**Information Technology Management for Amazon**

Student’s Name

Institutional Affiliation

Due Date

**Introduction**

**Background into Amazon’s IT management in Singapore**

People nowadays prefer to buy online rather than at physical stores since they may find a wider range of products at lower costs in one location. As a result, e-commerce firms are growing at a rapid pace throughout the world and are fiercely competitive. Companies may use internal resources to enhance their organizational management approach and acquire a lasting competitive edge (Cardenas, 2017). In this article, I'd want to look at a case study of Amazon, an online retail business. I'll also go through its operational tactics. In addition, I will examine Amazon's difficulties and potential answers to those challenges.

Amazon is an example of a disruptive innovator. It began as an online bookstore and has now expanded to include music, DVDs, CDs, software, video games, home goods, cuisine, toys, and cloud computing (Fleerackers, 2010). It earned a competitive edge in each market since customer satisfaction is its top concern. Amazon, for example, offers free same-day delivery for orders placed by its prime users. As a result, Amazon takes a market-oriented strategy, and its mission statement declares unequivocally that consumers may customise what they want with low-cost products.

Furthermore, Amazon generates money by investing in its own brands (Dennis, 2018). Amazon, for example, makes use of information technology by creating the kindle, which is an electronic book reader (Fleerackers, 2010). Organizational sustainability is dependent on the interdependence of information systems and companies (Laudon & Laudon, 2007). Organizations utilize Porter's five forces model (competition rivalry, risks from new entrants and alternative goods, supplier and customer bargaining power) to identify industry structure strengths and weaknesses (Kroenke, 2007).

Similarly, Amazon employs Porter's five forces model to fight with its competing brands, such as WalMart, using the power of massive accessibility of substitutes, top quality consumer information, and cheap switching costs (Greenspan, 2019). For example, Amazon used to rely on third-party delivery services; however, Amazon altered its approach last decade and created its own delivery method to preserve revenue and focus on customer satisfaction (Feinberg, 2018). Amazon's major activities, according to the value chain business model, include incoming shipping, administration, delivery of products and services, promotion, and customer relationship management. Amazon offers a fulfillment by Amazon (FBA) service to its sellers in order to streamline the selling process. Sellers may keep their items at Amazon's warehouses, and Amazon will ship them to consumers when they are requested (Dudovskiy, 2020).

Amazon has opened Amazon Go shops in the belief that it can meet customers' expectations of physical retail experiences while also breaking into the fashion industry (Schaverien, 2018). Amazon Go shops use artificial intelligence and machine learning algorithms to observe customers and what they buy (Bandoim, 2019). Moreover. With cashier-less technology in Amazon Go shops, Amazon wants its consumers to have a better shopping experience. As a consequence, in the technological environment, consumers will not need to carry cash, and there will be no long lines for check out: nonetheless, Amazon gives cash choices when purchasers wish to claim in cash

However, owing to the nature of laws and regulations, Amazon has a significant influence on pushback from China and Singapore. Amazon provides fulfillment services for domestic merchants in India, but it cannot sell its items under the new e-commerce laws. As a result, data from their merchants is important for Amazon to satisfy the needs of its consumers. Furthermore, customer experiences are the best value, and Amazon will pursue this policy despite opposition from India. Alibaba, a local e-commerce company that dominates the Chinese market, is Amazon's main opponent. As a result, Amazon needs to obtain a competitive advantage against Alibaba in the Asian market.

**Amazons Information Management System**

The information management system (IMS) of a firm assists in the collection, processing, and integration of data with the organization's proper activities. Amazon's IMS consists of two major components: information management for the company's business goals and customer relationship management (CRM) (Imran, 2014). SAS (Smart Analysis Approach) and SOA (Service Oriented Architecture) are used to handle information. The main strength of the company's technology is Linux. The SAS system reduces and identifies fraud within the system by analyzing its users' behavioral patterns. More significantly, the feature tracks and personalizes client data. The SOA is a fully decentralized service platform that assures the information for its clients is resilient and scalable (Imran, 2014).

The IT infrastructure has also been created to support millions of operations and consumer inquiries. The IMS is aided by the construction of high-tech warehouses, which lower the firm's operating costs. The CRM module of enterprise resource management saves personalized information, preventing security concerns related to storing and safeguarding credit and debit card information (Imran, 2014). Because the program is utilized for data analysis, it can effectively track all customer and supplier information. Because the institution would have grasped the buying patterns based on the data acquired, it will be able to adjust its markets.

**The Competitiveness of Amazon’s IMS**

The famed Amazon S3 is one of the firm's IMS's competitive advantages. The component is one of the world's largest data warehouses. The system is built up of intricate web features and. It creates a framework for detecting and mitigating fraud. The structure is designed in such a manner that it evaluates customer personalization and assesses the effectiveness and quality of Amazon's services (Imran, 2014). S3 detects any scammers on its platform and allows businesses to sell their products remotely through the internet.

The advent of EC2 (elastic computing) has strengthened Amazon's supply chain. Because it supports the developers and partners that run web-scale computing, the services provided by elastic computing provide the business with a competitive edge. Its goal is to save time by avoiding the requirement to start up a new server. Because the firm only pays for real use, no resources are wasted while the service is not in use. More significantly, it assists the organization's developers in customizing apps and serves as a storage device for internet users.

**How the IMS Helps Coordinate between Supply Chain Partners**

In certain aspects, Amazon's IMS is beneficial for coordinating amongst supply chain partners. To begin, the firm employs barcodes for accurate tracking and links to web databases used by its partners (Franks, 2018). The barcode method guarantees that information and goods are not lost during transit, particularly when clients enter the wrong address. Drop shipping is a method used by the organization. Amazon assures prompt payment and delivery of items since it has real-time relationships with its suppliers. Furthermore, it handles and distributes inventory for stores such as Target and Eddie Bauer.

Furthermore, the technology ensures that the firm receives hourly information on the whereabouts of a delivery. The receipt of real-time information by partners builds confidence and boosts profitability. Furthermore, the IMS finds the optimal shipper for each of its partners. The IMS system is designed to be adaptable, allowing functional players to be readily added (Franks, 2018). The default download protocol used by IMS is HTTP, which is a system that is easy for all consumers and providers.

**How the IMS Aids in Order and Inventory Level Monitoring and Customer Satisfaction**

One of the most important roles of Amazon's IMS is inventory monitoring. The company keeps an eye on inventory levels in real time. Online shopping is one sign of the type of items that have been liberated from shops. Furthermore, the online shopping system assesses the likelihood of product turnover as well as their relative pricing. Customer feedback is one method through which the firm ensures that its customers are happy. Customer feedback is used by suppliers to improve product quality. Customers and suppliers are reminded by the IMS (Imran, 2014). The IMS assists in the creation of online filters and the delivery of real-time data about the company's items to customers.

Because it is less expensive and improves higher-scale distribution, the Bit Torrent protocol interface is utilized for inventory control and general usage. The company also employs authentication measures to protect consumer data from unauthorized access. Amazon makes use of SOAP interests, and REST is meant to be interoperable with an Internet development tools, making it simple for clients to access the site (Franks, 2018).

**Importance of Managing Information**

For certain companies, such as Amazon, handling information is equally as crucial as moving things. For starters, MIS is critical for storing critical company data that aids in complicated management decision making (Imran, 2014). Critical information is maintained in an organized manner, and the firm can readily retrieve such data. Furthermore, data management aids in trend analysis, forecasting, and strategic planning. Information management is critical for forecasting and strategic planning since the information supplied in MIS reports based on current data analysis is useful in establishing Amazon's future goals.

Another advantage of data management is that it allows you to improve efficiency, security, and compare business performance (Franks, 2018). To avoid legal action and damage to the client base, all essential information must be kept safe. The present performance of the company is depicted in MIS reports. Furthermore, present performance may be compared to previous outcomes as well as those of the corporation's rivals.

**Conclusion**

Businesses now rely on information technology, and Amazon recognizes the importance of information technology. Amazon is attempting to replace human labor with robots in its warehouses in order to complete the work more efficiently (Dastin, 2019). Furthermore, Amazon Go stores implement cashier-less technology. On the other hand, these processes may provide difficulties for Amazon since thousands of people may be laid off, and Amazon may be chastised and requested for compensation.

As a result, Amazon should enable its staff to use information technologies to overcome these constraints, such as how to maintain and control robots by themselves. Another problem is Amazon's use of state Post Offices. The president points out that government Post Offices lose money while Amazon profits (Lukas, 2018). It is not because of Amazon: the solution is for the United States Postal Service to be overhauled and privatized in the same way that European countries have done. As a result, Amazon may be able to pay hefty rates in the future. As a result, Amazon could try to negotiate a corporate pricing for using Postal Services.

Every firm strives to improve its business plan in order to get a competitive edge. Information systems may decrease costs, focus on a specific market, provide a differentiated product or service, spark disruptive innovation, and create new business models. Organizational information systems are supported by information technology, which is important for competitive advantage. Amazon is the finest example of information technology, having created AWS and Amazon Go shops with cashier-less technology. Furthermore, Amazon generates profits through its innovation delivery approach and its proprietary brands, such as the one-of-a-kind electronic product kindle. It primarily focuses on delivering low-cost services to clients. Amazon knows the critical responsibilities of technology and information systems in an industry, as well as how to build a long-term competitive edge.

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