

# The Impact of Knowledge Sharing on Organizational Commitment of Employees: Case Study of Iranian Manufacturing Companies

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This study was conducted in Mazandaran, a northern province of Iran, and aimed to analyze the impact of knowledge sharing on organizational commitment of employees. We selected 50 manufacturing companies as statistical population of the study. There were 650 employees in those companies. According to Krejcie and Morgan (1970), the minimum number of sample size was determined as 242 employees. A total of 300 questionnaires were distributed among the employees and 268 usable questionnaires were returned. The factors analysis and the findings show that knowledge sharing in companies has a significant positive influence on organizational commitment of employees.

**Keywords:** Knowledge sharing, organizational commitment, organizational performance.

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## Introduction

Among organizational resources, human resources are known as one of the most important assets of any organization. Managers should develop effective strategies to achieve competitive advantages through employees. These advantages will be reached when employees try their best to achieve organizational objectives. There are some factors influence employees attempts in organizations. Among these factors, organizational commitment is regarded as one of the variables drawing researchers' attention. Commitment of employees is an important issue which needs to be understood by managers. Organizational commitment has positive influences on organizational outcomes. When employees are committed to their organizations, organizational objectives will be reached more simply. Further, the ultimate consequences are increasing revenue, market share, efficiency, effectiveness, and productivity of organizations.

In this study, we also focus on knowledge sharing inside organizations. According to Davoudi and Kaur (2012), in the modern global economy, the increasingly rapid flow of information, and the growing recognition of the significance of intellectual capital, knowledge is

increasingly claimed to be a critical resource of competitive advantage for organizations. Thus, the idea of knowledge management and its related concept has enjoyed widespread popularity in today's studies.

Despite the growing literature on organizational commitment and Knowledge management, sharing and application, the authors of the present study could not find any study explore the relationship between knowledge sharing and organizational commitment. Thus, the present study proposes a framework on the mentioned topic among the employees of 50 manufacturing companies in Iran.

## Knowledge Sharing

Knowledge is a crucial organizational resource that leads to a sustainable competitive advantage in a competitive and dynamic economy (Davenport & Prusak, 1998; Foss & Pedersen, 2002; Grant, 1996; Spender & Grant, 1996; Wang & Noe, 2010). To gain a competitive advantage it is required but insufficient for organizations to depend on staffing and training systems that focus on selecting employees who have specific knowledge, skills, abilities, or competencies or

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helping employees acquire them (Brown & Duguid, 1991). Organizations must also consider how to transfer expertise and knowledge from experts who have it to newly employed who need to know (Hinds et al., 2001). That is, organizations need to concentrate and more effectively exploit knowledge-based resources that already exist within the organization (Damodaran & Olphert, 2000; Davenport & Prusak, 1998; Spender & Grant, 1996).

The study of knowledge sharing has its roots within the technology transfer and innovation literature. Research in this area has focused on explanations for different nations' successes or failures in fostering economic growth through technological development. While some theorists argue that high investment rates in physical and human capital drive national innovation and growth rates (Young, 1993; Kim & Lau, 1994; Krugman, 1994).

Previous researchers use the terms knowledge and information interchangeably, emphasizing that there is not much practical utility in distinguishing two concepts of knowledge and information in knowledge sharing research (Bartol and Srivastava, 2002; Huber, 1991; Makhija and Ganesh, 1997). Knowledge sharing refers to the provision of task information and know how to help others and to collaborate with others to solve problems, develop new ideas, or implement policies or procedures (Cummings, 2004; Pulakos et al., 2003; Wang & Noe, 2010). Knowledge sharing can occur via written correspondence or face-to-face communications through networking with other experts, or documenting, organizing and capturing knowledge for others (Cummings, 2004; Pulakos et al., 2003). Although knowledge sharing is generally used more often than information sharing, researchers tend to use the term "information sharing" to refer to sharing with others that occurs in experimental studies in which participants are given lists of information, manuals, or programs.

The literature identifies five main contexts that can affect such successful knowledge sharing implementations, including the relationship between the source and the recipient, the form and location of the knowledge, the recipient's learning predisposition, the source's knowledge sharing capability, and the broader environment in which the sharing occurs (Figure-1). A synthesis of this research suggests three types of knowledge-sharing activities to be evaluated. First, analyses of the form and the location of the knowledge are important because each can affect the types of sharing processes that will be necessary as well as how challenging these processes might be. Second, the types of agreements, rules of engagement and managerial practices adopted by the parties are important to evaluate in that they can shape both the flows of resources and knowledge between the parties and the actions taken to overcome and accommodate significant relational differences between the parties. Third, the specific knowledge-sharing activities used are important in that they are the means through which the parties seek to facilitate knowledge sharing (Cummings, 2003). (Fig. on next page)

Successful knowledge sharing results in firms capability and getting into practice product designs, manufacturing processes, and organizational designs that are new to them (Nelson, 1993). Richard Nelson's volume on technology transfer, *Technology, Learning, & Innovation* (Kim & Nelson, 2000) implies that, knowledge sharing is seen as occurring through a dynamic learning process where organizations continually interact with customers and suppliers to innovate or creatively imitate.

Knowledge sharing has also become an important issue in the strategic management field, where knowledge is seen as "the most strategically-important resource which [organizations] possess," (Grant, 1996) and a principal source of value creation, (Nonaka, 1991; Spender & Grant, 1996; Teece et al., 1997). Indeed, "in many industries, the importance of developing abilities

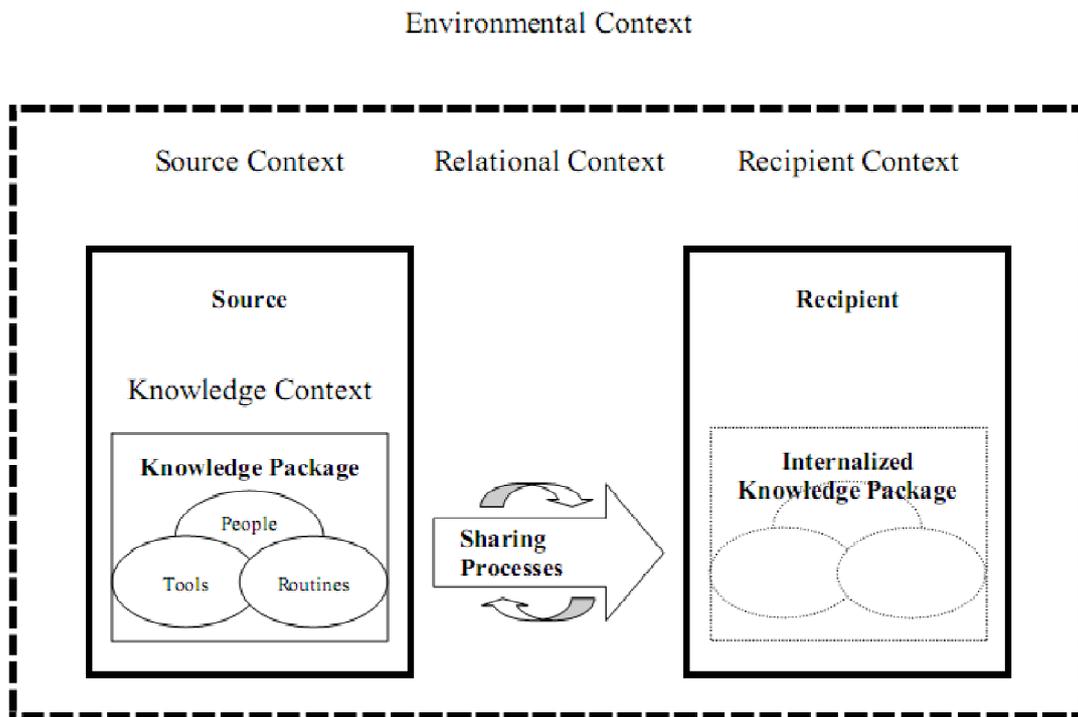


Figure-1 Five contexts of knowledge sharing

to better utilize the knowledge contained in the firm's network has become apparent...Benchmarking has demonstrated the potentially great benefits of best practices transfer. Instances of failure in downsizing, on the other hand, have revealed the costs of losing knowledge. Empowerment and globalization have created local knowledge with potential for utilization elsewhere, and information technology has given individuals increasingly differentiated knowledge, unknown to [the] head office," (Bresman et al., 1999). Moreover, the very basis for some organizational tasks is the sharing of knowledge both between units and with outside partners and clients (Cummings, 2003).

Knowledge sharing has been viewed from two theoretical perspectives in this literature. Beginning with Roger's (1983) investigations of early and late adopters of technological innovations, and more recently with Szulanski's (1996) study of best practices transfers within organizations, many researchers have used communications theory (Shannon & Weaver, 1949) to

examine in particular the factors that make knowledge transfers difficult. According to communication theory, "a transfer of knowledge is likened to the transmission of a message from a source to a recipient in a given context. Characteristics of the message or the situation that limit the amount of knowledge that can be transferred render the transfer stickier" (Szulanski, 1996, p. 438). More recently, organizational learning theories have become a central focus in this field, as successful knowledge transfers are increasingly seen as requiring an ongoing process of learning, rather than just a series of communications (Szulanski, 2000; Cummings, 2003).

### Organizational Commitment

Organizational commitment has an important position in the study of organizational behavior. This is in part as a result of vast number of works which have examined relationships between organizational commitment and attitudes and behaviors in the workplace (Porter et al., 1974, 1976; Koch and Steers, 1978; Angle and Perry, 1981).

Batemen and Strasser (1984) state that the purpose for studying organizational commitment are related to "(a) employee behaviors and performance effectiveness, (b) attitudinal, affective, and cognitive constructs such as job satisfaction, (c) characteristics of the employee's job and role, such as responsibility and (d) personal characteristics of the employee such as age, job tenure".

Organizational commitment defined in different ways (Mowday et al., 1982; Reichers, 1985). In the present study, organizational commitment refers to an accordance between the goals of the individual and the organization whereby the individual identifies with and extends attempt on representing the general goals of the organization.

Meyer and Allen (1991), and then confirmed by Dunham et al (1994), identified three types of organizational commitment: affective, continuance and normative.

Affective commitment defined as employee emotional connection to, identification with, and involvement in the organization and its goals. It results from and is induced by an individual and organizational value accordance. So, it becomes almost natural for the individual to become emotionally connected, and enjoy continuing membership in the organization (March & Simon, 1958; Hall et. al., 1970; O'Reily & Chatman, 1986, Meyer & Allen, 1984). Steers (1977), and Mottaz, (1988), identified agent which help develop inherently rewarding situations for employees to be antecedents of affective commitment.

Continuance commitment defined as readiness to remain in an organization because of personal investment in the form of non-transferable investments such as close working relationships with coworkers, retirement investments and career investments, obtained job skills that are unique to a particular organization (Mowday et al., 1982; Dunham et al., 1994).

Normative commitment inspired by a feeling of duty responsibility to remain with an organization. Such a feeling of obligation often results from that Wiener (1982) characterized as "generalized value of loyalty and duty." This is a natural susceptibility to be loyal and committed to institutions such as family, marriage, country, religion and employment organization. Socialization in a culture places a reward on loyalty and devotion to institutions as a result. This view of commitment holds that an individual exhibit commitment behavior solely because he or she believes it is the moral and right thing to do. Schwartz and Tessler (1972) introduced personal norms as a responsible factor for what Wiener referred to as an incorporated normative pressure, that makes organizational commitment a moral obligation because the individual feels he or she must do so. This feeling of moral obligation measured by the extent to which a person feels that she or he should be faithful to her or his organization, make personal sacrifice to help it out and not disapprove it (Wiener and Verdi, 1980).

### **Research Model and Hypothesis**

H: Knowledge sharing has a significant positive influence on organizational commitment of employees.

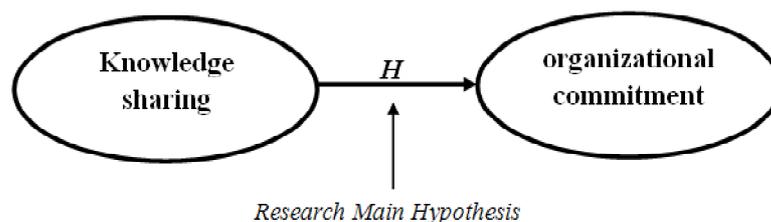


Figure-2 Conceptual model of research

## Methodology

### Statistical Population

Statistical population in this research includes 50 companies in Mazandaran and their 650 employees. Referring to the Krejcie and Morgan (1970), the minimum number of sample size was determined which

was 242 employees; the authors used random sampling for this research. After the distribution of 300 questionnaires, 268 usable questionnaires were gathered. Table 1 illustrates the descriptive statistics of the respondents.

**Table-1 Description of the Respondents**

Item	Description	Frequency	Percentage
Gender	Male	169	63%
	Female	99	37%
Age	Below 30	65	24%
	31-40	159	59%
	41-50	31	12%
	Above 51	13	5%
Education	Diploma	56	21%
	STP	59	22%
	Bachelor	140	52%
	Master & PhD	13	5%

### Instrument

In order to collect the necessary data, a questionnaire was used to test the hypothesis of the study. The questionnaire consists of three sections. The first part includes 3 questions about demographic information of the respondents (table 1). In the second part, we used 5 questions developed by Yang et al. (2012) to measure the level of knowledge sharing in companies. Further, in the third part, we used 5 questions to measure organizational commitment. We extracted these 5 questions from the original scale developed by Meyer & Allen (1991). We used five-point Likert type scale for all the items. Response categories range from 1 (strongly disagree) to 5 (strongly agree).

### Reliability and Validity

The summary statistics of formal survey are shown in Table 2. For reliability evaluation we utilized Cronbach's alpha. The Cronbach's alpha reliability of two scales

are more than 0.7 ( $\alpha > 0.7$ ), which indicates the scales demonstrate good reliability.

For evaluating the validity of the questionnaires, we used content validity and construct validity. Content validity deals with how representative and comprehensive the items were in creating the scale. It is assessed by examining the process by which scale items are generated (Moon & Kim, 2001). Content validity assured us that all aspects and parameters that impact on main content were evaluated. In order to test the content validity after devising a framework for the questionnaire, we asked 10 experts to modify it if needed. These experts evaluated all the implemented criteria in the questionnaire and modified it.

Construct validity determines the extent to which a scale measures a variable of interest (Moon & Kim, 2001). In this research we used factor analysis for considering

**Table-2 The Summary Statistics of Formal Survey**

	Mean	Std. Deviation	$\alpha$
<b>K1</b>	4.5410	0.76572	
<b>K2</b>	4.7463	0.52198	
<b>K3</b>	4.5000	0.76192	
<b>K4</b>	4.2761	1.06979	
<b>K5</b>	4.4254	0.93117	
<b>Knowledge sharing</b>	.....	.....	<b>0.784</b>
<b>OC1</b>	4.5597	0.74463	
<b>OC2</b>	4.6716	0.62142	
<b>OC3</b>	4.5522	0.77476	
<b>OC4</b>	4.5970	0.72017	
<b>OC5</b>	4.4776	0.79055	
<b>Organizational commitment</b>	.....	.....	<b>0.811</b>

the structure of research. Confirmatory factor analysis was used to investigate the construction of the questionnaire. Factor analysis depicted that all the mentioned criteria are measured in these questionnaires.

Based on Joreskog & Sorbom (1989), Chi-Square/df  $\leq 3$ , RMSEA  $\leq 0.10$ , NFI, NNFI, CFI, GFI, AGFI and RFI  $> 0.9$ , and  $0 < IFI < 1$  show that the measurement model provides a reasonable fit to the data.

**Table-3 The structural model fitness indices**

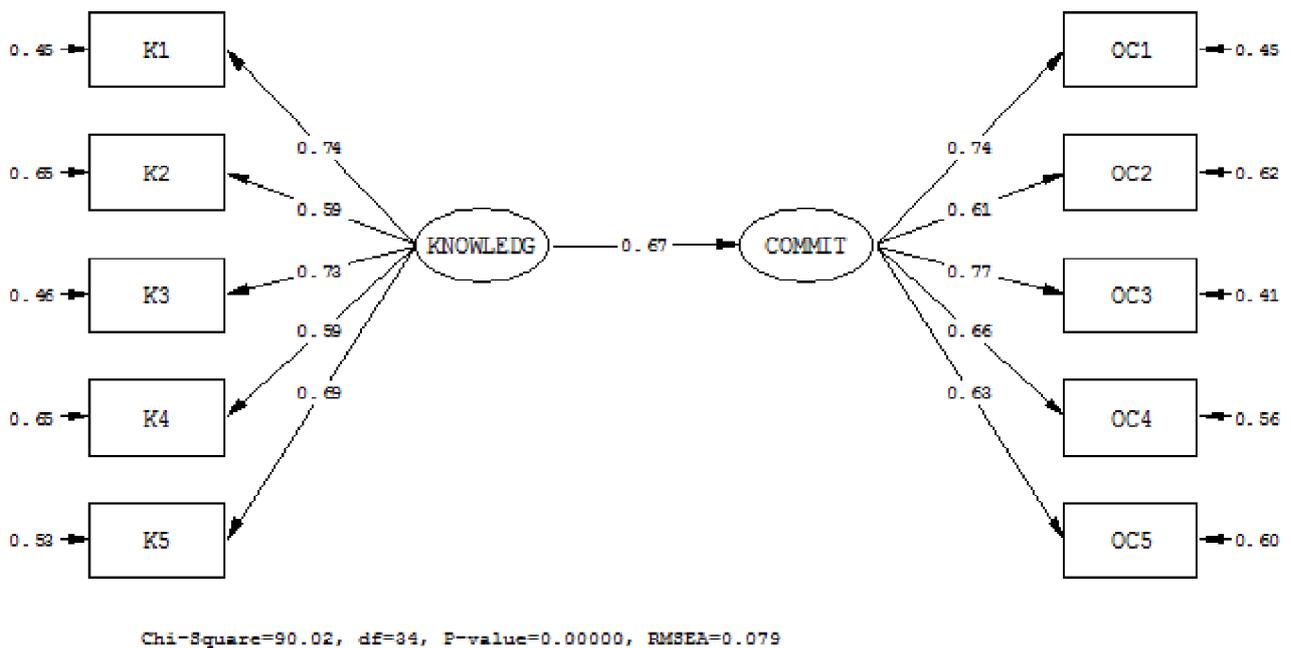
Fitness Indices	Measure of Index
Chi-Square/df	2.6476
P-value	0.0000
Root Mean Square Error of Approximation (RMSEA)	0.079
Normed Fit Index (NFI)	0.95
Non-Normed Fit Index (NNFI)	0.96
Comparative Fit Index (CFI)	0.97
Incremental Fit Index (IFI)	0.97
Relative Fit Index (RFI)	0.93
Goodness of Fit Index (GFI)	0.94
Adjusted Goodness of Fit Index (AGFI)	0.90

**Results**

This study tends to investigate the impact of knowledge sharing on organizational commitment of employees. The relationship between research variables was tested using the SEM technique that is explained below. For testing our hypothesis, we performed our structural model applying 5 questions of knowledge sharing and

5 questions of organizational commitment. Figure 3 shows the results of the SEM analysis which indicates the relationship of knowledge sharing and organizational commitment. Moreover, figure 4 shows the t-value of the analysis. Based on the results of SEM analysis, our Hypothesis is confirmed.

**Figure-3 Structural equation model for core competencies**



**Figure-4 T-value test**

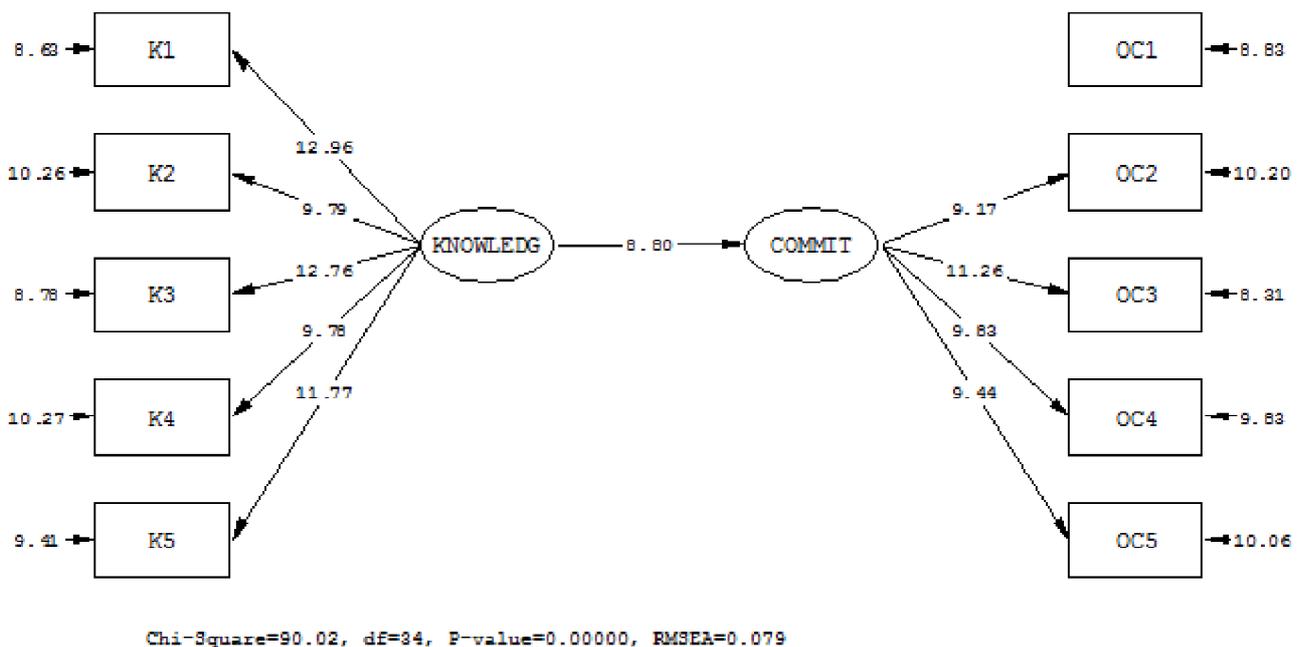


Table 4 summarizes the hypothesis test result in terms of path coefficient (standardized) and t-value in significance level of 0.05.

**Table-4 The result of the Hypothesis Test**

No	Hypothesis	Path coefficient	t-value	Result
H	Knowledge Sharing → Organizational Commitment	0.67	8.80	Accept

### Discussion

The aim of the present study is to investigate the influence of knowledge sharing on organizational commitment of 268 employees of 50 companies in Mazandaran province of Iran. Previous studies have discussed about employees organizational commitment in different context; however, lack of sufficient research, studying the relationship between knowledge sharing and organizational commitment, was the reason this research was carried out. Further, because of the positive consequences of organizational commitment, examining factors which have positive impact on employees' commitment to their organizations is an important issue for managers of organizations which was another reason this research was carried out.

The findings of the present study show that knowledge sharing in organizations has a significant positive influence on organizational commitment of Iranian employees. The findings imply that when knowledge sharing inside organizations increases, the level of employees' commitment to their organizations will also increase. When organizational commitment of employees increases, they will try their best to reach organizational objectives. Thus, managers of organizations should improve knowledge sharing and application in organizations. Organizations will apply various ways which facilitate knowledge sharing inside organizations. One of the most significant ways that organizations are focusing on is investing on information technology. Information technology decreases organizational hierarchy and facilitates knowledge sharing by providing databases which help managers

and employees to access appropriate information helps them do their tasks appropriately.

As shown in this study, knowledge sharing positively impact organizational commitment of employees and the reason is that appropriate information about processes and objectives of organizations provide further insight for personnel about different aspects of their organizations and also, they observe the consistency between their own objectives and organizational objectives. Thus, the ultimate consequence is commitment of employees to their organizations.

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