), which can be calculative or exchange basis (Shore et al. 2006) therefore closer to the concept of controlled motivation.

In addition, the groups with a larger proportion of people who held extrinsic motivations did not harvest much, because the municipalities have used up quickly. If we compare a situation of sharing knowledge with the dilemma of public goods, then we can assume that the quality of motivation will affect the willingness to share knowledge. Frey (1993) provides further evidence to support this argument; it reviewed research on the effectiveness of incentive systems and sanctions on behaviors such as conservation of the environment and the donation of blood and concluded that the use of rewards (an extrinsic motivator) can have negative effects on ethical behavior and presocial. In addition, Wang (2004) found when we asked people to share information with a colleague with whom they were competing for a promotion; they were less likely to share information with this person if they are not competing with him or her. In addition, this allows us to formulate the following hypothesis :



## **Hypothesis 2: The motivation of an employee increases his intention of sharing knowledge with a colleague.**

### **1. RESEARCH METHODOLOGY**

Before analyzing the data collected, it is important to present in this part of the methodology adopted to test the hypotheses of research and test the validity of the conceptual model. The methodology of research is defined as the terms of acquisition of knowledge, that is to say, it represents the route of research and includes both stages of selection, production collection, analysis processing (or treatment) of data, etc.

#### **1.1. THE GENESIS ITEMS**

The variables of this study once identified, we can move to the genesis of items to measure our variables and through the measurement scales. Collecting variable items in our model is dependent on the literature. Regarding our subject, we found that few articles studying the link between confidence in the knowledge, motivation to share and knowledge sharing.

#### **1.2. MEASURING VARIABLE : TRUST IN THE KNOWLEDGE**

We refer to the research Siemsen, Enno. Roth, Alenda V., & Balasubramanian, Sridhar. (2014) to measure this variable by a Likert scale 5 points translating the degree of agreement of respondents. This variable consists of five items. Respondents will indicate their perception by answering the following proposals.

**Table 1. Items measuring confidence in the knowledge**

<b>VARIA BLE</b>	<b>ITEMS</b>	<b>AUTHORS</b>
Trust in knowledge	I am convinced that this knowledge is correct.	Siemsen, Enno. Roth, Alenda V., & Balasubramani an, Sridhar. (2014)
	I am sure that this knowledge is right.	
	I have no doubt that this knowledge is accurate.	

#### **5.3. MEASURING VARIABLE : MOTIVATION TO SHARE**

The measurement items used for this variable are inspired Siemsen work Enno. Roth, Alenda V., & Balasubramanian, Sridhar. (2014). In this study, the interviewees are asked to respond, according to a Likert scale ranging from "not at Strongly Disagree" to "Strongly agree"

**Table 2. Items measuring Motivation to share**

VARIABLE	ITEMS	AUTHORS
<b>MOTIVATION TO SHARE</b>	I did not intend to share my knowledge with my colleagues.	Siemsen, Enno. Roth, Alenda V., & Balasubramanian, Sridhar. (2014)
	I was motivated to share what I know with my colleague.	
	I really wanted to share this knowledge with my colleague.	

#### 5.4. MEASURING VARIABLE : KNOWLEDGE SHARING

The literature is rich with works that have used empirical measures of knowledge sharing. We chose to measure this variable, below mentioned items. This work summarizes the measures proposed by many theorists.

Respondents were asked to answer the following statements on a scale of 5-point Likert ranging from "not at all agree" to "strongly agree." We ask respondents to give their assessments of the variable knowledge sharing in their companies.

**Table 3. Measurement of knowledge sharing items**

VARIABLE	ITEMS	AUTHORS
<b>KNOWLEDGE SHARING</b>	I feel that my organization encourage employees to share their knowledge with their colleagues.	Hsiu-Fen Lin, Taipei, Taiwan, and Gwo-Guang Lee. (2006).
	I feel that employees are valued for what they know.	
	In a team framework, I would like to share knowledge with colleagues who helped me in the past.	
	I think that sharing knowledge between teams can help build my image as an expert.	

	<p>I am happy to learn and share knowledge between the different teams.</p>	
	<p>I am ready to use my free time to help other team members.</p>	

In terms of our research, we followed a specific methodological approach, choosing a sample of 312 companies and interviewing via a questionnaire to identify the link between knowledge sharing, technology innovation and business performance. Moreover, to develop our questionnaire, we have clarified the different measurement scales for existing variables in our model.

In this regard, we noted that our research model, as applied today, a relationship of this conversion vector.

## 6. VERIFICATION OF ASSUMPTIONS AND DISCUSSION OF RESULTS

Assume that the dimensions of this research are independent; so we opted for the orthogonal rotation, also called VARIMAX; "It is a method that minimizes the number of variables with a strong correlation to each variable and facilitate the interpretation of the factors"

### 6.1. RESULTS OF EXPLORATORY FACTOR ANALYSIS

#### 6.1.1. Trust in knowledge

First, we recall that the measurement scale 'confidence in the knowledge' is composed of three items. The results of the factor analysis are satisfactory. Indeed, the matrix data of this measurement scale is factorisable since  $KMO = 0.706$ . Thus, the Bartlett's test shows a chi-square = 0.000 and  $p = 218.127$ . Similarly, the determinant is different from zero (0.402).

By observing the values of the quality of representation, we find that the items have values ( $> 0.5$ ).

Thereafter we proceeded to extract the components. We end up with a satisfactory solution and a single factor having individual value greater than one, which is 2.107% of 70 235 restores the initial information.

The results of ACP applied to the second variable "Confidence in knowledge" are summarized in the tables below with their respective interpretations.

**Table 4. Principal components analysis applied to "Confidence in knowledge"**

ITEMS	REPRESENTATIONN QUALITY	FACTOR CONTRIBUTION
TRUST1	,620	,787
TRUST2	,736	,858
TRUST3	,752	,867
<b>TOTAL VARIANCE EXPLAINED</b>	70.235%	
<b>KMO</b>	0.686	
<b>OWN VALUE</b>	2.107	
<b>CRONBACH ALPHA</b>	,787	

Based on this analysis, all the conditions are met (senior MSA are 0.5, items of contributions to the formation of factors are above

0.7, Cronbach's alpha is higher than 0.7 ( $\alpha = 0.787$ ).

### 6.1.2. Motivation to share

Examining the correlation matrix between the variable items "Motivation to share" shows that they are positive and significant and attest thereafter uniqueness of the scale. In addition, the determinant of the matrix, which is different from zero ( $449 \neq 0$ ), and the value of KMO which is (0.691) show excellent integrity between items.

This result is more appreciated with indices that are higher commonalities are all above 0.5.

The PCA results concerning this variable is summarized in the table 5.

**Table 5: Principal components analysis applied to "Motivation to share"**

ITEMS	REPRESENTATION QUALITY	FACTOR CONTRIBUTION
MOTIVATION1	,633	,796
MOTIVATION2	,705	,840
MOTIVATION3	,721	,849

<b>TOTAL VARIANCE EXPLAINED</b>	68.625%
<b>KMO</b>	,691
<b>OWN VALUE</b>	2,059
<b>CRONBACH ALPHA</b>	,768

From this table we can see that the implementation of the ACP on the variable "Motivation to share" acknowledged one reliable factor. Bartlett's sphericity test is significant, and the risk of rejection of  $H_0$ : "the correlation matrix is an identity matrix" is zero so the correlation matrix is not identical, in other words, there is a correlation between items. From the diagonal of the matrix anti picture we find that msai of each item is greater than 0.5, in contrast to values outside the diagonal that are very low, therefore the common part between the items is strong, which approved the principle of factorization. Successful retrieve all items (68 625%) initial information. In addition, the reliability analysis indicates one reliable factor Cronbach's alpha was  $0.768 > 0.6$ . Finally, this variable is one-dimensional and reliable.

### 6.1.3. Knowledge Sharing

Factor analysis shows that the matrix data from the measuring scale of the variable "Knowledge sharing" is factorisable :

- \* KMO = 0.771 is greater than 0.5.
- \* Bartlett Test displays indicates that all variables are completely independent of each other ( $p = ,000 < 0.05$ , chi-square = 855.525).

Thereafter we proceeded to extract the components. We meet as well with a satisfactory solution. This result has appreciated more commonalities with indices which are all above are all greater than 0.5 except the item (sharing1) with its value equal to (0.453). This brings us to remove this item.

We can also note that the matrix is a positive-definite matrix that is to say that the decisive reversal seen ( $=, 027$ ) is different from zero.

We also note that all values of msai corresponding to each item are greater than 0,5sauf item (sharing7 and sharing8) having values equal to (0.331 and 0.466). This brings us to remove these items.

The contribution of items to the factor composition is greater than 0.6. In light of these good results, we can conclude that there is a strong correlation between the items and therefore we can refactor them. New PCA results concerning this variable is summarized in the table 6.

**Table 6. Principal components analysis applied to «Knowledge sharing»**

<b>ITEMS</b>	<b>REPRESENTATION QUALITY</b>	<b>FACTORIEL CONTRIBUTION</b>
<b>SHARING2</b>	,542	,736
<b>SHARING3</b>	,673	,820
<b>SHARING4</b>	,815	,903
<b>SHARING5</b>	,885	,941
<b>SHARING6</b>	,548	,740
<b>TOTAL VARIANCE EXPLAINED</b>	69.258%	
<b>KMO</b>	,834	
<b>OWN VALUE</b>	3.463	
<b>CRONBACH ALPHA</b>	,884	

The results of this analysis give off a solution where the percentage of the information retrieved from the duty is high in the order of 69 258%. Correlations of these items with this factor varies from 0.736 to 0.941. These correlations are used to interpret the role of each variable (item) in the definition of each factor. The higher the weight, the higher the representative variable is the factor. Therefore, the choice of these items is acceptable since these correlations are high. These results are of advantage enjoyed by the alpha value of 0.884 Crombach who rated well. Finally, this variable is one-dimensional and reliable.

## **6.2. RELATED VALIDITY OF THE CONSTRUCT**

Roussel et al. (2002, p77) argue that "the internal consistency reliability is verified when all indicators measures actually built the same way and not too unequal."

At this stage, we used the calculation of Jöreskog of Rho that is a measure coefficient, which is used to verify the reliability of a built. It is manually calculated based on factor inputs and measurement errors. It is deemed reliable only if it is greater than 0.7, Roussel et al. (2002) and the closer it is to 1, the more the scale is so consistent and reliable.

This coefficient is more rigorous than that of Cronbach's Alpha because it integrates the error terms (Roussel et al., 2002, Elodie, 2008). This is his formula :

$$\text{Rhô de Jöreskog}(\xi) = \frac{(\sum \lambda_i)^2 \cdot \text{Var}(\xi)}{(\sum \lambda_i)^2 \cdot \text{Var}(\xi) + \sum \delta_i}$$

The following table presents the reliabilities of the constructs, their items and corresponding factorial contributions.

**Table 7. Study of the reliability of the constructs**

CONSTRUCTS	FACTORS	P (A)
<b>MOTIVATION TO SHARE</b>	Motivation to share	0,822
<b>TRUST IN KNOWLEDGE</b>	Trust in knowledge	0,723
<b>KNOWLEDGE SHARING</b>	Knowledge sharing	0,794

We can notice that the internal consistency reliability of the various builds of the research is verified.

Relating to the validity of a construct is ensured by its convergent and discriminant validity.

### 6.2.1. Convergent validity

This type of validity to determine to what extent the indicators supposed to measure the same phenomenon are converging. It is estimated using several approaches, mainly including:

□ **Approach of Anderson and Gerbing (1988)** : it allows to verify the contribution (Loading) for each indicator (item) to the constructed measure.

To test the significance of this contribution, we make use of Critical Ratio (CR) which had to be greater than 1.96 ( $p > 5\%$ ). The CR is considered to Student t.

However, this approach requires multi-normality, untested in our research, which leads us to examine the convergent validity of the approach according Fornel and Larker.

□ **Approach of Fornel and Larker (1981):** It identifies the Average Variance Extracted (VME) as the ratio to verify the convergent validity.

VME shows the mean variance between the construct and its measures, it must be greater than 0.5. In other words, more than one-half of the extracted variance must be attributed to the indicator, and not with its measurement.

$$VME(\xi) = \frac{\sum \lambda_i^2}{N}$$

With  $\lambda_i$  = factorial contribution of item i raised to square and n = number of items built.

Recall also that to check convergent validity of the various built we examined two coefficients and NFI index :

- Ration A coefficient ; CR > 2
- A rho convergent validity ;  $\rho_{vc}(A)$  or VME > 0.5
- $0.8 < NFI < 0.9$

**Table 8. Study of the convergent validity of the constructs**

CONSTRUCTS	FACTORS	VME
Motivation to share	Motivation to share	,881
Trust in knowledge	Trust in knowledge	,726
Knowledge sharing	Knowledge sharing	,799

We can notice that all constructs conform to the rules of decision convergent validity; therefore, they all have good convergent validity.

### 6.2.2. Discriminant validity

Discriminant validity of reasoning implies a pairs of constructs. The table below shows both the structural link between the built kidnapped square that represents the external link, the



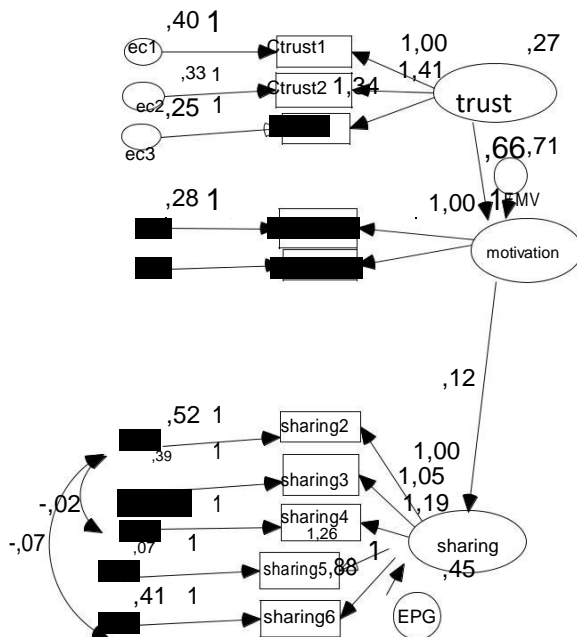
reliability of each index VME built and which together constitute the internal link, which are shown on the diagonal of the table .

Recall that to decide on good discriminant validity of the constructs check that the internal link > external link.

**Table 9. Study of the discriminant validity of the constructs of research**

	MOTIVATION	TRUST	SHARING
MOTIVATION	0,779		
TRUST	0.142	0,889	
SHARING	0.004	0.190	0,857

**Figure : Structural model**



**chi2=162,907 dl=128 gfi=,932**  
**agfi=,909 cfi=,983**  
**tli=,979 nfi=,925**  
**rmsea=,034**

As we can notice it, discriminant validity for all constructs is verified. After completing AFC, all deductions all scales are reliable and valid.

We can judge that the structural model has a good fit, and therefore the theoretical model is a good representation of reality.

## 7. VERIFICATION OF HYPOTHESIS

A good fit is a necessary but not sufficient condition for the validation of model assumptions; an analysis of the various correlation coefficients must follow the review of the adjustment indices. (Roussel et al.; 2002).

But remember that to confirm a hypothesis tested must the coefficient ratio is greater than 2 and that the probability of rejecting Ho (p) is less than 0.05 with Ho : "There is no link between the explanatory variable and the dependent variable»

### Regression Weights : (Group number 1 - Default model)

	Estimate	C.R.	P
motivation <--- trust	,656	4,396	***
sharing <--- motivation	,127	1,122	,303

The results for some of the research hypotheses are presented in the table number 10.

For the **hypothesis 1**, an increase in trust of an employee in his knowledge increases his motivation to share this knowledge with a colleague. (Beta1 = 656, CR 4396 order of > 1.96 and p = 0.000 < 0.05). This allows us to accept the hypothesis H1. The H1 hypothesis of our research is verified

We can therefore say that the motivation of an employee increases his intention of sharing knowledge with a colleague. (Beta2 = 127, CR = 1, 122 < 1.96 and p = 0.303 < 0.05). The **H2 hypothesis** of our research is verified.

**Table 10. Summary of research hypotheses**

Hypothèse 1	An increase in trust of an employee in his knowledge increases his motivation to share this knowledge with a colleague.	verified

<b>Hypothèse 2</b>	The motivation of an employee increases his intention of sharing knowledge with a colleague.	verified
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## 8. THE DISCUSSION OF RESULTS : APPROXIMATION OF RESULTS WITH LITERATURE

The objective of this section is to analyze in depth the results of the empirical study to identify the link between trust in knowledge, motivation to share and knowledge sharing. We try thus to reconcile the results obtained in our study with those found by other studies in the literature.

After purification of the results, five dimensions for this study were selected : trust in knowledge, motivation to share and knowledge sharing.

We start by sharing knowledge, and which is bounded by two variables : trust in knowledge and motivation to share.

### • Trust in Knowledge

According to the results, there is a positive relationship between trust in knowledge and motivation to share. This relationship is confirmed by the past work of Siemsen, Enno. Roth, Alenda V., & Balasubramanian, Sridhar. (2014) that showed the positive link between these two variables.

The examination of a literature review showed that trust in knowledge positively affects employee motivation to share their knowledge. Indeed, this hypothesis was tested in the Tunisian context. However, since the trust is based on individual perception towards a certain thing, a knowledge manager will need to put more efforts on creating or influence this perception.

Our research provides important information on the role of trust in increasing employee motivation to share their knowledge. This opens the way for future research into the behavior of sharing knowledge achieved. Specifically, he suggested that the performances are wider and behavioral implications of dyadic knowledge transfer are important.

When the relations are based on mutual trust, people are more pious to provide useful knowledge. In addition, people are more willing to listen to each other and to acquire knowledge of the other. In this study, we investigated the effect of trust on the motivation to share knowledge. The hypothesis was confirmed. This means that trust has a direct and

significant effect on the development of knowledge sharing within the organization. Trust is a key component of effective acquisition of knowledge and an important attribute to improve performance. When an organization has the support and cooperative systems for confidence, both knowledge transfer within the organization will be easier, ameliorate not only the relationships and the management of the employee, but also results in effective and efficient performance, and possibly increase production.

As regards the standard coefficient, it is concluded that the coefficient of the trust of the effect was higher than the effective coefficient of motivation; this indicates importance of trust as motivation in the knowledge sharing process.

#### • **Motivation to share knowledge**

The examination of a literature review has shown that the motivation of an employee increases his intention of sharing knowledge with a colleague. Indeed, this hypothesis was verified in the Tunisian context. This result corroborate with the one that was found by Siemsen, Enno. Roth, Alenda V., & Balasubramanian, Sridhar (2014). These authors have shown a significant relationship between these two variables.

Therefore, if people do not have enough motivation, we cannot expect the existence of a sharing of knowledge between individuals in the organization, so it is recommended that the organization's managers try to provide an enabling environment for people to be motivated, and therefore they share their knowledge. Senge 1990 expressed that when people have the interest and motivation for sharing knowledge, they can help others develop their skills and facilitate knowledge sharing process within the organization. In this study, the motivational effect on knowledge sharing in the former case was investigated and the hypothesis was reversed, ie the motivation to share have a positive effect on the development of knowledge sharing processes in organizations. Therefore, we can say that the motivation of the employee is one of the factors affecting knowledge sharing.

The culture of knowledge sharing should include three criteria for organizations to be able to achieve growth objectives and strategies. Employee motivation, encourage and stimulate increase knowledge sharing. In the case of the organization could meet these three criteria, and then it will be able to capture, transfer and apply knowledge useful. The motivation and confidence play a key role in developing the knowledge sharing process. If there is no trust in organizations, relations will be very limited and can be said that if there is no relationship between people, knowledge will not share in the organization.

## CONCLUSION

In a paperless environment increasingly greater value to the company, this study has questioned the relationship between variables: trust in knowledge, motivation to share and knowledge sharing. The lack of research in this area, mainly in developing countries, strongly motivated this study.

This done, the sharing of knowledge within and between teams is very crucial for companies. The impact of different types of general confidence in the sharing of knowledge is obvious. The knowledge sharing capacity is mainly related to the competence of the person to contact his social behavior. Knowledge of the properties could not be transferred because people are not able to define and explain them. Therefore, the degree of readiness is impacted by many factors. The pride of the person skilled in the ownership of knowledge has a crucial role. Limiting the time because of the real or imagined information overload could also decrease the preparation to participate in knowledge-sharing activities.

Finally, people are often afraid to move on to other knowledge because they think they will lose their position within the firm. For most processes related to confidence in knowledge is very important, for example, the transparent provision of knowledge or its use and its sharing. Many people do not want to take the risk of sharing knowledge to have no logical reason to trust.

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