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Business capability meta model an effective conceptual illustration

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ABSTRACT

This article explains how to describe a business using modeling concept to achieve strategic perspective value proposition which would benefit aligning related business disciplines such as case management, BPM, requirement analysis, information management and more importantly helping organization transformation definition and solution deployment.

Keywords— *Conceptual model, Business capability modeling, Business architecture, Enterprise architecture, Technology architecture*

1. INTRODUCTION

This paper covers the modeling considerations when designing business solutions around technology services. It tries to present a logical view of business architecture supported by business capabilities. A conceptualization meta-model context highlighting key business concepts and interactions between the key components.

2. CONCEPTUALIZATION

Today's businesses are complex. The system that implements their business processes is equally complex. But people have a hard time agreeing on how to define the complexity. Typically, a complex business consisting of a hierarchical organization of departments and their functions. Some of these functions, however, are not restricted to one department; they cross horizontally across several departments not only within the organization but also include their partners, vendors, and suppliers.

The traditional method for documenting a business is to draw an organization chart, which divides the business into several departments or sections (e.g., research and development, marketing, sales, manufacturing, etc.), represented vertically. This documentation method is limited to how the business is built and organized. It does not document the business processes that flow horizontally and affect all the vertical departments (e.g., the development of a new product will affect all divisions). The intent is to have a successful marriage between business and technology stakeholders and bring a consensus around the business-need that can be simplified through a generic model.

Other structures in the business can be, such as service-oriented driven business processes, are workflow-centric resources that participate-in or used in the process, rules that govern the execution of the business, the goals, and addresses the problems that hinder the achievement of those process-centric goals, primarily those that cannot be captured in the traditional organizational view. Over the past several years modelers and experts have presented business model contains all this information. Capturing and documenting this information can be the basis for making better decisions that result in a business that runs more smoothly, and better documentation for specifying the requirements of the information system.

But modern days where business need comes with exponential scaling, geographical distributions, cloud-driven lightning speed, hundreds of independently deployed micro services with prerequisites requirements such as elasticity and resilience to failure. And these cannot be addressed in the existing process modeling constituents, this means model would well fall short to communicate and address the new requirement expectations. Unless there is a transparency to the business ecosystem such as capability, value, information & organization mapping, the model would not be beneficial to the value proposition. We would still be modeling the business which would describe activities scenarios within the business ecosystem such as capability, value, information & organization mapping, the model would not be beneficial to the value proposition. We would still be modeling the business which would describe activities scenarios within the business and how they relate to and interact with the resources in the business to achieve a goal for the process.

Many different theories strive to explain and improve how to structure and run a business. Very few standards, or even methods, exist in this area, and most of the literature concentrates on how to describe a business rather than on the well-defined techniques for running a modern day's business. How to describe a business to achieve strategic perspective value proposition which would benefit aligning related business disciplines such as case management, BPM, requirement analysis them and more importantly helping organization transformation definition and solution deployment.

“Business concepts are related to each other: A rule can affect the way some resources are structured; a resource is allocated to a specific process; a goal is associated with the execution of a specific process. The goal of business modeling is to define these concepts and show the relationships and interactions among them.”

A meta-model is a model of the basic business concepts and their relationships. The concepts depicted in this model are used to create other models. Figure 2 is a meta-model that summarizes the concepts used in business modeling and their relationships with each other. This meta-model is a UML class diagram in which each concept is depicted as a class, and the relationships between the concepts are either an association or a specialization. The meta-model also indicates which factors would hinder or prevent the business from achieving its goals.

The meta-model shows how Capabilities attempt to achieve goals. A goal is established to overcome one or more problems and expresses the desired state of one or more resources. Goals can be expressed as rules that control the process. A capability interacts with a process which then interacts resources through an interface and can cause the states of resources to change. The capability also interacts with other capabilities and processes by generating or handling events. Resources can be physical (such as people or machines), abstract (such as an invoice or account), or information, holding information about another resource (such as a database record in an information system). The cornerstones of the meta-model are the process, goal, resource, and rule classes. Each of these concepts is explored and discussed in more detail later in this chapter.

By diagramming business concepts, it becomes much easier to grasp and remember them than by reading textual descriptions. This meta-model of the basic concepts demonstrates the power of using models to describe complex structures and

relationships, such as the classes and relationships are shown in figure 2. The concepts in this meta-model are used in the views and diagrams that describe a business based on the focus and purpose of the diagram.

To a great degree, standard UML symbols and diagrams can be used to create business capability models. For the reader who regularly uses UML to describe the code structure of a program, remember that this topic uses UML to create high-level business models; the concepts described here are not coded specifications and should not be translated, even mentally, to lines of programming code. Information systems will be designed to support these business models at a later point in the development process, but that step is a long way from the business modeling stage. Attempting to capture reality and business thinking and directly translating it into the syntax of a programming language is very dangerous and subverts the focus of business modeling. This topic does not discuss Business Architecture to a Software Architecture.

4. CONCLUSION

By using this metamodel, technology or business architects would be able to define and create smart business architecture that would help to describe capability mapping integration in a common language that you would be able to clearly communicate current state business challenges and articulate a business-centric vision for the future that eventually resulting in IT Architecture transformations.

5. REFERENCES

- [1] Article “Rosetta Stone” of Business/IT Alignment” by William Ulrich: <https://www.cutter.com/article/business-capability-map-rosetta-stone-businessit-alignment-469506>
- [2] Book by Hans-Erik Eriksson and Magnus Penker: Business Modeling with UML