Importance of IS in Mergers and Acquisitions

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Abstract. With the growing competition, many companies are merging together to get competive advantage [1]. Post-merger integration (PMI) is the process of integrating two or more organizations together in a scope of Merger & Acquisition (M&A) initiative. Current PMI research can be divided in two main parallel streams – PMI of strategy and organizational structure, and PMI of information systems (IS). However, each organization is a complex system, which should be viewed from different interrelated aspects, such as personnel, culture, infrastructure, product portfolio, processes, etc. With this, it sounds reasonable to research PMI as a holistic integration of several socio-cyber-physical systems (SCPS). This paper focuses on the existing PMI and IS PMI research literature review to summarize existing knowledge in these areas, as well as to state main questions for the future SCPS PMI research.

Keywords: mergers, acquisitions, post-merger integration, PMI, M&A, IS PMI

1 M&A and PMI Strategies

PMI is perceived as a part of merger and acquisition (M&A) initiative, that happens after all formal merge processes are executed and real integration of two or more organizations starts [2]. According to the statistics, 2/3 of M&As fail [3], and it is stated that post-merger implementation (PMI) has a big impact on the overall M&A success [2]. One of the reasons for this is unaligned M&A and PMI strategies and lack of planning.

In the existing research, main M&A strategic objectives are [2], [3], [4], [5]:

- Company and market share grows
- Resource and process base strength
- Expansion of product portfolio
- Reserch and design (R&D)
- Industry convergence

In other words, M&A goals are different types of reconfiguration of the organization.

In order to achieve them, there should be a clear PMI strategy, answering the following questions [4]:

- What is the integration scope – what are system parts that should be integrated: resources, lines of products, business units, target top management teams, systems, etc. [4]
- For each of parts selected for integration – what is the integration approach: absorption, symbiosis, preservation, holding [1], [3].

As one of the main success criteria for PMI is defined the integration of involved systems, with a quality and scope leading to the synergy [6]. But synergy can be treated in many different ways and there is no easy way how to measure it.

So, future research could elaborate more on PMI goal linkage to M&A goals, structuring them into all three perspectives: cyber, physical and socio, as well as PMI goal decomposition and result evaluation for each of listed perspectives.

Besides M&A strategic goals, PMI strategy is also impacted by the context in which it is executed, and PMI decisions depend on the different contextual factors [1], [6]:

- Organizations size and structure
- Time limitations
- Organization industry sectors
- Level of equality between merging partners
- Degree of previous collaboration between merging partners

Future research could focus on more detailed model of influencing factors and related decision making process, leading to the specific PMI characteristics.

2   IS Integration Role in PMI

As already mentioned in Section 1, PMI is the crucial part of each M&A initiative. And major part of identified problems in M&A are linked directly to information systems (IS) PMI [2], [7]. Despite this, PMI research is still primarily focused on strategy and organization PMI, not IS/IT.

There should be more attention to IS PMI due to several reasons:

- IS integration is a complex process, which requires time and extensive resources [2]
- Nowadays IS is the central part of any business process. Organizations literally depend on the quality and accessibility of information in IS [2], [6]
- Such enterprise systems as ERP, SCM, CRM are the key elements in organization functions [3]
- IS is a crucial for customer services, all problems in IS (like errors and lost data) could lead to customer loses [2]

So, IS PMI should be the integral part of PMI process. But, yet again, IS PMI should not be treated as a separate activity, but rather as a cyber part of SCP system PMI. We may need additional research in the areas how to incorporate IS integration part into strategic/structural integration:

- Include IS integration activities into each step in overall PMI process, starting with planning and ending with result evaluation, so that IS PMI support effective and efficient M&A [6]
- Link high level M&A and PMI goals with IS PMI goals to align all three integration aspects [6]

Here we could come to one more challenge for IS PMI, as merger related discussions are often not public [6] and there could be required special approach how to involve IS into overall M&A without sharing all information, but sufficient data.

Additionally, if properly managed, IS PMI can significantly improve organizations competitive state and enable execution of new business strategies. This can be done through:

- Raising IS competence, IS maintenance efficiency and quality of end-user support [6]
- Creating synergy through combination of resources [4]
- Improving IS integration into organizational processes, enhancing IS integration between organizational units [6]
- Introducing new technologies and attracting high-end IT professionals [6]

This area of research also could be investigated more properly in order to come up with the comprehensive model of so called "side-effect" M&A strategic goals, which are achievable through IS PMI.

3   Why IS Integration is Difficult

At the same time, IS PMI tends to be complicated and complex process, due to several reasons:

- There are quite many IS in each of merging organizations [2]
- These IS quite often are old systems, different versions of systems, heavily customized variations of systems, or several copies of the same system, that makes the integration much more difficult [2], [3]
- Quite often systems are geographically distributed [3]
- There also quite often is a dependency on external vendors [3].

This list is still high-level types of potential difficulties, which in future research could be elaborated in more details, as well as accompanied by related risk and problem management activities, which can be taken from existing best practices mentioned in generic PMI research:

- Detailed audit of current situation [3]
- Proper planning [3]
- Realistic goals [1]
- Focus on best value for minimum resources [1]
- Keeping organization functional also during transformational process [1]
- Ability to learn and recover from integration mistakes

Additionally, IS PMI is linked to changes in other areas in merging organizations, like internal process execution and customer facing services, which requires management of human factor related risks like emotional traumas, learning challenges, and expectation mismatch [4], [7]. Some of already mentioned practices should be turned into more detailed guidelines:

- End user involvement [3]
- Extensive and open communication [1], [3]
- Alignment between stakeholders [5]

One more aspect in IS PMI is related to the fact, that it leads to some unneeded IS resources, that should be reconfigured or delaminated [4]. Currently, there is a lack of a proper model for capturing such resources, as well as defining required reconfiguration activities, so that in the end new resource structure operates in the most efficient way.

4   IS PMI Research Perspectives

There is as well a tendency, that current research takes the perspective of one of the following stakeholders – acquire organization, target organization or future organization. However, there are more participants involved in the PMI process – like sellers and consultancies, and their perspective should be taken into account. [5]

Also, major part of existing research is focused on the production industry case studies, which have own specifics. With growing amount of mergers in IT sector, current PMI models should be reviewed and adopted to the IT specifics [3]. But before that, IT specifics impacting PMI process, should be identified and described.

5   IS PMI, IS Architecture and IT Strategy

IS Architecture could be useful for linking together enterprise architecture and specific IT systems. As IS architecture usually serves as an intermediate level between organizational processes and IT systems supporting these processes, it is important and valuable step in combining PMI of enterprise business models and related IT systems. [8], [11]

IS Architecture also helps to plan in details IS integration, as it covers all three aspects – information architecture, application architecture and technological infrastructure. [10]

With looking on IS PMI through IS Architecture perspective, it makes sense to go even further and integrate PMI into IT Strategy. IT strategy helps us focus on final goals for PMI and link all planned activities to them yet again. [9], [10]

Integrating IS architecture and IT strategy into PMI would mean to execute the following activities:

- Create for all merging enterprises IS Architectures, clearly stating which business goals and processes are supported by IS from information, application and technology perspective

- Create merged enterprise IS Architecture, based on the enterprise architecture for new enterprise
- Define IT Strategy to implement IS Architecture created on the previous step

6 Conclusions

In the current PMI and IS PMI research there is a place for SCPS perspective, which would combine both streams together. SCPS PMI research could become comprehensive methodology, covering all three dimensions of integrated organizations – socio, cyber and physical:

- M&A strategic goals and linked PMI goals, with clearly defined measurable success criteria
- Impacting contextual factors and related decisions about PMI strategy
- Selected PMI strategy with identified integration scope and approach
- PMI process framework and best practices

This methodology would include different stakeholder perspectives, as well as would take into account different industries specifics. This methodology potentially could reuse and incorporate some of existing IS Architecture and IT Strategy approaches.

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