

CONNECTING WITH SUCCESS: COMPANY CASE STUDY AMAZON.COM

George Hudson Machado Araujo³²

Hugo Silva Ferreira

SUMMARY

Browse and learn about one of the great stories of global e-commerce protagonism, a company that started in a garage with the intention of selling books, and in 1998 it glimpsed a new and little-explored tool, but with tremendous potential for future opportunities: online sales. The mastery with which its founder managed and faithfully believed in it made the dream of that somewhat obscure project come true, the advancement of technology and data and information management enabled greater strides towards success. It was then necessary to invest in new technologies, and after implementing the marketplace concept and popularizing the use of cloud computing, the next step seems to be the definitive merger between retail and banking services. Big data is a tool capable of managing the diverse data and information generated every day by various electronic devices, analyzing the processing of this information in various ways and techniques to assist in decision-making in the most diverse areas. With Amazon's exponential growth, it is necessary to use technologies to better serve the multinational's organizational process, improving the processes and management of what is considered the largest e-commerce store in the world.

Keywords: Big data, Technology, Process, Management, E-commerce.

ABSTRACT

Navigating and discovering one of the great success stories of global e-commerce, a company that emerged in a garage with the aim of selling books, also saw in 1998 a new and little explored tool, but with tremendous potential for the future, selling online . The mastery with which its founder managed and believed faithfully, made that dream of that somewhat obscure project become a reality, the advancement of technology and the management of data and information enabled greater steps towards success. It is then necessary to invest in new technologies, and after putting the concept of marketplace into practice and popularizing the use of cloud computing, the next step seems to be the definitive merger between retail and banking services. Big data is a tool capable of managing a variety of data and information generated every day from different electronic devices, analyzing the processing of this information in various ways and techniques to assist in making decisions in the most diverse areas. With the exponential growth of Amazon, it is necessary to use technologies to better serve the multinational's organizational process, improving the processes and management of what is considered the largest e-commerce store in the world.

Keywords: Big data, Technology, Process, Management, E-commerce.

³²Bachelor of Science in Accounting from Estácio de Sá University – UNESA. MBA in Teaching for Higher Education – SEAMA College and Master in Administration from Must University. E-mail hudsonoar@hotmail.com .

1 INTRODUCTION

This paper will list the concepts studied in the Technology management discipline. in the global economy, presenting the case study of the company Amazon, with its success story, the challenges and competitive advantages in the market, seen by its CEO, the opportunities of online commerce, still in mid-1998 as marketing strategies, used to increase the visibility of businesses on the Internet. The applicability of Big Data is in the treatment of this volume of data, which comes from various sources and demands high processing speed, in the search for value (Taurion, 2013). Big Data (BD) was used to describe large amounts of data, which are also characterized by an unstructured flow that cannot be treated by the existing infrastructure in the organization and has the main characteristics of large size, high speed and great variety.

The five VS, Volume (quantity of accumulated data), Variety (means of propagation and types of data), Velocity (data transmission rate), Veracity (whether the data is reliable) and Value (result obtained from the use of Big Data tools) denote the objective of keeping platforms and systems in harmony in such a way that they generate the expected result. (VEJA, 2013).

To prepare this article, a bibliographical research was carried out on data and information collected from websites, articles and books according to the proposed theme, and all studies considered concepts related to administrative practice. Using qualitative methods, the objective is to describe the case study, its management process, recommendations on competitive advantages and data processing. To analyze the strategies adopted by e-commerce companies, more specifically the case of Amazon.

2 A SUCCESS STORY

Amazon was created by Jeffrey Preston Bezos in 1994. Its operations began in the garage of his home in Washington, USA. Its initial investment was \$40,000, made by Nick Hanauer through financing and then an investment made by Tom Alburg of \$100,000. The only products available for sale in the company were books. At first, the name of the company was going to be "Cadabra", alluding to something magical. Attorney Todd Tarbert was the one who convinced Bezos to change the name because it could be understood as "corpse", especially when speaking on the phone. Jeffrey also agreed with the name "Tireless", however, it was not what he liked either. Given so many options, the chosen one was "Amazon".

The Amazon.com Inc. is the name of the largest freshwater tributary on the planet (located in Brazil). In the month of its launch, Amazon sold books to people in every state in its country and in 48 other countries. An important date was May 15, 1997, when the company became listed. The initial share price was \$18. However, by the end of the day, demand caused the shares to rise to over \$24. This enabled the company to raise around \$54 million. Amazon is listed on the NASDAQ (National Association of Securities Dealers Automated Quotations) with the stock code AMZN. On this date, the price is \$3,107.17 (close on November 12, 2020).

In early 1998, Amazon created its first international websites in Germany and the United Kingdom, and its success was instant in Europe. By mid-1999, the company had opened fulfillment centers in the cities of Fernley, Nevada; Coffeyville, Kansas; and Campbellsville and Lexington, Kentucky, to handle large orders. The company's founder and CEO was named the Person of the Year by "Time" magazine and was named "The King of E-Commerce." In the first five years, Amazon operated in the red and faced major financial difficulties. It was only by the end of 2001 that the state-owned company achieved a profit of US\$5 million. Although the initial profit margins were not very dubious, they led people to believe that Bezos's innovative business project could achieve success. In the following years, Amazon took off definitively, reaching historic levels of revenue and production, becoming the largest and best-known online store in the world.

New developments began to emerge, with the "Find in a Book" function added in 2001 quickly becoming a popular tool for consumers to check whether a book could meet their needs. Later, in 2003, the "Search in Book" function was added, allowing consumers to search for keywords contained in the text. Amazon expanded the market, and booksellers could sell on the marketplace for a small commission, cooperating with many companies to provide products through the site.

Over the years, the number of employees has skyrocketed. In 2011, there were already 30,000 full-time employees in the US; by the end of 2016, there were more than 350,000 workers worldwide, an increase of more than 1070% (2017).

At the end of 2016, the first convenience store opened in the city of Seattle, USA. The original format was presented and tested months earlier in the testing phase. In practice, the store operates differently from Walmart. When browsing the store, the customer has the possibility to choose the products they want to buy in their online account, and also

eliminates checkouts, as sensors were placed at the exit to automatically check online invoices in customers' accounts on the platform.

In Brazil, Amazon went live at midnight on December 6, 2012. Previously, it was possible to buy products and services through the American website and pay taxes and import fees. Initially, only e-books and the most basic Kindle readers were sold, but it soon became possible to buy physical works. At the end of 2014, the Kindle Unlimited reader subscription model was officially launched.

The dream must be bigger soon continued, in 1998 it sold CDs and DVDs, and the following year it started selling toys and electronic products. But it was in 2000 that the market began a great revolution and the sale of third-party products, as users or smaller stores advertised and paid for each sale on Amazon. It was in this same year that the Internet bubble burst, investment in online companies was so high and impractical that it crashed the shares on the New York Stock Exchange and depressed stock prices overnight. Many brands ceased to exist or never recovered, and the stock price fell from \$100 to \$6. Many people on the team were laid off. The company survived, and continuing to operate was important, because after that turbulent time the company found its place in the market. Amazon Prime launched its premium subscription system in 2005, initially just to shorten delivery times and bring exclusive offers, and soon the subscription will also give people access to Amazon Video, a streaming platform for movies and TV shows. The competition with Netflix, the platform's main competitor, is fierce, with original and syndicated programs receiving accolades and awards, such as "Location in the Castle", "American Gods" and "Transparency". There is also a "Classic Tour", the classic host of which is "Top Gear".

In March 2006, Amazon Web Services or AWS began operating publicly, which is almost an independent cloud storage and hosting company. It all started when the brand sought to create an online store platform for customers, but it took several years to get started. The wait was worth it because today it also offers support for network, application and database management, development tools, and Internet. By 2015, the user base had reached over 1 million people in 190 countries, including clients such as NASA and Netflix. Today, the company offers a range of services and products, some of the offerings are: Amazon Prime, Amazon Web Services, Amazon Wireless, App Store, Amazon Drive, Echo, Kindle, Fire Tablets, Fire TV, Video, Kindle Store, Alexa, Music Unlimited, Amazon Fres, Amazon Digital Game Store, Amazon Studios, and etc.

2.1 THE USE OF BIG DATA IN THE BUSINESS SCENARIO

Big data is part of the reality of many online businesses. Due to the large amount of data, technical support is required. It is impossible to manipulate and analyze it mechanically, demanding time and people, which makes decision-making difficult. And since the information never stops growing, the entire storage process is completed in the cloud. Evaluating the situation from a technical point of view, it is important to remember that we are dealing with two types of data: Structured: these are more structured data that can be measured using the less complex tools available on the e-commerce platform itself. From them, we can obtain information about the average number of tickets in the store, the location of consumers and the types of products that each person likes.

Unstructured: These are disorganized and difficult to capture, but generally more so than the first. But they can provide managers with powerful insights, such as analyzing the relationship between customers and their brands through emails, images, videos, posts on Facebook, Twitter, Instagram, etc.

Amazon's distribution centers are increasingly impressive with the high technology used. The Distribution Center (DC) in Stanislaus County, California, is a haven of logistics technology, covering an area of more than 300,000 square meters. The structure opened more than a year ago and is packed with Amazon's own technology, such as the incredible Kiva robot, which automatically transports goods around the warehouse.

Each Kiva unit — which looks like a giant hockey puck — can move more than 3,000 pounds. They deliver products to Amazon employees who can replenish inventory or pick up items at checkout. The structure has a 4-mile conveyor belt that can move smaller products and a more powerful robot called "Amazon" that can lift up to 16,000 pounds of cargo. The mezzanine is more than 24 feet tall.

Amazon has a cardboard production system that can create custom boxes for products ordered by customers. This system is called "box on demand", which can save packaging materials and optimize the use of space in the logistics structure (whether storage or transportation). As business advances, new technological methods are needed to contribute to decision-making, and big data is one of the main methods for analyzing all the information that serves as an aid in decision-making. According to Cukier (2010), this shows that the information management business is promoting processes that facilitate the

understanding large amounts of data. On the other hand, as long as the raw information generated by data mining is transformed into intelligence through the analysis process, big data contributions can be made. The relationship between big data and e-commerce carried out by Amazon is very interesting. Big data processes various pieces of information and performs more precise analyses of the interests and patterns of individuals or groups according to their needs. This technology can collect and understand key information about customers. The advantage of this alternative method is that sales and marketing strategies can be formulated based on the content proposed in the analysis. For Amazon, this tool has been meeting the need and helping with business plans and especially future projects. In practice, big data is characterized by the 5Vs.

Volume:A large amount of data and information processed every day; **Speed:** the speed of data identification and processing. **Variety:** the diversity of types of data collected and intercepted by these applications;

Truthfulness:the data collected by the technology is accurate;

Value:quantity is not everything; the data collected must be relevant to aggregate important information in decision making.

It is worth noting that Big Data, for the most part, is a set of data that is added every millisecond, therefore, the current world of digitized data contains an unimaginable amount of information, a base that is constantly growing (DAVENPORT, 2012).

According to a study by BSA The Software Alliance, 2.5 quintillion bytes are generated every day. By 2025, Seagate, a technology company, expects this number to reach 163 zettabytes, which is 10 times more data than in 2016.

The e-commerce platform operated by Amazon, in addition to offering regular quotes, the platform also allows third parties to sell quotes for new and old products on the online marketplace at a fixed price. By using the Marketplace, third-party sellers can access the company's customer base and website, and can extend their offers to other users without having to invest in additional inventory. Customers must follow strict product searches to access other offers in order to create pages on the Amazon Marketplace that contain accurate, up-to-date and standardized details of their products, thus promoting increased competition, product differentiation and the ability of consumers to choose products for sale to third parties. Knowledge of this tool is a unique and valuable resource for anyone. Organizations can generate competitive advantages. Big data

It can also help transform many traditional methods of carrying out business activities, the insights generated will become Knowledge that can improve management decision-making capabilities (KABIR; KARAJANNIS, 2013).

Cezar Taurion (2013), in his book "Big Data", made a metaphor: big data tools will represent the same important position as microscopes in medicine for companies and society. An analysis tool with which you can extract information, predict events and correct them when they occur, or even prevent them. The advent of the internet in the 1990s and technological advances made it possible for Jeff Bezos' plans to go from a mere dream to a tangible and possible reality and so it was, not by chance that the company is recognized and respected in the global market. Lohr (2012) states that it is a new approach to understanding the world and decision-making. In e-commerce, big data can help managers improve the results obtained in all types of activities.

Expanding knowledge about consumer data, this is because it is possible to measure customer interactions with the platform's content and the types of products that arouse their interest. In this case, we can evaluate the time spent browsing each project and how they interact with the brand on social media, etc. It can be inferred that the data is much more complete than just analyzing it at the time of purchase. Based on this, it is possible to predict behaviors and achieve success, in addition to showing each user a personalized solution. Since not everyone masters this technology, this knowledge can also make better decisions than competitors.

Based on the detailed information gathered from the customer profile, you will lay the foundations for personalized promotion, a differentiated offer for each buyer, a better digital marketing strategy and segmentation of consumer groups (which will guide the relationship with them). These factors should also be considered to help prove the value that the company adds to the customer, making them feel important to the brand. Therefore, users become potential customers, buyers and admirers.

Improve the brand experience All this data can be analyzed to find out if there is a bottleneck between one process and another, providing a more consistent basis for decision-making and improving failures. Ecommerce managers can also understand which products need to be kept in stock in large quantities to avoid stockouts (when consumers need the product but stock is low). Another point is that product descriptions can be based on the customer's personality, which will make the customer identify more with themselves and have a real desire to consume. It is important

saying that the possibility of using big data correctly does not offer the preparation you need to do, but rather insights for decision making.

2.2 FUTURE OF AMAZON

New projects

It also has some very ambitious projects during the testing phase or when the startup is limited. Highlights include the Prime Air system (used to deliver orders with drones), the Amazon GO supermarket, where no one is on duty, you just have to take the product off the shelf and leave. There is also Amazon Dash, which is a series of small devices that can be used to buy more units of the product without having to go to the store. The latest electronic product is the Echo, this speaker can control your home devices and even use Alexa, Siri and current competitors Cortana as personal assistants. Versions for screens and clothing have also been launched, and the success has far exceeded the entity's expectations.

Among the company's most recent strategic moves, one of them was the investment in the purchase of WholeFoods, which is an American supermarket chain that is considered high-end and focuses on organic or natural products. Jeff Bezos, however, is currently the CEO of Blue Space, a space exploration and transportation company that competes with Space X. This has nothing to do with Amazon, but without its success, the executive would not be able to obtain resources to use every year in spacecraft launch tests. In addition, he can now compete with Bill Gates for the position of richest man in the world and show that he really wants to be the first.

FINAL CONSIDERATIONS

This article aims to review the concepts and learning of the discipline Technology management in the global economy by telling the true story of a dreamer named Jeff Bezos who envisioned an opportunity and made it a reality with the use of knowledge and technological tools. He was born into the world of a garage, went international and became the company it is today.

With globalization, the generation of data and information, companies tend to follow this advance. AMAZON stands out on the world stage and is applying modern technologies to harness the power of data science. Thus optimizing decision making

decision-making. As technology and human behavior continue to change, business owners need to be prepared to adapt.

I'll end with the company's mission statement, taken from the company's official website: "Our mission is to be the most customer-centric company on Earth. Amazon is guided by four principles: customer obsession rather than competitor focus, passion for invention, commitment to operational excellence, and long-term thinking. Customer reviews, 1-Click shopping, personalized recommendations, Prime, Fulfillment by Amazon, AWS, Kindle Direct Publishing, Kindle, Fire tablets, Fire TV, Amazon Echo, and Alexa are some of the products and services pioneered by Amazon."

This is the story of Amazon, one of the biggest companies on the planet, an enviable e-commerce, a powerful bookstore, an example of persistence and management and (why not) a survivor in this market.

REFERENCES

CUKIER, Kenneth. **Date, date, everywhere**: a special report on managing information. The Economist, vol. 394, Issue 867, Feb. 2010.

DAVENPORT, T.H; BART, P.; BEAN, R. **How Big Data is Different**. MIT Sloan Management Review, n.30, Jul. 43-6, 2012.

LOHR, S. **The age of big data**. The New York Times, 2012. Available at: http://www.nytimes.com/2012/02/12/sunday-review/big-datas-impact-in-the-world.html?pagewanted=all;_r=0. Accessed on: 12 Nov 2020

KABIR, N.; CARAYANNIS, E. **Big Data, Tacit Knowledge and Organizational Competitiveness**. Proceedings Of The International Conference On Intellectual Capital, Knowledge Management; Organizational Learning, p. 220-227, 2013.

VEJA MAGAZINE. **Understand what Big Data is**, 2321 ed. 2013

TAURION, C. **Big data**. London: Oxford University Press, 2013.