

Product Development Management

IAR061

2015-10-26, 14.00 – 18.00

M-building

Maximum 2 pages per question – 10 total

Please write your student code on each page

The exam result will be published in Ladok no later than November 13, 2014. Reviewing of the exam takes place at the division of Operations management, room 3316, on November 23 at 12.00 and November 25 at 12.00. The request for correction shall be in writing and must be delivered to the division no later than 2 weeks after the opportunity for reviewing. After this the possibility for reviewing and correction ends. Only obvious errors, such as errors in the summing of the result will be corrected later. When the student chooses to bring the exam home all possibilities for correction of the result ends.

Questions will be answered in the room around 15.00
by Lars Trygg

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Master in Product Development
Chalmers University of Technology

Product Development Management – IAR061

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1. R&D Challenges and Dilemmas

An R&D manager is daily confronted with a number of challenges and dilemmas and a subsequent need for decisions. Illustrate by three examples of different key challenges/dilemmas, as described by Wheelwright and Clark, which were illustrated/exemplified by the mandatory guest lecture by R&D manager Stefan Brämberg from Ascom. (10p)

2. The Development process

Discuss, in short, the following five product development process related issues:

- What is the underlying thinking about the “stage-gate process” set-up? (2p)
- What is the difference between a “stage-gate” and a “milestone”? (2p)
- Who is reporting at a stage gate meeting? (2p)
- Who is usually the “Key decision maker” at a Stage-gate meeting? (2p)
- Where, organizationally, does usually this decision maker come from? (2p)

3. Organizing product development

- Organization Design* by Jay Galbraith (lecture content from 150930 when we talked about organizational theory) describes the need for creation of lateral relations in an organization in order to increase the capacity to process information. However, before this need for lateral relations emerges, organizations use other forms of integration mechanisms in order to achieve unity among different actors/functions. Describe these basic organizational mechanisms. (5p)
- What kind of team structure (one out of four), using the definitions introduced by Wheelwright and Clark, would you claim is used by Applied Material in the 5000 project? Illustrate your suggestion with clear examples from the case. (5p)

4. Applied Materials and Topic reports

Recall Dan Maydan’s dilemma in the Applied Materials case. Choose one of the Topic reports, the one that best, in your opinion, can help Dan to sort out the situation and help him to come up with the “best” recommendation that he has to propose to his CEO Jim in that specific case. Explain why. (It can be you own groups topic if applicable). (10p)

5. Product development methods and tools

- Explain the “Design-Build-Test Cycle” and illustrate where the two methods: DFA and QFD can come to play in this cycle. (5p)
- In “Lean Product Development” there is a clear distinction between the “Knowledge value stream” and the “Product value stream”. What does it mean, what is the difference between these two value streams? (5p)

Good luck / Lars