Product Development Management

IAR061

2014-10-27, 14.00 – 18.00 V-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 14, 2014. Reviewing of the exam takes place at the division of Operations management, room 3316, on Tuesday November 18 at 12.00 and Thursday November 20 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

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1. Technology sourcing and Dominant Design

- a) <u>Describe</u> not list 5 different ways to source needed technology. Which of these is the most commonly used by companies (5p)
- b) What is a "Dominant Design" and when/how does it emerge? (5p)

2. Project portfolio management and R&D dilemmas

- a) What are the goals with Project portfolio management and <u>describe</u> one method and/or tool that can you use in order to achieve these goals respectively (5p)
- b) Managing R&D is really much about management of dilemmas. <u>Describe</u> three typical managerial dilemmas or "trade-offs" that commonly needs to be handled by R&D managers. (5p)

3. Cross-functional integration

- a) Traditional functionally organized structures have a tendency to develop barriers to the necessary cooperation and integration between the functions. <u>Discuss</u> the underlying reasons to the existence of these barriers? (5p)
- b) <u>Describe</u> commonly used integration mechanisms that organizations use in order to overcome these functional barriers? (5p)

4. Learning goals and the Topic reports

Recall the learning goals and aims of this course. Pick four out of the eight topic reports and describe the learning points from each of them. Describe <u>also</u> how these learning points relate to the learning goals of the course. Select your topics so that you cover as much of these learning goals as possible. (10p)

TR: Management of risk, Project start-up, Cross functional teams, Stage gate processes, Design for environment, TQM in PD, Project planning methods, and Problem solving techniques.

5. Lean product development and Product platform management

- a) In Lean product development, the notion of waste can be expressed in terms of "knowledge waste" which can be divided into three categories. Explain the rationale behind the expression "knowledge waste" and give three examples of a knowledge waste; one from each category. (5p)
- b) Discussions about platforms are often related to the re-use of physical components. But a platform can be many other things also. Describe three other views (except for components) of what a platform is, and the benefits to gain from each of these three views. (5p)