Employees Perceptions about Knowledge Sharing Impacts on Organizational Practices

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Abstract: - This article main objective is to identify the organizations processes which facilitate knowledge sharing, application and impacts on organizational practices. The research question for this study was: what are the impacts of the knowledge sharing processes on organizational practices?
The research was qualitative and also quantitative. The qualitative approach involved semi structured group interviews with the goal to identify forms of knowledge sharing and collaboration among co-workers and also from document analysis on organizational evidences: reports, procedure sheets and manuals and also from observation grids filled during factory visits. These techniques were used to better understand the context and the processes they used to share knowledge within one organization from the heat water sector.
The quantitative methodology was applied through a questionnaire filled in by workers from several sectors and departments of the organization.
The study reveals as main findings the main forms used for knowledge sharing: suggestion boxes, several types of workshops and several transversal projects of improvement, quality and maintenance; and the main impacts of knowledge sharing in the organizational practices of Alpha organization.

Key-Words: - knowledge, organizations, organizational practices, sharing processes, case study, employees perceptions

1 Introduction

The main subject of this article is the identification and analysis of processes that facilitate the sharing of knowledge within organizations and the Impacts in the organizational practices. To accomplish this goals was analyzed the concept of knowledge and the processes of knowledge sharing - one of the assumptions of this study, refers to the fact that tacit knowledge can be made explicit (though not entirely) through various forms of sharing knowledge, whether it is done informally or through mechanisms and well-structured with clear objectives to capture and disseminate it.

In this context, was performed a case study that helped to understand how organizational actors interrelate in different moments sharing their knowledge and identify the impacts of that sharing in the organization itself.

This research was oriented in accordance with the following research questions:

— What are the main knowledge sharing mechanisms used by the workers?
— Which are the major Impacts of knowledge sharing in organizational practices?

For data analysis was used content analysis on data collected by semi-structured interviews (12 workers were interviewed) and also descriptive statistic as a result of a questionnaire applied to 25 elements of the organization. This data collection tool was design according to the results of the content analysis.

2 Problem Formulation

The research problem investigated was "what are the impacts of the knowledge sharing processes on organizational practices" and the main idea was to quantify the importance of the impacts using descriptive statistical analysis.
To analyse de problem – identifying the impact on organisational routines – the perception of the employees were the main boundary and the main framework to select the impacts on: human resources practices, work organization, organizational structure, technology, product development, market, process, external relations, employee participation, knowledge management, management practices.
To define the problem the reviewing of the literature about knowledge sharing concepts was important to conceive the semi structured interviews and to identify potential forms of knowledge sharing and also expected impacts on the organizational

practices.

2.1 Literature Review on Knowledge Sharing Concepts

Knowledge has been studied by different schools of thought analyzing mainly the concept and the life cycle of knowledge processes. About the concept, several important authors define it using different perspectives:

According to [1] "knowledge is a mix of experience, values, contextual information, and insights that provide a mental framework that helps evaluate and incorporate new experiences and information".

Other important author connects knowledge to action; he states that "knowledge is the ability to act." [2]

Knowledge "is created by the flow of information associated with beliefs and commitments of those who possess it", [3]. In the opinion of these authors, knowledge enables organizations to achieve their successes, keep them in the market, and increase its competitiveness.

More recently Coulson-Thomas [4] has reinforced this idea by stating that organizations today do not compete in terms of products, services or technology, but in terms of knowledge, processes, and values.

Each one of these definitions helps us to acknowledge the multiplicity of dimensions of the concept. There are several authors who distinguish two specific dimensions of knowledge: tacit and explicit knowledge [5], [3]. Tacit knowledge is personal, unique, hard to capture, reproduce, encode, and sharing / transfer - this knowledge can also be assigned to individual knowledge. Moreover, explicit knowledge is easily encoded, systematized, and converted into words, numbers, or symbols. It is possible to be captured, shared, transferred, stored - made available to be accessed and reused.

This is knowledge that can be assigned to organizational knowledge. Alwis and Hartmann [5] also reported that tacit and explicit knowledge are complementary, and therefore, both are essential for the process of creating knowledge.

From another perspective all that dimensions need to be managed in order to be explored by the organizations. In the last decade the organizations have invested in developing knowledge management systems with the goal to capture, organize, and make accessible the most important knowledge developed in house [6].

Knowledge management systems have the important goal to facilitate the knowledge sharing process – it is possible to say that it's a system that creates conditions for workers to have the opportunity to access and share their knowledge through collaborative practices and mechanisms, such as discussion forums, workshops, and intranet and internet tools, among others. Through these processes can also assist in the transformation of tacit knowledge into explicit knowledge.

It also facilitates access to knowledge already established within the organization and that is stored in organizational memory, allowing its re-use as well as the creation of new knowledge. The process of knowledge sharing in organizations only reaches its full potential to create value when it is embedded in organizational routines and when it has been converted into organizational knowledge [7].

To promote the sharing of knowledge among employees, organizations tend to invest in information and communication technology. However, it is fundamental to focus on the development of social relations and processes of personal interaction [8], because they lead to organizational and cultural transformation needed for the knowledge sharing process. Information technology and communication are part of the essential infrastructure for sharing knowledge, but not enough because knowledge involves an activity that only people can do - think.

Extensive literature provides several examples of organizations that dominate the process of knowledge sharing [9], but most of these case studies did not explore how these organizations have been successful in this effort and what kind of impacts results from that process.

The knowledge sharing process is only effective when produce results conducting to organizational change [10] and this study intended to understand if there are impacts on organizational practices.

2.2 Research Methodology

In order to identify the knowledge sharing processes were used qualitative techniques that consisted of semi-formal structured interviews that were recorded and then transcribed. Twelve participants were interviewed with different years in the organization and different departments.

The interviews were structured in-depth interviews that lasted, on average, 60 minutes. All interviews were tape-recorded and then transcribed. The results were coded resulting in categories that were identified according to the knowledge sharing processes discussed by the participants during the interviews.

To identify the impacts of knowledge sharing in the organization practices it was used quantitative techniques that consisted in the application of a questionnaire to a sample of 25 workers in the organization. This sample included workers from different departments of the organization and from several hierarchical levels

3 Problem Solution

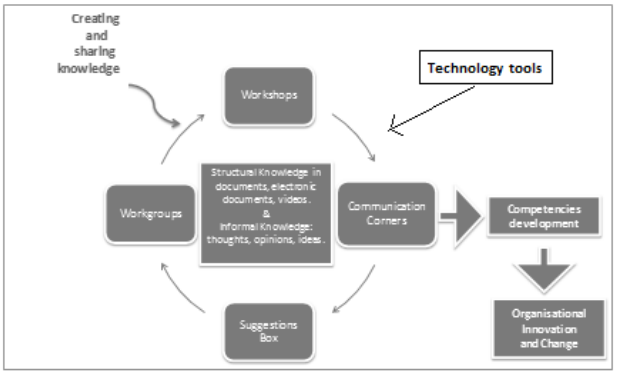
3.1 Evidences from the Knowledge Sharing Process

The collection of evidence in the case study identified processes of knowledge sharing that occurs through the implementation of routines and the promoting of collaborative activities in systematic transfer processes.

Apart from the openness to suggestions and routines for problem solving, the workers are also motivated to participate in transversal projects of improvement, quality, and maintenance.

The following diagram (Fig. 1) represents the processes used for knowledge sharing and for interaction processes that lead to constant innovation in organizational practices.

Fig. 1 - Creating and sharing knowledge within the company



The knowledge is shared through workshops, working groups with workers from different sectors and departments, suggestion boxes and spaces for communication, which are spaces for exchanging ideas, opinions and thoughts, but also holds structured knowledge through documentation, videos and other technological means. The application of knowledge created and shared through these mechanisms promotes the development of workers skills, allowing them to be in a process of incremental innovation, with the aim of continuous improvement of its products and organizational practices.

3.2 Impacts of Knowledge Sharing in Organizational Practices

All of those knowledge sharing processes create conditions for a systematic transfer of knowledge used in the creation of new practices or in the change of the implemented practices which has a huge impact on organisational routines as the following results that emerged from the data collected with the questionnaires:

a) Human resources practices

The responses about human resources practices are very high, except when it comes to the impact of the reward system.

The knowledge sharing process has great impact, especially on the practices of information transmission, competencies of workers, and managers, and in the recruitment of new workers.

Impacts	% of responses
Practices of information transmission	100%
Workers' competencies	87,5%
Managers' competencies	87,5%
Recruitment of new workers	87,5%
Motivation levels	75%
Performance Levels	75%
Reward Systems	25%

Practices of information transmission: the organization had a change in terms of sharing ideas in the meetings, and through all the information displayed throughout the organization (the new organization chart, the new mission, goals and strategy, and also the technical information that circulates on files).

Workers' competencies are a main concern, because the main impact on the technical an also the behavioral competencies.

Recruitment of new workers refers mainly to temporary workers and sometimes this brings some difficult situations, not only because of their integration, but also because of especially when the contract is finishing and their work influences negatively the team's productivity.

Performance levels have increased because of the new work practices introduced by the production system implemented.

Motivation levels have increased with the new culture of participation and knowledge sharing through the workshops, the new ideas development

system (suggestion boxes), and because most workers really like to work at this organization.

Manager's competencies development has helped them to coach and to develop their subordinates since the production system implementation.

The new reward system has not yet produced results and this can explain the low level of scoring.

b) Work organization

In the work organization, the level of responses is also very high; involving all hierarchical levels, and only Project teams and Services' externalization got very few responses.

Impacts	% of responses
Total Quality Management Programs	87,5%
New work processes	87,5%
Increasing planning processes	87,5%
Self-Quality Control	75%
Increasing dialogue	75%
Semi-autonomous teams	75%
Network	62,5%
Project teams	12,5%
Services' externalization	12,5%

Total quality management programs were implemented with the definition of problem-solving routines and quality standards.

Project teams are a concept, which is not very clear in the organization. Nevertheless, they work in teams in each section of the plant.

New work processes are linked with the production system principles and all the new and continuous change in the work organization and development.

Network refers to the informal relationship among workers and managers in order to solve all the emerging problems and to find their specific solutions.

Self-quality control has increased because of the new management practices and quality standards.

Increasing planning process through production systems instruments with the ultimate goal to reduce costs and to increases productivity.

Increasing dialogue with the creation of the communication corners, the realization of the workshops and with the visual management procedures.

Semi-autonomous teams refer to team's autonomy to solve some problems according to the workstation complexity.

Services' externalization is a practice only used in specific situations when the organization does not have the competencies needed to develop the work.

c) Organizational structure

According to the organizational structure, most part of workers had the perception that the decision making process has changed.

Impacts	% of responses
Decision making decentralization	62,5%
New hierarchical levels	25%
New organizational units	25%

Decision making decentralization ws achieved through the implementation of the semi-autonomous teams. New organizational units have not been created and new hierarchical levels have not changed.

d) Technology

Most part of workers were aware of the acquisition of new information and communication technologies and acquisition of new production technologies.

Impacts	% of responses
Acquisition of new information and communication technologies	62,5%
Acquisition of new production technologies	50%

Impacts on the acquisition of new information and communication systems in office automation and also acquisition of new production technologies in order to increase productivity.

e) Product development

Most part of workers agree with the practices introduced or changed in the products' development process.

Impacts	% of responses
Technical characteristics	62,5%
Design	50%
Packaging	25%

Technical characteristics have specifically increased the quality of the projects. Products' Design makes them more modern and with style. Packaging does not seem to be relevant for their production activities.

f) Market

Most part of participants have a clear perception about organization's *Market Share* and its exploration of *New Markets* worldwide.

Impacts	% of responses
Product and services quality	75%
New markets	50%
Market share	50%

Product and services quality has increased with the TQM and 5S´s systems. New markets refer to entering into the USA market. Market share has been increasing since 2000.

g) Process

According to all participants' opinion, there has been an increase of production capacity deriving from the organization's knowledge share culture, and an increase of production flexibility.

Impacts	% of responses
Increase of production capacity	100%
Production flexibility	87,5%
Work cost	62,5%

The Increase of production capacity is due to the continuous change in the work and organization practices. Production flexibility increased with the semi-autonomous teams and with the competencies matrix system implemented in the plant. Work coast decreased especially due to the waste reduction and with the new stock management system.

h) External relations

There were a high number of answers that pointed to the increasing relations with suppliers and increasing relations with other organizations and community. Operators do not point out the increasing relations with clients because they don't have a direct contact with them.

Impacts	% of responses
Increasing relations with suppliers	87,5%
Increasing relations with other organizations	75%
Increasing relations with community	75%
Increasing relations with clients	50%

Increasing relations with suppliers got high marks because of the quality standards and costs reduction.

Increasing relations with clients were attained by making them participate in the innovation process and by the quality of post-sales support services that helped them solve problems with the equipment's.

Increasing relations with other organizations and the community applies mainly to university developing innovation projects.

i) Employee participation

Almost all participants answered that there was a high level of workers' participation in the organizational life.

Impacts	% of responses
Improvement suggestions	100%
Meetings	87,5%
Technical problem solving	75%

Improvement suggestions are made through the suggestions boxes and directly to the managers. Meetings are made in the communication corners to discuss the problems and the new changes. Technical problem solving routines are increasing and being improved to help solve the problems in lesser time and with less production costs.

j) Knowledge management

Operators and some technicians don't have the perception about the existence of a knowledge network or best practices repositories, perhaps because they do not have computer access in the organization.

Impacts	% of responses
Knowledge network	50%
Best practices repositories	50%

Knowledge network refers mainly to informal networks to solve problems and best practices repositories are databases that can be used for others sections or departments of the organization.

k) Management practices

The quality management and human resources management are practices that almost all participants considered to have changed for the better with the knowledge sharing culture of the organization.

Impacts	% of responses
Quality management	87,5%
Human resources management	75%
Project management	25%

Quality management is in implementation, defining the quality standards and implementing routines to help quality problem solving. Human resources management implemented performance appraisal, training needs diagnosis, competencies' matrix, and the mobility system that helped to develop workers' competencies. Project management is being implemented.

Finally, it is also important to stress the importance of the sharing during the training programs that have prepared managers and workers to work within the new set of organisational dynamics imposed by the production system implemented in the organization.

4 Conclusions

Knowledge is a crucial element in the life of a company, not only in daily activities, but especially to boost the innovation process and the implementation of new practices and processes.

For all this takes effects, two elements must be managed as a single: people and knowledge. Assuming that people are the source of knowledge, practices such as communication, skills development, and recognition are core to promote the sharing of individual knowledge.

In this context, it is important to identify mechanisms that allow continued participation of workers, whether through meetings, especially spaces for the sharing and discussion or more technological mechanisms, such as discussion forums or a particular system of knowledge management.

In Alpha context the routines for creating and sharing knowledge are mainly: suggestion boxes, openness to make suggestions to the managers, several types of workshops where employees from different sections participate, and several transversal projects of improvement, quality and maintenance.

With great visibility, Alpha workers use the suggestion boxes as a space where they can uncover new ideas that help improve the organization.

Cross-functional workshops and meetings are a crucial space to share perspectives and to make discussions that provide invaluable knowledge.

Organizational actors share their opinions and insights, as well as their own questions, sharing and creating new knowledge. For added impact, outside specialists and even costumers participate in these sessions. Their perspectives can be refreshing and break down the thinking routines of internal workers.

Transversal projects like TPM or projects related to quality systems also help to develop workers' competencies with the share of their knowledge and experiences.

In parallel, it is necessary to highlight the importance of such mechanisms as support in solving problems, identifying solutions and creating new ideas within the organization space and the impacts on the organizational practices in all their dimensions.

An important condition for implementing a culture of knowledge sharing is to overcome various types of obstacles, whether they are related to the nature of knowledge itself, the lack of infrastructure on which to make its management or individual obstacles, as fear of loss of power when sharing their knowledge with anyone. But the main challenge for organizations is to "capture" and transform individual knowledge into organizational knowledge conducting to the introduction of new practices or the change of the existing ones potentiating the competitive value of the organization.

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