Fractal Enterprise Model and its Usage for Business Model Innovation

Your company’s Business model 2017-2022

Tutorial
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Have you thought ....

That your company’s main business model can be dead in 5-10 years ... and how do you address that?
Solution: Business Model Innovation (BMI)

Three types of BMI

1. **Industry** model innovation - which amounts to change the position in value change, entering new markets, and/or other type of radical changes.

2. **Revenue** model innovation - which results in changes in how a company generates revenues, e.g. reconfiguring offerings and/or introducing new pricing models.

3. **Enterprise** model innovation - which involves innovating the structure of an enterprise, such as enterprise goals, business processes, products and/or services


New problem

- How to get from here to there?
Solution

- Find the company’s assets (people, processes, machines)
- Try to combine them in another way to get a new BM

In other words use destruction (of an old model) and creation (of a new one) by reconfiguring the existing elements

New problem

- How to find the assets?
  - Very few, if any member of staff has an exact picture of how the company works


- Assets can be hidden for the management
Solution: Model and Method

Requirements on Model and Method support:

- Should visualize the business and its assets
- Should support generation of hypotheses for change
- Should help to evaluate hypotheses
Fractal Enterprise Model (FEM)

FEM is a means to identify the enterprise’s assets that can be used as a basis for new and innovative business models.
Fractal Enterprise Model (FEM)

- FEM focuses on enterprise processes and assets and relations between them, and helps to visualize these relationships.
Fractal Enterprise Model (FEM)

- FEM facilitates generation and evaluation of hypotheses about new or complementing business models based on the existing processes and assets - and helps to evaluate them.
FEM – step by step

- To build a FEM, one starts with a process (in most cases a primary one)

Book sales over Internet
FEM – step by step

- ... then assets that are needed to run process instances are identified

Book sales over Internet
FEM – step by step

... then assets that are needed to run process instances are identified

Book sales over Internet

- Beneficiary
- Workforce
- Tech & Info Infrastructure
- Tech & Info Infrastructure

- Private Customer - Book Readers
- Packing and Delivering Staff
- Webshop Software
- IT Plattform for Webshop Deployment
FEM – step by step

Then for each asset, identify how it is managed (created, maintained and removed)
FEM - step by step

Then for each asset, identify how it is managed (created, maintained and removed)
FEM – step by step

- For each asset, identify the processes for its creation, maintenance and removal
FEM – step by step

- Then for each newly added process, once again, identify the assets that are needed for running its instances.

**Diagram:**
- Book sales over Internet
  - Beneficiary: Private Customer - Book Readers
  - Workforce: Packing and Delivering Staff
  - Tech & Info Infrastructure: Webshop Software
  - Tech & Info Infrastructure: IT Platform for Webshop Deployment
  - IT Platform for Webshop Deployment
  - Aquire
  - Maintain
  - Retire
  - Phasing out old platform
  - Platform creation
  - Platform maintenance
FEM – step by step

Then for each newly added process, once again, identify the assets that are needed for running its instances.
To support identification of assets for a process one can use a process-assets archetype.
Build FEM – with archetypes (patterns)

- "Process-assets" archetype
Build FEM – with archetypes (patterns)

- To support identification of processes for an asset one can use a process-assets archetype
Build FEM – with archetypes (patterns)

- “Asset-processes” archetype
Build FEM – with archetypes (patterns)

- FEM is created by recursive application of archetypes (process-assets → asset-processes → ...
Examples of FEM
What is special with FEM?

- It is possible to build a FEM relatively quickly using archetypes
What is special with FEM?

- Reveals all assets that exists in the enterprise that can be used for BMI
What is special with FEM?

- Relates assets to the processes which gives an overview where they are used.
What is special with FEM?

- Supports the process of finding the enterprise’s assets (and processes) that can be a foundation for a new BM.
What is special with FEM?

- Supports evaluation of hypothesis
Publications of FEM


Archetypes
Archetypes - Instantiation
Archetypes - Instantiation

Asset
- Acquire
- Maintain
- Retire

Asset
- Customers
- Acquire
- Acquire
- Maintain
- Retire

- Marketing
- Sales
- Customer Relationship Management
- Canceling a contract
- The presentation of the CAiSE 2018 tutorial: https://people.dsv.su.se/~perjons/FEM/
- A short paper that takes this example: http://ceur-ws.org/Vol-1859/bpmds-02-paper.pdf
- Erik's slides when presenting the above paper at a research conference. A YouTube recording is included https://www.slideshare.net/ilia12/using-a-fractal-enterprise-model-for-business-model-innovation
- Research paper with detailed information, but might be too heavy to read: https://link.springer.com/article/10.1007/s10270-016-0554-9
- One more example of a FEM model, from the paper above, related to teaching & learning https://insightmaker.com/insight/19994/Teaching-Learning
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