

# THE ART OF KNOWLEDGE TRANSFER

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*"Even today, there is a fear among employees that sharing knowledge reduces job security", Andreas Reige.*

## **ABSTRACT**

Through education and experience, people acquire facts, information and familiarity with a person, a thing, an action or a subject. This is termed as knowledge. It can be practical (hands on experience) or theoretical (that we acquire from books, people etc.). As the famous Greek philosopher, Plato puts it, "knowledge is the justified true belief". Knowledge is the power or the fuel that runs the brain, the engine. Knowledge is a wider concept than information. As the world is shifting from an industrial economy based on assembly lines within a country to wider, global, decentralized, information driven economy, the importance of knowledge transfer and its implications are relevant. Any knowledge acquired from information available, can be vital in one way or the other for any organization.

## **DESIGN**

This article reviews the mechanism, fundamental dimensions, parties involved, types of barriers and ways to prevent the barriers to knowledge transfer.

## **FINDINGS**

It helps individuals and organizations to get familiar with the mechanism, types of barriers to knowledge transfer and ways to prevent it for achievement of goals.

## **PRACTICAL IMPLICATIONS**

All prevention methods for barriers in knowledge transfer are not applicable to all organizations. The intelligence or common sense should be applied to find which one is right for your organization and then implement it without much resistance.

## **ORIGINALITY**

The aim of the article to familiarize individuals and organizations of the importance to knowledge transfer and how barriers pertaining to this can be resolved in the best practical way.

## **KEYWORDS**

Knowledge Management, Prisoner's dilemma, knowledge provider, knowledge taker,

## **TYPE**

Literature Review

## **INTRODUCTION**

Per Plato, knowledge should satisfy three

aspects: Knowledge should be true, it should be justified and it should be believed. It is not very clear what belief is and to what extent the belief can be true. Robert Nozick argues that knowledge should track truth and Richard Kirkham suggests that the definition of knowledge requires that the evidence of belief necessitates the truth.

In an organization, bits and pieces of data is available in all the different departments. The management has to assimilate all these data and process them to be useful information so that decisions can be made on the basis of this information. As a part of an organization, people are required to transfer the knowledge to others too. Sometimes these transfer occur from lower level to the middle/top level or vice versa and sometimes its within the same levels too.

Information management as the enabler for knowledge management can be defined as the collection of data or information from different sources and processing it for the stakeholders, and distributing it for decision making. Knowledge management is viewed as the collection and integration of bits and pieces of information within and across the boundaries of the organization to produce and share new knowledge, thereby increasing the knowledge and value of the individuals.

Since disseminating and acquiring knowledge available through different sources increases the value of an individual, sharing or transfer of knowledge becomes difficult and poses threat to the provider; at least some individuals think so. Transferor sharing can be defined as conveying or moving something from one person to the other or one place to another or handing over something.

It is with great difficulty, time and patience that we acquire knowledge. It involves money, matter and materials. Sometimes, in an organization, they need to transfer knowledge from one set of individuals to the other for obvious reasons. The reasons could be for: delegation, empowerment of the lower employees, orientation for the new employees, termination of the employment of the knowledge giver etc. It imposes a challenge for the giver than the receiver. The knowledge provider in an organization

is always scared that his importance would be low once the transfer is done as his position could be threatened by the other employee who just acquired the knowledge from him.

The transfer of knowledge is important from an organization's point of view because it helps the organization and its employees to understand what others are doing and to reduce duplication of work thereof. It also helps the organization to reduce the cost of training; education of the lower level employees to do certain work as providing the same from outside would not be cost efficient. It also helps the organization to prepare its resources up to date with state of the art technology in this highly competitive world. Archiving, transferring and increasing knowledge for everyone so that the organization doesn't get threatened by a "I know all" employee, are crucial factors for high performance organizations. It imposes a lot of challenges to the organization too as there would be lots of resistance from the part of the knowledge provider who feels threatened.

In this article we will analyze the mechanism of knowledge transfer, the challenges and advantages of knowledge transfer, and how management can promote the knowledge transfer mechanism smoothly so that the employees feels safe and feel their job is secure.

**KNOWLEDGE TRANSFER MECHANISM:**

Let us consider an example of two persons, X and Y, who are authorized by their organization to transfer knowledge. Here four situations can happen:

1. X and Y decides not to transfer the knowledge and face the consequences.
2. X decides to transfer the knowledge and Y doesn't.
3. Y decides to transfer the knowledge and X doesn't.
4. X and Y both decide to transfer the knowledge.

**The result:**

- In case one the knowledge transfer doesn't happen and both are stuck with their respective intelligence/knowledge (0, 0).
- In case 2, X decides to transfer the knowledge and loses his edge (0) and Y gains X's knowledge (new knowledge) in addition to what he had (10).
- In case 3, Y decides to transfer his knowledge and loses his edge (0), and X gains Y's knowledge (new knowledge) in addition to his (10).
- In case 4, both X and Y gains new knowledge (5,5)

**Diagram 1**

X's choices are made based on Y's behavior.

- If Y chooses to transfer the knowledge then X will chose to not to transfer.
- If Y chooses not to transfer the knowledge then X will also chose not to transfer.

X will choose the dominant strategy in either case.

Similarly, Y's choice are made based on X's behavior.

- If X chooses to transfer the knowledge then Y will chose to not to transfer.
- If X chooses not to transfer the knowledge then Y will also chose not to transfer.

Y will choose the dominant strategy in either case.

It is always better for both the parties to mutually agree to transfer the knowledge as its beneficial for them and the organization together.

In an organization the knowledge transfer doesn't come only once. It is played infinite number of times. Maybe once X can play not to transfer and win, but the next time Y will anticipate the same and won't participate in the knowledge transfer game and choose not to transfer. So, the strategy one can adopt will win in short term but in the long run it won't.

As Henderson's discussion of strategic partnership defines organization interdependence as, a working relationship that reflects a long - term commitment, a sense of mutual cooperation, shared risk and benefits, and other qualities consistent with concepts and theories of participatory decision making." The organization's goals reign supreme to individual's goal. So the organizations should come up with incentives and pay offs that are beneficial to the employees for initiatives done for knowledge transfer for the achievement of goals. The payoffs and the benefits are maximized when employees share the risk associated with the knowledge transfer.

**FUNDAMENTAL DIMESNSIONS OF KNOWLEDGE TRANSFER:**

Knowledge transfer is not just mere displacement of knowledge but generation of new knowledge and its application and absorption by the knowledge taker too. It is non linear and recursive so there is no definite beginning or end for this process. It is a continuous, never ending process and can happen at any time. It is not a unidirectional sequence.

Knowledge transfer is a process which has three dimensions:

- Knowledge generation
- Knowledge diffusion
- Knowledge absorption

Knowledge generation - often starts with the topic selection and the act of the knowledge provider.

Knowledge diffusion - It is the process of preparation and dissemination of the topic or knowledge.

**Knowledge absorption** - It is the act of receiving the knowledge disseminated by the giver or the assimilation of the new knowledge generated.

### **ACTORS IN THE PROCESS OF KNOWLEDGE TRANSFER**

There are three major actors involved in the process of knowledge transfer based on their roles:

- Knowledge creators/ providers
- Knowledge disseminators
- Knowledge takers / receivers

**Knowledge creators** - are the ones actively involved in the creation of knowledge. They are the ones who are asked by the management to transfer the knowledge. It is from them that the process originates and maximum resistance is generated.

**Knowledge disseminators** - are the ones who disseminate the knowledge.

**Knowledge takers** - are the last ones in the link of knowledge transfer. They usually offer little resistance. They are the ones who benefit the most out of this process. They absorb the knowledge that is transferred to them.

Diagram: Knowledge Transfer Process

### **DETERMINANTS OF KNOWLEDGE TRANSFER**

The barriers that could arise and the success of knowledge transfer depend on the determinants of knowledge transfer.

- Transfer-object
- Transfer-media
- absorptive ability of the knowledge taker

The transfer object is the dimension of the knowledge creation.

The transfer media is the dimension of the knowledge dissemination.

The absorptive ability of the knowledge taker is the dimension of knowledge taken.

### **SIGNIFICANCE OF KNOWLEDGE TRANSFER**

Computers can transfer large amounts of data from one place to the other in a matter of short time. But knowledge transfer, sharing of knowledge doesn't happen that easily, from one brain to the other. Knowledge transfer becomes increasingly important in today's globalized world where a person sitting in one part of the world has information about a company or another person sitting in another part in no time. Knowledge transfer becomes important from the knowledge creation aspect too.

Participation in the aspect of knowledge creation and transfer has a benefit of access to the informal knowledge and the improvement of own absorption capabilities.

It helps in the subsequent use of knowledge application in future during decision making.

It helps in cost reduction, as duplication can be avoided when people share knowledge about their work.

It helps in creation of a knowledge bank which can be accessed by the right people whenever required for the benefit of the organization.

It helps during training a new employee, which usually proves to be costly if a knowledge bank is unavailable as when an employee leaves, the knowledge that he has leaves the doors with him.

The explosion of knowledge in the recent times has created urgency for knowledge available from all parts of the world in making better decisions for an organization.

Due to increased specialization, customer demand, research and development activities are highly important to create new knowledge to make high quality products and services to match the customer needs.

No department can thrive on its own. There is always an inter-connected system that always helps in achievement of the goals. For making a new product, marketing, research, production, finance and human resources departments work in synergy. In such an environment, the knowledge transfer between departments plays a vital role.

The knowledge that a person handles during his tenure in an organization is not his own. The organization has the primary right over that knowledge. So it is important that the person shares it with whichever new person that the organization asks him to share it with.

It can be a good appraisal technique to see if a person is competent enough.

It helps in to pool ideas from different sources, both seniors and juniors and valuable inputs from these can be used to develop new products and services.

The ultimate aim of any organization is to achieve its goals. So if knowledge transfer is required by its employees to train or to support another person in the department or a different department, then, it becomes a tool by which the senior management can appraise him, for his degree of cooperation. Only those people who support others around them to bring the best out of them, rise to rule.

## **BARRIERS IN KNOWLEDGE TRANSFER**

Though the advantages outnumber the disadvantages for knowledge transfer, there still exist barriers. The humans, the sole vessels of knowledge, find it difficult to communicate when it comes to knowledge transfer. They feel in under the spot light when asked to do the transfer, even though it is mutually beneficial.

According to Hard H. and Lindkvist B. (Hard and Lindkvist, 2000), there are two main barriers to knowledge transfer:

- Culture
- Localization

**Culture:** According to Edgar Schien, culture of an organization is defined as the shared values, beliefs and practices of the people in the organization (Schien, 1993). Culture is reflected in all the aspects of the organization especially its mission, the way the employees act, the way they make sense of each other and react. The core values of the organization reflect that. If the organization has a culture of taking knowledge transfer in a positive and constructive way, then there won't be much resistance for knowledge transfer in that organization. Sharing ideas and knowledge among themselves would be seen as a way to enhance and develop personally. In olden days those individuals who would hoard the knowledge over years to achieve power were considered to be the successful ones. But times have changed and now, it is those individuals, who share their knowledge and can get their hands on available knowledge from others, are considered to be management materials.

**Localization:** Business is global in the present scenario. Gone are the days when the face to face interaction with employees, customers and suppliers etc. would happen on a continuous basis. Most businesses are able to manage by sitting way on the other side of the continent by means of advancement in technology. Most of the time knowledge transfer occurs face to face. Since that is not possible now for certain businesses, knowledge transfer doesn't happen smoothly or barriers occur in knowledge transfer.

Based on the research findings by Gabriel Szulanski, the barriers to knowledge transfer are:

- Ignorance
- Non-Absorptive capacity
- The lack of pre-existing relationships
- Lack of motivation

**Ignorance:** There are certain people among the knowledge providers, who think that the knowledge they have is a powerful and useful resource and it

can be shared with others who don't have the same to educate them to make them resourceful for the organization. Those individuals who would benefit from the knowledge have no idea what they are losing for not absorbing the knowledge that is available with the providers.

**Non-Absorptive capacity:** Even when the resources are available, some employees don't have the money, time and capacity to absorb the knowledge being disseminated for them to enrich themselves for being resourceful. The resourceful person not knowing the power and value of his knowledge and the knowledge recipient, who is unaware of his shortfall, are equally part of the barrier in knowledge transfer. A firm too, should understand the importance of absorptive capacity to get the new information, assimilate the new knowledge for commercial ends. The firm should always invest in research and development for creating new information.

**The lack of pre-existing relationships:** Knowledge transfer between known people happens without many barriers. The transfer will occur smoothly when the parties involved are known or friendly to each other. If two managers don't talk to each other or are hostile then transfer will not occur or there will be lot of barriers. It will always be good if we maintain a friendly atmosphere in the working place. The competition between employees and organizations should never pose a threat to the knowledge transfer process as both the parties tend to gain in most cases.

**Lack of motivation:** the employees involved due to sheer short sightedness won't perceive the good in knowledge transfer and best practices. It is highly required that the organization educate them about the importance and need for knowledge transfer and clearly make them aware of the advantages of the same. The motivation could be extrinsic or intrinsic. Extrinsic motivation happens when the person involved is not motivated by the task but by the benefits associated with the task. For eg. An employee will be motivated by the bonus associated with the knowledge transfer or by the measures that might come against him for not transferring the knowledge. This is extrinsic motivation. Sometimes the employees will be motivated by the sheer opportunity he gets to communicate his experiences to others so that others can learn from it. This is intrinsic motivation. The more the employees develop intrinsic motivation, the better for the organization when it comes to the question of knowledge transfer.

Per Andrea Riege, the barriers in knowledge

transfer can be segregated into:

- Individual barriers
- Organizational barriers
- Technical barriers

**Individual barriers include:**

- Lack of time to share knowledge
- Lack of time to identify the individual's need for a specific knowledge
- Age differences
- Difference in levels of education
- Gender differences
- Poor communication skills
- Dominance shown by the knowledge provider
- Fear of losing by the provider
- Lack of social network
- Lack of trust in people
- Insufficient feedback, capture, evaluation etc of past mistakes
- Lack of contact time between the provider and recipient
- Difference in experience levels
- Lack of trust in accuracy of the knowledge from the source
- Difference in cultural, national and ethnic background

**Organizational barriers are:**

- Knowledge sharing requirements are missing from the mission or goals of the company
- Lack of managerial direction and leadership in knowledge transfer practices
- Shortage of formal space for knowledge transfer
- Lack of transparent rewards and recognition systems
- Existing corporate culture doesn't provide sufficient support for sharing practices
- Knowledge retention and highly skilled staff is not a priority
- Deficiency of company resources that would provide sharing opportunities
- Excessive competitions within and outside the company
- Communication channels are not open enough
- Hierarchical organizational structures inhibits the knowledge sharing practices
- Size of the organization is too big to facilitate knowledge transfer.

**The technological barriers are:**

- Lack of proper maintenance of IT systems obstructs the knowledge transfer process
- Improper integration of IT systems and processes impedes on the way people do things
- Mismatch between individual's need and the IT

systems

- Reluctance on the individual's part to use the IT systems
- Lack of proper training to staff in the IT systems
- Unrealistic expectations by the employees on what certain systems can do or can't.

**HOW TO REDUCE THE BARRIERS TO KNOWLEDGE TRANSFER**

All companies to achieve growth in their business and improve their market share need knowledge sharing. It has to be made an integral part of their operations. It is true that they will face a lot of challenges or barriers in achieving it. Investing in the creation of new knowledge and processes to effective knowledge transfer should be incorporated in the budget. Employees should be trained and made aware of the importance of knowledge transfer.

**The major ways by which barriers in knowledge transfer can be reduced are:**

- Motivation
- Open organization structure
- Rely on modern technology
- Training
- Incentives
- Clear organizational policies and principles
- Take off the fear factor
- Lead by example

**Motivation**

Encouraging, motivating the employees to capture and assimilate and receive knowledge is a clear way of reducing the barriers of knowledge transfer. Most of time the employees aren't motivated enough to participate in the knowledge transfer process. Creating awareness among employees about the advantages of knowledge sharing would be the best option.

**Open organization structure**

The organization structure should be such that it allows free flow of information and knowledge to the intended recipients. The clear communication of information regarding company goals, strategy linking knowledge and knowledge transfer practices should effectively control the barriers in knowledge transfer.

**Rely on modern technology**

Modern technology provides the best platform accessible to all those in need of knowledge from diverse internal and external sources. Giving access to employees to online libraries, historical records and new IT platforms, helps them to access the knowledge in a faster pace and free of cost.

**Training**

Provide training to employees once a month or

year in various functional level aspects of the organization. This will keep them updated about the different operations done by departments. It is also good in another sense that it will create a sharing atmosphere or culture among the employees.

### **Incentives**

Monetary incentives or any other kind of incentives should be provided to the knowledge providers as a token of appreciation for their efforts and taking part in the goal achievement process indirectly. This will also encourage the knowledge takers to participate in future knowledge transfer processes.

### **Clear organizational policies and procedures**

Organization policies and procedures should be clearly communicated to the new employees. It will ensure that the new employees are aware of the organization culture. If we ask the employee to participate in the knowledge transfer process without them being aware of such culture prevailing in the organization, they will feel a fear factor within themselves about the security of their jobs.

### **Take off the fear factor**

Employees fear that their importance will go once the knowledge transfer is done. They have a feeling that once everyone knows what they do and how they do it, they will be easily replaced. This is one of the major barriers in knowledge transfer. So it becomes a major job and important factor for the human resources managers to educate the employees that such a fear doesn't stand any ground and that knowledge transfer is done for the betterment of the organization.

### **Lead by Example**

It is always good for the managers to show the employees how to do the knowledge transfer and educate them about the importance and benefits of knowledge transfer. When the managers show the employees with examples, the fear factor will lessen for the employees and they will get motivated to participate in knowledge transfer.

### **CONCLUSION**

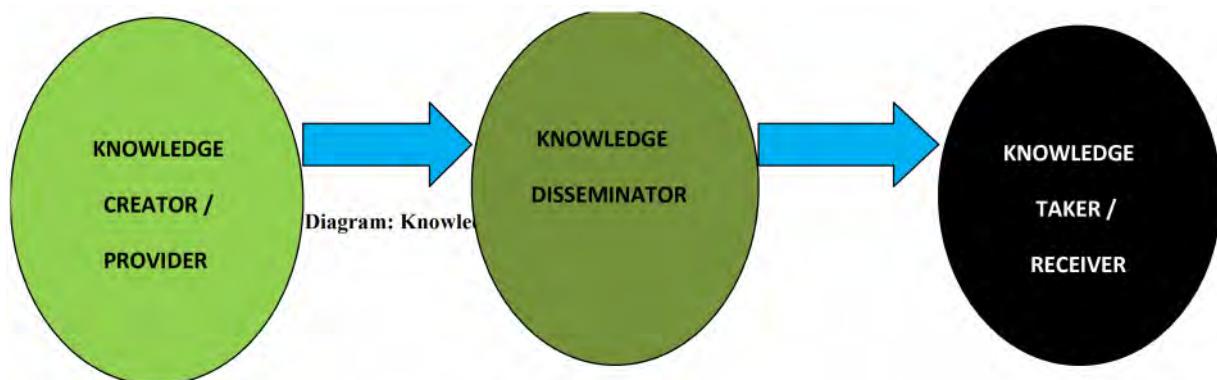
For a win-win situation, it is always beneficial for the employees to participate in the knowledge transfer process. In this world of globalized economy, where management is done from one end of the world, production is done on the other end and the whole world is your market, knowledge transfer or knowledge sharing gains utmost importance to stay competitive in the market. The cultural diversities that have risen in the work place have made the importance of knowledge transfer and sharing

significantly higher. The increasing importance of R&D facilities, stresses the never ending quest of man for knowledge creation. The dominance of large companies in the knowledge creation process does not result in little relevance of the transfer object for small enterprises. Formal and informal sharing networks already exists in companies and its often a matter of building and expanding on those existing networks. If utilized properly, these networks will prove to be one of the stepping stones on which the corporation would be riding high to achieve the corporate goals and carve a niche for it in the new business world.

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		<b>EMPLOYEE Y</b>	
<b>EMPLOYEE X</b>	<b>TRANSFER</b>	(5,5) CASE 4	(0,10) CASE 2
	<b>DON'T TRANSFER</b>	(10,0) CASE 3	(1,1) CASE 1

**Diagram 1: The Prisoner's dilemma applied to Knowledge Transfer case.**