
Towards Detecting Misalignment Symptoms: An Alignment Perspective-Driven Architecture-Matching Framework (Extended Abstract)

Dóra Óri¹

Abstract: When assessing the harmony between business and information systems, most of traditional studies deal with the presence and the achievement of strategic alignment. On the contrary, exiguous attention is paid to the phenomenon of strategic misalignment, which means the absence or difficulties of business-IT alignment. This paper deals with strategic misalignment between business and information systems. It proposes an enterprise architecture (EA)-based framework to detect the symptoms of misalignment in enterprise architecture models. It collects typical misalignment symptoms along the traditional alignment perspectives and connects them to relevant EA analysis types. The paper discusses the typical signs of strategic misalignment in different EA domain matches. Suitable EA analysis types are recommended to the detected signs of misalignment. The work summarized in this extended abstract has been published in Dóra Óri: *Towards Detecting Misalignment Symptoms: An Alignment Perspective-Driven Architecture-Matching Framework*. Enterprise and Organizational Modeling and Simulation. Lecture Notes in Business Information Processing, Vol 231. Springer Berlin Heidelberg, 2015.

Keywords: Strategic Alignment Perspectives, Enterprise Architecture Alignment, Misalignment Symptoms, Enterprise Architecture Analysis.

1 Introduction

One of the most important issues on information systems (IS) research is the need to align business with information systems. Since information systems facilitate the success of business strategies, the importance of business-IT (or strategic) alignment is unquestionable. While organizations are continually trying to achieve alignment, they are suffering from difficulties which encumber the achievement of alignment [Ca08]. Most of traditional alignment studies deal with alignment achievement [He93], while *misalignment* issues are scarcely covered in the literature. Besides the low attention on misalignment, existing literature on the topic suffers from another shortage. The innate ability of the enterprise architecture (EA) concept [Za87] to support alignment assessment is also scantily addressed in the literature (for exceptions see e.g. [Ca12], [Pe05] and [So05]).

This paper aims to present a framework to address the above illustrated concerns. The paper discusses strategic misalignment between the business dimension and the

¹ Corvinus University of Budapest, Department of Information Systems, Fővám tér 13-15, H-1093 Budapest, DOri@informatika.uni-corvinus.hu

information systems (IS) dimension. It addresses misalignment analysis by proposing an EA-based framework to detect the typical symptoms of misalignment in an organization. The specific contribution of the paper lies in connecting typical misalignment symptoms to relevant EA analysis types.

2 Related Work – Excerpt

The theoretical foundation of the paper consists of two main parts. The first part deals with theoretical background: 1) Strategic Alignment, 2) Misalignment and 3) Enterprise Architecture. The second part of the section deals with specific works: Different EA analysis types as well as EA alignment methods are presented.

3 Framework Building for EA-Based Misalignment Assessment – Excerpt

The research model deals with enterprise architecture-based misalignment assessment. In this section an introduction is given on the components of the proposed framework. 1) Meta-methodology is used as a supportive research concept to build the framework. 2) Alignment perspectives are decomposed into perspective components according to the necessary SAM domain matches. 3) Typical misalignment symptoms are collected to every traditional alignment perspective. 4) Subsequently, suitable EA analysis types are recommended to the misalignment symptoms. *Figure 1* shows the research model of the proposed framework. The original paper contains the above mentioned collections.

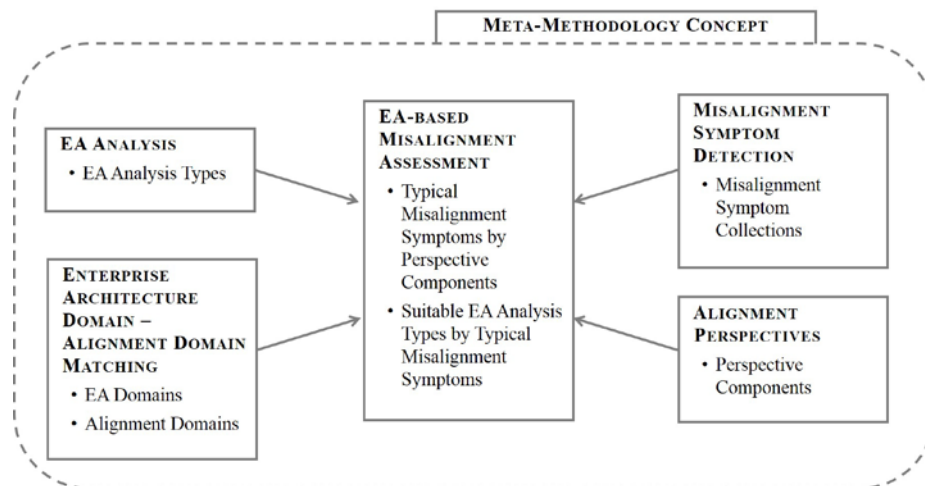


Fig. 1: The construction of Enterprise Architecture-Based Misalignment Assessment Framework

4 Operation of the Framework: An Example

This section provides the operation results of the proposed EA-based misalignment assessment framework. A detailed analysis is given on misalignment symptoms and relevant EA analysis types via matching alignment domains along the four traditional alignment perspectives (Strategy Execution, Technology Transformation, Competitive Potential and Service Level). As a first step typical misalignment symptoms are introduced to each alignment perspective. As a second step suitable EA analysis types are recommended which are able to detect the corresponding misalignment symptom. The results of the proposed framework are introduced in a well-structured manner.

As an example, the analysis of Strategic Execution Perspective is given. *Table 1* shows typical misalignment symptoms as well as suitable EA analysis types to the perspective components of Strategy Execution perspective.

Perspective Component	Misalignment Symptom	EA Analysis Type
P.1.1 Business Strategy and Business Structure matching	S.01 Undefined organizational mission, strategy and goals	A.03 Coverage analysis
	S.02 Undefined business process goals, business process owners	A.03 Coverage analysis
	S.03 Lack of relation between process goals and organizational goals	A.01 Dependency analysis, A.02 Network analysis
	S.04 Undefined business roles or responsibilities	A.03 Coverage analysis
P.1.2 Business Structure and IT Structure matching	S.06 Application functionality does not support at least one business process activity	A.01 Dependency analysis, A.03 Coverage analysis, A.08 Heterogeneity analysis
	S.07 Business process task supported by more than one application	A.01 Dependency analysis, A.03 Coverage analysis, A.08 Heterogeneity analysis
	S.08 Critical business process does not depend on scalable and available applications	A.01 Dependency analysis, A.03 Coverage analysis

Table 1: Analysis of Strategy Execution perspective – Excerpt

5 Conclusion and Future Work

This paper dealt with EA-based misalignment assessment. After introducing theoretical context and related work, a framework was proposed on architecture matching-driven misalignment symptom detection. It was followed by an analysis: the framework was used to connect typical misalignment symptoms with traditional alignment perspectives. After collecting typical misalignment symptoms, relevant EA analysis types were recommended which were able to identify the misalignment symptoms in question. The main contribution of the paper was that it connected typical misalignment symptoms to relevant EA analysis types along the perspectives of the SAM model.

Presenting typical misalignment symptoms and recommending suitable EA analysis types along the four traditional alignment perspectives provided us with several insights regarding the nature of misalignment assessment. In the original paper 1 out of 4 perspective-based analysis – the Technology Transformation perspective – is evaluated in detail. The justification of the choices is based on the operation of the proposed framework.

As part of future work the approach will be evaluated against some set of testable criteria. In addition, the proposed framework will be tested and validated in real-life situations. Furthermore, containing EA models will be added to the framework. Finally, additional examination methods will be established in order to approach EA-based misalignment assessment from different perspectives.

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