Big Data Impact in Development E-Commerce

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Abstract. The purpose of this research is to enable a business to have access to an amount of larger data, and some of that information comes from an e-commerce business. The literature review method was used to describe how big data Analytics can affect to an e-commerce business. Big Data is a good asset for sales and marketing because there is valuable information from tons of data. The result from this research is that Big Data improved shopping experiences, customer satisfaction, and increase sales. The conclusion of this study is that Big Data Analysis in E-commerce can help improve customer experience and help make the right decisions in business.

1. Introduction
Why does the understanding of the big data impact make consumers interested and help make the right decisions in a business? This is because almost all business processes play a major role in conceptualizing transformations with large potential data in generating business value that is with high strategic and operational potential [1].

In the last decade maybe Big Data is the biggest innovation in computing. The potential to organize, collect, and process all data in all areas of life has just begun. The federal government accelerates development and deployment through simple investment [2]. Basic concepts related to big data try to consolidate discourse that has hitherto been fragmented. Large data determine the size of a large characteristic and existing tools and technology. From corporate leaders, by utilizing the potential of large data, it will be the subject of attention to a certain extent [3]. Hafedh said that it was important to have flexible framework. Big data and also the program can support several parts of the company along with improving operations throughout business [4]. As for the narrative by Dr. Eddy, to manage the business is to manage the process of resources, build systems, organizational culture, set goals, and formulate business strategies and make the organization stable, independent, advanced, and superior [5]. And according to Damanpour, the way companies communicate has been changed by the internet, how they share information with business partners, and the way they buy or sell. Likewise the internet has changed the way they look at investment in internet technology. When companies launch an electronic business, many throw away the idea of the need for investment money and this allows them to advance their overall business strategy - whether to increase customer satisfaction, increasing awareness, or selling new channels. The point is that E-business is increasingly seen as something that must be pursued in various ways [6]. The research conducted by Yandi about Big Data decision
making is high volume and complex information management can be used in effective cost management and as a result of Big Data technology decision making [7] many technical challenges that look real using big data. However, managerial challenges are even greater, starting with the role of a more senior team. Also, the big data aspect is the impact on how decisions are made and who made it. When a lot of expensive and rare data is to be obtained or not yet available in digital form, some people make decisions based on experience. One of them has built a pattern and observed it [8]. Unconsciously, we are all fundamental decision makers. Whatever we do is the result of several decisions. Much of the information we collect is to help us understand events, to develop better information, to make decisions. Not all information is useful to our consideration and understanding [9].

Hart’s research on what is a literature review is an important literature review, because without it there will not be an understanding of the topic. It has to be known what has been done in it, understand how research has been researched, or what major problems need to be addressed. In the written project, it is expected to show understanding of prior research on the topic. It needs to be shown that there is the understanding of the main theories used in the subject area, as well as how they have been applied and developed, know what are the main criticisms of research, and the methods used in the field. However, the importance of literature review is not balanced with a general understanding of how a review of the relevant literature can be conducted, how the literature can be used in research, or why it needs to be done in the first place. Research is some form of written account. This can take various forms including articles, reports, dissertations or conference papers. Dissemination of important findings is also important. This is because the aim of the research is to contribute in several ways to our understanding of the world. This cannot be done if the research findings are not shared [10]. The purpose of this study is to enable the development of a business to have access to large numbers because the information can come from e-commerce. Delving deeper into the big data impact on e-commerce technology in the business world, as well as analyzing the way Big Data increases sales in e-commerce follows helps to improve the consumer experience and help make the right decisions in online business.

2. Method
In this study the author uses literature study methods to get the data needed, looking for references related to scientific work is one example of the method carried out. The descriptive method is also used in this study in order to better describe and explain in detail how the impact of Big Data in e-commerce development is.

3. Results and Discussion
One way to support decision making is the need for good quality information. In order to get complete, reliable, accurate and up-to-date information, good data processing is needed. Big Data in the development of an e-commerce is one of the right solutions, because in this industrial revolution 4.0, the existing companies must be able to keep up with current development trends in order to remain competitive. In this 4.0 industrial revolution era, data is a very important asset for the company, many large company companies invest in data. In the last 3 years, the publication of research on ‘Big Data Development’ has become the source of big data itself. There are several types of data from big data itself such as administration records, prices, market share (Figure 1).
Although the development of big data is very rapid, there are still many companies that have not switched to the data age. Whereas by collecting data and then processing it appropriately, it will make the data become information. When processed even further, it can become knowledge. Unfortunately many companies engaged in the e-commerce still have not processed the data into useful information, most of the data that is only limited to being a report, for example, is transaction data (Figure 2).

Figure 1. Big Data.
Figure 2. Global Mobile Data 2014.
This Figure was adopted from www.idc.com

91% or more top managerial level in firm make a decision from customer data, social media used by large firm tax marketing media, but less than 40% of marketers can’t turn data to useful knowledge (Source : iab.net). More than 53% survey on big data has an impact to multi-channels sales (Source: Wipro) (Figure 3).
According to Figure 3 Big Data has 6 benefits: Trend Forecasting is forecasting system to predict things such as market data by capturing a lot of data from any relatable source like social media. Product Prices, after processing the data the result of information could be optimum prices for the product by real-time. Market Demand, with enough data and good analyzing process, leaders can predict the high demand of products in specified time. Personalization, customers can get recommendation of products from the customer behavior data. Customer Centralize, Fast response processing could make better customer experience so that the company doesn’t lose the customer which is done with better customer care. Increase Sales, Big Data Analytics offer a solution to purchasing problems.

4. Conclusion
The conclusion of this study provides results that show that the increasing impact of using big data analytics seems to be a way for e-commerce development to improve decision making. More specifically, there is a higher level of transparency and accuracy in making and assessing decisions in an organization under study. Even indirectly, the routines and processes change, and overall the organization becomes more efficient.
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