ENTERPRISE ARCHITECTURE VALUE ANALYSIS
BASED ON VALUE DRIVERS

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ABSTRACT
In the past two decades, in order to obtain a description of the current business and IT (Information Technology) state and/or to establish the desired future state, a significant number of organizations began to build Enterprise Architectures. Similar to what has occurred with the IT, currently, there is a growing desire to effectively demonstrate the Enterprise Architecture value. However, it is widely recognized by practitioners and researchers that it still is very difficult for organizations to assess and measure the Enterprise Architecture value. In this extended abstract is presented the problem definition, the research question, the research design and the main results expected from the currently ongoing Ph.D. project on Enterprise Architectures value.

PROBLEM DEFINITION
For several years now, the concept of architecture has being adopted in organizations as an umbrella term (Stecher 1993), that essentially encompasses a set of concepts and constructions (models, plans and methods) used to describe all aspects of an organization, from business (e.g., strategies, objectives, plans, procedures, etc.) to IT that support it.

Basically, an Enterprise Architecture is a formal description, a complete model of an organization that provides an overview of the organizational structure, business processes, information systems and technology infrastructure, through a coherent and comprehensive collection of principles, methods, models, diagrams and other documents that describe the organization, considering the perspectives of different stakeholders.

Recent studies, of one of the largest services companies in this field, Gartner, pointed out that about 55% of Enterprise Architecture construction projects are being abandoned or suspended due to the current economic pressures and the difficult for organizations to define and communicate the value of Enterprise Architecture (James et al. 2008).

Why it is so difficult for organizations to assess and measure the Enterprise Architecture value? Several reasons can be pointed out (Rodrigues e Amaral 2010): the complexity of the value analysis process; the definition (vagueness) of value itself; the lack of consensus about what should be measured; and the acceptance by its stakeholders.

During the literature review, we have found several models and methods that have been suggested for the value analysis of the Enterprise Architectures, however, most of them do not have a sufficient detail to allow it to be useful in this value analysis; and they still require further studies to prove their utility. So far, the existing approaches are not very detailed, are not theoretically
well founded, nor derive transparently from current practices (Schelp e Stutz 2007). In our view the solution to this problem may involve a value-based approach which clearly identifies the key value drivers of enterprise architectures to its stakeholders. Given this, the main research question formulated was the following:
- How can be the Enterprise Architectures value demonstrated using the key value drivers for stakeholders?

From the work that is currently being developed is expected the following contributions:
- An identification and characterization of the key value drivers to stakeholders;
- The proposal of an value model for Enterprise Architectures;
- And the proposal of a methodology that can assist organizations in the analysis of Enterprise Architectures value.

RESEARCH DESIGN
To address the research question of this Ph.D. project in the research design we choose the following methods: Literature Review; Delphi Method and Action Research Method.

The Literature Review will allow to review the state of the art in Enterprise Architectures field, to analyze and discuss the different concepts of value and study their applicability in Enterprise Architectures, and to identify and study the value models and the methods already proposed and applied either in Enterprise Architectures and in IT domain.

With the Delphi study we intend to identify and characterize the key value drivers that should be used in the value analysis of Enterprise Architectures. From the results of this study it is also expected the proposal of value model that allows to classify the Enterprise Architecture value drivers.

Finally, with the Action Research method we expect to study and analyze how the organizations and the Enterprise Architectures stakeholders can use the value drivers and incorporate them in method that makes possible to assess and measure the Enterprise Architectures value.

CONCLUSION / FUTURE WORK
Despite the enormous interest of organizations in determining the Enterprise Architectures value, it is still a difficult and complex task to achieve.

At this moment, it is being prepared one of the most important stages of this work, the Delphi study, with the identification of the initial list of value drivers, the selection and invitation of the persons that will participate in the study and the construction of the webpages that will support the entire study.

To conclude, with this Ph.D. project we expect to contribute with a new model and a new method that can assist organizations to effectively demonstrate the Enterprise Architectures value.

REFERENCES

AUTHOR BIOGRAPHIES
LUI S SILVA RODRIGUES is currently a Ph.D student at the University of Minho and is a lecturer at the Instituto Superior de Contabilidade e Administração do Porto where he teaches courses on information systems and technology. He holds a M.Sc. in Informatics from the University of Minho, with specialization in Information Systems Architectures. He is the author of three books on Information Technology (in Portuguese) and has scientific papers presented and published at international conferences.

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