MMS = Sem Dec. 2007 PM 01

Roll No.

Total No. of questions : 2

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## Q. No.1 Answer questions given at the end of the caselet. [15 marks]

Du Pont, the chemical and energy giant, had earned a reputation for being at the forefront of managing information technology. The company spends about \$ 500 million per year on computers, software and related salaries. The large budget reflects the belief that information systems are essential to Du Pont's competitive position. Raymond E. Cairns, Du Pont former vice president for information systems, has told managers that they should look at computers not only as a means of cutting costs but also as a potential tool for increasing revenues and market share.

Du Pont mangers have been following Cairn's guidance in a variety of ways. One example occurred in a major Du Pont business that has a strategy of growth through acquisition. The business found itself with a number of different manufacturing approaches because of the varies types of manufacturing equipment and processes used by the acquired companies. In order to take a comprehensive view of the problem, a team consisting of both manufacturing and information technology specialist was formed. Having the information technology specialists involved during the problem definition stage enabled the team to develop an innovative approach using information technology. The resulting computer-based system united manufacturing operations and helped them operates at significantly less cost- a change that has enhanced the competitive position of the business.

Another instance involved a Du Pont business that faced a very competitive environment. To complicate matters, there was a fairly long distribution chain (e.g. wholesalers, distributors, retailers) between the points of manufacturing the product and the point of the product's reaching the ultimate customer. Because of the multiple links in the chain, Du Pont had difficulty obtaining sound market knowledge about the consumers, yet such information was critical to an effective marketing effort.

In assessing the problem, marketing managers recognized that using computer based information systems could help correct the situation. Accordingly, a team of marketing and information specialists was formed. They conceived of an information system that could be used to alter the role of a major part of the distribution chain, and in the process, provide access to previously unavailable market information. Within 1 year of implementation, the new system had helped Du point significantly increase its market share.

Du point also makes use of expert systems and other types of decision support systems, says manager of decision support and artificial intelligence. For example, one of its experts systems helps manufacturers design item such as squeezable ketchup bottles or microwave containers, very complex engineering design problems. Du Pont sells the system to outside manufacturers as a mean of expanding the market for one of its products—resin—a substance used in making the various bottles and containers that can be designed with the expert system.

In attempting to utilize its information resources affectively and efficiently, Du Pont has centralized some aspects and decentralized others, says the division manager of architecture and planning within the computer and systems function. For example, Du Pont has centralized such areas as the basic operations of large computers, the implementation and maintenance of communication networks, the setting of common data standers, and the development of applications that are basically similar across businesses (e. g., Computer-based cost system). Most other resources, though, are allocated to various businesses so that the businesses can use the technology to develop competitive advantages in their marketplaces.

These efforts are linked to some degree with centralized efforts through a goal-setting process. The basic philosophy is that information technology resources should be located as close to the individuals running the various Du Pont businesses as possible. To facilitate the process of decentralizing resources, individuals within the computer and systems function are often given training in a particular business. The training helps them be more effective in identifying how the business can use information technology to differentiate itself from competitors.

## Questions:-

- A] Highlight the salient points emerging from the case.
- B] Discuss the advantages and disadvantages of the company's approaches to managing information systems resources.

## Q. No. 2 Answer questions given at the end of the caselet

[15 marks] •

Ms. Kamal is a participant in the LG Company's training program titled Systems and Procedures Study. The participants meet once in a week for two hour as over an eight-month period. The program is a staffed by a professor of a prestigious university. As a part of the requirements of the program, each participant is required to undertake a work-study project of his own choosing with the idea of critically analyzing the work activities observed and suggesting improvement for them through the application of techniques and ideas learnt in the program. It was stressed by the professor at the beginning of the program that the "human element" was one of the prime factors to pay attention to, when undertaking such a study.

Ms. Kamal holds the post of Planning Engineer. In this capacity, she engages in coordinating activities between the operating, production and engineering departments. Her selected workstudy project for the training program deals with the purchase and order of heavy equipment for installation in new plants being constructed by the company. It concerns specifically the control of cost associated with purchased equipments that sometimes sits crated on a new plant location for weeks before it is ready for installation. Ms. Kamal had analyzed the scheduling procedures of the construction department and the purchasing procedures of the operating department plus the required specifications and design of equipment by the engineering department. She was of the opinion that, the company could save every year lakhs of rupees if the construction and operating departments would adopt the formal planning and purchasing procedures that she proposed. She felt convinced that her analysis of the problem was sound and her analysis of potential cost savings accurate.

Upon submitting her work-study project to fellow participants in the training program, she felt pleased that the group and the professor endorsed this project as "well done". Upon submitting her proposal to her immediate boss, the vice- president of engineering, Mr. Mahadik she was gratified to know that Mr. Mahadik planned to propose the introduction of her new procedures at the next meeting of the executive management committee.

Two weeks later Mr. Mahadik called Ms. Kamal to his office and told her that her suggestions had been presented to the executive management committee. He told her that the response of the committee was negative. The committee did not like a planning engineer crossing functional lines and making recommendations in areas other than his own. Mr. Mahadik also told him that the committee disliked the implication that their activities were costing lakhs of rupees yearly, and that in future, Ms. Kamal would not given any importance in her department.

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The vice-president of engineering, Mr. Mahadik suggested to Ms. Kamal that maybe it would be best if she was transferred to another division in the company. At least she would not run the risk of meeting these executives personally.

## Questions:-

- A] Could Ms. Kamal have avoided the problem brought about by her proposal? How?
- B] How should the vice- president of engineering have handled Ms. Kamal's proposal?
- C] What do you think of the suggestion that Ms. Kamal should be transferred to another division?