The Added Value of Facilities Management: How to map and manage?

Professor Per Anker Jensen
January 2015

DTU Management Engineering
Department of Management Engineering
Who am I

• Education
  • MSc. in Civil Engineering, DTU 1978
  • PhD. in Construction Management, DTU 1985
  • MBA, Copenhagen Business School 2004

• Employment
  • Researcher at DTU, 1979-1984
  • Consultant in Rambøll, 1985-1991
  • DR – Danish Broadcasting Corporation, 1991-2005
    • Project and Real Estate manager, 1991-1999
    • Deputy Project Director on DR Byen, 1999-2005
  • DTU, 2005-
    • Associate professor, 1. April 2005, Civil Engineering
    • Centre director, 1. January 2008, Management Engineering
    • Professor in Facilities Management, 1. January 2009
Agenda

• FM Value Map
• Value Adding Management
• RENO-EVALUE
• Plans for book 2
• Added value process model
Facilities Management Best Practice in the Nordic Countries

- Research project at DTU 2005-2008
- 36 cases
- Involvement in a NordicFM workgroup
- From cost reduction to adding value
- FM Value Map
- EuroFM research group
General conclusions

• A change in focus from mainly cost reduction towards adding value

• Implication for knowledge and competences
  • Change from general management methods transferred from other industries and experience based knowledge
  • Towards new research based knowledge and more FM specific professional competences
Added value – for who and how?

• For who?
  • Shareholders?
  • Stakeholders?
    • And which?

• How?
  • Value for money?
  • Efficiency?
    • More of the same for the same money
    • The same for less money
    • Value for money

• Effectiveness?
  • Something better for the same or less money?
Figure 4.1: Added use value and cost reductions (Jensen, 2010)
The FM Value Map – What is it?

• A conceptual framework to understand and explain how FM creates value for core business and society
• Based on an analysis of best practice cases from the Nordic countries
• Inspired by Strategic Mapping in Balanced Score Card Methodology
• Part of a NordicFM workgroup on “Highlighting the added value for the core business provided by FM”
FM Value Map – Generic version, level 1 and 2, 2008

STAKEHOLDERS
- Society
- Customers
- Staff
- Owners

IMPACTS (OUTCOME)
- Economical
- Social
- Spatial
- Environmental

SURROUNDINGS

- Satisfaction
- Cost
- Productivity
- Reliability
- Adaptation
- Culture

CORE BUSINESS

PROVISIONS (OUTPUT)
- Basic products
- Additional offerings
- Space
- Services
- Development
- Relations

PROCESSES (PDCA)
- Planning
- Coordinating
- Controlling
- Improving

RESOURCES (INPUT)
- Facilities
- Activities
- Real Estate
- Technology
- Manpower
- Know-how

FACILITIES MANAGEMENT
FM Value Map – Generic version, level 3 - Impacts
Value Adding Management

• A concept with the purpose to:
  • increase the awareness of the impacts and strategic importance of FM for organisations
  • be a practical tool for facilities managers in implementing value adding strategies and practices
Development of the concept

- From existing models of FM and Real Estate value and strategy mapping
- From existing management theories and models
- From case studies among leading actors, for instance LEGO
- From workshops with researchers and practitioners
# Coordination mechanisms

<table>
<thead>
<tr>
<th>Degree of centralisation</th>
<th>Centralised</th>
<th>Semi-centralised</th>
<th>De-centralised</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decision-making</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>One-sided</strong></td>
<td>Authority relationship (Hierarchy)</td>
<td>Agent relationship</td>
<td>Norms/customs</td>
</tr>
<tr>
<td><strong>Two-sided</strong></td>
<td>Partnership</td>
<td>Negotiation</td>
<td>Price (Market)</td>
</tr>
<tr>
<td><strong>Multi-sided</strong></td>
<td>Coalition</td>
<td>Voting</td>
<td>Team</td>
</tr>
<tr>
<td>Level</td>
<td>Demand side</td>
<td>Relationship focus</td>
<td>Coordination form</td>
</tr>
<tr>
<td>------------</td>
<td>-------------</td>
<td>-------------------------</td>
<td>---------------------------------</td>
</tr>
<tr>
<td>Strategic</td>
<td>Client</td>
<td>Business orientation</td>
<td>Coalition</td>
</tr>
<tr>
<td>Tactical</td>
<td>Customer</td>
<td>Customer orientation</td>
<td>Negotiation</td>
</tr>
<tr>
<td>Operational</td>
<td>End user</td>
<td>Service orientation</td>
<td>Price per order/Service charge</td>
</tr>
</tbody>
</table>
Figure 10.3: LEGO's Facilities Strategy Map 2010 (Møllebjerg, 2010)

**Value Add Perspective**
- World Class effectiveness ahead of peers
- Efficiency ahead of peers

**Customer Perspective**
- Support the business plan
- Make services easy to understand, access and use
- Make service delivery even more competent and reliable

**Process Perspective**
- Improve our customer engagement
- Transform TLG needs into services
- Improve communication of services
- Continuously improve service delivery

**Employee Perspective**
- Put end-users and customers in the center
- Continuously ensure the needed professional competencies and capabilities
- Live the LEGO Brand Framework
- Leadership...
The added value-equation

\[ \text{Added value} = \text{Volume} + \text{Quality} + \text{Flexibility} - \text{Costs} \]

- Number of non-standardized services
- The quality experienced and documented
- Number of standardized and provided services
- Total cost for the enterprise for providing the service

Min. 5% per year
## LEGO Service Centre and Value Adding

<table>
<thead>
<tr>
<th>Stakeholder</th>
<th>Channel</th>
<th>Target Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Client</td>
<td>Leadership team survey and meeting</td>
<td>Top 40 management level including vice president</td>
</tr>
<tr>
<td></td>
<td>Facilities committee meetings</td>
<td>CFO, heads of LEGO Corporate Center, Global Supply Chain, LSC and others by invitation</td>
</tr>
<tr>
<td>Customer</td>
<td>Customer meetings</td>
<td>Director level and above</td>
</tr>
<tr>
<td></td>
<td>Customer survey</td>
<td></td>
</tr>
<tr>
<td>End users</td>
<td>User survey</td>
<td>Everyone below director level level</td>
</tr>
</tbody>
</table>
**FM Value Net and FM Value Matrix**

- **Focus on co-creation of value**
<table>
<thead>
<tr>
<th>Relationship</th>
<th>Company &lt; &gt; Society</th>
<th>FM &lt; &gt; Client</th>
<th>FM &lt; &gt; Customer</th>
<th>FM &lt; &gt; End user</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Value dimension</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Use value</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Customer/consumer/user value</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Economical/financial/exchange value</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social value</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relationship value</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environmental value</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- **Company < > Society**:
  - Use value: Topic 3 Sustainability and CSR
  - Social value: Topic 4 Branding

- **FM < > Client**:
  - Use value: Topic 1 Corporate Strategy

- **FM < > Customer**:
  - Use value: Topic 2 FM Value Map

- **FM < > End user**:
  - Use value: Topic 5 Relationship Management
RENO-EVALUER

- A tool for decision support for renovation projects in early stages and evaluation
  - Eracobuild program:
    - Value Driven Processes
  - Value is in the eye of the beholder
- Stakeholders assess renovation projects differently
  - Therefore we emphasize subjective evaluations
  - To make the evaluations made by stakeholders visible is important to create a basis for a meaningful dialogue
  - The evaluations should as far as possible be based on the same factual information/preconditions
  - The reasons for the evaluations are important
  - Decision should not necessarily be based on consensus but on compromises that balance the different interests and considerations
RENO-EVALUE: Categories and Parameters

- Environment
  - Resources (energy etc.)
  - Climate (CO2 etc.)
- Stakeholders (satisfaction)
  - Product (quality)
  - Process (quality)
- Organisation (incl. competences)
  - Procurers/building clients (demand)
  - Consultants/contractors (supply)
- Economy (in a broad sense)
  - Euros/crowns (quantitative)
  - Value (mostly qualitative)
RENO-EVALUATE templates

1. Case description

2. Evaluation
RENO-EVALUE example

PRODUCT
- Esthetics and architecture
- Function and usability
- Comfort and indoor climate
- Durability/future-proofing

CONSULTANT/CONTRACTOR
- Project management competences
- Technical competences
- Problem solving competences
- Interpersonal skills
- Coherence in delivery team
- Risk/responsability/innovation

OWNER
- Project management competences
  - Decision competences
- Technical competences
  - Interpersonal skills
  - O&M involvement
- Risk/responsability/innovation

VALUE
- Attractive property
  - Property value

ECONOMY
- Reasonable maintenance costs
  - Reasonable operational costs

PROCESS
- Collaboration between stakeholders
- Mutual information sharing
- User involvement
- User consideration during construction

RESOURCES
- Energy consumption
- Renewable energy sources
- Water consumption
- Reuse of water
- Waste amount
- Reuse of waste
- Reuse of materials

CLIMATE
- CO2-emissions
- Pollution
- Local water treatment

ENGINEERING CONSULTANT
BUILDING CLIENT CONSULTANT
Book 2 on the Added Value of FM

• Preliminary title:
  • FM and CREM as Value Drivers - How to manage and measure added value

• Editors and contributors
  • Per Anker Jensen and Theo van der Voordt
  • An anthology with contributions from a number of authors

• Publishing
  • Routledge
  • Planned spring/summer 2016
Overall framework

• The general process model:
  • Input -> Throughput -> Output --> Outcome = Impact = Added Value

• The Added Value process model:
  • Intervention -> Management -> Added Value
  • Decision on type of change -> Implementation -> Outcome
  • What → How → Why
FM Value Map – Generic version, level 1 and 2, 2008

STAKEHOLDERS
- Society
- Customers
- Staff
- Owners

IMPACTS (OUTCOME)
- Economical
- Social
- Spatial
- Environmental
- Satisfaction
- Cost
- Productivity
- Reliability
- Adaptation
- Culture

SURROUNDINGS
CORE BUSINESS

PROVISIONS (OUTPUT)
- Basic products
- Additional offerings
- Space
- Services
- Development
- Relations

Management

Interventions

PROCESSES (PDCA)
- Planning
- Coordinating
- Controlling
- Improving

RESOURCES (INPUT)
- Facilities
- Activities
- Real Estate
- Technology
- Manpower
- Know-how

FACILITIES MANAGEMENT
FM and CREM interventions typology

- Changing the physical environment on different scale levels (portfolio, building, space)
  - Moving to another location (new or existing building)
  - New building
  - Rebuilding, refurbishment or adaptive re-use
  - Changing workplace layout
  - Changing appearance

- Changing facilities services
- Changing the interface with core business
- Changing the supply chain
- Changing the internal processes
- Strategic advice and planning
TYPES OF INTERVENTIONS AND ADDED VALUE PARAMETERS

Interventions

- Changing the physical environment
- Changing the facilities services
- Changing the interface with core business
- Changing the supply chain
- Changing the internal processes
- Strategic advice and planning

Can influences all

Added Value

- Satisfaction
- Image
- Culture
- Health and safety
- Productivity
- Flexibility
- Innovation
- Risk
- Cost
- Value of assets
- Sustainability
- CSR
"I'm in value-adding. What do you folks do?"