

# Research Paper

---

## Contents

<b>1. Introduction.....</b>	
(a) Third-Party Seller Services	
(b) Financial Information	
(c) Amazon's Competitors	
<b>2. Company's Organization and Management of Information Systems.....</b>	
(a) Information System	
(b) Customer Relation Management/System	
(c) Transaction Processing System	
(d) How Information Systems enhance the company's business processes	
(e) How the company can use information systems to achieve competitive advantage	
<b>3. Company's Information Technology Environment.....</b>	
(a) IT Infrastructure	
(b) Customer Information and Privacy	
<b>4. Application of Information Systems to Managing the Company's Business.....</b>	
(a) Amazon Supply Chain Management	
(b) Electronic Commerce and Internet Connectivity	
<b>5. Conclusion.....</b>	
(a) Limitless inventory	
(b) Customer Care	
(c) High Margin, Lowest Price	
<b>6. Bibliography.....</b>	

## Introduction

Shopping at brick-and-mortar stores is nice if you want to see items in person before purchasing them. But how annoying is it when you drive all the way to a store. Only to discover that they don't have the particular item you were looking for. How many different stores are you willing to drive to in search of the best price for the item you want. All of this hassle can be avoided by shopping on [amazon.com](https://www.amazon.com). You can compare the prices from different sellers and have your items delivered straight to your door. Amazon is the largest Internet company by revenue in the world. Amazon was founded by **Jeff Bezos** in Bellevue, Washington, on July 5, 1994. The company started as an online marketplace for books but expanded to sell electronics, software, video games, apparel, furniture, food, toys, and jewelry.

Amazon is one of the largest and most popular online marketplaces. Users can buy items from Amazon directly or from third-party sellers through Amazon. Amazon orders are delivered using common courier services worldwide. Amazon also sells its own line of technology products. You've probably heard of their e-reader Kindle. So how does Amazon work? Well, there are three ways to use Amazon. The first is for online shopping. Amazon and its third-party sellers offer a wide variety of items. So chances are you'll find what you're looking for. You can search for items you want to purchase. Pick out the ones you like best and add them to your shopping cart. Once you've added everything you want to buy. Start the virtual checkout process. Enter all your shipping and billing information to let Amazon know where to send your order and how you want to pay for it. Once you've placed your order Amazon will send it to your door.

### (a) Third-Party Seller Services

Amazon allows third parties to sell items using their website. If you're interested in selling a few items or a lot Amazon can help you to do it. You can sell anything from books to electronics to sports equipment. For this service, Amazon charges commission fees, shipping fees, and related fulfillment costs.

### (b) Financial Information

Amazon's annual/quarterly revenue history and growth rate from 2016 to 2020.

Amazon revenue for the quarter ending June 30, 2020, was **\$88.912B**, a 40.23% increase year-over-year. Amazon revenue for the twelve months ending June 30, 2020, was **\$321.782B**, a 27.66% increase year-over-year. Amazon's annual revenue for 2019 was **\$280.522B**, a 20.45% increase from 2018. Amazon's annual revenue for 2018 was **\$232.887B**, a 30.93% increase from 2017. Amazon's annual revenue for 2017 was **\$177.866B**, a 30.8% increase from 2016. Online grocery sales than tripled year over year powered Amazon.com Inc. to a 43.4% increase in second-quarter sales in North America and 33.5% growth worldwide.

### **(c) Amazon's Competitors**

Amazon is in a wide range of industries and has many competitors. Amazon's top worldwide competitors are Alibaba, eBay, Walmart, JD.com, Flipkart, Rakuten, Google, IBM, Microsoft, and Oracle.

- Walmart and Target are just a few of the retail competitors.
- Google and Apple are competitors in cloud computing data storage and content providing.
- Netflix Hulu and YouTube are competitors in the content providing and streaming.

With \$232 billion in net sales annually, Amazon is the most dominant online store in existence today. [Forbes](#) reported that Amazon had surpassed Walmart to become the world's largest retailer.

## **2. Company's Organization and Management of Information Systems**

Amazon started as an online bookstore. It would take 30 days for a book ordered on Amazon to be delivered to your doorstep. In 1997 Amazon went public and by 2000 Amazon was a platform for all types of retailers, not just books. Amazon used the money it gained from going public to fill this large infrastructure. A big part of that infrastructure is software and information systems. By 2018 Amazon sees 35 orders every second and sells almost everything. On Cyber Monday that number grows to 629 orders per second.

### **(a) Information System**

By 2000 Amazon had to upgrade the original information system that was put in place due to the large volume of customers using the site on a daily basis. This upgrade costs them 200 million dollars in 2003. Amazon implemented a smart analysis search that would analyze behavioral patterns on the site and help to catch

fraud. For communication with suppliers Amazon seal deal with Excelon for business-to-business integration system. (Konicki, 2000) . **Amazon Web Service (AWS)** and **Simple Storage Service** are the main systems developed by Amazon. Through this system, Amazon can maintain its vast number of products and millions of active customers. [Amazon.com](http://Amazon.com) is an information system based on **Service Oriented Architecture (SOA)**. SOA is a fully distributed and decentralized service platform that enables Amazon's information system to be robust and scalable. SOA concentrates on multiple applications rather than a bigger process.

### **(b) Customer Relation Management/System**

Amazon uses a customer relation system with the main purpose to maximize customer satisfaction and loyalty. This saves information like credit cards, previous purchase information, customer profile information, and much more. This system is also responsible for sending automated emails to customers when they make a purchase.

### **(c) Transaction Processing System**

Every customer has his profile on Amazon or must have a profile in order to order any product. Amazon offers many features to personalize their profile with web tools like shopping cart, wish list.

### **(d) How Information Systems enhance the company's business processes**

Every business needs some type of data or information to run their operations. These pieces of information could be about employees, customers, suppliers, products/services, and of course their payments. The information system makes it possible for industries to manage all its information to make better decisions and improve the execution of their business processes. These are all about improving business processes that lie at the heart of the business.

So, now it's important to understand what is meant by a business process. The business process is referred to as the way in which an organization's work with information and knowledge and chooses how to coordinate. Every business can be seen broadly as a collection of business processes. For example: In every organization, there is a specific way to hire employees. This means it engages in a set of activities that are used to hire employees.

This can be achieved by further dividing it into steps like an advertisement, contacting employment agencies, collecting resumes, reviewing those resumes, interviewing candidates, ranking candidates, and making employment decisions and that's hiring employees. So these all collectively come together and become a part of an information system and help a business prosper.

### **(e) How the company can use information systems to achieve competitive advantage**

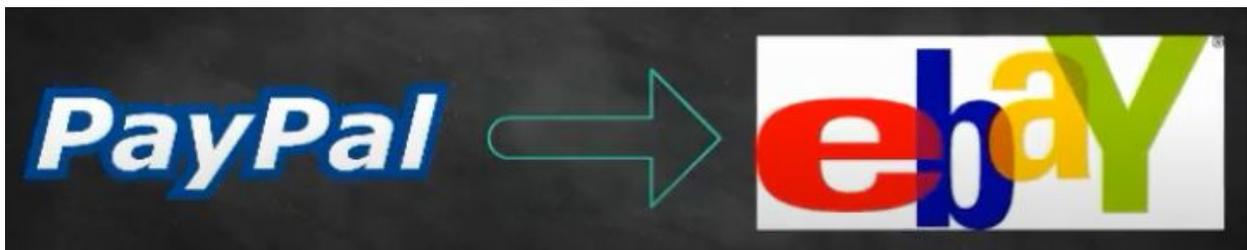
Information systems can improve the overall performance of the business units by promoting synergies for competencies and network-based strategies.

#### **Low-Cost Leadership**

Use the information systems to achieve operational cost and lowest prices. An example is **Walmart** where if these prices low and shelves well stopped using a legendary inventory replenishment system. This system can contact directly to suppliers and consumers.

#### **Product Differentiation**

Use information systems to enable new products and services. For example, for the iPod portable digital music player, **Apple** introduced a music service app **iTunes**. Google introduced Google Maps. PayPal electronic payment system for eBay.



#### **Focus on Market Niche**

Use the information systems to enable a specific market focus and serve a narrow target market better than competitors. The information system enables the company to analyze customer buying patterns, customer preferences, and customer tastes. **Hilton Hotel** determined guest references likely checkouts.

#### **Strengthened Customer and Supplier Intimacy**

Use the information system to tighten linkages with suppliers and develop intimacy with the customer. For example, amazon.com can keep track of customer preferences and recommend purchases.

### **Internet Impact on Competitive Advantage**

- Enable new substitutes to emerge with new approaches to meet needs and perform a function.
- Shift bargaining power to customers.
- Raise bargaining power over the supplier.
- Reduce the barrier to entry.
- Widens the geographic market increased the number of competitors and reduce differences among competitors.

## **3. Company's Information Technology Environment**

### **(a) IT Infrastructure**

Information technology has become a vital and integral part of every business plan. From multinational corporations that maintain mainframe systems and databases to small businesses that own a single computer, IT plays a role. The reasons for the use of computer technology in business are communication, inventory management, data management, information systems, and customer relationship management.

Your IT infrastructure is a key component of your company. An IT infrastructure that is up-to-date and high-quality is a valuable asset that enables you to successfully do business and complete your goals. However, an out-of-date, low-quality system can be a headache that wreaks havoc on productivity, efficiency, and work quality.

To keep up with changing customer expectations, fluctuating data volumes, increasing network traffic, regulatory requirements, and other changing aspects of your business, you need to consistently maintain and upgrade your IT infrastructure. The capital cost of system replacement via an IT infrastructure upgrade is only one piece of this puzzle. The numbers go beyond the annual operational costs because the effort to support an aging system is not static -- or simply an annual cost. Each month that passes and every software upgrade that's installed might cause the infrastructure to slow down and demand more resources.

Costs and reliability are the key reasons for replacements, but the features and functionality that new technologies can deliver are equally important. An IT infrastructure upgrade not only eliminates the work necessary to maintain older systems but also brings additional capabilities and automation features to ease infrastructure management and deployment.

### **(b) Customer Information and Privacy**

Customer trust is Amazon's top priority. Amazon is committed to keeping its customer's data safe, giving the user control over how they want to secure their data. Because they deliver services to millions of active customers, including enterprises, educational institutions, and government agencies in over 190 countries. Their customers include financial services providers, healthcare providers, and governmental agencies, who trust them with some of their most sensitive information. According to Amazon: "We know that customers care deeply about privacy and data security". "We offer you strong encryption for your content in transit and at rest, and we provide you with the option to manage your own encryption keys" ("Data Privacy - Amazon Web Services (AWS)," n.d.).

## **4. Application of Information Systems to Managing the Company's Business**

### **(a) Supply Chain Management**

For the huge success by 2004, the "Supply Chain System" played a huge role. In 2000 Amazon spent a good amount in order to build an automated warehouse and automated supply chain management. (Jenkinson 2005, business week 2003) All the supply chain activities are controlled by the CRM system. (Gabe 2010) The Amazon supply chain management approach is to embrace technology. The company utilizes countless automation and robotic solutions, both to pick and pack orders as well as stacking and storing inventory (Stevens & Johnson, 2016). These tools not only up the company's efficiency and delivery speeds, but they also cut down on warehouse and staffing costs – freeing up funds for other logistics or supply chain needs. The company has also embraced drones as well, launching Amazon Prime Air. Though the program's not fully operational just yet, the drones will eventually allow for 30-minute deliveries in some of the nation's biggest markets

#### **- Warehousing**

A big part of Amazon's success lies in its expert warehousing strategy, which ensures products are easily accessible from pretty much everywhere in the world (Min et al., 2019). All the company's warehouses are strategically placed near big metros and population hubs, and inventory is spread amongst them to ensure supply can meet demand. There are even mini-warehouses in smaller areas to ensure orders can be sent and delivered fast, no matter what is being purchased. Warehouses are also optimized internally. Each with five unique storage areas, the organization strategy allows team members and pick-and-pack robots to pull products almost instantly and move them toward delivery (Min et al., 2019).

### **(b) Electronic Commerce and Internet Connectivity**

In the early stage of amazon.com's journey, the business strategy of amazon.com was very simple and forward. Their one and only strategy were to sell books to the customer online. They invested in the customer and offer them a huge collection of books online. "From the beginning, our focus has been on offering our customers compelling value. We realized that the web was and still is the World Wide Web. Therefore we set out to offer customers something they simply could not get any other way and began serving them with the book." -Jeff P. Bezos (shareholder's letter 97) Amazon.com attracted customers by offering 1-click shopping, low price, and increasing customer's value. Creating easy to use and easy to learn customer interfaces was a key aspect of Amazon's strategy. (Jarvanpaa, S.L., Tiller, E.H.)

## **5. Conclusion**

The amazon information systems have resulted in value addition for the customers in the following ways;

### **(a) Limitless Inventory:**

When amazon started offered books to the customers. But over the period it increased its products from books to music, movie, cloud storage, gaming, and many more due to increased demand.

### **(b) Customer Care**

One of the success factors of amazon.com is word of mouth. Because of excellent customer service customers trusted Amazon. The efficiency and security of the Amazon information systems have significantly improved communication with its

staff and users. This gives the customers rich user experience with the system since they are able to get a solution to various issues in real-time.

“If you do build a great experience, the customer tells each other about that. Word to mouth is very powerful” - **Jeffrey p. Bezos**

### **(c) High Margin, Lowest Price**

Amazon provides products significantly cheaper than its competitors. One of the main visions of Amazon.com is based on the long term plan. (1997 Stockholder report) This makes it easier for amazon to take risks of low profit in order to succeed in the future. An estimate shows how it is possible for amazon to become profitable at the lowest price. A product on average gets sold in 33 days through amazon.com. On the other side, competitors like best buy took 70 days to sell the product. (FAVERNOVEL) Amazon keeps the best-selling product to its own stock and longer tail items to third party sellers stock. This gives an advantage to the company.

### **Bibliography**

- Gabe, M. (2010) "Lessons in Distribution" Mortgage Banking
- Jarvanpaa,S.L.,Tiller,E.H. "Protecting Internet Business Method: Amazon.com and 1-click-checkout" center for business strategy and law, University of Texas
- Bachelador, B. (2004)" From Scratch: Amazon Keeps Supply Chain Close to Home" Informationweek
- FAVERNOVEL (2013 updated), "Amazon: The Hidden Empire" URL: <https://www.fabernovel.com/work/amazon-com-the-hidden-empire/>
- <https://www.statista.com/statistics/266282/annual-net-revenue-of-amazon-com/#:~:text=The%20time%20series%20shows%20the,billion%20US%20dollars%20in%202017.>
- <https://www.macrotrends.net/stocks/charts/AMZN/amazon/revenue>
- <https://venturebeat.com/2020/01/30/amazon-earnings-q4-2019/>
- <https://www.bigcommerce.com/blog/amazon-competitors/#top-ecommerce-competitors-for-amazon>
- <https://www.digitalcommerce360.com/article/amazon-sales/>

