#### **Knowledge Management for M&A Performance**

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Abstract:

This study focuses on knowledge management role in Mergers & Acquisitions (M&A). With high proportion of M&A failure, it is important to define possible ways to increase M&A success rates. Knowledge acquisition and management is the important part of M&A initiative, as it forms the foundation for M&A decisions. But with M&A high complexity, uncertainty and ambiguity, effectively organized knowledge management of M&A can become a challenge. In this article authors review current research on knowledge management in general and M&A specific knowledge management, identify the levels of M&A knowledge hierarchy, namely – individual M&A initiative scope, M&A initiatives in scope of one company, M&A initiatives in scope of the same industry. For each level success factors and obstacles for the effective knowledge management are defined. As a result, a proposal for M&A knowledge management high level framework is presented, accumulating all knowledge management levels, and defining the knowledge structure and flow between them.

#### 1 INTRODUCTION

Performance of Mergers & Acquisitions (M&A) initiatives is a popular topic in the recent research. It is noticed that proportion of so-called successful M&A is relatively low and only third part of them is later evaluated as positive change (Jie-mei, 2011). One of the challenges for M&A is the ability to transfer the knowledge about merging parties and build on competences to make respective decisions in a fast and efficient way, learn from the previous M&A activities to make smarter decisions next time, and learn from other companies experience to not make the same mistakes (Jie-mei, 2011), (Schumann & Tittmann, 2008). As an organizational learning (accumulating, transferring and processing knowledge) is a part of the effective knowledge management, we can conclude that effective knowledge management can contribute to the overall M&A success (Vásquez-Bravo & Sánchez-Segura & Medina-Domínguez & Amescua, 2014), (Lohrkea & Frownfelter-Lohrkea & Ketchen, 2016). But with M&A complexity, uncertainty and time limitations, M&A knowledge management faces known difficulties (Gruber & Paneva, 2014), (Keizer, 2012).

This research explores how knowledge management activities can be integrated in the scope of M&A initiative, defines success factors and obstacles that can impact M&A knowledge management. As a result, several knowledge management hierarchy levels are defined and M&A knowledge management framework is proposed, specifying knowledge management levels, activities, and enabling factors. Research results can be used later in the real-life M&A case studies.

In the next section each of knowledge management levels is explored, current practices and approach are summarized, success factors and obstacles are identified, and framework architecture is created. In the last section overall knowledge management framework is described.

### 2 KNOWLEDGE LEVELS IN M&A

With importance of learning in M&A projects, it is crucial to inspect how knowledge transfer is organized during specific M&A, as well as between several linked M&A activities. This research analyzes M&A knowledge management from the perspective of the knowledge accumulating, transferring and processing for learning on different hierarchical M&A levels, which can be seen as M&A knowledge management hierarchy levels (levels have been obtained by amalgamating findings of 9 related works) (see Figure 1):

- Level 1: Scope of each specific M&A initiative

   knowledge acquisition and integration during
   the individual M&A activity (Jie-mei, 2011),
   (Horie & Ikawa, 2014), (Eisenman &
   Paruchuri, 2019);
- Level 2: Scope of M&A initiatives for one specific acquiring company - knowledge processing during and after M&A for learning and developing capabilities for future M&A initiatives (Vieru & Rivard, 2012), (Zollo & Singh, 2004), (Ellis & Lamont, 2004);
- Level 3: Scope of M&A initiatives for different acquiring companies industry knowledge accumulation and structuring to formalize M&A processes (Wijnhovena & Spila & Stegweea, 2006), (Hwang, 2004), (Ravikumar, 2017).

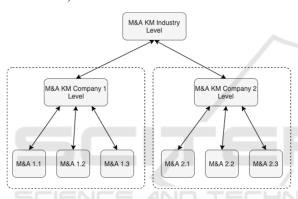


Figure 1: M&A knowledge management levels.

Effective knowledge management on each of these levels, as well as well-established knowledge transfer between these levels are key enablers for M&A final success (Lodden, 2012). In the following sections each of these levels is explored through the following aspects based on the literature review:

- What is the current knowledge management approach and best practices on this level?
- What are the success factors and obstacles impacting effective knowledge management on this level?

In the end, all findings are aggregated in the one framework for knowledge management in the scope of M&A activity set. This framework, in the further research is intended to be applied across several linked M&A initiatives to gather case study results and cros-validate it in practice.

## 2.1 Knowledge Acquisition and Integration during the M&A Activity

The main goal for Level 1 is to integrate several participants of the M&A. This level is the most popular topic of the overall M&A research. Knowledge management on this level covers the following dimensions of the integration: (1) physical, (2) cyber, (3) social. Many frameworks for M&A organization are proposed (Ellis & Lamont, 2004), (Wijnhovena & Spila & Stegweea, 2006), (Hwang, 2004), (Ravikumar, 2017), (Gasik, 2015), however none of them looks on the M&A from the joint sociocyber-physical perspective.

#### 2.1.1 Proposed Approach

This knowledge management level is focused on specific M&A initiative execution, and can be seen as the following sequential activities (Chua & Goh, 2009), (Horie & Ikawa, 2012):

- Initial assessment of the M&A participants;
- Decisions on M&A approach and M&A execution plan;
- Execution of M&A plan, including partners reorganization and knowledge integration.

Each of these activities consists of the following knowledge management tasks with the goal also to transfer the gathered or created knowledge to the next activity (Chua & Goh, 2009), (Horie & Ikawa, 2012) (see Figure 2):

- Acquire knowledge about the M&A initiative, as well as about merging parts;
- Process and apply knowledge to make decisions about M&A and define future state;
- Accumulate and share knowledge to support effective decision execution.

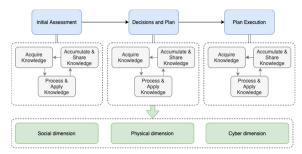


Figure 2: M&A knowledge management on an individual initiative level.

#### 2.1.2 Success Factors and Obstacles

There are several important factors, required for the efficient knowledge management on this level (Jiemei, 2011), (Horie & Ikawa, 2012):

- As each merging part should be pereceived as a complex socio-cyber-physical system, all three dimensions of the integration should be covered as interrelated: social, physical and cyber;
- As it is extremely important to support cultural merge and take only the best from all merging parts - acquiring organization should understand and respect and importance to learn from acquired organization;
- As for keeping engagement and motivation high in both merging parts - acquired organization should be encouraged to share the opinions and should be involved in decision making;
- As for keeping the transparency and alignment between all involved participants - acquiring organization is interested to share knowledge with acquired organization, especially if reorganization and optimization is planned;
- For the same reason knowledge should be communicated properly between management and execution levels of M&A project participants (meaning between process planning and execution phases);
- As it is important to base decisions on an actual and complete facts about M&A initiative and current state of merging parts - explicit knowledge should exist and acquisition of tactic knowledge should be properly planned prior any decisions about M&A execution.

As can be noticed, success factors are related to acquiring company's culture and attitude to the knowledge management, as well as with acquired company motivation. But important prerequisites are also availability of explicit knowledge.

There are also M&A specific factors, that can negatively impact knowledge management efficiency (Gruber & Paneva, 2014), (Lodden, 2012):

- M&A complexity requires proper resource allocation on in-depth investigation and analysis of the current state before future state definition;
- As M&A uncertainty and unpredictability can block the ability to gather knowledge upfront, knowledge acquisition should be planned as an

- integrated part of decision-making during M&A execution;
- M&A project time constraints usually do not allow to spend required effort on knowledge management. With that, predefined knowledge management process, as well as reused knowledge management assets from the previous M&A initiatives could help to optimize required resources.

These factors can be addressed by accumulating experience and reusable knowledge in the previous M&A initiatives. This ability is directly related to the next M&A knowledge management level.

# 2.2 Knowledge Processing during and after M&A for Learning and Developing Capabilities for Future M&A Initiatives

As M&A is one of the commonly used tools for growth, often there is a sequence of M&A projects in a company. As with any repeating process, it is good to have lessons learned and best working practices accumulated from the individual M&A initiatives, that can be reused in the upcoming M&As. Research of knowledge management on this (second) level is not as frequent as on the M&A activity in general. Main reasons for that are that each M&A is often assumed to be unique (meaning – previous practice is not applicable), as well as the fact that M&A can take long time for accomplishing and evaluating the results (meaning the next M&A activity can be started before it is clear what worked and what did not in the previous projects).

#### 2.2.1 Proposed Approach

Aggregated M&A knowledge can be shared using several approaches (see Figure 3):

- Artefacts produced during previous M&A projects, can be used in the future projects as source of inspiration and reusable information. Basically, the artefacts, created during each phase of the individual M&A initiative, are reused in the future projects;
- The use of templates and guidelines created based on the previous M&A lessons learned. Lessons learned can be incorporated in the individual M&A initiative as part of the process (for example, retrospective after each phase), or can be organized as a separate activity after the project competition.

Artefact and template applicability for future projects usually is evaluated subjectively by specific executor (Eisenman & Paruchuri, 2019), (Lohrkea & Frownfelter-Lohrkea & Ketchen, 2016).

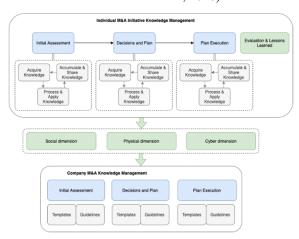


Figure 3: M&A knowledge transfer between individual M&A level and company level.

#### 2.2.2 Success Factors and Obstacles

There are the following prerequisites for M&A experience gathering and learning (Horie & Ikawa, 2012), (Morrison & James, 2002):

- As already stated previously, all acquired knowledge should cover three dimensions of merging parts: social, cyber and physical, as well as interrelationships between them;
- To have clear responsibilities on M&A knowledge sharing, dedicated M&A team in the organization should be allocated on sharing M&A experience across the organization;
- As M&A previous experience is mentioned as one of M&A success factors, individual M&A initiative project team should be capable in producing and sharing the knowledge about M&A results;
- This team also should have enough motivation and planned time to share the knowledge accumulated during the project and promote it across the company and with future M&A project teams;
- For more efficient knowledge sharing, M&A evaluation process should be established, helping to identify similarities across several M&A approaches and structure the M&A knowledge to find relevant parts for the future M&A initiative more easily. Otherwise, applied inappropriately, previous knowledge

can compromise the usefulness of the accumulated M&A knowledge.

Several M&A limitations can negatively impact the learning process (Horie & Ikawa, 2014), (Zollo & Singh, 2004):

- As M&A is time limited, there should be well defined balance which knowledge should be documented, to which extent, and how it should be populated;
- It can take time to see and evaluate M&A results, thus not always it is possible to foresee which practices are successful or not.

These limitations can be addressed by accumulating M&A knowledge on the industry level, which is described in the next section.

#### 2.3 Knowledge Accumulation and Structuring to Formalize M&A Processes

The third knowledge management level is focused on the accumulating and aggregating knowledge from several similar M&A initiatives (like same industry, same acquisition size, same constraints, etc.) and creating framework for the M&A knowledge management organization. Research on this level is very limited. Together with issues already mentioned on the previous level (company level), Level 3 additionally faces issues related to the information privacy.

#### 2.3.1 Proposed Approach

Currently there is no any publicly available M&A knowledge management framework, which would accumulate best practices for different M&A initiatives and would structure these practices per M&A specific parameters, allowing to choose appropriate practices for each specific M&A project. However, there are many described M&A case studies, which can be analyzed and processed to extract best practices, guidelines and templates to be used on the industry level of M&A knowledge management (see Figure 4) (Jie-mei, 2011), (Horie & Ikawa, 2014), (Eisenman & Paruchuri, 2019), (Zollo & Singh, 2004).

In order to structure available case studies, the classification of different M&A initiative types should be introduced. There are already several attempts to classify M&A initiatives and define specific M&A process parameters, that can have an impact on the overall project success (Ellis & Lamont, 2004), (Hwang, 2004), (Ravikumar, 2017).

Some knowledge management efficiency related parameters are (Ellis & Lamont, 2004), (Gruber & Paneva, 2014):

- Acquired company resource quality and relatedness to acquiring company;
- Differences and geographical distance between acquisition parties;
- The scope and depth of an integration and the level of management replacement;
- Documented integration knowledge experience.

Still, the parameter list can be expanded to support the variety of case studies, and a holistic model of possible M&A characteristics could be established, as well as M&A taxonomy could be created. Nevertheless, for managing M&A complexity issue, only knowledge management relevant characteristics should be selected.

Additionally, more detailed M&A performance criteria could be established, as different M&A may have different goals and priorities and they have direct impact on required knowledge management activities.

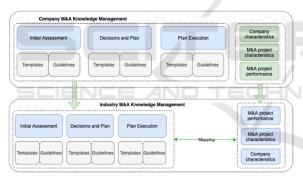


Figure 4: M&A knowledge transfer between company level and industry level.

#### 2.3.2 Success Factors and Obstacles

There are several key success factors, enabling the development of one common M&A knowledge management process (Ellis & Lamont, 2004), (Gruber & Paneva, 2014), (Keizer, 2012), (Lodden, 2012):

- All three dimensions are represented also on this level: social, cyber and physical;
- As a lot of corporate knowledge stays inside the specific companies and does not become publicly shared, close collaboration between researchers and industry is required, allowing to access and process M&A experience

- knowledge and transform it into publicly available artefacts;
- But as a lot of M&A knowledge is a subject of limited access information, there should be specific process how researchers can access and use M&A knowledge and create publicly available meta knowledge about M&A projects.

There are several obstacles currently hindering future research (Ellis & Lamont, 2004), (Gruber & Paneva, 2014), (Keizer, 2012), (Lodden, 2012):

- Some information about M&A projects still has strictly limited access rights and will not be available for external researchers;
- Currently there is no taxonomy of different M&A approaches, neither there are any established standard M&A frameworks. Often acquiring organization is developing its own specific M&A approach, which later is hardly comparable with approaches developed by other organizations;
- With M&A initiatives complexity and scope, it is problematic to find correlations between M&A characteristics, applied knowledge management approach and M&A results.

To mitigate these obstacles, at least to some extent, the integrated M&A knowledge management framework is proposed in the next section.

#### 3 M&A KNOWLEDGE MANAGEMENT FRAMEWORK

M&A knowledge management levels together with corresponding success factors and obstacles, discussed in Section 2, form the proposed M&A knowledge management framework with a purpose to accumulate and share gathered knowledge and improve M&A performance.

The framework illustrates how M&A knowledge, covering all social, cyber and physical perspectives, is gathered in the scope of one individual activity; is transferred to the company level, where company specific M&A experience is accumulated; and then how company level M&A knowledge can be aggregated into industry level M&A knowledge (see Figure 5).

The framework represented in Figure 5 corresponds to the quality parameters that should be present in any proposed reference model (Taylor & Sedera, 2003). All these quality parameters can be

divided into three main quality aspects reviewed below.

One quality aspect is a syntactic quality, related to a language used in the model. From this perspective, the model has both clear structure and clear language. Model notation includes data structures and data flow, represented by graphical elements commonly used for data modelling. Definitions used in the model are aligned with ones used in the M&A scientific research.

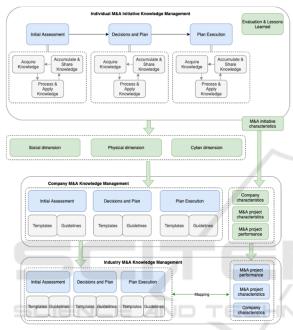


Figure 5: M&A knowledge management framework.

Another quality aspect is a semantic quality, related to a domain coverage in the model. Model incorporates M&A domain and knowledge management domain principles. Several hierarchical knowledge management levels specific for M&A initiatives is an important topic for both domains. Despite the novelty of the structural hierarchy of KM levels, the model still is easy to understand for all M&A practitioners and does not require additional trainings or clarifications.

And one more quality aspect is pragmatic quality, linked to the fact how effectively the model can be interpreted by the audience and applied in practice. Two important specific quality parameters here are pragmatics (accessibility and applicability) and feasibility (economical efficiency). Analysis of these quality characteristics are the matter of further research as it requires the data gathered in rela world applications of the proposed framework.

#### 4 CONCLUSIONS

In this paper we highlighted the importance of M&A knowledge management for overall M&A initiative success. We reviewed and proposed models for different hierarchy levels of M&A knowledge management - specific M&A initiative level, organizational learning between M&A initiatives, cross organizational M&A knowledge management. For each of the levels current practices were analyzed, success factors and obstacles defined. Based on this, and also, for M&A experience accumulation, overall M&A knowledge management framework was proposed that incorporates all three knowledge management levels. This framework can help in M&A knowledge management as it represents the experience and scientific evidences in this area in a structured and conceptually clear manner. It takes into account three essential perspectives: social, cyber and physical ones, combination of which becomes more and more important in todays M&As. As a future work, framework can be elaborated in more details and the model of M&A specific knowledge management can be created. Additionally, the framework should be applied to real M&A initiatives and potential improvements should be identified.

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