



NTNU

Kunnskap for en bedre verden

TDT4151 - Enterprise Architecture for Enterprise Innovation

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1. Enterprise Modeling

1.1. Case Description

Expectations	Theory related
A good textual description of the case that you will model and your motivations for selecting this case and modelling. Are there any challenges you want to address? Is there something you want to clarify?	If the description is inadequate, unclear or incomplete, marks will be deducted.

1.2. Purpose/Goal of the Model

Expectations	Theory related
Why are you modeling? How would the model address your case? What purpose would your model serve? Note: this is very important for evaluating the model as your model should be evaluated against this.	This must be very clear and well scoped. Sub-goals are also important. (Note: goals of the model, not the enterprise you're modelling.) What are the success criteria for your model? How would you know if/when the purpose of the model is fulfilled - connection to evaluation of the model? Who will be the main users and beneficiaries of the model?

1.3. The Model

Expectations	Theory related
Models in ArchiMate AND 4EM. The actual model(s) must be submitted along with the report (Visio, LucidChart, Archimate, etc.). The report should include screen shots of the model with relevant explanations.	The textual descriptions of your model should explain the non-obvious parts. The model should for the most part explain it self.

1.4. Design of the Model

Expectations	Theory related
This section should explain the design decisions and how you have designed your model to meet its purpose.	How have you structured your model to reflect your case and the purpose? How does the choice of the enterprise aspects reflect your case?

1.5. Perspectives/Aspects

Expectations	Theory related
The model should include at least three perspectives/aspects of an enterprise in both 4EM and ArchiMate. Enterprise models by definition contain models of several perspectives (referred to also as sub-models), and they relate to one another. Note that the relationships across the perspectives are very important.	In your report, you should explain them and how they relate to one another. An Enterprise model vs. several models of a single aspect is important here; hence the relationships across the different aspects and layers must be described and explained. The student should demonstrate that they understand the relevance of the relationships across the different aspects.

1.6. Modeling Tools

Expectations	Theory related
At some point in the modelling process, you may notice that one of the languages is better suited for your case. If so, after modelling 3 aspects in both languages, you can select one of the languages to continue modelling with. Explain the reasons for your choice.	You should be able to explain why you think one approach/language is better suited to model your case. Note: it may be that both are equally suitable. Reflect on the modelling choices you have made by comparing the two modelling languages and explain. Are there other features that you would have like to have in a modelling tool?

1.7. Using the Model

Expectations	Theory related
How would you use your model? "Views" are how you would "extract" some information from your model for a particular purpose. E.g. A view that serves a specific sub-goal for your model. Or what a specific stakeholder/user would like to see or what is relevant in a specific situation. How would you use the model to obtain such a view? The answer expected here must include a discussion of the view and how the model is used to get.	You should be able to explain why you think one approach/language is better suited to model your case. Note: it may be that both are equally suitable. Reflect on the modelling choices you have made by comparing the two modelling languages and explain. Are there other features that you would have like to have in a modelling tool?

2. Open Service Innovation and Service Design

2.1. Identify Innovation

Expectations	Theory related
Describe a service-oriented approach to your enterprise, with one or a few services. (Innovation)	How would your enterprise remain agile and innovate? Describe the service idea and how this could innovate your enterprise. Describe the type of innovation w.r.t. the theory; e.g. open or closed innovation, digital, process, etc. Reflect on the type of innovation(s), e.g. is this a service innovation, process, digital or a business innovation? What is the ICT or digital component of the innovation?

2.2. Create a Customer Journey

Expectations	Theory related
Describe the service as a set of experience points (or touch points) or a customer journey. Include this in the report.	Explain the idea behind the customer journey and how you envisage the customers' experiences (Innovation). Explain the customer journey from the customers' and the enterprise's perspectives.

2.3. Blueprint

Expectations	Theory related
Model the blueprint for the service. Include this in the report.	Describe the details of realising the service and where technology is relevant. Describe in detail how the ICT components are affected or how any new components will be integrated into the current Enterprise Architecture.

2.4. Reflections

Expectations	Theory related
	Reflect on the relevance of innovation and the use of complementary modelling methods. Identify the main differences between service design and enterprise modelling. Explain how service modelling complements enterprise

3. Business modelling

3.1. Business and Value Modeling

Expectations	Theory related
Create a sustainable business model or a value model for the new (innovative) services in your enterprise using the relevant templates. Include this in the report.	Explain the choice of your business modelling framework and why it is the most appropriate for your case. Explain the business or value model you have created and the value proposition.

4. Redesigned enterprise model

4.1. Changes in the Enterprise Model

Expectations	Theory related
Identify the changes that you have to make in your enterprise to realise the business model and deliver the services. Enhance your 4EM or Archimate model from part 1. The new model should be submitted. (Hint: did the service innovation create more goals for your enterprise? If so, are there implications for the processes, roles, technology, etc. in your enterprise?)	Explain the changes in your enterprise model and how they would support the service innovation e.g. new or changed processes, new organisational structure, new competences and therefore new roles and actors, perhaps new technological solutions, etc.). Note: again, it's important to be clear about the purpose of the model as was relevant for part 1.

4.2. Enterprise Model & Enterprise Architecture

Expectations	Theory related
Structure model according to an Enterprise Architecture Framework, e.g. TOGAF	Reflect on the relationship between Enterprise Modelling and Enterprise Architecture.

5. Reflection

5.1. Model Evaluation

Expectations	Theory related
Assess if your model meets its purpose. You can use any of the methods we learned for evaluating models or any other means. (Hint - connect your model to its purposes and ask if it meets the purpose)	How did you evaluate your model - what evaluation methods (from theory) did you consider? Justify your choice of evaluation method(s). Describe how you evaluate your model, using the model and include screen shots of the relevant parts of the model. Describe why you think your model is good and meets the purpose (or not).

5.2. Reflections

Expectations	Theory related
Describe what you have done. Reflections and lessons learned. Reflect on the work, the process you followed and share some of your thoughts.	Also discuss the modelling experience. And what would you do anything different next time?

6. Bibliography

7. Appendices