An information system

Introduction:

An information system is a set of interrelated components that collect or retrieve, process, store and distribute information to support organisational decision-making and control. One of the key issues with ‘ information systems’ (IS) (these days) is that companies cannot measure if they are becoming more profitable or efficient by using the systems that they purchase. In a study done by KPMG on 200 UK firms, around seventeen billion GBP is lost each year due to the mismanagement and misalignment of information technology (IT). One way to evaluate a firms’ IS usefulness is to use the resource-based view “ inside-out approach,” which means that a company should identify its core business values and in turn, align these goals with a suitable information system that will fulfil these needs. Often times, however, large multinational firms implement new technology, regardless of whether it benefits the company or not and there is no way to measure results. Therefore, it is beneficial to look at a firm who has implemented a successful IS, for which it receives its competitive advantage.

Inditex is a major holding company based in La Coruña, Spain, which maintains controls over popular clothing stores such as Zara, Massimo Dutti and Bershka amongst others. For the purpose of this report, we will look at Zara in more detail, a store known for its high fashion for reasonable prices, with many clothing stores in prime locations in metropolitan cities around the world. It competes with other clothing stores such as H&M and Gap but it sets itself apart from them using its savvy information system and rapid production schedule. For the purpose of this report, we will examine Zara’s Technological and Socio-Economic Environment along with Zara’s knowledge chain management to evaluate its alignment of information technology as a function of Zara's business strategy.

IT in alignment with Business Strategy:

Zara's business strategyis to provide fast fashion for low prices. Based on this principle, one of Zara's developed core competencies is its effective and minimalistic approach to utilizing IT for the purpose of timely knowledge transfer, fast production turnaround and employee empowerment. Aspects beyond which are not directly connected to Zara's core competencies, the company prefers to outsource, such as its logistics. In order to understand the effects of IT on Zara's business model, we must take into consideration the technological and socio-economic factors affecting Zara, such as its management process, employee skills, technology, structure and strategy.

The management process:

The management processof Zara is supported by its holding company Inditex, who manages other popular European brands such as Massimo Dutti, Pull and Bear, etc. however, each clothing store is distinct because Inditex supports organisational learning, as opposed to maintaining firm control on these stores. Not only is each entity separate, but management encourages employee empowerment at Zara by allowing its employees the flexibility to choose new clothing designs for its store on a bi-weekly basis. Therefore, in just one city alone, one Zara store may have significantly different inventory than another Zara store up the road. Despite these differences, Inditex is still able to create economies of scale and scope based on the learning curve between its inter-related brands.

Individual Skills:

Employees and managers at Zara stores are trained to respond quickly to fashion trends, which they report through a PDA system to in-house designers twice per week. This system is useful for information collection in Zara headquarters in La Coruña, Spain, and it is also very user-friendly for store managers, as it does not require tremendous skill to understand how to use the technology. Zara heavily relies on the decision-making abilities of its employees. For example, store managers decide which styles to choose from and how many items are needed while employees in the headquarters, called “ commercials,” facilitate ongoing production, volume and allocation choices for each garment.

Technology:

Opportunity exists within Zara’s information systems. Although part of Zara’s strategic plan is to maintain simple operating systems in each store, there is room for improved software at the point-of sale (POS) terminals. It would be more helpful if customer purchases and returns could be updated instantaneously as opposed to having each manager, at approximately 1, 500 stores worldwide, counting inventory at the end of each day. This system would not detract from employee empowerment of forecasting demand and new styles; rather it gives them an opportunity to focus on more significant rather than menial tasks, like counting. Also, headquarters could implement an enterprise-wide system where upper-management could connect to each POS system at any point during the day, which would enable them to manage economic order quantity (EOQ) more frequently and efficiently, thus promoting a leaner production schedule.

One obvious implementation is that Zara could enhance its website to allow people to buy clothing online. There is a tremendous market for online shopping, however, due to capacity constraints and Zara’s pull strategy, it is unlikely we will see this emergence in years to come.

Structure:

The organization enables the introduction of information systems on an incremental basis. In 1994, Zara managers used fax machines and floppy disks to transfer information from store to headquarters each day. This process was expensive and slow, which is why they installed new operating systems. Staying consistent with Zara’s business strategy, the CEO describes the firm as highly information intensive, but it does not need employ “ bloated applications” that contain more modules than necessary.

Strategy:

Managers account for store demand in order to reduces inventory costs. With good inventory management, the company keeps its inefficiency and wastage at less than 1% annually. The CEO Jose Maria Castellano estimates that the firm spends about 25 million euros per year on IT or approximately . 5% of revenue on IT as opposed to its rivals that spend at least 2. 5% on it’s IT needs. Cost savings on IT are not Zara’s only recipe for success, we must also look at its competitive advantage as a function of its information system.

Information Systems and Communication

Zara’s success and competitive advantage is fostered by its hybrid information system, which employs both human capital and information technology (IT) to streamline information between Zara stores and headquarters in La Coruña, Spain. As noted by Figure B, inputs come from store managers who record daily sales and place clothing orders twice per week through a personal digital assistant, noting fashion trends and high demand products. This information is sent to approximately 200 in-house designers who create computer-aided designs (CAD) based upon store manager recommendations and market research. These designs are drawn, processed, allocated to various Zara shops, and sent to local factories that cut, finish and press each garment. They are then delivered within three weeks of order placement to over 1, 500 stores worldwide.

The competitive edge that Zara exhibits over Gap and H&M is partially explained by its timely knowledge exchange between store managers and the design team coupled with its relatively inexpensive IT system. Managers immediately report consumer tastes to designers who then send design requirements via Zara's intranet to local subcontractors. Since Zara does not outsource its production to foreign countries, goods can be in Zara stores within three weeks, as opposed to rivals such as Gap who may take up to 12 times longer.

Conclusion (DISCUSS ALIGNMENT at the end of " Do you have too much IT?" case. Does IT drive strategy or does strategy drive IT?)

- Incremental vs. radical innovation
- The firm is highly information intensive, but Inditex does not employ " bloated applications" that contain more modules than necessary. Their systems are not even connected () and the systems do not account for demand;

- Based on this philosophy, “ fast fashion logistics” is employed in order to get clothing orders from store managers onto shelves within less than three weeks of ordering.
- High fashion for low prices with a quick turnaround time
- Develop a system the requires short lead times, decrease quantities produced to decrease inventory risk, and increase the number of available styles and/or choice.
- Cooperative strategy with Inditex; not trying to reinvent the wheel.

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1. Laudon, K. C & Laudon, J. P. (2006), Management Information Systems, Pearson Prentice Hall.
2. KPMG study 200 UK firms.
3. Do you have too much IT?
4. Add source
5. Zara: Spanish Season
6. McAfee, Andrew. Do You Have Too Much IT? MIT Sloan Management Review. Spring 2004.
7. Zara: Spanish Season
8. Fast Fashion.