Business design case –
Future insight study for ABB

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Agenda

• Gofore and our services
• Creating customer value through technology & business design
• Case: Future insight study for ABB
• Examples of the findings of the study
GOFORE

We change the world for the better through digitalisation and by renewing ways of working.
We build the change with you

1. Lead
   Leading digital transformation requires a comprehensive workplace cultural change that starts at the very top of the organisation.

2. Design
   Attractive digital services bring added value for their users and generate new business.

3. Build
   Constant changes in the operational environment and users’ expectations for new services are growing. This requires quick technical development and an agile service architecture.

4. Cloud
   Utilising cloud infrastructure ensures that service development and maintenance is flexible, scalable, and easily configured.
Our history in 17 years

- **50,6 M€**  
  TURNOVER 2018

- **>10% PROFIT**  
  (FOR THE PAST 14 YEARS)

- **550**  
  EXPERTS

- **150+**  
  CLIENTS
Creating customer value through technology & business design
Traditional product business

**Enabler**
- Technical excellence as driver of development

**Back**
- Back-stage silos as objective setters

**Front**
- Customer facing silos as product proxy

**Product**
- Nominator of value is product sales success

**Customer**
- Customer as passive entity & product consumer

**Technical excellence**
- R&D
- BD
- IT

**Sales**
- Application experts
- Field engineers
- Customer service
- Marketing & comms
- Partners
Digital service business

Enabler: Technology

- Integrating understanding of tech and customers to create solutions
- R&D
- Customer in center
- Partners
- Field engineers
- Sales

Coordinating internal resources and discussing with multiple customer representatives
CASE: Future insight study for ABB
Summary of discussion

• ABB is developing configuration and management tools for grids.
• This project was about business trends and current state analysis of substation control and protection.

The purpose of the project was:
• Research and understand the customer needs for asset management; the usage of substation and how to benefit from data
• Understand product overlaps and gaps also for other ABB products
• Identify opportunities for future
Research objective

1. Understand key trends for future needs
2. Understand how current user roles are evolving
3. Collect information for ABB product architecture definition

Focus was more towards understanding the future business opportunities rather detailed analysis of the current tools.
Project phases

Data collection
- Collect the data:
  • Interviews among users, customers and stakeholders
  • Previous research results
  • Workshops with stakeholders

Analysis
- Analyze and summarise:
  • Future direction
  • Customer needs

Prioritizing
- Crystallize the information:
  • Key opportunities for future
Customer research – Interviews

• During the internal interviews with ABB experts we collected list of hypothesis and key questions to be asked during customer research
• Relevant stakeholders and electricity grid experts were interviewed
• Participants were representatives of different DSOs, university and ABB.

• The customer research phase focused on understanding the following themes
  • Data and data centricity in electricity grids
  • Machine learning
  • Development of market demand
  • Expectations and needs towards ABB products and services
  • Cyber security
  • Distributed generation
  • Country-specific legislation
  • Future professions
Two workshops were conducted using futures wheels method.

Participants were representatives of different DSOs, Energy organization, municipality, university and ABB.

Futures wheels method:
- It is for graphical visualization of future consequences resulting from different types of change.
- It gathers collective wisdom.
- It visualizes possible futures, but it does not predict probabilities of these futures.
Futures wheels – selected themes

- Based on the interviews three main themes were selected for the workshops.

- Technical development in electricity grid (in Finnish “Verkkomalli”)
- Data and data centricity (in Finnish “Data ja datakeskeisyys”)
- Changes in value creation (in Finnish “Arvon muodostuksen muutos”)

• Based on the interviews three main themes were selected for the workshops.
Examples of the findings of the study
Examples of findings from workshops

- Scenario 1, Bi-directional power flow in electricity grid:
  - Increased amount of distributed generation causes bi-directional power flow to grid.
  - Amount of microgrids, off-grid solutions etc. Increases the complexity in the grid.
  - There is a need for updating protection devices in electricity grid.
  - More developed protection systems are needed

- Scenario 2, Batteries and Energy Storages develop
  - Prices of batteries and BES solutions decreases and they come more common -> can replace some grid investments -> DSOs as an “insurance company”
  - Need for monitoring battery and energy storages -> new kind of data -> needs for data-analytics
## Tool to indentify future business opportunities

<table>
<thead>
<tr>
<th>Product portfolio</th>
<th>Scenario 1</th>
<th>Scenario 2</th>
<th>Scenario ...</th>
<th>Scenario N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product or service 1</td>
<td>How this product or service solves the problems in this scenario? How it fits to the scenario?</td>
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<tr>
<td>Product or service 2</td>
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<tr>
<td>Product or service N</td>
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Conclusions

• In traditional product business, customer is mainly passive entity and product consumer.
• In digital services business, design methods give understanding of who customer is and what are their real needs.
• In this case study, business design methods was used research and understand the customer needs for asset management.
• Based on the study, different scenarios of future in electricity industry was created.
• Scenarios was used to create a tool that can be used to compare different product portfolios to future scenarios to understand the future business opportunities.
Thank you!

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