XaaS Benchmarking: Everything as a service?
Learning from Software & Manufacturing Companies

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St.Gallen
XaaS Benchmarking: Everything as a service?
Learning from Software & Manufacturing Companies

Motivation
- Software companies already implement as-a-Service offerings profitably
- Manufacturing companies have difficulties reaping the benefits from service offerings and the potential of digital technologies
- Transforming towards XaaS requires strategic and organizational adaptations
- XaaS is a viable option for monetizing digital services

Objective
- Identify software and manufacturing companies that provide XaaS offerings successfully
- Examine their strategy, business and operating model and related enablers
- Derive implications for managing the transformation towards XaaS

Benefits
- Direct influence on the topics examined
- Profit from our experience in knowledge transfer
- Learn from industry experts
- Visit successful practice companies

Approach
Our proven benchmarking process is employed to identify Successful Practices: companies providing XaaS offerings and having mastered the necessary strategic and organizational adaptions.

Benchmarking Model

Project Overview
Time Frame
- Ca. 8 months
- Planned kick-off: 01/2020

Meetings
- Kick-off meeting (1 day)
- Review meeting (1 day)
- Site visits (1 day per visit)
- Final conference (1 day)

Participation Fee
CHF 20'000

Website
https://item.unisg.ch/xaas
Manufacturing companies are on the cusp of revolutionizing their offering towards XaaS

Vision and Motivation

Enabler of XaaS

<table>
<thead>
<tr>
<th>Manufacturing Companies</th>
<th>Product</th>
<th>Adding services</th>
<th>Product &amp; Service Bundle</th>
<th>Digitalization</th>
<th>Smart Product &amp; Service Bundle</th>
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Pricing Models

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<thead>
<tr>
<th>Cost-Plus</th>
<th>Usage-Based</th>
<th>Availability Output-Based Contracts</th>
<th>Economic Output-Based Contracts</th>
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Digitalization

<table>
<thead>
<tr>
<th>Automation</th>
<th>Industry 4.0</th>
<th>Industrial-Internet-of-Things</th>
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Transforming towards XaaS

Motivation

- Software vendors have proven that XaaS is a highly successful business model
- XaaS providers benefit from:
  - An increasing customer retention
  - Superior financial performance
  - Monetizing their service suite

Challenges

- XaaS affects all business processes
- The entire organization has to be restructured
- Increasing business risks must be managed

Smart product and service bundles, new pricing models and digital technologies are emerging. Thus, manufacturing companies have laid the foundation to move on beyond selling products and services.
Leading software companies have transformed towards XaaS

Vision and Motivation

Motivation
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Restructuring the traditional software offer and applying new pricing models enables software companies to offer SaaS.
KUKA and Adobe showcase the profitability of XaaS
XaaS in Manufacturing and Software Industry

<table>
<thead>
<tr>
<th>Production-as-a-Service</th>
<th>Software-as-a-Service</th>
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<tbody>
<tr>
<td><strong>KUKA</strong> → FIAT CHRYSLER AUTOMOBILES</td>
<td><strong>Adobe</strong> →</td>
</tr>
<tr>
<td><strong>Benefits</strong></td>
<td><strong>Benefits</strong></td>
</tr>
<tr>
<td>• Diversification of Kuka’s product portfolio</td>
<td>• Diversification of Adobe’s product portfolio</td>
</tr>
<tr>
<td>• Flexible value packages to better meet customer needs and thus, increase customer retention and profitability</td>
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<tr>
<td>• Participation in Chrysler’s value creation</td>
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<tr>
<td><strong>Challenges</strong></td>
<td><strong>Challenges</strong></td>
</tr>
<tr>
<td>• The new revenue model loads process &amp; market risks to KUKA</td>
<td>• Customers require often a free version of the product</td>
</tr>
<tr>
<td>• Emerging dependency between KUKA and Chrysler</td>
<td>• Increased error vulnerability of online/cloud based services</td>
</tr>
<tr>
<td><strong>Enabler</strong></td>
<td><strong>Enabler</strong></td>
</tr>
<tr>
<td>• Smart services and business model transformation</td>
<td>• Using cloud services to provide software to the customers</td>
</tr>
<tr>
<td>• Data analytics and prediction methods driven by connected robot systems that ensure uptime of the production line</td>
<td>• Modularization of the software</td>
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</table>
Disrupting traditional value creation, XaaS raises pivotal questions

Comparison of a Traditional & XaaS Business Model

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**Transformation Path**

<table>
<thead>
<tr>
<th>Traditional Value Chain</th>
<th>XaaS Value Network</th>
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<tbody>
<tr>
<td></td>
<td>Product (physical/digital)</td>
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<tr>
<td></td>
<td>Updates</td>
</tr>
<tr>
<td></td>
<td>After Sales Service</td>
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<tr>
<td></td>
<td>Additional Offer</td>
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<tr>
<td>Customer</td>
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</table>

**Questions to Answer**

**Strategy**
- Which strategic objectives drive your XaaS transformation?
- How should your future portfolio look like?
- Which (additional) resources do your company need to perform XaaS?

**Business Model**
- Which value package serves your customer needs?
- Which revenue model fits best to the value package of your XaaS offering?
- How should your company transform customer relationship management?

**Operating Model**
- Is an organizational transformation required?
- Which business processes have to be adapted to develop, sell and deliver XaaS?
- Are new policies as part of your corporate governance needed?

**Enabler**
- How should arising risks be managed?
- Which partners support your XaaS offering?

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A comprehensive transformation is a prerequisite to offer XaaS

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Due to the far-reaching interdependencies of introducing a XaaS approach, we strive to examine this topic from a holistic perspective.

The Benchmarking Model

- **Strategy**
  - Objectives
  - Portfolio
  - Resources

- **Business Model**
  - Value Package
  - Revenue Model
  - Customer Relationship

- **Operating Model**
  - Structure
  - Processes
  - Governance

- **Enablers**
  - Risk Management
  - Value Network
As partner you steer the scope of this study & profit from access to experts

Your Benefits as a Consortia Partner

- You influence the focal points, precise topics and define questions of the benchmarking
- You benefit from the detailed screening results
- You will visit five successful-practice companies and exchange views with the experts on-site
- You have the opportunity for networking with other consortia partners and industry experts
- We ensure effective and efficient procedures
- We provide you with a competent project organization, including among others:
  - Preparation of the kick-off, review and final meeting
  - Questionnaire design
  - Distribution of questionnaire and evaluation of the questionnaire
  - Derivation of cases and recommendations of successful-practice companies
  - Preparation of site visits (including a written report)
  - Documentation of the whole benchmarking

We guarantee high quality, scientific validity and invaluable insights through our experience in performing almost 100 successful benchmarking projects
ITEM-HSG benchmarking process ensures systematic & efficient approach

Our Proven Benchmarking Approach

**Preparation & Customization**
- **Identification of**
  - Goals, Challenges and Topics for the project
- **Development of**
  - Selection criteria of successful-practice and questions for the benchmarking questionnaire

**Screening**
- **Benchmarking survey**
  - Contact 1000+ companies
  - Answered questionnaires are returned and evaluated
- **Identification of**
  - Successful companies
- **Documentation of**
  - Successful case studies
- **Selection of**
  - 5 successful-practice companies

**Site Visits**
- **Low effort**
  - Planning and organization by ITEM-HSG
- **Invaluable insights**
  - Five site visits to enable the exchange of knowledge, experiences and ideas
  - Discussion of successful-practices with experts of the corresponding companies

**Conclusions & Adaptations**
- **Knowledge preservation**
  - Summary of lessons learned and successful approaches
  - Derivation of improvements
  - Development of own, adapted road map
- **Further benefits**
  - Successful-practice awards
  - Exchange of ideas
  - Networking with partners

**Meeting Timelines**
- **Kick-Off Meeting**
  - 6 Weeks
- **Screening**
  - 12 Weeks
- **Site Visits**
  - 10 Weeks
- **Conclusions & Adaptations**
  - 4 Weeks

University of St.Gallen | Institute of Technology Management | Competence Center Smart Services
We have a history of strong, diverse and contented benchmark partners

Selected References of Successful Benchmarks

<table>
<thead>
<tr>
<th>Year</th>
<th>Category</th>
<th>Description</th>
<th>Consortium</th>
<th>Successful-practice</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>Digital Technologies - Evolution of production in high-wage countries</td>
<td></td>
<td>Bosch, BSH, Claas, Continental, Model, Oerlikon, Rehau, Siemens, Stihl, Sulzer</td>
<td>Bosch, ebmpapst, infineon, Voith, Voit</td>
</tr>
<tr>
<td>2018</td>
<td>Smart Services – Transformation of the Service Organization</td>
<td></td>
<td>Lenze, Liebherr, Palfinger, Siemens, Trumpf, Karl Storz</td>
<td>Bühler, Hilti, John Deere, thyssenkrupp, Voith</td>
</tr>
<tr>
<td>2016</td>
<td>Industry 4.0 – From a Management Perspective</td>
<td></td>
<td>ABB, Bühler, Rieter, RUAG, Intellion, E+H, ZF</td>
<td>Festo, Egger, Bosch, Heidelberg, MR</td>
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<tr>
<td>2015</td>
<td>Success in the Future of Smart Services</td>
<td></td>
<td>Bosch, GEA, Metrohm, Siemens, Intellion</td>
<td>John Deere, Schindler, Nordex, Heidelberg, Kärcher</td>
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</tbody>
</table>

«The study together with HSG was a highly insightful and informative experience. The project meetings were very well prepared, efficient and covered all relevant theoretical aspects. Especially the site visits were extraordinarily instructive for all participants. We profit from the contacts gained through this cooperation even beyond the study!»

Balthasar Gwechenberger  
Vice President Corporate/Global Service  
PALFINGER AG

«As Liebherr, we were interested in how best performers position themselves in the Smart Services sector. The discussion with other consortium partners and best performers in the workshops, moderated by HSG, enabled us to evaluate trends and make strategic decisions.»

Dr. Tanja Sieber  
Head of Business Development Services  
Liebherr-EMtec GmbH
Tight project plan drives results & keeps tension within the project high

**Preliminary Time Schedule**

<table>
<thead>
<tr>
<th>Activity</th>
<th>2020</th>
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<tr>
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<td>Q1</td>
</tr>
<tr>
<td>1. Preparation &amp; Customization</td>
<td>![Bar]</td>
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<tr>
<td>2. Screening</td>
<td>![Bar]</td>
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<tr>
<td>3. Site visits</td>
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<tr>
<td>4. Conclusions &amp; Adaptations</td>
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Data security

- **Confidentiality** and anonymous publication
- We obey the «International Benchmarking Code of Conduct»

**Participation Fee**

Consortia partners get the full benefits of the benchmarking project and participate with a cost share of **CHF 20’000** each.

* The fee includes participation, meals at the Kick-Off Meeting, Review Meeting and at the Final Conference. Travelling expenses etc. are not included.

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* University of St.Gallen | Institute of Technology Management | Competence Center Smart Services
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Please do not hesitate to contact us if you have any questions

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