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Value Trees usefulness in assessment of Enterprise Architectures value

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Abstract

In last two decades a significant number of organizations began to build Enterprise Architectures in order to deal with complexity and change, to align business and IT, to cut costs and several other objectives. The current economic pressures and the significant investment that Enterprise Architectures represents are increasingly demanding an assessment and demonstration of their usefulness and value. Despite the need and interest there still is no consensus on how to demonstrate the value. Some value models and methods have already been presented but they are still not detailed enough to be used and require further research to be useful for most organizations. In this paper, we present an initial discussion about the usefulness of value drivers and value trees as a way to measure the Enterprise Architectures value.

Keywords: Enterprise Architecture, Value, Value Drivers, Value Trees.

Introduction

In last two decades a significant number of organizations began to build Enterprise Architectures in order to deal with complexity and change, to align business and IT, to cut costs and several other objectives. An Enterprise Architecture can be defined and conceptualized in many ways. According to TOGAF (TheOpenGroup, 2009) an architecture is a formal description of a system, or a detailed plan of the system at component level to guide its implementation. From this perspective, an Enterprise Architecture is a formal description (a complete model) of an organization that brings together a collection of documents which describes all aspects of the organization, taking into account the perspectives of different groups or users. This formal description can be a description of the organization's current state and/or the desired future state.

Given the current economic pressures and the significant investment that Enterprise Architectures represents there is a growing need of an assessment and demonstration of their usefulness and value. However, despite this need and interest there still is no consensus on Enterprise Architectures value and the value assessment still is a very difficult and complex process for most organizations. In our view the main issues that contributes for the difficulty and complexity of value assessment are: (1) the lack of a clear definition of what is meant by value, (2) the different value views from stakeholders, (3) the lack of a clear understanding on what are the most important value factors and how they can/must be measured, and (4) the organizations need to quickly demonstrate the Enterprise Architectures value.

In the little literature available, the discussion of the value proposition is mainly focused on the Enterprise Architectures benefits and how they can be quantified; however, it is important to emphasize that value is more comprehensive than the benefits. The value results from a balance between what is gained and what is lost and the key to demonstrate the value of one Enterprise Architecture is relating the investment in its construction and maintenance to the incremental achievement of business outcomes.

At this moment, some approaches, some value models and methods have been presented and/or suggested (e.g., (Kluge et al., 2006; Rico 2006; Schekkerman, 2005; Schelp and Stutz, 2007)), however there still are no clear evidence of its usefulness, much by the fact that many of these proposals do not have enough detail to allow its replication in others organizations. In other hand, these approaches do not address most of the value assessment issues mentioned above; therefore in this following section we briefly present and discuss one other approach, the value trees approach, which in our view may be very useful to address those issues.

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Value Trees and Value Drivers Approach

The value trees and value drivers are two familiar concepts on performance management and Value-Based Management, and in which the main focus is the organization's value creation for shareholders. A value tree is a systematic method of analytically and visually linking the business operational metrics to financial metrics and shareholder value (Koller et al., 2005). The value drivers are the key components of a value tree and they represent the variables that affect the value of an organization.

Usually, in a value tree are only considered the key value drivers, which although only represent a small number of total value drivers, their impact on value is very significant and have an important feature: they can be continuously measured and controlled by management. For this it is important that each value driver is well defined by management and are properly established several metrics and indicators to measure it. In figure 1 is presented a small example of a value tree with four value drivers: margin, revenue, costs and invested capital.

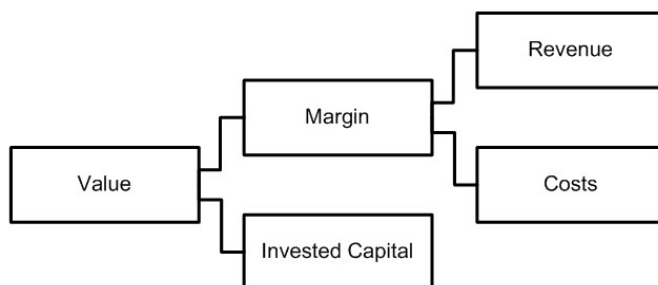


Fig 1. Value Tree Example

In the construction of an Enterprise Architecture value tree will be important to consider not only the generic value drivers of the organization, which are affected by the architecture, but also the value drivers specific to Enterprise Architectures, which somehow affect the generic drivers. This can be done by creating different levels of value drivers (like figure 1), being the top levels drivers most generic and more relevant than the others. The number of levels will depend on the level of detail desired by management. The linkage between two drivers is established by the impact of the lower level driver in the higher level driver.

In value assessment of Enterprise Architectures value this approach can be very useful as it can help organizations to create a performance management system of enterprise architectures. In other hand, this approach can help to solve many of the value assessment issues mentioned above, considering that:

- The value drivers can represent not only the benefits of an Enterprise Architecture as well the costs associated with it construction and maintenance.
- The identification of key value drivers will focus on the variables that actually have more impact on the value both in short term and long term.
- It is possible to create different levels of value drivers and thus consider the different value views of stakeholders.
- For each value driver can be set operational metrics, performance indicators or financial metrics. The type of measures will depend on the nature of the value drivers and the stakeholder's value views considered.

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Conclusion / Future Work

Despite the importance given to the subject, it still is very difficult and complex for most organizations to assess the value of Enterprise Architectures. Although there are already some proposed approaches, including some models and methods, in our view, they are still not detailed enough to be used and require further research to be useful for most organizations. In this paper we make an initial presentation and discussion about the usefulness of value trees as a way to measure Enterprise Architectures value.

In the research that we are conducting we intend to identify and characterize the generic key value drivers of Enterprise Architectures and propose and validate a generic value tree based on experience and knowledge of Enterprise Architecture stakeholders

References

Kluge, C., Dietzsch, A. and Rosemann, M. (2006), 'How to realize corporate value from Enterprise Architecture', Proceedings of 14th European Conference on Information Systems, Göteborg, Sweden.

Koller, T., Goedhardt, M. and Wessels, D., (2005) Valuation: measuring and managing the value of companies, 4th Edition, John Wiley & Sons, New York.

Rico, D F. (2006), 'A Framework for Measuring ROI of Enterprise Architecture', *Journal of Organizational and End User Computing*, 18 (2), i-xii.

Schekkerman, J. (2007), The Economic Benefits of Enterprise Architecture, Trafford Publishing, Victoria.

Schelp, J. and Stutz, M., (2007), 'A Balanced Scorecard Approach to Measure the Value of Enterprise Architecture', *Journal of Enterprise Architecture*, 4 (3), 8-14.

TheOpenGroup (2009), TOGAF - The Open Group Architecture Framework 9 Enterprise Edition, The Open Group.