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Quality management in enhancing firms' financial performance in global operations

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In this paper we consider the management of the organizations, by focusing in

- Questioning how the firms' **financial performance** can be enhanced as an element of the corporate-wide quality management
- Our presentation builds on the authors' extensive business and quality experience, combined with the multidisciplinary action-based case study research we have carried out together during the last five years
- Our consideration builds on our findings from practical business cases, and hence confirms the practical utility of this research

In our thinking, we follow ISO 9000 Quality Management Principles

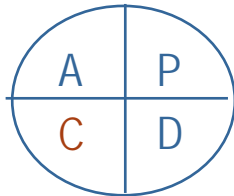
- The ISO 9000 Definition of Quality Management:
 - ***Quality Management consists of coordinated activities to direct and control the firm with regard to quality, i.e. fulfilling the needs and expectations of all of the stakeholders*** (ISO, 2015).
 - Hence, the concept of quality is a perception, closely related to the psyche of each individual stakeholder.
- Quality management is based on recognized principles, and practical managerial infrastructure and tools, of which.
 - Managerial tools include means, methodologies and even theories to be used for organizational management.
 - Many of these means have been particularly recognized as professional quality tools.

Organizational performance and its evaluation

- Holistically, organizational performance consists of four categories of performance (The American Malcolm Baldrige Model):
 1. Product,
 2. Customer-focused
 3. Financial and marketplace, and
 4. Operational performance.
 - In this context, our focus is financial performance,
 - Which certainly is not an isolated issue within business management
 - Which is a basis for the firm's overall business continuity
 - Which in today's severe global business environment is constantly at stake, and
 - Which therefore has to be continually followed from all of its dimensions
 - and we link our financial approach in QM through the PDCA
-

Our 'Triple PDCA model' covers the whole area of operational daily mgmt & strategic management

- Operational daily management is fundamentally divergent from strategic management but they must be consistent with each other (Anttila 2012, Osijek):
 - The **strategic** goals relate to the organization's change programs and are measured against the required qualitative and quantitative strategic change targets.
 - The **operational** goals relate to the organization's everyday operations which are being carried out in the organization's processes and measured with business units internal performance indicators.



P = Plan
D = Do
C = Check
A = Act

The 'Triple PDCA' model covers the whole area of the organizational management:

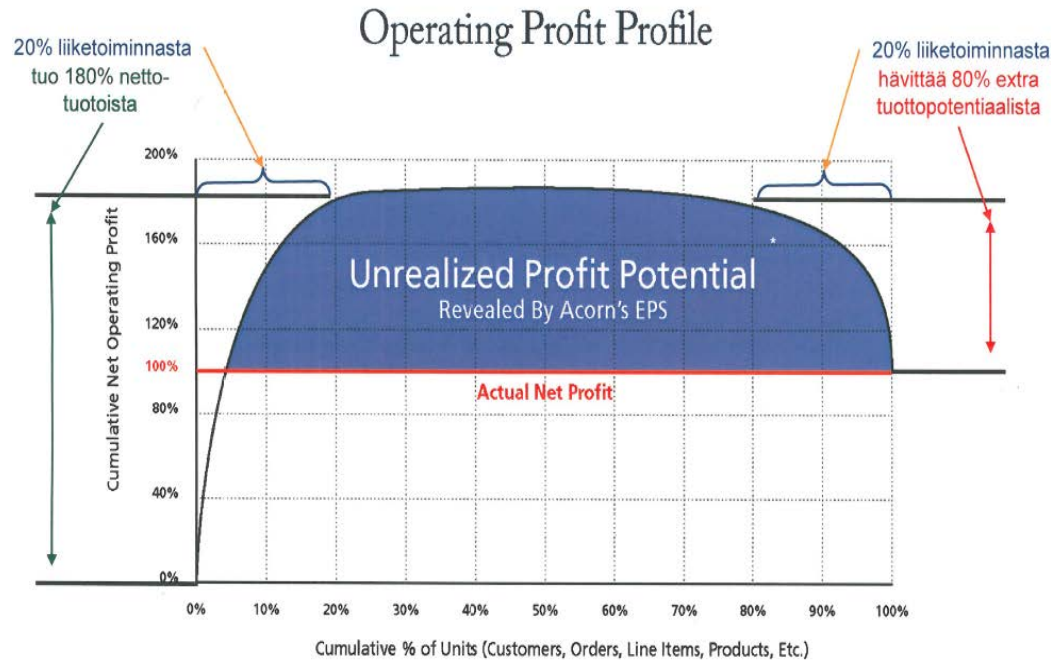
1. Control (operational / rational)
2. Continual small step improvement (operational / rational),
"Kaizen" approach
3. Breakthrough changes and transformation (strategic / creative)

Especially the phase C of the PDCA's is related to performance measurements.

Organizational performance and its evaluation

- Understanding the firm's financial performance, and its relationship with the firm's profitability are tough but rewarding tasks when trying to enhance financial value in today's fierce competition.
- In our paper, we follow the concept and practice of Time-Driven Activity-Based-Costing (TDABC), which methodology is utilized for understanding the quantification and dynamics of the firm's financial performance.
- TDABC studies have shown that at a minimum 20-40% of the firm's customers and products are unprofitable, but the challenge is to know which ones.
- This result fits well with our long-time experience in this topic.

Time-Driven Activity-Based-Costing: Unprofitable customers / products



- Benchmark data across 100 companies, 400 facilities, 10 industries ranging from \$25M to \$20B
- Source: Acorn Systems

“At a minimum 20-40% of the firm’s customers and products are unprofitable, but the challenge is to know which ones.”

AcornSystems

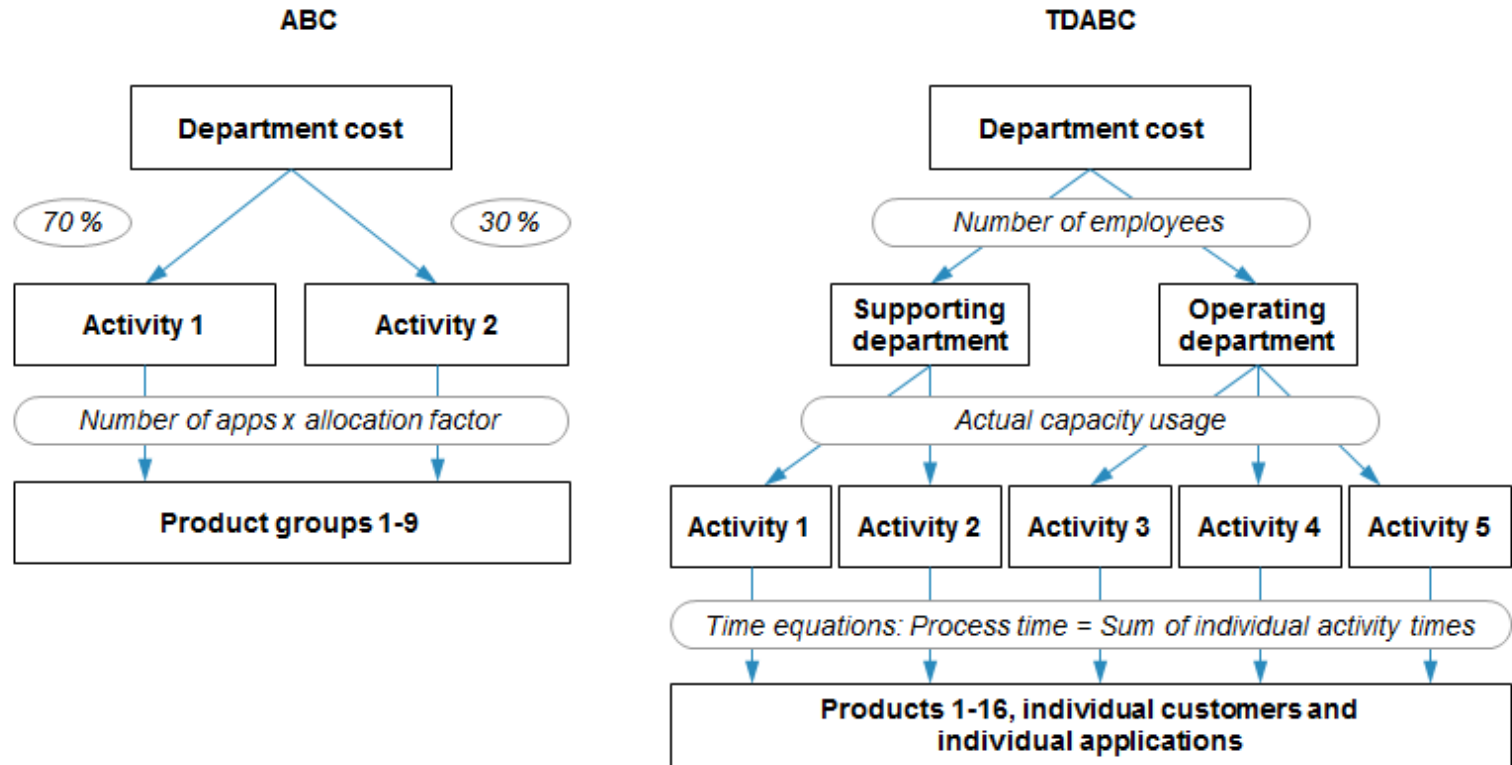
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Introducing the Time-Driven Activity-Based-Costing

- When creating the TDABC methodology, Kaplan and Anderson designed the concept of “time equations”, which is used to model time drivers to describe how time is spent on a particular activity:
 - In TDABC,
 - the organization’s resource expenses are allocated to support and operating departments.
 - the activity costs are allocated further to products (and customers) by applying time equations that take into account the main cost drivers related to each activity.
 - the cost estimates are based on direct observations of processing times of different activities in the organization, not on the subjective estimates where and how people and other resources spend their time (Figure on the next slide).
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Cost assignments: Traditional ABC model vs. TDABC model

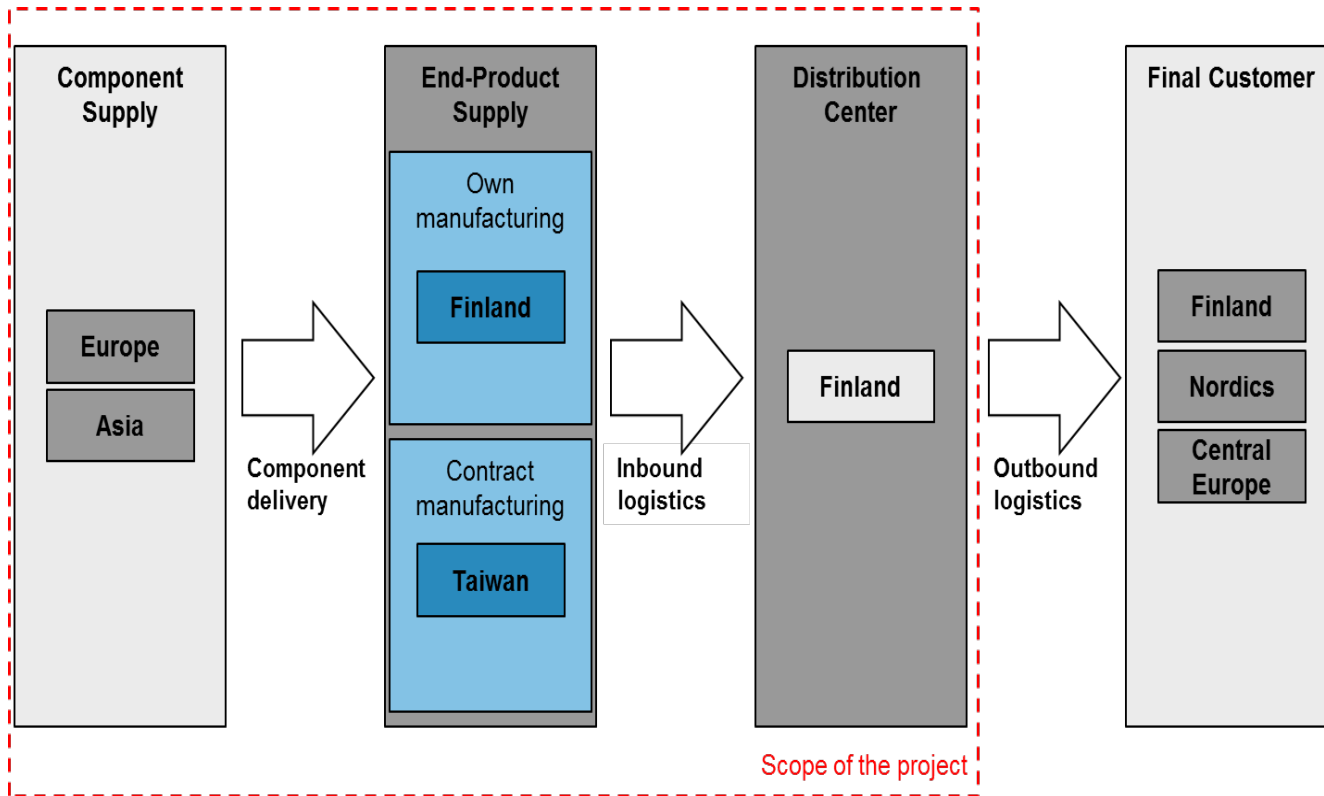


Comparison of cost assignments in the traditional ABC Model vs. TDABC Model.
(Gylling 2012)

TDABC & The Scope of Our Paper:

- The TDABC approach can be utilized as a link
 - between the external and internal accounting, and
 - between the financial and process management.
- The TDABC approach is relevant because
 - also all of the indirect costs are allocated to processes and finally further to products and customers,
 - hence indicating the financial impact of these activities on the firm's financial performance.
- And finally, by interpreting TDABC as **C**, “a check”, of our triple PDCA model, it can be interpreted
 - as a link between financial and quality management, i.e.
 - as a method which connects financial performance measurements both into operative daily management and strategic management

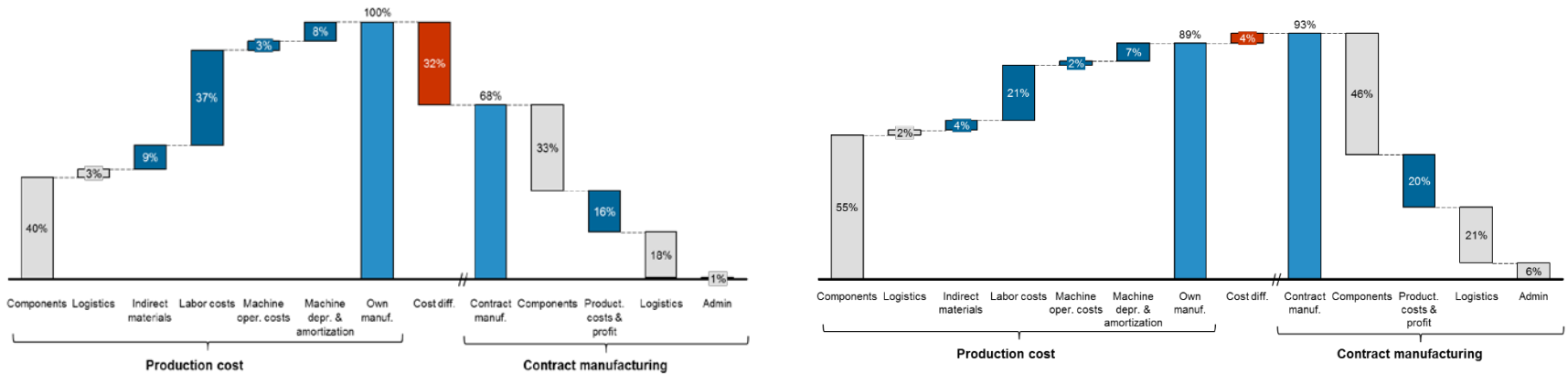
Scope of the Case Study



Action-based case study research in a Finnish bicycle SME, (Gylling et al., 2015)

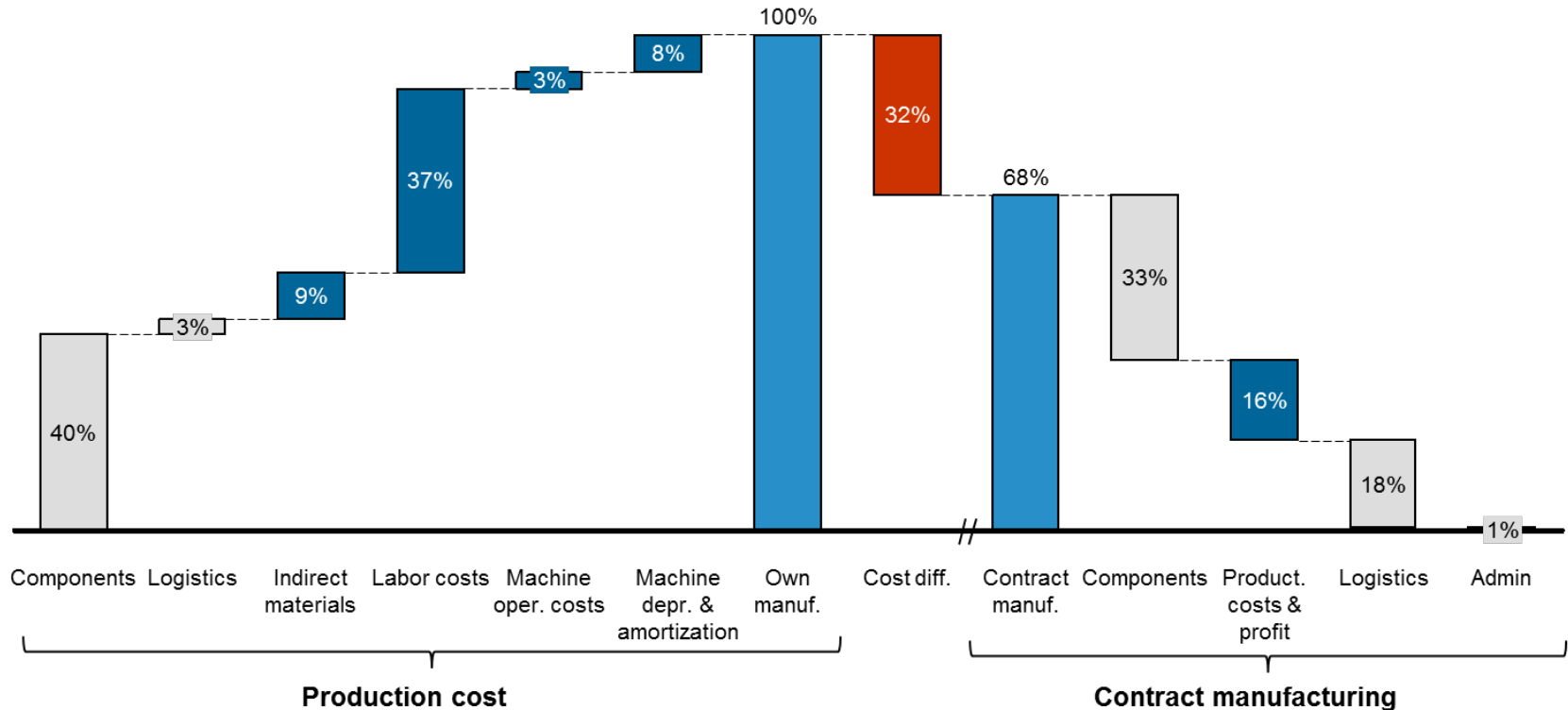
- The first phase of research was carried out in 2007-2008, and
- The second phase of the research in April-August 2010.

Case Study: The comparative analysis of production and contract manufacturing costs



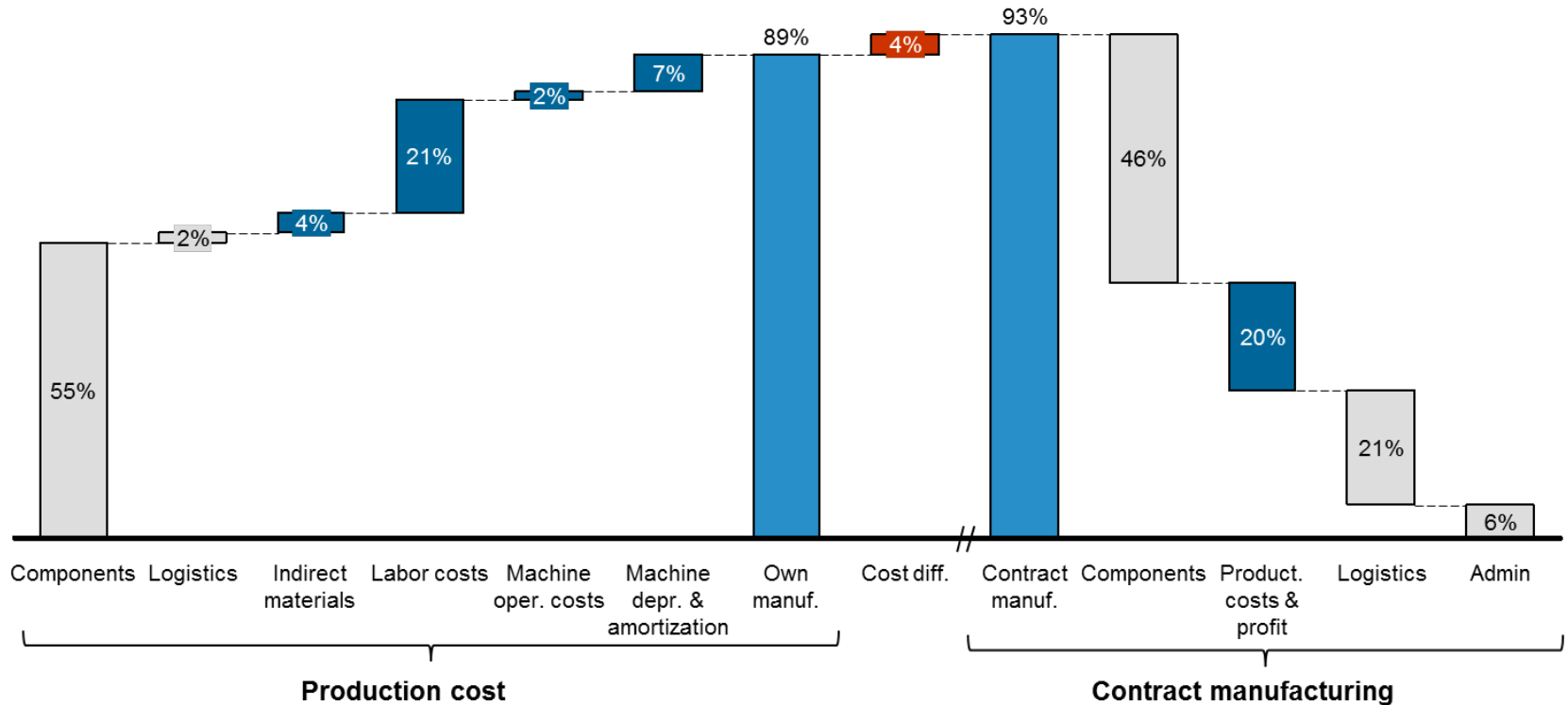
The updated comparative analysis of production and contract manufacturing costs of *jopo* bicycles in 2008 and in 2010, respectively. (Gylling et al., 2015)

Case Study: The comparative analysis of production and contract manufacturing costs



The updated comparative analysis of production and contract manufacturing costs of *jopo* bicycles in 2008. (Gylling et al., 2015)

Case Study: The comparative analysis of production and contract manufacturing costs

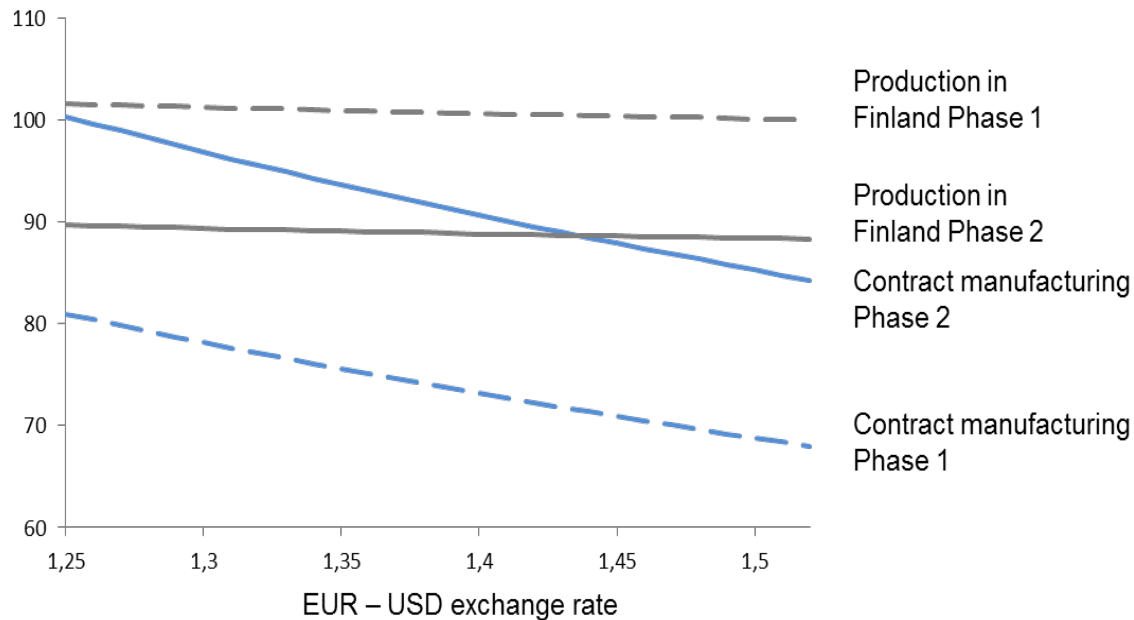


The updated comparative analysis of production and contract manufacturing costs of *jopo* bicycles in 2010. (Gylling et al., 2015)

Case Study:

Illustrating make-or-buy analyses

Unit cost per bicycle (indexed)



Make-or-buy comparison of the *jopo* bicycles based on the effect of changes in production costs and the EUR-USD exchange rate. (Gylling et al., 2015)

Summary

- In today's severe global business environment, the firm's overall performance is constantly at stake and it had to be continually followed from all of its dimensions,
 - of which those related to quality and profitability clearly determine the firm's competitive position in the market
 - and form a basis for the firm's overall business continuity in the long run.
- However, in the recent years, the firms' short-term pursuit of maximizing shareholder value and profit have reached a disproportionate value over other product characteristics and the firm's long-term interaction with its stakeholders.
- Moreover, in the global business environment we have to remember that the Earth's resources are not unlimited, and hence the prevailing judgements on market capitalism and shareholder value maximization will not be considered sustainable for a long time.

Summary (Continued)

- The fierce competition with the motto that “The winner takes it all” cannot be tolerated as a good and sustainable management principle, considering the future of our own societies in the 21st century. Instead, we need partnerships with shared interests, shared outcomes.
- We have to take into account that
 - “sustainable development meets present needs without compromising the needs of future generations”, and that
 - “in sustainability, long-term and holistic thinking is essential rather than the short-termism which currently dominates” (Dunlop et al., 2015).
- In this exercise, we also need effective tools for quality and financial management, and efficient managing infrastructure; and excellent understanding of processes and their management. We have noticed that the TDABC approach has shown its practical utility as a powerful tool for various organizations’ profit improvement projects.