

Exam

Anonymous Code: _____

COURSE NAME	Manufacturing Strategy
PROGRAM	Master Program in Production Engineering
COURSE CODE	TEK195
EXAMINOR	Mats Winroth
DATE AND TIME	Tuesday December 18. 2012 14.00-18.00
NUMBER OF QUESTIONS	5, maximum 10p each
ALLOWED AID	Dictionaries
TEACHER IN CHARGE Can be reached on phone Visits the exam at	Mats Winroth 031-772 1217 Around 15.30 and 17.00
SOLUTIONS AND RETURN OF EXAMS	Solutions (where possible to generalize) will be uploaded on PingPong the next working day. Return of exam according to the routines of the department at division of Operations Management floor 3 Vasa 3. Only written protests are accepted. Protesting must be done within two months of the exam date.
GRADING	Points will be added to the project with the following grades based on total number of points: Grade 3: minimum 40 points Grade 4: minimum 60 points Grade 5: minimum 80 points Minimum 20 points are required from the exam

Question 1. Knowledge Management (2 pages)

Knowledge management is about actively working with the employees trying to get them to share the company vision and goals, gain sufficient knowledge on their specific work tasks, and to feel interest and pride in what they are doing. In this issue it may be interesting to create models on HOW knowledge can be shared. In this course we talked about one model, the so-called SECI-model.

- a) Describe the SECI-model and how it is intended to illustrate this complex issue (5 p)
- b) Knowledge and creativity are very much interlinked. Therese Amabile described creativity linked to motivation. Which two types of motivations are there and what implications may they have on creativity? (5 p)

Question 2. Outsourcing (max 2 pages)

Outsourcing has become popular and companies seek to minimize their own operations in favor of companies with other core competencies. This task is however not easy and many companies have turned the other way around and after some time started to insource the previously outsourced activities. The failure is often that they have not really identified the strong and weak candidates for outsourcing.

- a) Which are most important characteristics of strong and weak outsourcing candidates (activities). Which are, according to you, the most likely reasons why some companies have failed? Motivate! (5 p)
- b) Describe the concept of offshoring and how it relates to outsourcing (5 p)

Question 3. Strategic resonance (max 2 pages)

Brown and Blackmon talk about strategic resonance between manufacturing and business strategies. Describe the concept. (10 p)

Question 4. Case – Chilly Willy (max 2 pages)

Chilly Willy makes and distributes ice cream. During the past ten years, the company has produced a limited product range in high volumes and delivered these in large units (so-called Big-Packs) to larger supermarkets. The market demand is fairly stable and the company shows profit.

The son of the owner, Little Willy, has recently been appointed CEO. His idea is that the company should diversify in order to reduce its vulnerability in being so dependent on a few larger customers. He is planning to introduce a large range of different special ice creams to be sold to smaller customers, such as ice cream stands and smaller grocery stores.

Your **task** is to develop a report to the new CEO about the consequences this proposed product change will have upon the production system. You shall comment on the following:

- a) Differences in performance objectives between the two types of customers (2 p).
- b) Possible differences in demand variation (2 p).
- c) The implications of these differences upon the design and management of the production system (4 p).
- d) The risks associated with the proposed strategy and how these risks may be reduced (2 p).

Question 5. Case – The Tao of Timbuk2 (max 2 pages) Please read the following carefully. Your task will come at the end of the text.

Case

“Timbuk2 is more than a bag. It’s more than a brand. Timbuk2 is a bond. To its owner, a Timbuk2 bag is a dependable, everyday companion. We see fierce, emotional attachments form between Timbuk2 customers and their bags all the time. A well-worn Timbuk2 bag has a certain patina – the stains and scars of everyday urban adventures. Many Timbuk2 bags are worn daily for a decade, or more, accompanying the owner through all sorts of defining life events. True to our legend of ‘indestructibility,’ it’s not uncommon for a Timbuk2 bag to outlive jobs, personal relationships, even pets. This is the Tao of Timbuk2.”

What makes Timbuk2 so unique? Each bag is custom designed by the customer on their Web site. After the customer selects the basic bag configuration and size, colors for each of the various panels are presented; various lines, logos, pockets, and straps are selected so that the bag is tailored to the exact specifications of the customer. A quick click on the mouse and the bag is delivered directly to the customer in only two days. How do they do this?

This San Francisco-based company is known for producing high-quality custom and classic messenger bags direct to customer order. They have team of approximately 25 hardworking cutters and sewers in their San Francisco plant. Over the years, they have fine-tuned their production line to make it as efficient as possible while producing the highest-quality messenger bags available.

The local manufacturing is focused on the custom messenger bag. For these bags, orders are taken over the Internet. The customers are given many configuration, size, color, pocket, and strap options. The bag is tailored to the exact specifications of the customer on the Timbuk2 assembly line in San Francisco and sent via overnight delivery directly to the customer.

Recently, Timbuk2 has begun making some of its new products in China, which is a concern to some of its long-standing customers. The company argues that it has designed its new products to provide the best possible features, quality, and value at reasonable prices and stresses that these new products are designed in San Francisco. Timbuk2 argues that the new bags are much more complex to build and require substantially more labor and a variety of very expensive machines to produce. They argue that the San Francisco factory labor cost alone would make the retail price absurdly high. After researching a dozen factories in China, Timbuk2 found one that it thinks is up to the task of producing these new bags. Much as in San Francisco, the China factory employs a team of hardworking craftspeople who earn good wages and an honest living. Timbuk2 visits the China factory every four to eight weeks to ensure superior quality standards and working conditions.

On the Timbuk2 Web site, the company argues they are the same hardworking group of bag fanatics designing and making great bags, and supporting our local community and increasingly competitive global market. The company reports that demand is still strong for the custom messenger bags made in San Francisco and that the new laptop bags sourced from China are receiving rave reviews. The additional business is allowing them to hire more people in all departments at the San Francisco headquarters – creating even more jobs locally.

Questions

- a) Consider the two categories of products that Timbuk2 makes and sells. For the custom messenger bag, what are the key competitive dimensions that are driving sales? Are their competitive priorities different for the new laptop bags sourced in China? (5 p)



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- b) Compare the assembly line in China to that in San Francisco along the following dimensions: (1) volume or rate of production, (2) required skill of the workers, (3) level of automation, and (4) amount of raw materials and finished goods inventory. (5 p)