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# **Knowledge Sharing Barriers in New Product Development**

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#### **Abstract**

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The purpose of this research is to analyze the factors influencing the success or failure of the integration between two organizations after a corporate merger or acquisition. The success for the acquiring firm and its stakeholders depends a lot on the efficiency of the integration process. This research presents an exploratory case study conducted at 8 Albanian merged companies and provides more insight in the factors relating to the organizational integration between two NPD departments. This investigation also reveals a discontinuity in knowledge sharing and uncovers three, empirically derived and theoretically informed, barriers to knowledge sharing in a multilingual post-merger environment. Many organizations consider effective knowledge sharing to be a source of competitive advantage after the mergers occur. However, the sharing of knowledge is often inhibited in various ways [1]. They have been articulated as the lack of an explicit definition of information about the knowledge used and generated in the product development process, and the absence of mechanisms to make this information accessible in a multilingual environment and to disseminate it to NPD project team members. Collectively, these barriers inhibit a shared understanding of product development process knowledge. Existing knowledge management methodologies have focused on the capture of knowledge, rather than providing information about the knowledge and have not explicitly addressed issues regarding knowledge sharing in a multilingual environment after mergers occur in a developing country setting [2]

Keywords: New Product Development (NPD); Knowledge sharing; Mergers and acquisitions.

#### 1. INTRODUCTION

Mergers and acquisitions (M&A) are important phenomena in the business world. Recently, mergers and acquisitions have been recognized as an important mechanism by which firms increase productivity. The purpose of this research is to analyze the factors influencing success or failure of the integration between two organizations after a corporate merger or acquisition. If an M&A is a success for the acquiring firm and its stakeholders and the value can be gained from it depends from the integration process. The post-merger integration process is complex and affects the organizational structure and departments in multiple ways. Several factors influence the outcome of post-merger integration. Many of these are tied to the organizational processes and the relationships between employees [3]. While there are numerous frameworks that describe the post-merger integration processes between two merging organizations hardly, we can find studies that are related to the knowledge sharing process. This study aims to provide more insight in the factors relating to the organizational integration between the two New Product Development departments, while exploring new ways to measure the integration between them that affect the post-merger integration. This study also aims to uncover the barriers to knowledge sharing in a post-merger multilingual environment between the NPD project team members. The following research questions are examined during this research paper:

- 1. How do integration objectives, organizational fit and critical factors influence the post-merger integration success?
- 2. How can the level of communication, knowledge sharing in the post-merger integration be measured and analyzed?

# 2. Which are the knowledge sharing barriers in a post-merger environment

In order for the company to create value from an M&A the integration of knowledge after the merger is important, since in this phase the projected synergies get realized [4]. The integration of the two merged organizations requires changes to the situation before the integration. These changes can affect the strategy and organizational systems of the companies. Several variables of a merger and acquisition have direct influence on the post-merger integration and how successful it is from an organizational perspective [5]. These factors include:

- The fit between the merging organizations from a strategic, organizational and cultural angle.
- The level of integration that should be reached in order to achieve the M&A objectives.
- The changes to the organizations that are necessary to achieve the objective.
- The national and organizational cultural differences between the organizations and the acculturation that tries to overcome these
- The intensity and the quality of communication between the employees after the merger.

Many of these factors have impact on the employees and their behavior and influence the factors that lead to the success or the failure of the merger or acquisition [6]. The changes to the organization that follow the merger are often seen negatively by the employers, since they interrupt their continuity and can create resistance to change and effect the integration efforts [7]. Also, the merging of two formerly separate groups of employees can create

tensions and biases that need to overcome for success in the integration [8]. Change management interventions to ease the integration are seen only by the communication point of view. Mergers represent a discontinuity in knowledge sharing so identifying the barriers in this process will help to deal with a post-merger environment [9]

Most objectives measures that are used in the research on post-merger integration focus on the financial and market performance, the measures for the integration between the organizations are mostly subjective and often based on perception [10] There are not direct and discursive measures for the integration between two groups of employees during and after the post- merger integration. Since the interaction between the employee groups is important for the success or failure of integration the knowledge sharing process can be used to judge the integration itself.

In the post-merger integration, communication and knowledge sharing have shown to have an impact [11]. In this thesis the process of knowledge sharing and the barriers of knowledge sharing are also identified.

Furthermore, the impact of changes and organizational reorganization as part of the integration process, on the success or the failure of the integration shall be examined taking the different change management interventions and the overall success of the integration into account.

# 3. Research Approach

To find answers to the research questions a multiple case study approach is prepared. To analyze the background of the integration, people involved in the integration will be interviewed and publicly available documents will be studied. This information will be used to create a description of the acquisition and the organizations involved in it when the M&A occurred using structured interviews and a questionnaire, information will be gathered to determine and illustrate the specific objectives for the acquisition on an organizational and departmental level as well as to evaluate and analyze the fit.

A structured interview with the managers of the integration process will be used to collect perceptions on the level of success of the integration.

To analyze the knowledge sharing barriers in the post-merger, process a questionnaire will be used to collect data necessary to reproduce the knowledge sharing process.

The information collected in each case study on the organizational integration will be compared to each other and the findings from the literature review to give an analysis on the level of fit, critical success factors and change interventions that had relevant impact on the integration success in the specific case studies. The selection criteria for the case studies are as follows:

- M&A occurred within the last two years so the changes still can be detected and employee fluctuation is low
- One merged new product development department
- Full integration as desired outcome

- Changes to organization of the integration
- Mixing of employees from the different companies during the reorganization
- Successful integration as perceived by the management

### The phases for this case study were:

- 1. Acquisition of information and documents on the selected acquisition case to describe the general background, the starting situation and the type of M&A.
- 2. Acquisition of information on the specific objectives of integration between the two new product development departments to explore the reasons for the changes that took place in the integration.
- Collection and rating indicators for the critical success factors and change management measures for determining the impact they had on the post-merger NPD integration success.
- 4. Identify and describe the knowledge sharing process in a multilingual environment.
- 5. Analysis comparison and evaluation of integration process

# 4. Analysis of case studies

The importance and impact of several factors on the integration of the NPD departments was evaluated. The short time to execute the integration, the resistance of the employees to the necessary changes, the cultural differences and the low level of knowledge sharing were discovered to have negative influence on the integration processes. The high level of integration to be achieved, the commitment of management combined with an appropriate budget, the professionalism of the employees and a high level of document sharing had a positive influence on outcome.

In the post-merger integration process change management interventions to improve knowledge sharing and communication were undertaken. These involved on the one hand clear communication by the company and department management of the objectives of the acquisition and the subsequent changes to employees.

In the case companies the analyzed processes of product development in the merging departments there were partial misalignments between them. Mainly the way the processes of development of new products were managed and controlled the same way. This was in all 8 case studies. The literature based on the level of fit states that a lack of fit could have a negative impact on the outcome of the integration. This was not observed on the 8 cases. One factor mitigating the lack of fit between the processes could be the fit between the departments in other areas, mostly the ones involving the employees and HR systems as well as the general fit of the companies based in the same industry and with the same corporate background. Three key knowledge-sharing barriers were found. The three barriers were:

- 1. Lack of a definition of information about knowledge used in the NPD process.
- 2. Lack of support for a multilingual NPD post-merger environment
- 3. Lack of a means to disseminate information about NPD process knowledge among different culture team members

#### 5. Conclusions

In the prior section the relationship between the change management and the objectives for the post-merger integration of two NPD departments of the case companies were analyzed based on the information collected in the case studies. It was found that in the specific cases the level of restructuring as part of the change management had a positive impact on reaching the integration objectives and also on the integration success. The high level of organizational restructuring contributed in achieving a high level of organizational and NPD integration. It was also seen that the presence of a project manager could compensate for the impact of the high level of organizational restructuring by increasing coordination, which was one of the fundamental problems in the integration found in the literature.

The level of fit and the impact on the change management was also analyzed. It was seen in the case studies that the high level of organizational restructuring helped to balance the low level of fit between the processes of development of products prior to the integration because it reduced the time this process was valid after the merger. This depended on the fact that the fit between the employees and the cultural background existed.

Next the relationship of the change management and the success factors for the post- merger integrations that were identified in the literature were explored. It was seen, that in the cases of this particular integration the high level of communication that the management saw as having a high positive impact for the integration mitigate the high impact of the high level of changes by providing adequate possibilities for interaction between the employees, thus reduced uncertainties caused by broken continuity and creating trust.

The knowledge sharing process and the barriers were analyzed in respect to their meaning in the post-merger integration. In the post-merger integration in a multilingual environment it was observed that product development activities are subject to many knowledge-sharing obstacles. Only three barriers were identified.

The absence of explicitly defined information about knowledge used and generated in the NPD process was the first barrier. That is, there was a lack of formally defined information about this knowledge. The names and locations of human knowledge repositories and the knowledge associated with different projects prior the merger is part of this information. Another example was the absence of a link from tasks in the process to relevant knowledge. That is, the knowledge needed to carry out a specific task. The absence of this kind of knowledge contributes to two important problems. Firstly, it makes it more difficult for NPD practitioners to find relevant knowledge to their tasks. Secondly, employees are unaware of what knowledge is actually available, prior the merger. NPD employees taking part in the interviews identified these problems. They stated that time is spent searching for knowledge and gave examples where duplication of efforts occurred. Knowledge already available prior the merger in each of the companies was reproduced, wasting time, effort and money. The second barrier was the absence of a mechanism to make information about knowledge accessible to individuals in a multilingual environment. In the literature review language was also highlighted as a major obstacle to knowledge sharing.

Three different languages are spoken in some companies after the merger. The solution is to provide a mechanism to translate information among three different languages. These barriers inhibit the achievement of a shared understanding of NPD knowledge in a multilingual product development environment.

#### 6. Limitations

In this paper only 8 case studies were presented and the companies are in a developing country so the results cannot be generalized or transferred to other cases directly but can be only used to explore the topic for this case only. In these cases, the information for the organizational factors, such as objectives, fit, success factors and change management interventions of the post-merger integration were collected in interviews and with questionnaires to the management of the NPD department. The data is subjective to the person responding and as shown in the literature reviews are reported more positively.

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