

Productification of Business Modeling by adding Situational Knowledge

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Abstract Enterprise and business models are artifacts and tools that can be used in various kinds of discussions about and work in an enterprise. This paper introduce a work oriented approach to modelling that treats enterprise models as products created by experts or professional modelers. By adding work oriented situational knowledge, experiences can be drawn from practices such as product development, design, job-to-be-done and business model canvas analysis. The explicit addition of situational knowledge can improve relevance, effectiveness and other qualities of the use of enterprise models.

Keywords Enterprise modeling, situational knowledge, product, design, job to be done

1 Introduction

Enterprise and business models are artifacts and tools that can be used in various kinds of discussions about and work in an enterprise. As such, an enterprise model has been designed by someone with a purpose and a target audience in mind, and a focus on a particular aspect of the enterprise, e.g. processes, business rules, concepts/information, vision/goals, and actors {Stima:2018tu}. An enterprise model has usually been designed by researchers and method developers using a scientific or practical method, where the model satisfies identified requirements.

This paper introduce a work oriented approach to modelling that treats an enterprise model as an artifact developed similarly to a product that serves a need or satisfies a want.

By treating an enterprise model as a product it becomes possible to incorporate knowledge and experiences from fields such as product development, design and innovation, which has a strong focus on aspects such as usefulness and long term viability.

In particular, when treating enterprise models as products, the development process does not stop when the artifact has been evaluated to satisfy initial requirements. Analogous to product development, the life cycle of a product goes through a journey with several stages. A key part of the journey is that demonstrations and evaluations should be done with the intended users and not proxy groups such as students.

After the product has been developed, Problem-Solution Fit is evaluated, followed by a decision to continue, modify the product, do a pivot or discontinue the development. The next stage traditionally involves evaluating the Product-Market Fit of the product, i.e. do the users actually use the product and actually pay for it. If not, then pivot, modify, or discontinue. The journey does not generally stop here. Subsequent stages often involve growth hacking, evaluation of long term Business Model - Evolution Fit and Production - Quality Fit.

There are practical and real reasons for these stages. In today's information age product ideas are found in abundance and they are shared rapidly across the globe. The saying goes that in Silicon valley the graveyard is full of super products that customers don't want to use and pay for, so surviving products need to travel through a longer journey. A product push out features and possible

benefits in use, at the same time customers pull in what they desire and what they consider as useful. For a viable situation to occur the product-push and customer-pull must meet, align and fit over time.

As a consequence, for an enterprise model product it is not sufficient that the model developer claims that the enterprise models purpose and focus are relevant and valuable for a particular person in work they do with others. The intended user is part of the fit equations and must be part of determining if the product is of value to them in their own work situations.

2 Adding situational knowledge

In the work oriented approach one important piece of situational knowledge is added in order to move enterprise modeling into product development. Here the situation where the enterprise model is intended to be or is actually used is explicitly identified and documented. This situational knowledge includes knowledge about work practices and use-requirements, and can be used to tailor, frame, constrain, contextualise, configure, or regulate the development and use of enterprise models [1]. The characterisation of a (work) situation includes the following aspects:

- General Situational aspects: facts, conditions, circumstances, and events that affect someone or something at a particular time and in a particular place [2].
- Work practice aspects: actual work being conducted, tasks, ways of working, ways of thinking, questions asked, information needs, objectives, results, outcomes, techniques, tools used, deliverables, work products, professions, organisational jobs or positions [3] [1] [4] [5] .
- Use-requirements: requirements on the use of enterprise models.

In the “A Method for Situating Capability Viewpoints” paper [1], a method is introduced that can be used to tailor and adapt existing enterprise models to fit with work people do with others. This method is based on situational method engineering [6] and can be generalised to work on aspects other than capabilities

This situational knowledge provides a key source for use-requirements of enterprise models. Importantly, it serves as an explicit source and anchor for the purpose, which is embedded in real work people do in specific organisations.

The situational knowledge provides a sound base for the validation of users needs and requirements in their work when answering questions, taking actions and and making decisions.

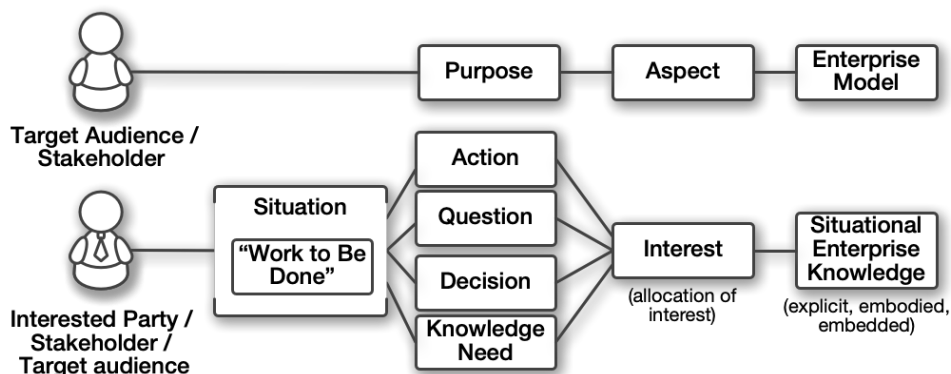


Figure 1: Illustration of the work oriented approach to an enterprise modelling

3 Job to Be Done there and practices

The work oriented approach is analogous to the contemporary Job-to-be-Done theory and practices as described in the HBR article from Sept 2016, “Know Your Customers’ “Jobs to Be Done”, by Clayton M. et. al. Here a job-to-be-done is characterised by:

- A. “Job is shorthand for what an individual really seeks to accomplish in a given circumstance”
- B. The circumstances are more important than customer characteristics, product attributes, new technologies, or trends.
- C. Good innovations solve problems that formerly had only inadequate solutions-or no solution.
- D. Jobs are never simply about function—they have powerful social and emotional dimensions.”

The job-to-be-done theory and practices has made a significant inroad into the innovation, design and product development fields. Here they significantly complements or rather extends traditional practices of stakeholder and persona analysis by adding situational knowledge as a key driver and source for artifact requirements, use of artifacts and products.

The work oriented approach has similar characteristics as the job-to-be-done theory and practices and aims to improve enterprise modeling and use of enterprise models.

4 Discussion

The inclusion of situational (work) knowledge has the potential to increase the value of artifacts such as enterprise models by improving relevance, intention to use and by providing a better fit between the artifact and actual use (usefulness). This is achieved through being explicit about work being done, questions asked, decisions being made and other information needs as expressed by an interested party. Furthermore, the fit is improved due to that the linkage between artifact and use is established at a later time than when the artifact kind was designed by researchers or methods developers. Artifact developers are typically aware of general usage situations, although they may be different from later and more specific situations.

The direct linkage to an (work) situation can improve the willingness by users to own the content of an enterprise model since the content is directly and visibly relevant to users work.

The implicit productification of enterprise models creates a dynamic relation between developers of model and the users. The developers of enterprise models must be careful to supply a beneficial artifact and establish fits’, and users become empowered to demand artifacts and products that does the job for them.

The behind-the-curtain vs. in-front-of-the-curtain problem can occur when enterprise models are developed by an expert *behind-the-curtain*, possibly for their own use, are directed or advised by the expert to be used by business people *in-front-of-the-curtain*. In this case, the expert expects the enterprise models to be relevant to and used by the user, but the user may perceives low relevance and interest in understanding and using the enterprise models. The inclusion of situational (work) knowledge has the potential to mitigate such problems.

The situational (work) knowledge provides an base and anchor for quality models and artifact criteria that can be verified by asking users directly without mediation through experts that may self-report success or fulfilment of requirements.

The simple “Tell me”-test can be used to rudimentary verify artifacts. Here a third party is asked to read enterprise models prepared by experts and then present the content to a (typical) (intended) user of the models. The intended user is asked, after the presentation, the question; “How much knowledge of your work was presented to you by the presenter?” The answer can then be used to evaluate aspects such as relevance, coverage, scope, usability, and utility with respect to the (work) situation.

In some cases enterprise models are used for governance and for monitoring and evaluating compliance [7]. However, product developers, designers, startup companies and innovators know the what is considered as a problem and solution today may shift tomorrow. Therefore, both the artifact solution and relevant (work) situations should not be considered as static and subsequently be observed and evaluated regularly.

Adding situational (work) knowledge pose a challenge to the notion that a single model kind can provide the truth to all interested parties (single-source-of-truth). This challenge can be seen in the case of process model kinds where it is common to create stylistics and theoretically driven levels or stratifications of process model kinds [8]. In an organisation it is easy to assume that everybody has an interest in what happens and who does what with whom. That is, all people are interested processes. A supervisor is not only interested in the lowest task-level and a top-manager may take a gembas-walk to understand what really happens the factory. What happens when the division-of-labour principles of an organisation are based on pragmatic ideas such as circles, network, or Holacracy? In such cases, developing, adapting or tailoring enterprise models based on actual (work) situational knowledge may improve relevance, efficiency and other qualities.

In conclusion, the addition of situational (work) knowledge has the potential to increase the efficiency and value of enterprise models.

5 References

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