

EASTERN UNIVERSITY, SRILANKA

Faculty of Commerce and Management

Final Year/Second Semester Examination in BBA/B.Com/Specialization in HRM/

Specialization in MKT (2008/2009) Proper

MGT 4214—Operation and Quality Management

Answer all five questions

Time: 03 hours

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Q1 Read the Case and answer the questions given below

**JEANS THERAPY—LEVI'S FACTORY WORKERS ARE ASSIGNED TO TEAMS, AND MORALE TAKES A HIT**

In an industry notorious for low wages and lousy working conditions, Levi's has prided itself on being a grand exception. It offered generous pay plus plenty of charity support in factory towns—all financed by the phenomenal profitability of its brilliantly marketed brand name. It clung to a large U.S. manufacturing base long after other apparel firms began moving offshore, and it often was ranked among the best companies to work for.

But to many of Levi's workers, the company's image has not fit for some time. In 1992 the company directed its U.S. plants to abandon the old piecework system, under which a worker repeatedly performed a single, specialized task (like sewing zippers or attaching belt loops) and was paid according to the amount of work he or she completed. In the new system, groups of 10 to 35 workers would share the tasks and be paid according to the total number of trousers the group completed. Levi's figured that this would cut down on the monotony of the old system and enable stitchers to do different tasks, thus reducing repetitive-stress injuries.

At the time, the team concept was a much-touted-movement designed to empower factory workers in many industries, and Levi's unions agreed to the effort. But there was more to it than that for Levi's. Faced with low-cost competitors manufacturing overseas, the San Francisco-based company did not feel it could keep many of its U.S. plants open unless it could raise productivity and reduce costs, particularly those incurred by injured workers pushing to make piecework goals. Teamwork, Levi's felt, would be more humane, safe, and profitable.

Instead, the new system led to a quagmire in which skilled workers found themselves pitted against slower colleagues, damaging morale and triggering corrosive infighting. Many top performers said the first thing they noticed about teams was that their pay shrank—and some of them decided to throttle back. They felt cheated because they were

making less. Whenever a team member was absent, inexperienced, or just slow, the rest of the team had to make up for it. That infuriated some team members who felt they were carrying subpar workers. With limited supervision from coaches, groups were forced to resolve most workflow and personality issues themselves.

The fundamental problem arises from the nature of work at Levi's factories. Unlike an assembly line for cars or copiers, speed in garment-making relates directly to a worker's skill and stamina for grueling, repetitive motions of joining and stitching fabric. The Workers in Levi's plants operate machines that perform specific tasks: pocket setter, belt looper, and fly stitcher, among others. Some employees work much faster than others. In 1993 Levi's hired a consulting firm to analyze the problems. Its conclusion was simply that the company should start from scratch and involve all parties in a redesign of pay structures and work processes. As they began discussing the changes, some plant managers complained that the sessions were "at times too touchy feely and not business-based enough.- Some managers just did not like the idea of having sewing machine operators challenge their 'authority. Costs mounted, and in April 1994 plant managers were warned that they must cut costs by 28 percent on average by the end of 1997 or face an uncertain future.

By early 1997, Levi's share of the domestic men's denim jeans market fell to 26 percent from a high of 48 percent in 1990. Burdened by new debt, Levi's in February 1997 announced plans to cut its salaried workforce by 20 percent over 12 months. Later in November 1997, the firm announced the closing of 11 U.S. plants and layoffs of 6,395 workers. The company said that none of these jobs were transferred overseas. Still, over the years the company shifted much of its work abroad. Industries wide in 1991, approximately 15 percent of the jeans for the U.S. market were manufactured abroad. Approximately 45 percent of the jeans were produced in foreign plants by the end of 1997.

Levi's says the team approach was the company's attempt to ensure long-term survival for as many U.S. plants as possible. Plant closures might have come sooner, and job losses might have been heavier, had teams never been adopted, company officials say. Levi's vows to persevere with the team strategy at its remaining U.S. plants. But unofficially, much of the approach is being scrapped as individual managers seek ways to improve productivity. People in the plants are gradually going back to the old way of doing things.

## Questions

1. What went wrong with Levi's move to teams in their plants'?  
(09 marks)
2. What could Levi's have done differently to prevent the problems?  
(09 marks)
3. Do you think the need to move jeans production offshore was inevitable? Could Levi's have done anything to prevent the problem of increasing labor costs?  
(10 marks)

(Total 28 marks)

- Q2
- a. Briefly explain the catercaries of operation management services in manufacturing firms  
(05 marks)
  - b. Why does the proper operations strategy keep changing for companies that are world class competitors  
(06 marks)
  - c. Identify and explain the current issues in operation management  
(07 marks)
- (Total 18 marks)

- Q3
- a. Define the term job design and identify the job design decision patterns  
(05 marks)
  - b. Why might practicing managers and industrial engineers be disbelieving about job enrichment and socio technological approaches to job design?  
(06 marks)
  - c. "Some suggest that customers' expectation is the key to service success". Give example for from your own experience to support the above statement.  
(07 marks)

(Total 18 marks)

- Q4
- a. Describe how E-Business has affected Operation Management  
(05marks)
  - b. Differentiate between product layout and process layout  
(06 marks)

c. "Layout significantly influences the behaviour of people and their perception of the job, ultimately affecting job performance, motivation, and satisfaction". Identify and briefly explain the advantages of effective and efficient plant layout.

(07 marks)

(Total 18 marks)

**Q5**

a. What is meant by a process? Describe its important features

(05 marks)

b. Briefly explain the major business functions involved in the product development process

(06 marks)

c. Differentiate process flow structure and product process matrix

(07 marks)

(Total 18 marks)