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Research Article

Business Analysis, Business Intelligence and Its Importance for Business

İş Analizi, İş Zekâsı ve İşletme için Önemi

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Abstract

In today's developing world, technology effects our lives more and more every day, and this situation has become inevitable for businesses-enterprises. Automation systems and modern technology replace labor force. Along with these developments, there are specializations in the workplace. As long as this change exists on a routine basis, business, corporations need to follow and know the jobs-business and job descriptions in detail in order to find new suitable employees, retain them, make their wages and evaluate the work. It plays an important role in the developments in the world. For this reason, it is necessary to adapt the technology and employees to this change. Technological developments in the globalizing world have enabled the economy to gain a different shape. In highly competitive markets, a strategic production-manufacturing approach for service/product is required, as well as cost analysis. Big data and business analysis have a huge impact on large businesses' decision making and forecasting for future situations and technological infrastructure of the business. It helps the business to use the data as it wants in order to improve the management understanding at a specified time. Classical expence accounting takes into account only the price of the product/service at the production stage, and counts the expenses in other stages as a price. Based on this, this situation handles the product life cycle from beginning to end and ensures that profit and price are made more accurately. In this research, business analysis and business intelligence are discussed. A literature review is conducted within the effectiveness of business analysis on production- manufacturing management of bussiness. Sample applications made in businesses-industries are mentioned. These presented applications of this study are highlighted for business analysis and business intelligence to increase business efficiency for production- manufacturing/service sectors.

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Öz

Günümüzün gelişen dünyasında teknoloji her geçen gün hayatımızı daha fazla etkilemekte ve bu durum işletmeler için kaçınılmaz hale gelmiştir. Otomasyon sistemleri ve modern teknoloji insan-iş gücünün yerini almaktadır. Bu gelişmelerle birlikte işyerinde uzmanlaşmalar da artmaktadır. Bu değişim rutin olarak var olduğu sürece, işletmelerin, yeni uygun eleman bulması, bünyesinde çalıştırması, ücretlerini sağlaması ve yapılan işi değerlendirmesi için iş ve sorumluluk tanımlarını detaylı olarak takip etmesi ve bilmesi gerekmektedir. Bu akış, dünyadaki gelişmeleri takip etmede önemli bir rol oynamaktadır. Bu nedenle teknolojinin ve çalışan personelin bu değişime uyum sağlaması gerekmektedir. Küreselleşen dünyada teknolojik gelişmeler, ekonominin farklı bir şekil kazanmasını sağlamıştır. Rekabetin yüksek olduğu pazarlarda, hizmet/ürün için stratejik bir üretim-imalat yaklaşımının yanı sıra maliyet odaklı bir yaklaşım gereklidir. Büyük veri ve iş analizi, büyük işletmelerin karar aşamalarında, karar vermelerinde ve gelecekteki durumlar için tahminlerde bulunmalarında büyük bir etkiye-güce sahiptir. Büyük veri ve iş analizi işletmenin belirli bir zamanda yönetim anlayışını geliştirmek için verileri istediği gibi kullanmasına yardımcı olur. Genel gider muhasebesi, ürün/hizmetin sadece üretim aşamasındaki fiyatını dikkate alırken, diğer aşamalardaki giderleri de fiyat olarak saymaktadır. Bu tür hatalardan kaçınmak için stratejik iş yönetimi ve iş analitiği kullanılır. Bundan yola çıkarak bu durum ürün yaşam döngüsünü baştan sona ele alır ve böylece kar ve fiyatlandırmanın daha doğru şekilde yapılmasını sağlar. Bu araştırmada iş analizi, iş analisti ve iş zekâsı konuları ele alınmaktadır. Çalışma kapsamında literatür taraması yapılmıştır. İşletmelerde yapılan örnek uygulamalara değinilmiştir. Bu çalışmanın sunulan bu uygulamalar, iş verimliliğini artırmak için iş analizi ve iş zekasının önemini vurgulamaktır.

1. INTRODUCTION

Today, operational databases belonging to many institutions are not sufficient. The need to produce new information by making various analyzes with the data obtained from external sources and to use this information in the processes for the institution has arisen. Genaral and customary database management systems, on the other hand, cannot provide sufficient support for the use of these data from external sources in the management of internal information. Because the data received from external sources can be easily transferred to their own operational databases and may not be in a structured state. For this reason, many big technology companies are making huge investments in big data. Together with big data, analysis that could never be measured, stored. The vast majority of things that cannot be shared and shared have begun to be data (Ram et al., 2016; Schönberger and Cukier, 2013; Cackett, 2013). Big data and business analysis have a huge impact on large businesses' decision making and forecasting for future situations. At a specified time, it helps the business to use the data as it wants in order to improve its management understanding. Business analysis is resorted to as a result of big data being in an undifferentiated state and we cannot manually extract information from it. Business analysis allows us to parse this data and obtain usable data (Ram et al., 2016; Schönberger and Cukier, 2013; Cackett, 2013).

Big data is an accumulation of data from a scope of sources which is usually described in terms of characteristics. Volume is one of the characterisitics. A very large volume does not allow us to know where the desired information is located. The fact that data is growing at a high rate prevents the data from being up-to-date. The fact that it has data from all areas of the business makes it diverse, which means that the data is mixed with each other. It is known by everyone that the existing data has a reality, but it is a fact that this reality is uncertain in an unblended way. Finally, the fact that this data cannot be found elsewhere makes this data valuable. Because of these characteristics, data analysis becomes indispensable for a large business. There are three types of business analysis, They are descriptive, predictive and normative. In the descriptor, the data are separated by a simple statistical decomposition. The data from here is transferred to the estimator. In the estimator, on the other hand, it is a system that defines the estimation variables with an advanced software. Here the deeply separated data is transferred to the normative. In the normative, the data blended in the descriptor and the estimator is poured into statistical data for use and gives a response (report) to the user for the desired data (Tunç, 2019; Srivastava and Gopalkrishnan, 2015). Outsourcing is defined as the use of a third-party logistics company to offer logistic support. Outsourcing is quickly developing one of the most used business strategies today, especially in the logistics industry. In logistics, the cost-effectiveness of augmenting human resources and meeting supplier requirements with trained labor has made it imperative to address supply-chain and logistics operations on a strategic level. A collection of conclusions and recommendations concerning supply-chain in competitive companies and logistics management activity needs are offered in this research (Erturgut, 2021, Cardinalli, 2001).

Technology-based enterprises (TBFs) are concerned about getting a competitive advantage, thus they create technologies to incorporate in their goods and services in order to differentiating themselves from their counterparts. TBFs with comparable products should contend against one another, implying that TBF business engagement should take place at the product and service layers. This research presents a paradigm for better understanding TBF business competition by connecting their business sectors and technologies, which correspond to items and services in their brands and technologies detailed in their applications, respectfully.This paradigm identifies technology-based business frameworks and gives a knowledge of business rivalry from both a general business viewpoint and within specific domains, while taking into account the TBFs' innovation knowledge and commercial capability. This research makes a significant academic contribution by being the first to conduct a business competitive market assessment at the product and service stages, as well as an important industrial contribution through proposing a structured procedure for acknowledging the rapidly changing business marketplace(Ko et al., 2020).

For financial firms and management professional organizations alike, improving operating performance necessitates a well-thought-out strategy. This study outlines the key factors influencing management consulting company performance and then generates and empirical evidence analyzes three regression models of corporate finance business performance to carryout empirical studies. It is based on the point of view of the organization of an executive leadership consulting company in an investment company, as well as the related management contracting business and operational processes between the two financial services companies and managerial consulting firms. The yearly earnings and

operational profitability of industry leaders are shown to be constant across the two models. When an accounting company engages in employment in China and uses e-commerce to run its business. Positive aspects could indeed arise for business management consulting when they engage in work in China and use e-commerce in their operations, and when the salary significant proportion of older employees, percentage of consultants, proportion of the total of CPA (certified public accountants)-qualified staff members, professional competence of staff members, and concentration of market segments are all significantly greater (Lee et al., 2021).

In today's business-focused organizational learning, maintaining an organization's social media content for business purposes is a new difficulty. Organizations may acquire fast and complete views of platforms through social media analysis of information for consumer web surfing, online buying, consumer feedback, and content marketing analysis. Manufacturing, acquiring, selling a product, and generating or generating revenues are the foundations of business. The BD-SMAB (Big Data-Social Media Analytics for Business) Model raises awareness and influences marketing strategy decision-makers. Companies may utilize big data analytics to improve operations in a variety of ways. It can assess competition in real time and adjust pricing, make deals better than competitors' revenues, and examine adverse comments from competing companies to determine if they can surpass them. The suggested technique investigates the effects of social media analysis on several aspects of life. The suggested technique investigates the effects of social media research on many fields including such property investment, companies, and beauty industry events. The variety of these businesses demonstrates the impact of social media and how beneficial decisions may be made to establish a strategic marketing strategy and to provide smarter business judgments. As a consequence, the BD-SMAB technique helps to improve consumer happiness and experience while also increasing brand recognition (Zhang, H. et al., 2022; Kumar et al., 2020; Pham et al., 2020).

A sustainable enterprise strategy is a term that is progressively being used to describe business models which employ a triple bottom line strategy to achieve economic strength through health and environmental activities. Nonetheless, there is a necessity for further experimental study on quality and engineering in connection to sustainable supply chain, as well as their relevance to company success.This study examined how incorporating social sustainability goals into a company model affects financial efficiency, fosters sustainable development, and improves a company's capacity to resist disruptions such as the current economic crisis. During a series of studies, four arguments are developed and evaluated using four international reduced operators in a case research approach (Rotondo et al., 2019). Innovation in business strategies, rather than just product development, has indeed been effective in addressing obstacles related to technological advancement and dissemination. However, just a few studies have looked at how business practices are applied in the associated with climate services. Using a sampling of 32 climate services, we investigate the fundamental aspects underlying business models in this article. The set includes continuing and finished joint innovation initiatives, as well as in-house inventions from individual firms. The authors of this article used the business model canvas (BMC) as a framework for semi-structured conversations with senior executives. BMC enables the identification of eight aspects that are always interacting and developing over the life of a service. We updated the conventional BMC and included two crosscase construction pieces which are critical with. Content analysis was used to give codes to specific tokens from the transcribed. Researchers analyzed the association among major subjects using graph theory and hierarchical clustering, expressing them in a graph structure with vertices represent codes and linkages based on the closeness of words in each piece of text (Larosa and Mysiak, 2019).

2. BIG DATA AND BUSINESS ANALYSIS

2.1. The impact of big data and business analytics on the corporate system

Enterprise systems are generally data-based software that includes events related to tracking, stock management and makes them simple. As a result of this stored data, it helps the business to prepare more effectively for the data that managers need. In corporate businesses, there may be difficulties in

combining internal and external data. Business analysis, on the other hand, normalizes this data after extracting and cleaning it within certain systems (Oncioiu et al., 2019; Tunç, 2019; Srivastava and Gopalkrishnan, 2015). Business analysis entails the application of modern analytical tools to extract crucial information from enormous amounts of data in order to aid decision-making. Advanced analysis, which sprang from the discipline of operational research, has been classified in several ways, the most prominent of which are descriptive, predictive, and prescriptive analysis. Descriptive analysis is focused on data research that describes previous business circumstances, developments, patterns, and deviations. Descriptive research approaches include conventional analyses and scoreboards, ad hoc reporting, query drilldown (OLAP- Online analytical processing) alerts, and watching. Due to the success achieved collectively by the data mining and statistical analysis community, data analytics continues to be an active area of research. Statistical machine learning, often based on well-grounded mathematical models and powerful algorithms, techniques such as Bayesian networks, Hidden Markov models, support vector machine, reinforcement learning, and ensemble models, have been applied to data, text, and web analytics applications. Other new data analytics techniques explore and leverage unique data characteristics, from sequential/temporal mining and spatial mining, to data mining for high-speed data streams and sensor data. Increased privacy concerns in various e-commerce, e-government, and healthcare applications have caused privacy- preserving data mining to become an emerging area of research (Oncioiu et al., 2019; Tsai et al., 2015; Chen et al., 2012; Zeng et al., 2011; Lustig et al., 2010).

2.2. Enterprise Resource Planning

Enterprise resource planning (ERP) is a comprehensive software that gathers the workflows of an enterprise under a single roof and makes it easier to manage with the help of enterprise information management. It can be said that the enterprise resource planning system will positively affect the objectives of strategic cost management since it collects the information at the head office as a result of the transaction and can be accessed at any time. Enterprise Resource Planning – ERP is the systems used by enterprises in different sectors and of various scales, in which stock control, production and supply management, accounting processes are integrated (Çelebi and Bulut, 2016). Today, different variations of these package programs are used all over the world. This diversity is caused by the manufacturing companies as well as the different accounting processes carried out around the world. Users of this system enter all production-related data into a single system, thus facilitating accounting and management transactions. In addition, they can easily access the reports and brief information to be presented (Ersan, 2019; Çelebi and Bulut, 2016; Çağlıyan, 2012; Robert Jacobs and Ted Weston, 2007; Shehab et al., 2004; Aydın, 2003). As technology advances one step further every day in the globalizing world, it is of vital importance for businesses to adapt to the order. Thanks to the constantly developing and changing order, the conditions of competition are shaped around the technological conditions. So much so that technological opportunities can offer us new business opportunities and business processes. At this point, ERP is an efficient application that provides information flow between parties by keeping data related to many functions of the business together. The development of the ERP package took years and over time, new solutions were presented for the needs of the enterprises. The programs have taken a more comprehensive form, facilitating planning and management from distribution to product stocking, from customer data to campaigns. After the transition to the ERP program, product planning, purchasing materials, managing stocks, communicating with suppliers, monitoring sales and orders, controlling financial affairs and human resource management have become easier. Apart from this, it also helped to reduce the workload of the employees. Noticeable changes have occurred in employee productivity and motivation. Considering all these productivity increases and performance improvements, the metal production company started to think about the existence of a continuous education and thus continuous development. Apart from the benefits it provides, there are also some disadvantages that may occur. Although ERP programs cause cost reductions in the long run, a high cost may arise due to installation fees in the first stage. When comparing the financial burden and the program, it is of great importance to offer a package that definitely meets your needs. The business that offers you the software package should understand you and create an answer to needs of the company. Otherwise, the expenditure is only an unnecessary accounting part and can lead the business to decline (Ersan, 2019; Çelebi and Bulut, 2016; Çağlıyan, 2012; Robert Jacobs and Ted Weston, 2007; Shehab et al., 2004; Aydın, 2003).

3. BUSINESS MANAGEMENT PROCESS

Business Process can be harder and harder to overcome the difficulties encountered in the increasingly complex and difficult business world. It has become a necessity for businesses that want to overcome these difficulties, simplify and control the complexities to have advanced workflow processes. According to the results of the researches, it is revealed that the business process management has a great contribution to the companies to stand out from their competitors and to be successful. Accordingly, the value given to this issue by the enterprises is increasing day by day (Abas, 2021; Sebetci et al., 2018; Elzinga et al., 1995). Business Process can be defined as the sum of the activities of creating an output that creates value for the target audience of the business by collecting one or more inputs. Business process management is defined as "a systematic and structured approach to analyze, develop, control and manage processes in order to improve product and service quality" (Elzinga et al., 1995). As can be understood from this definition, business process management is considered as a business management model. Therefore, it should be structured according to business objectives and changing conditions. Businesses that want to survive in the face of increasing competition in the world should always have the best strategies, use the latest technologies and adopt the best management principles. Business process management is a good practice management principle that provides them to businesses (Abas, 2021; Sebetci et al., 2018; Elzinga et al., 1995).

Although Business Process management exists in the industrial age, it has undergone radical changes as it transitions into the digital age. The first of the changes that occurred in business process management between the two eras is the continuation of the process, which is carried out by humans or machines in the industrial era, as a hybrid in the digital era. Secondly, while business process management is problem-solving in the industrial age, it exhibits an opportunity-oriented perspective in the digital age. Third, while business process management was corporate-minded, it has become entrepreneurial-minded in the digital age. Fourth, while profit-oriented business process management stands out in the industrial revolution, a purpose-oriented business approach is accepted in the digital age. The fifth change is the emergence of a business process management that prevents transaction delay in the digital age, while transaction speed comes to the fore in the industrial age. Finally, while there is a business management process in which business processes are at the forefront in the industrial age, business processes management in the transition to a customer-oriented economy has turned from being a business process to a customer-oriented one. Today, businesses are not aware of new digital technologies, and they also have insufficient information about which technologies they should use to keep their businesses up to date. There is a need for application studies and their results for the development of business processes. In the next part of the study, the profitability of an enterprise that switched to the smart storage system in the traditional storage system will be revealed (Abas, 2021; Sebetci et al., 2018; Elzinga et al., 1995).

Many definitions of big data have been developed. McKinsey Global Institute used big data in 2011 to describe the tools that host, manage, and make available datasets in a way that traditional database software cannot. This definition has been used in publications such as Kord Davis, Ethics of Big Data. In general, it refers to data sets that are beyond the storage, management and processing capacity of programs using big data. Expressions that cannot be measured, stored or analyzed with big data have been turned into data. Big data refers to the type of managed data, the technology used to store and process the data. A large part of such technologies have emerged from the technology developed by companies such as Google, Facebook, Amazon while managing big data. In addition to the data owned by the institutions, the data that is needed from outside may not be sufficient for information management in existing databases. Technology companies invest in big data, as data from external sources can be easily transferred to in-house databases and may be unstructured. Big data constitutes the storage, analysis and processing of data collection collected from different data sources. It refers to the need to combine multiple unrelated datasets, to process data, to collect confidential information in a short time (Ram et al., 2016; Erl et al., 2016; Cackett, 2013; Davis and Patterson, 2012; Diebold, 2012).

Purposes and uses of business analysis- Why business analysis: Since the data in the business is not in a certain order, it is often impossible to reach the goals. For these reasons, these data should become usable. To do this, job analysis is used. This allows us to reach our goals in a healthier and faster way. Job analysis also simplifies the management of jobs by identifying this data for us. Incorrect management of business analysis is the biggest problem of businesses. It brings failure with it. Thus, it enables business analysts to highlight their necessity and importance. Of course, this problem does not

go away only if the business analyst does his job right. The institution can only eliminate this process by applying it together correctly. guaide is not just a business part, there is no single answer to be sought there. Business analysis resides throughout the business as a whole (Sherman, 2014; Liebowitz, 2006).

An Application for Business Management Process: Business Management Process is significant facility of business analysis for production/service management activities for corporate- institutional system. An Application for the Business Management Process of a company in manufacturing industry is Marmara Region presented and declared below:

The manufacturing process is the most important process of the company because it fulfills the purpose of the company by producing and therefore being the most used process, it gives the company more opportunity for improvement than any other process can provide. The production process of this manufacturing company starts with an order from a customer, and Manufacturing and Sales evaluate this order by requesting stock information from the Production-manufacturing department. Based on the stock value, Manufacturing and Sales decide whether to accept the order. The accounting department has vital importance for this business management process and business flow. The probability of order acceptance is strongly dependent on this stock control information, as it affects the firm's production planning. Since the firm can keep very little inventory, it must plan production control and accept orders carefully so that none of the firm's regular customers will be dissatisfied. Assuming there is appropriate merchandise on hand and Manufacturing and Sales approve the order, operations are sent immediately to system operation. Nevertheless, if there is insufficient merchandise in inventory and the demand is approved, the Manufacturing phase of the operation is completed. Top Management places a raw - materials demand with the Supplier. The Purchase Department places an order with a supplier from the approved list. When raw supplies reach at the firm, industrial workers execute Admission Checking to ensure that the achieve the vision are absolutely what was expected. (Manage both the amount and the quality of the approach to getting). Following the completion, the Supplier changes the provider ranking for distribution and pricing concerns. Professional, on the opposing side, changes the rating after Admission Controlling depending on the quality related performance of the custom control. If the request is refused in Admission Controlling, the provider is notified and the Purchase Department places another demand for raw resources from a separate insurer on the approved database.

4. BUSINESS INTELLIGENCE

Increasing production and accelerating commercial relations after the industrial revolution brought with it a great bureaucratic burden, the importance of accounting and production tracking systems increased, and it has become an important business objective not to get lost in this data sea and to use the necessary information correctly. On this occasion, the concept of data warehouse has been developed, computing systems have been invented, recording systems have been developed, and the requirements for tracking the business of large trusts and cartels that have embargoed their markets have increased. Technological and digital developments accelerating as a result of globalization have enabled the transfer of these recording systems to the virtual environment, facilitating the department's work and speeding up the decision-making processes. The plus of this acceleration has further increased the incentives of companies to make profits in a liberal environment and increased their understanding of growth=earning. However, the fact that the data piles created by this growth have to be processed and the understanding of recorded economy created by various auditing institutions by resorting to legal means has led the concept of business intelligence to gain importance in businesses and public institutions. In addition, as a business intelligence application, it transforms the data in the data warehouses into useful raw materials by transferring them to the departments and decision-making bodies where they will be processed and transformed into information. These data, which have become raw materials, are transferred to the departments and the last decision makers in the hierarchy and made ready for use. Here, too, algorithmic programs using artificial intelligence and the latest technology come into play and create a systematic output, and this useful output acts as a coach that will enable the business to take it one step ahead of the competition and make a difference in the market. Leading business intelligence platform providers as the most common and market leading business intelligence applications include; IBM, Oracle, SAP- Systems Analysis and Program Development, SAS- Statistical Analysis System, Microstrategy, QlikTech, Information Builders. Companies pushing the leading

business intelligence platform providers include; Tableau, Tibco Software (Spotfire). Business intelligence platform providers companies that provide applications in specialized areas and therefore do not appeal to all users are; LogiXML, Actuate, Panorama Software, Prognoz, Salient Management Company, Board International, Arcplan (What is Business Intelligence, 2021; Williams, 2016; Kronios and Yeoh, 2010; Jayanthi, 2009; Vercellis , 2009; Han et al., 2006; Liebowitz, 2006; Garner Group, 2006).

In business intelligence institutions, performing multi-dimensional analysis, ensuring the effectiveness of reporting systems, maintaining the continuity of work flow processes, developing scenarios that will provide maximum benefit and efficiency in decision-making processes with the help of algorithms developed based on artificial intelligence and technology, determining performance management processes, and fully working in corporate resource planning organizations. It has purposes such as providing support (What is Business Intelligence, 2021; Williams, 2016; Kronios and Yeoh, 2010; Jayanthi, 2009; Vercellis , 2009; Han et al., 2006; Liebowitz, 2006; Garner Group, 2006).

4.1. Business Intelligence (BI)

Some organizations in the field of business have said that the concept of business intelligence and its application area will become even more valuable in the future. They stated that it will be at a point where all stakeholders outside the organization and the organization can reach. Firms that are in competition with each other should stand out among themselves and be placed in the forefront. For this reason, the manager's own ideas and thoughts do not provide progress alone. Rational findings, reports and data analysis are required. The collection of information that distinguishes the necessary data within the enterprise and comes to the fore is called business intelligence (Gartner Group, 2006). Business Intelligence (BI) is a collection of procedures, structures, and technology that transform raw data into useful information that drives lucrative business activities. It is a collection of tools and services designed to turn data into actionable insight and knowledge (What is Business Intelligence, 2021; Williams, 2016; Kronios and Yeoh, 2010; Jayanthi, 2009; Vercellis , 2009; Han et al., 2006; Liebowitz, 2006; Garner Group, 2006).

Organizations are discovering that data and information really shouldn't be considered as separate components of information management, but instead as part of the comprehensive corporate strategy. Organization's information systems integrate business intelligence and business process management. Companies are increasingly focusing on Operational Business Intelligence, which is now underserved and uncontested by vendors. By generally, business intelligence providers have concentrated only on the top of society, but a theories and empirical is occurring that is transferring the concentration of business intelligence to the bottom of the hierarchy, including an importance of self intelligence (What is Business Intelligence, 2021; Kronios and Yeoh, 2010; Jayanthi, 2009; Han et al., 2006).

4.2. Business Intelligence Technology

In order to apply business intelligence in organizations, some skills must be formed. Some of these are updating data stores and configuring them to work in line with business intelligence. In order to apply business intelligence, data capacity must also be checked. In order to control and evaluate the processed data in the conclusion part, technical facts should be examined. Business intelligence, which facilitates the life and work of the members working in the organization, provides convenience in terms of providing large amounts of data together (Ranjan, 2009). Business Intelligence technology includes many tools. Some of these can be listed as competitor analysis, business process plans, data warehouse systems report, manager information system, human resources element, finance indicators. In addition to these, the management and performance indicators of the enterprise itself are also important (Jayanthi, 2009; Vitt et al., 2008).

5. BUSINESS INTELLIGENCE AND CRITICAL SUCCESS FACTORS IN IMPLEMENTATION OF STRATEGIC COST MANAGEMENT DATA ANALYSIS

The concept of Intelligence here means two different meanings. The first of these is human Intelligence. Here is a field that explores the applications of Artificial Intelligence and Human Intelligence. The second is a technology that performs all kinds of data processing in order to enable corporate companies to make better decisions. In other words, a more comprehensive access opportunity has achieved success by becoming a whole with business intelligence in strategic cost management. One

of the indispensable concepts of today's most modern business areas is change. It has played an extremely important role in terms of management styles of strategic variables. Previously, it was seen that the concept of high-volume production and this understanding had a hard-to-change structure. Today, there is an understanding of production that changes more rapidly and has a dynamic structure. It is seen that today's production approach is shaped by management on cost and quality. Strategic cost management helps to better manage this dynamic structure. For this, it plans the income and cost well and maximizes the efficiency and profit. Accurate and appropriate cost calculations provide the product with a better price flexibility in the market. Behind its price flexibility, it plays an important role in attracting customers by offering the most affordable price in the market. This makes business valuable from the point of view of the customers, because businesses respond to customer needs (Jayanthi, 2009; Vitt et al., 2008; Garner Group, 2006; Gangadharan, 2004; Gray and Negash, 2003).

6. THE PLACE OF BUSINESS INTELLIGENCE SYSTEMS IN BUSINESS

The components of a Business Intelligence (BI) system are utilized to support a set of management decision-making actions (Cella et al., 2004). The actions are as follows: (a) acquire (e.g., supported by the data warehousing component), (b) gather (e.g., supported by the extracttransform-load component), (c) analyze (e.g., supported by the usage of on-line analytical products), and (d) report (e.g., supported by the data-mining component) (Olszak and Ziemba, 2007). The goal of this study is divided into two parts. The first stage is identifying and describing elements of each of the four most frequent components of a BI system. Once certain elements have been established, The first stage is identifying and describing elements of each of the four commonly frequent features of a BI system. Once discovered and defined, features are matched with the applicable managerial decision-making activity of (a) purchasing, (b) trying to search, or (c) locating (c) evaluating, and (d) information delivery The experiment's objective is to suggest methods to improve aide in the organizational statement procedure (Olszak and Ziemba, 2007; Cella et al., 2004).

Critical success factors: The critical success factors are the persistence of the data, the accuracy of the data, and the reliance on the bulk of the data. Accuracy and quality are known as key components of business analysis. The quality of the data plays a major role in the success of the plan to be made. At the same time, a low quality data seriously affects the market share of the business. In order not to risk the market share and not to lose value in the eyes of the customer, the seriousness of the data is increasing in the presence of accurate and quality data (Jayanthi, 2009; Vitt et al., 2008; Garner Group, 2006; Gangadharan, 2004; Gray and Negash, 2003).

BI is now a system that many companies put into practice. This system has become a system that all kinds of small and large enterprises put into practice and are required by the conditions. Companies applying business intelligence also come up with some problems. Examples of these are the inability to have a device, communication and connection problems as a result of connecting with more than one connection, and the problem of accessing data warehouses (Business Intelligence, 2021; Olszak and Ziemba, 2007; Cella et al., 2004).

7. AREAS OF INFORMATION PROVIDED BY BUSINESS INTELLIGENCE SYSTEMS

The use of Business Intelligence application provides businesses with information about their future status and economic indicators. This gives businesses or organizations a competitive advantage. When we look at the main purpose of business intelligence, we realize that it is to save time while doing the job and at the same time to keep quality. Business intelligence also enables organizations to move time and quality at the same time quickly (Garner Group, 2006; Gibson et al., 2004; Gangadharan, 2004; Gray and Negash, 2003).

7.1. Strategic Advantages of Business Intelligence Systems

Business intelligence provides a great advantage in strengthening communication with customers and responding to customer preferences. It also creates positive contributions to the company's supply process. The use of business intelligence provides fast results by combining communication and coordination between units in enterprises. In short, the use of business intelligence is effective in all activities in businesses and allows the development and improvement of the process (Jayanthi, 2009; Vitt et al., 2008; Garner Group, 2006; Gangadharan, 2004; Gray and Negash, 2003).

7.2. Application Example

Today, most businesses run and try to implement business intelligence applications under the name of enterprise resource planning framework. Thanks to this system, it is carried out as software together with the models that are connected with each other. Sales, stock customer orders and similar processes, which are the units of the enterprises, are gathered on the main line and are carried out from a single source. However, the processes taking place can be monitored in a single step. The example in the application is as follows: Electronics industry in Marmara Region, is a company which has units in many parts of this area and sells through these units. This company, which has been in this sector for many years, has all kinds of fabrics (Jayanthi, 2009; Vitt et al., 2008; Garner Group, 2006; Gangadharan, 2004; Gray and Negash, 2003).

(i) Under OLTP Order Management Structure: Thanks to data such as stock update of a company of electronics industry, information about prices, information about delivery, guidance can be made according to the demands of the customers. In this way, the customer relationship management system is developing. While examining this report, a process related to the customer order system application has been explained as below (Jayanthi, 2009; Vitt et al., 2008; Garner Group, 2006; Gangadharan, 2004; Gray and Negash, 2003). Sales units created by businesses inform customers about stock, price and similar situations; A specific offer criterion is created and this template shows the customer and order line; The utilization of ERP software and features in order to create stage; A firm order goes through some approval stages; Information automatically transmitted to the central unit of the system together with the order confirmation.

(ii) Clustering Order Information in the ETL (Extract, Transform and Load) Process and Saving the Data in the Data Warehouse: After the sale is completed, the data and information about the sale are recorded in the system. Color, type and similar features of the products produced by electronics industry are recorded after being classified according to certain criteria. However, saving is done in a single format. As a result of recording the data of white textile, certain ordering systems are established (Jayanthi, 2009; Vitt et al., 2008; Garner Group, 2006; Gangadharan, 2004; Gray and Negash, 2003).

(iii) Data Mining Analysis of Stored Data in Data Warehouse: As a result of the long-term production of electronics industry, all the processes and phases passed through the data warehouse and Extract, Transform, Load (ETL) systems. In these processes, it has been tried to ensure harmony between variables such as customer and period, customer and product. As it can be seen, electronics industry has applied to analyzes in many ways. However, it is not possible to prove the accuracy of all these analyzes. For example, a customer who bought the product with code x also bought the product with code xx. In another example, the product with code y is a newly released and designed product. Samples have been sent to customers (Jayanthi, 2009; Vitt et al., 2008; Garner Group, 2006; Gangadharan, 2004; Gray and Negash, 2003).

8. CONCLUSION AND RECOMMENDATION

Business Intelligence (BI) ensures that the obtained information is collected in one hand and used efficiently. Corporate businesses therefore need business intelligence and seek a process to assist data analysis regarding the use of data related to all processes affecting the organization. In this sense, the most comprehensive and broad complement of data is business intelligence. In order for the business intelligence system to be applied in organizations, businesses need to determine their organizational strategies and reports in accordance with their organizational structure. BI system means cost for businesses. However, if this cost is incurred, it will be possible to access and access many data at the same time with limited devices. This system is necessary for the development of multiple applications and the provision of data flow. This system used by the enterprises will cause great competition in the internal and external environment of the enterprise and will provide an advantage. Its main purpose is to provide faster and on-site data. Increasing institutionalization in businesses today brings some innovations. These innovations appear as complexity. The accounting department can contribute to the business by presenting the data requested by the business at the desired time. However, since the information presented is past time information, it will not be of much help in making a future plan for the business. For this reason, strategic cost management will provide a better cost calculation thanks to forward-looking plans. In other words, strategic cost management is moving towards a more effective strategic approach by fulfilling its duties in the accounting department. Strategic cost management still does not have sufficient equipment and infrastructure. It's not just for strategic cost management. This is a big problem for businesses that make such investments.The system designed for successful implementation of data is open to discussion in all aspects. The data created should have features such

as being appropriate, accurate information, and accurate in terms of time. One of the biggest problems in this system is how to evaluate this new system. Because without using the system, we do not know what the result will be. For this reason, businesses do not approach this system very much unless it is very convincing.

New entrants to businesses have been put above this term. It has been observed that businesses perform more efficient activities after incorporating business analysis. It has been said that the business analyst is the person who carries out the business analysis to his duties. Since the business analyst has just entered the business such as business analysis, there are many business analyst vacancies throughout Turkey. Business intelligence is mentioned next to the business analyst. Due to the existence of business intelligence, it has been seen that the business analyst analyzes the solutions and results more quickly and effectively. Since the data revealed by business intelligence is presented visually, it becomes easier to understand both for the department and for those in different departments.

Finally, it is a fact that companies growing in the globalizing world will need business analysis. Therefore, in order for job analysis, which is a promising and difficult job, to be more successful in the future, it is necessary to support job analysis as a sub-department by the faculty of economics and administrative sciences of universities.

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