

Background

Outsourcing and offshoring of engineering tasks is often a top management decision which has a profound impact on the product, the development process and thereby the way engineers are expected to work and how this work is to be conducted. The aim of this project is to provide insight into these consequences of offshoring and outsourcing engineering tasks so these can be considered and planned for already in the decision process.

Areas of relevance and contribution (ARC-Diagram)



Research Questions

Organizational impact

- How can the process when a B2B manufacturing company offshore or outsource engineering tasks be explained?
 - What is the impact on the product and the development process?
 - How can this impact be utilized in the decision process?

Impact on the engineering profession

- Which competences are needed for an engineer to work successfully within a company which undertakes this process?
 - Can the competences developed by engineers stationed abroad be generalized within this context?

Research Approach

Specific context

Develop an understanding for the impact offshoring/outsourcing has on the product, development process & engineering competences. This relates to information flow, knowledge and interpretation of strategies.

Descriptive study

Investigation of the organizational impact:

- interviews with top managers in several manufacturing B2B companies

Investigation of the impact on the engineering profession:

- interviews with engineers in several B2B companies who have contact with engineers stationed abroad
- interviews with engineers in several B2B companies who are stationed abroad (limited to Hong Kong and Greater China)
- interviews with local engineers working with or for Danish engineers in Hong Kong and Greater China

Prescriptive study

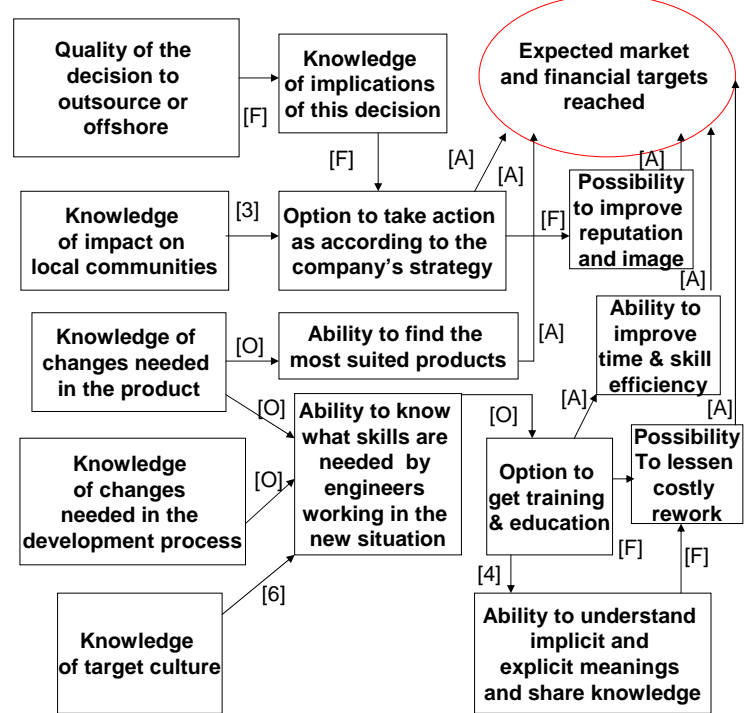
- Creation and modification of hypotheses based on analysis of the findings
- Proposal of methods and tools to explain/support the offshoring/outsourcing process in regard to the impact this has on the product, development process and engineering competences.

Descriptive study

Verification of the proposed methods and tools.

Reference model

[F] Facts, [X] Number of references, [A] Assumptions and [O] Own studies



Industrial Impact

Little knowledge exist of the process of offshoring and outsourcing engineering tasks in regard to the impact this has on the product, the development process and the connection to engineering competences.

This project aims at providing a model, methods and tools which addresses expected and realized goals and explains a possible gap between these. This includes any changes to the product, the development process and competences. Furthermore, a suggestion to which skills engineers situated in this context need to optimal the success rate of this process will be delivered.

This could save the company from costly mistakes and lessen the gap between expectations and realized results.

