

EASTERN UNIVERSITY, SRI LANKA
FACULTY OF COMMERCE AND MANAGEMENT

Second Year Second Semester Examination in Bachelor of Business Administration
and Bachelor of Commerce 2011/2012 (Proper) (August / September, 2014)

MGT 2063 Management Information System

Answer all questions

Time: 03 Hours

Q1. Read the Case study and answer the questions given below.

Wal-Mart Online

Wal-Mart is one of the largest companies in America. It is definitely the largest retailer, both in terms of the number of stores (8,970 worldwide in 2011) and the level of sales (\$419 billion from the 2011 Annual Report). By pushing suppliers to continually reduce costs, Wal-Mart is known for pursuing low prices and the stores often attract customers solely interested in lower prices. With Wal-Mart's expansion into groceries, the company has become the largest retail grocer in America. Even by 2002, over 100 million Americans visit a Wal-Mart store in a given week. Yet, Wal-Mart has struggled in the online world. The company has tried several approaches to selling physical and digital products online. From electronics to books, music, and movie rentals, the company has announced many different online stores. Wal-Mart has struggled with most of its attempts, while Amazon continues to grow and expand in e-commerce sales. Although Amazon has a fraction of the total sales of Wal-Mart, Amazon is substantially larger in online sales. Which raises the ultimate question of what Wal-Mart is doing wrong, or what it needs to do to get a larger share of online sales.

Background

Many articles and business cases have been written about Wal-Mart. Most customers are probably familiar with the store and the overall concepts, but a considerable amount of work takes place to manage the large inventory, suppliers, pricing, customers, and employees. Wal-Mart has been a leader in using information technology to reduce costs. A huge part of succeeding in retailing is to provide the right products in the stores at the right price, when customers want to buy them. To

succeed, Wal-Mart needs to forecast demand for every product in every store. Each product can have multiple variations—such as size or colour. Individual items are commonly identified with an SKU number (stock-keeping unit), pronounced “skew.” Any Wal-Mart store has tens of thousands of SKUs. Of course, all of this data needs to be tracked by IT. Wal-Mart also can track personal purchases—based on credit and debit cards. All of the data from every store is collected and sent to the central servers at Bentonville, Arkansas.

In 2002, Wal-Mart primarily focused on using its home-grown custom code on its centralized systems (Lundberg 2002). In an interview, Chief Information Officer (CIO) Kevin Turner noted that a key to Wal-Mart’s success was continued striving to improve. His goals for the IT organization are to (1) run a centralized operation, (2) use common platforms, and (3) “be merchants first and technologists second.” His first two conditions are important to holding down costs. It also makes it easier to transfer personnel among stores. Turner noted that the process was challenging when the standardized systems were first introduced to stores in other countries. The answer was to build a flexible system that still allowed local managers to make decentralized decisions but using centralized data. Turner emphasizes the importance of matching IT to the business needs—and simplifying all tasks. As one step in developing systems, the IT department requires developers to go out and perform the function before writing system specifications or designing changes. For example, a developer might spend a day working a cash register to understand the pressure and data-entry requirements.

Even as early as 2002, Wal-Mart was working on RFID. With an effort to reduce costs per chip, the ultimate goal was to replace bar codes with RFID chips. Even using the chips at the warehouse level would make it easier and faster to identify and route packages. Even in the store, finding products can be a problem. Carolyn Walton (no relation to the founder), an analyst noted that when she was working on the floor, it once took them three days to find a box of a specific hair spray in the back room—resulting in lost sales. If the box had been tagged with RFID, it could have been found in minutes with a hand-held scanner.

Turner noted that Wal-Mart also spends a considerable amount of time in the research labs of its technology partners—working with universities and companies to see which technologies will be useful and how they might be modified to apply to Wal-Mart's problems.

In 2006, Linda Dillman repeated the main points that drive the IT department: (1) merchants first, (2) common systems and platforms, and (3) centralized information systems. A secondary benefit of the centralized approach is that the data warehouse (RetailLink) is provided to the suppliers—who can also monitor sales in real time to help them plan production runs. The system also enables them to track the status of ships through the distribution centers to the retail stores. Providing another set of eyes and analysts in tracking sales and shipments.

By 2010, Wal-Mart was processing over one million customer transactions an hour; generating databases estimated to contain at least 2.5 petabytes (Economist 2010). Rollin Ford, the CIO in 2010 emphasized the importance of processing and analyzing the huge amount of data: "Every day I wake up and ask 'how can I flow data better, manage data better, analyze data better,'" (Economist, 2010).

E-Commerce

In 2011, Wal-Mart appears to have shifted part of its online strategy. The company also announced that it was ending the sale of downloaded music (a step they had also taken years before). Part of the restructuring appears to shift e-commerce responsibility to managers in individual nations. Regional managers were appointed to be in charge of nations within specific sectors, such as Latin America, Asia, and Europe. Interestingly, Wal-Mart, through ASDA provides online grocery shopping in Britain.

Vudu

Wal-Mart bought Vudu in 2010 for a reported \$100 million; an online site that provides rentals and purchases of digital downloads for Hollywood movies. Within a year, the site had become the third-most popular streaming site on the Web. However, the big two (iTunes at 65.8 percent and Microsoft Zune Video at 16.2 percent) dominate the 5.3 percent market share of Vudu. On the other hand, Wal-Mart dropped its music downloads in 2011 because of poor performance.

Amazon and Target

For several years, Target, a direct competitor to Wal-Mart, relied on Amazon to handle its Web sales. The Amazon Web site displayed the products and processed the payments. In most cases, Amazon also handled the warehouse operations, shipped the products, and handled customer service. Essentially, Target outsourced the entire Web operations to Amazon. After two-years in development, in 2011, Target launched its own Web site. At that point, Target will stop selling items on Amazon's site. In 2010, Target had \$1.33 billion in U.S. sales, making it the 23rd largest online retailer. [Zimmerman and Talley 2011]. Target said the new Web site will more closely match the in-store experience and that it will be able to carry a bigger assortment of products—with as many as 800,000 products with free shipping (probably free to pick up at a local store).

Wal-Mart Sales Data

In 2011, Wal-Mart shook up the marketing world by declaring that sales data from its stores was a strategic asset and the company would no longer provide access to the data to outsiders. A decade later, in July 2011, Wal-Mart agreed to provide access to its sales data to Nielsen—the market research company. In the meantime, the sales climate had changed, from the high-increases of the early 2000s to eight-consecutive quarters of declining sales in 2010 from stores open at least a year.

Cindy Davis, newly appointed as Wal-Mart executive vice president for global customer insights noted that “We plan to share our point-of-sale information to help us identify category growth opportunities sooner and collaborate with our manufacturer partners to develop more impactful customer-driven programs going forward”.

Questions:

- i) Describe how Wal-Mart's Web site is different from Amazon. (07 Marks)
- ii) Explain the problems faced by Wal-Mart in on-line sales. (07 Marks)
- iii) What do customers shop at Wal-Mart, both in-store and online? Describe. (07 Marks)

- iv) As a Management Information System student determine and describe a strategy for Wal-Mart to improve online sales.

(07 Marks)

(Total 28 Marks)

- Q2. i) "As managers, most of them will work for firms that are intensively using information systems and making large investments in information technology". Briefly explain what are the roles that played by information system in today's world.

(06 Marks)

- ii) Briefly describe what is "Information System" and three dimensions of information systems.

(06 Marks)

- iii) "IT Isn't Just Technology: it builds a business perspective on Information System". Clearly describe how IT would create value for the firm.

(06 Marks)

(Total 18 Marks)

- Q3. i) Briefly explain why should managers pay attention to business processes? What are the benefits of using information systems to support business processes?

(06 Marks)

- ii) "From a historical perspective, functional systems were the first kind of systems developed by business firms". Clearly explain one of the systems from functional perspective with examples.

(06 Marks)

- iii) Explain what Supply Chain Management System is and how information system facilitates the Supply Chain Management System.

(06 Marks)

(Total 18 Marks)

Q4. i) “Constituency Perspectives identifies systems in terms of the major organizational groups that they serve”. Briefly explain one of the system under Constituency Perspective and how the systems have the relationship with one another.

(06Marks)

ii) Describe Porter’s five force model and state how internet would impact on competitive forces and industry structure.

(06 Marks)

iii) Briefly explain how the information system strategies helpful to deal with competitive forces with real world examples.

(06 Marks)

(Total 18 Marks)

Q5. i) “The negative social costs of introducing information technologies and systems are beginning to mount along with the power of the technology”. Briefly explain any three negative social consequences of information technology.

(06Marks)

ii) What is Information Technology Infrastructure? Describe the levels of Information Technology Infrastructure.

(06 Marks)

iii) “There are several major components of systems necessary to see us through to this goal”. Explain any three (03) infrastructure components with appropriate examples.

(06 Marks)

(Total 18 Marks)