

AN OMG-BASED META-FRAMEWORK FOR ALIGNMENT OF IS/IT ARCHITECTURE WITH BUSINESS MODELS

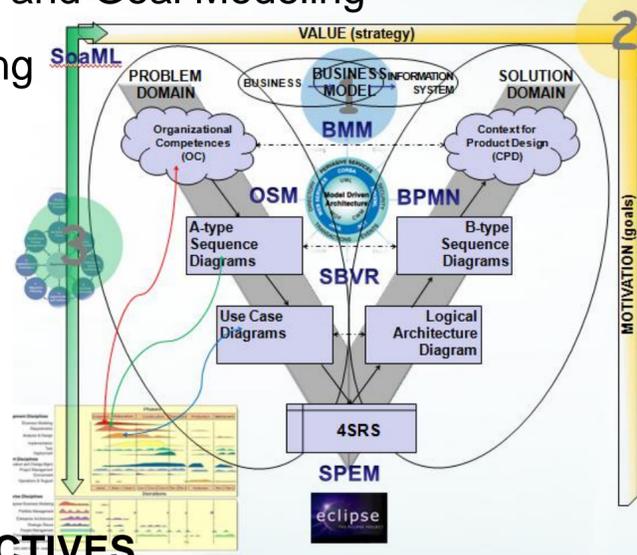
Carlos Salgado*

Supervisors: Ricardo J. Machado, Rita Suzana

• ced.sal@gmail.com

LITERATURE REVIEW TOPICS

- The Business Model Artifact
- Business Strategy and Goal Modeling
- Enterprise Modeling



RESEARCH OBJECTIVES

The objective of this research is to strengthen and extend the work of [Ferreira, Santos, Machado, Fernandes, & Gašević, 2013], in so promoting a better alignment between the business and IS worlds, specially in ill-defined contexts.

This can be achieved through the design and formalization of enterprise-wide, business model centered, views on the V-process software development framework, ensuring traceability across strategy, goals and requirements.

The use, and possible metamodel extension needs, of the OMG specifications for Business Modeling will support the necessary formalizations and enhance the research results communication to technological and business audiences.

The integration of best practices from TOGAF and RUP/EUP are also an important issue on this work.

RESEARCH PLAN

The early literature review focused on frameworks for enterprise, requirements and strategy alignment, and also on the current status of the OMG specifications for Business Modeling, on variants of the Unified Process for Business Software (RUP/EUP), and on the Eclipse Framework tools and the associated SPEM metamodel for formalization processes.

After our early work was positively received by the research community, next step will be to extend and formalize the V-process framework with the proposed solutions, and using SPEM and Eclipse, represent the dynamics of the different phases and develop a more business-oriented interface for deploying it.

This will be supported through designing / illustrating their applicability using real cases at business organizations or simulated ones, as appropriate.

Dissertation writing will be done incrementally during the entire research process and, as result of the work being carried out, more articles and conference communications are planned.

RESEARCH ACTIVITIES

The first year, in a two-year part-time basis, was dedicated to the disciplinary part of the doctorate, which included written works, the participation in the 3rd TSI Winter Workshop with a very preliminary paper on modeling organizations and business processes, and the preparation and presentation of the PhD thesis proposal, at the TSI Summer Symposium 2012.

Following the request for PhD thesis admission, research activities on the subject matters increased, originating the writing and acceptance of one poster and one article in relevant conferences in the information systems area (SAC'13 and ISD'13).

In the 3rd year, we plan to consolidate the present work in live projects within our research group and further explore the thematic of Enterprise Modeling.

REFERENCES

- Ferreira, N., Santos, N., Machado, R. J., Fernandes, J. E., & Gašević, D. (2013). Aligning Domain-related Models for Creating Context for Software Product Design. 5th Software Quality Days Conference - SWQD'2013
- Salgado, Carlos, Ricardo J. Machado, and Rita Suzana. "Modeling the Alignment Between Business and IS/IT: A Requirements Engineering Perspective." Proceedings of the 28th Annual ACM SAC, 2013.
- Salgado, Carlos, Ricardo J. Machado, and Rita Suzana. "Using Process-level Use Case Diagrams to Infer the Business Motivation Model with a RUP-based Approach." Proceedings of the 22nd International Conference on IS Development, 2013.