Web Mining and Business Intelligence: A Key Factor for Success

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Abstract

The world is evolving with a robust pace which has been an increase the competition and implication of various technological and system-oriented practices and gadgets within business. Web mining and business intelligence are the key examples of the digital tools and practice which helps a business company to analyse data about phenomenon and go with most suited corporate strategy and decisions in business. A huge number of business companies have been already applied the usages of web mining and BI in their business to meet a higher business growth in the worldwide market. Hence, this particular study has been kept its concentration on evaluating role of web mining and BI in the performance and success rate of a company in global periphery. Various definition and concepts of BI and web manning have been discussed within the study. Inductive approach and qualitative data have been taken to perform the overall study while the secondary data collection method has been used to gather various qualitative data within the entire study. The entire study has been found BI and web mining mostly enhance the growth of a company and increase the success rate of a company in the global market. Lastly, the study has been evaluated with sheer amount of insights and all of the discussed extension have been summarized within a certain manner.

Keywords

Business intelligence, Decisions, Web mining.

INTRODUCTION

The business world is transforming with a robust pace through the arrival of globalization and the industry 4.0. A huge number of technological gadgets and modern techniques have also arrived within the business periphery in the last few years in the worldwide business market periphery. The level of competition is also increasing according to the technological evolution and globalization in the market sphere as these factors have opened up a vast business opportunity for the business companies and tied up themselves with a uniform string. Business intelligence and web mining both are highly crucial and significant technological and strategic tools in the modern business market that have provided a key boost in enhancing the performance and business position of a company in a desired position. The entire strategic and operational activities of a company have been improved through the assistance of the business intelligence and data mining in the global market area.

Various business institutions with a superior quantity have shown their interest towards the application of BI and data mining within their business to gain a high business growth in competitive markets throughout the globe. The assistance of web mining helps to take the most suited designing and marketing strategy for a business company through analysing various databases of the company and enhance the success factors of the company [1]. It has given rise to the companies to perform data mining operations more effectively in business surroundings. On the other hand, the implication of BI provides most suited strategic build up towards an enterprise globally through analysing companies recent and past records as well as the likes and interests of the consumers in the international market [2]. It mostly helps an organization to take suitable strategic decisions in business and enhance the success rate of the company in worldwide business market surroundings. Hence, it becomes highly essential to make a study on BI and web mining. Thus, this particular study has involved itself to evaluate the contribution of web mining and BI to the success and growth of a company in recent days in the international market. Various concepts and theories associated with web mining and web mining have been discussed in detail within the overall study. It provides the key assistance to evaluate the influence of business intelligence and web mining on the success scope of a company all around the globe.

MATERIALS AND METHODS

Various numbers of diverse materials and methods used in order to perform a study effectively and comes forth with a critical output result. The entire part of making decisions of choosing most suited methods and materials while performing a certain study provides key assistance and guidelines. Hence, it is essential to select and declare the entire methods and materials which are actually going to be used while conducting the study and run their entire operations within study sequentially and in an organized way. This particular study has involved itself to analyse the role of business intelligence and web mining on the success of a business company in modern days business periphery. The entire methods and materials which have been chosen or going to be utilized within this particular study will analyse with an in-detail process within the discussion. It will help to enhance the performance of the study and help to gain an

authentic output result through performing the study.

This particular study needs to collect a numerous set of data which are mostly oriented and relevant with the research topic to gain ideas about BI and web mining. An inductive approach while performing a study helps to gather a large volume of topic-oriented data while performing a study on a certain topic [3]. Hence, an inductive approach will be followed while performing the entire study and helps to collect various topic-oriented data for the study. It will provide a key assistance to improve the quality of the study. The entire study has to analyse the impact of BI and web mining on business. Hence, it became essential to gather a huge set of non-numeric and textual data which are relevant with the topic. Qualitative types of data are actually non-numeric and provide textual information on the targeted topic [4]. Thus, the entire study will focus on using qualitative data and information to gain the most effective output for this particular study.

It is necessary to access information from the internet in order to gather qualitative data on BI and web mining. The secondary data collection method provides the opportunity to collect information from various peer reviewed and authentic online sites such as business journals, e-magazines, annual report cards and various other genuine sources of primary data [5]. Hence, the secondary data collection process will be used within the entire study. The data published before 2019 has been taken in exclusion category while the information onwards 2019 has been selected as inclusion category while performing the study.

RESULTS

In detailed concepts of web mining

Data is one of the key assets for the business companies in recent days business periphery in order to build the most suited strategic plan for the company to gain a desired business advantage in the global market. The entire process of mining Web provides a key assistant to the organizations to avail a higher quantity of Web and information which helps to develop best strategies and helps to meet the futuristic objectives of the enterprise in business surroundings. In definition, Web mining is the overall process which helps to analyse and interpret a large volume of data sources to evaluate the market trends, interest of the customers as well the guidance to use those data not effectively within business [6]. The prediction of outcome, decision making and framing out the operational objectives become easier through the support of web mining in the business market atmosphere. Web mining is actually a technique of data mining

A huge number of organizations all around the globe have already adopted the access of web mining to avail higher business growth in the international market. Through using web mining, a business company could be able to explore a large database and be able to take the best kind of strategic decisions to improve the market segments [7]. The business performance and activities become more prominent and

consumer centric through using web mining to analyse a numerous size of data set and interpret those data effectively in business. A business company can avail a higher business advantage and enlarge their consumer base through using web mining in the worldwide business market area. On the other hand, it is also involved with a serious issue of data redundancy and privacy concerns of the customers. A business enterprise has to concentrate on handling these particular issues while using web mining to gain desired business advantage throughout the globe.

Assistance of web mining in developing business strategy

Web mining most effectively helps an enterprise to analyse the stored data and assists to gain suitable plans to use those data in business. The entire process of web mining provides the guidelines to assume the tendency, interests, taste, behaviour, decision making pattern of the consumers in the global periphery. The product designing, manufacturing, and marketing operations of an enterprise become closer to the audience or consumers which helps to increase the sales rate and profitability of a company all around the globe [8]. The entire process of web mining has its superior involvement with the usages of artificial intelligence and helps to learn insights from previous experiences and enhance the strategic development to gain higher business growth in the global market. The entire performance of a company becomes more effective and consumer oriented through the implication of web mining within business. It has been increasing the tendency of the organizations to apply web mining with their operational areas to avail more effective business performance in the international periphery.

The entire decision making of the companies in their business become more fragile and delicate for the consumers through utilizing the assistance of web mining within business. The issues and opportunities of a company can be forecasted or predicted through interpreting the output of the web mining within business and helps to take most suited strategic or operational; decisions for the company all around the globe. It mostly helps an enterprise to avail a higher competitive advantage in the business surroundings. Though, most of the leading companies all around the globe has been already implemented the uses of web mining in their business which helps to provide higher satisfaction towards the consumers and avail high business position

Analyse the definition of business intelligence

Business intelligence is actually the overall combination of data mining, visualization of data, business analytics, data tools and infrastructure. The application of business intelligence uses a number of modern equipment such as AI, decision automakers, predictive analytics and various other data analysis tools within it which enhance the performance of a company in business market periphery [9]. A company can be able to take the best kind of and most convincing strategic decision within business through gaining data driven assistance of business intelligence within business. The upgraded technological supports used within business

intelligence provides the key assistant to an enterprise in the global market to take most suited business decisions and steps in the overall operational area of the company which helps to avail a higher position in business market hierarchy. It provides the guidelines and data driven strategic plans towards an enterprise to attract more consumers within business.

Business intelligence (BI) is one of the significant technological and system-oriented processes which has become the performance of a company in a global periphery mostly data centric and to help to meet the demand and needs of the customers all around the world. BI is actually referring to the overall process which has its involvement with procedural and technological infrastructure which assists to gather, store and analyse the detailed sets of data performed by a company in their regular activities [10]. It has its engagement with a broad team which encompasses descriptive analytics, mining, benchmarking performances and an in detailed process of analysis data which provides the guideline to undertake effective corporate strategies in business. The application of various modern gadgets, especially the support from robotics, data analytics, artificial intelligence and many other technical and statistical equipment in business intelligence actually increase the effectiveness and demand of business intelligence worldwide.

Impact of business intelligence on business growth rate of a company

Business intelligence is one of the most helpful techniques which provides a key assistance towards a company and helps to increase the business advantage of the company all around the world. A huge number of companies all around the world have been taking their steps forward to apply the use of business intelligence in order to avail a higher competitive advantage and business growth in the global business market sphere. The entire performance and operations of a company in the international market become more exquisite through availing the support of BI within the decision making and strategic development area of the enterprise. Business intelligence uses data to find answers to the issues of the company from the past days and recants and helps enhance the entire approach of the company in a competitive market [11]. It actually provides the key assistance towards a company to avail a higher business growth all around the globe.

The entire activities of BI tracks and monitors the key metrics of the company and helps to develop strategic goals for the company in the business sector. The overall process of tracking the present and previous performance metrics of a company, BI suggests the best suited organizational, product design, manufacturing, service oriented and promotional plan for an enterprise which increases the rate of economic earnings of the company in the international market. BI provides a superior backing towards a business company to have superior control and transparency of the performance and activities of the company through making authentic

analysis of the past and present data of the company in business periphery. It helps to identify past errors and also provides support to address opportunity for an enterprise in the global market. Thus, it most effectively helps an organization to avail a higher business growth for a company in a competitive market.

Cause of increasing demand for web mining and business intelligence

The increasing rate of competition in the worldwide business market atmosphere has caused a critical tendency of the business enterprises to avail various technological assistance in their business. The superior assistance of web mining, one of the most effective techniques of data mining, mostly assists an enterprise to analyse and interpret data and information in order to take the most suited business strategy to avail higher advantages in the competitive market [12]. The strategic decisions taken by an organization more consumer centric through the help of web mining in business which helps to avail greater satisfaction rate of the consumers in global periphery. Various top of the hierarchy institutions in the global market have shown their interest in web mining and utilize the assistance of web mining ethically to improve the consumer base of the company in the global periphery.

Furthermore, the assistance of BI helps to monitor and track the performance of a company and helps to bring forth decisions which provides the assistance to enhance the performance rate of the enterprise in the global market. The implication of BI involves a number of upgraded technical equipment which provides the scope to develop most suited and error free tactics to perform business and helps to achieve the long-term goal of an enterprise in the worldwide market. It has been actually increasing the interest and demand of BI in the business sphere all around the globe. It has been predicting the worldwide market size of the BI has been reached to 18 billion in 2025 which was actually achieved 15.2 billion U.S. dollars in the fiscal year of 2020 [13]. It has been showcased that business intelligence helps to make a superior strategic plan for a company and results in a desired competitive advantage for the company in a business market atmosphere. These are the basic cause of increasing demand for web mining and BI throughout the globe.
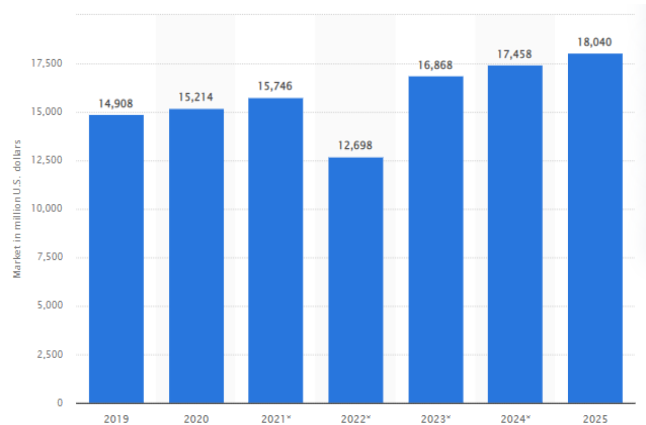

Figure 1: Market size of business intelligence

Role of web mining and business intelligence to gain higher business success in competitive market

The assistance of BI and web mining mostly helps an enterprise to increase its succession rate and competitive advantage in the global market. Web mining, and business intelligence both have their superior capability to analyse data and take most suited decisions which helps to enhance the success opportunity of a company in the competitive market. Web mining is one of the key techniques of data mining which provides the assistants and support to an organization to analyse the data about phenomenon and enhances the strategic decision-making steps of a company in the worldwide market sphere [14]. On the other hand, the application of the BI provides superior assistance to evaluate the performance, capacity and past records of a company and helps to develop most suited organizational goals which provides the assistance to meet the economic objectives of a company. Hence, it can be claimed that the application of BI and data analytics helps to improve the rate of succession for a company all around the globe.

The assistance of BI helps to keep concentrations of the consumers and takes effective policy to improve the satisfaction rate of the consumers. The implication of BI enables linking strategy according to consumers favour, access custom view towards customers, and access the history and recent updates of the sales cycle and helps to know the entire journey process of consumers and their decision-making tendency in the global market [15]. Although, the use of web mining also helps to analyse the data and information which provides help in making strategic decisions and ways to gain higher attention and retention from the consumers all around the global periphery. The entire process of availing BI and web mining mostly enhance the policy making and strategy to meet the long term of a company in worldwide surroundings. Hence, these provide a key assistance towards a business company to achieve desired success in the competitive business market atmosphere.

DISCUSSION

The following study is based on web mining and business intelligence which plays a key role towards the success of a following company. There are few themes that have been constructed which are based on the subject matter and all of these themes have been discussed and depicted by collecting valid and fruitful insights. Also, all these themes have been closely related with each other and all of the themes consist of several crucial pieces of information related to the subject matter. Also, each and every theme have contrasted a mixture of web mining and data mining and its usages within a business.

Firstly, in the study, the concept of web mining has been illustrated with a detailed information related web mining. In a simpler word, web mining is the procedure of data mining techniques to explore and extract the insights automatically from certain web documents and services in a successive manner. In this following section, the concept of web mining has been elaborated by depicting its importance to a business. Web mining is another part of data mining which has been done by implementing data mining techniques and algorithms to carry out certain insights from web services.

In this mentioned study, the assistance of web mining in constructing a business strategy has been represented by applying a sheer amount of insights which are related with the context of web mining. Web mining carries out the insights from the structure of the data or the insights which are available on a web portal or online. By examining the data which are available online, business firms, entities and organizations would be able to trace the required web graphs, nodes and hyperlinks which would be effective in fixing up the link among various commercial products and services of a company. Also, there are several kinds of advantages of using web mining in a business have been depicted in this section of the study.

Up next, the impact of business intelligence in developing a business and increasing the rate of growth of a company has been constructed within a certain manner. At first in this section, the brief introduction about business intelligence has been served in an extensive manner and business intelligence has been shown as the key player in developing strategies in a business. Business intelligence intends to describe a procedure and technical infrastructure that gathers, retains and examines the insight which has been manufactured by the actions of a company. In this section, the illustration has been made over the business intelligence and how it can give to a business has been discussed in an extensive manner.

Later on, the cause of enhancing the demand for web mining and business intelligence has been discussed with an extension. Both of these aspects are crucial to gain an excessive amount of profit in a business organization. Also, there are several purposes of using web mining in business intelligence that have been represented in a certain manner. In this following section, the relation between web mining and business intelligence has been developed within the discussion of the following topic. Also, the web mining can help to drive sales, understand the customer behaviour, meet the objectives and make new opportunities to explore a business in a successful manner.

At the end of the mentioned context, the role of web mining and business intelligence to achieve higher success in business and competitive advantages in the existing marketplace has been shared with an extensive order. The roles of both business intelligence and web mining have been represented in the study to showcase the significance to gain profit and competitive advantage in the target marketplace.

CONCLUSION

The arrival of the fourth industrial revolution and globalization has increased the competition rate in the business market atmosphere throughout the world. It has also brought forth various technological equipment and up to the date gadgets in business. The increasing competition in the

global market has increased the need for the most suited strategic and data handling technique in the business periphery all around the globe. The use of BI and web mining has their superior potential to analyse data and helps to make data-oriented decisions in business and helps to gain higher attraction from the consumers in the global market through taking various suitable and consumer centric policies in business. Thus, this particular study has kept its focus on evaluating the impact of BI and web mining in the success rate of a company in modern business market surroundings worldwide. The definitions and concepts which are related with BI and web mining have been discussed with a comprehensive process within the study.

An inductive approach has been taken to perform the overall study effectively. It has gathered a huge set of qualitative data while performing this particular study. Secondary methods of data collection have been taken while in case of gathering various textual qualitative data within the study. The entire study has found that the implication of web mining and BI mostly helps to improve the performance of the company and helps to improve the satisfaction rate of the consumers in the global periphery. The entire strategic development of a company becomes more consumer centric and data driven through the assistance of web mining and BI in business. It helps to gain higher consumer attention and highly competitive advantage in the worldwide market. Hence, the implication of business intelligence and web mining helps to increase the success rate of a company in a worldwide business market atmosphere.

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