Application of Business Intelligence in the Post-Industrial Period

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Abstract The purpose of the article is a theoretical and empirical analysis of the job insecurity due its influence on the employee job attitudes. Design. The design of the study was longitudinal. The empirical results were collected in 2018–2019. The empirical basis of the research is the separate structural department of the bank. The organization has realized downsizing project during the collection of empirical data. It has made possible to analyze the job satisfaction and work engagement before, during and after the downsizing project. The measures used in the present study are: 1) the "Utrecht Work Engagement Scale"; 2) "Brief Job Satisfaction Measure; 3) "The Job Insecurity Scale". An empirical analysis of the dynamics of job attitudes in the groups differ in age and gender has found out a short-term motivating effect of the threat of job loss. The motivating effect of the threat of job loss is lost during six months. The most significance motivating effect was wound out in within the group of ordinary employees in the senior category over 45 years. The threat of dismissal also has the greatest impact on the behavior change of that part of the staff that is most susceptible to experiencing job insecurity. The employees who perceived the job insecurity are more satisfied with their work and value it more highly.

1   Introduction

Small and medium-sized enterprises are the mainstray and engine of economic development of today's society, and as such they must be able to recognize market events in order to survive and operate. Management using traditional tools such as: CVP analysis, budget and financial ratio analysis are not enough for the successful operation of the company, but it is necessary to combine strategic and operational issues based on business intelligence. In doing so, the system of Economic Management, like any other socio-economic system, can be considered in structural, functional, organizational and process aspects.

In the structural aspect, the economic management system is characterized by a set of elements such as: economic performance, technical and information support, the system of distribution of powers and responsibility in decision-making.

In the functional aspect of economic management, the functions assigned to the economic management system in terms of planning, adjustment, analysis and control of operating parameters are observed. The organizational aspect studies the distribution of responsibilities between the executors of certain functions in the system of economic management and their hierarchy in the organizational structure of the enterprise. The process aspect, as the final aspect, is viewed as a set of administrative actions in time that form a unique process of developing economic management decisions based on laws and regulations that are mutually harmonized as key parameters of business economics.

SME businesses without the use of BI systems can have a much more difficulties and have to invest significantly more effort in creating reports and manually extract large amounts of data from Excel spreadsheets, billing systems and other programs. In doing so, such data passes through the hands of various employees carrying the risk of data loss while wasting valuable time and human resources. Therefore, business intelligence and related technologies will have wide application in modern business practice. Their success is determined by a consistent trend of ease of use but also increasing demand from business users - owners and managers of companies of all sizes and business profiles who

understand the value of business intelligence improving business efficiency and long-term success of the company.

In addition to all of the above, it is certainly important and efficient allocation of resources and minimization of costs, which inevitably causes a competitive advantage in the market. In this sense, companies in the 21st century are expected to transform from information to intelligent companies based on advanced ICT technologies, software solutions and knowledge bases, thus influencing real-time business decision making.

We live in a world where information is often described as a new fuel. The work of managers so far has been based on information from the external environment where decisions are made based on intuition or experience. However, nowadays there is a large amount of data and information aimed at collecting data related to competitors, potential business associates or consumers of goods and services. In order to be able to follow this, it is necessary to focus on intelligent applications, advanced software solutions, knowledge bases and mobile devices where continuous investment in such systems will enable companies to operate more securely through timely and quality business decisions, redefining market positions and discovering new potential for its further development in the market using scientific and analytical methods. This can be done by using a range of tools, methodologies and applications that enable organizations to collect data from internal and external sources, developing and defining data queries, reporting and data visualization to make analytical results clearer and more accessible to corporate decision makers or operations workers.

Understanding what a scientist does or connecting analysts with business management can only have positive effects on a company's business because each employee can combine their data into a meaningful task through software and access all the information needed to perform tasks more effectively and lead companies to rely entirely on BI systems to keep pace with increasing competition on a daily basis. The modern conditions of hypercompetitive globalized business have imposed a different pattern of behavior than in previous years, Today's manager is expected to anticipate future events and processes, recognizing business opportunities and potential threats.

Companies and organizations that fail to comply with Data Management practices or processes risk losing competitive advantage, market share and accompanying revenue. Therefore, such companies must clearly and precisely define their strategic goals and develop their short-term and long-term plans that lead them to achieve them. Gaining information and knowledge to gain insight into future opportunities and threats, as well as responding quickly to those same opportunities and threats, is a key competence of a winning company. An important characteristic of the modern world is that it contains many uncertainties and as such makes it difficult to conduct business activities and adjust in business organizations which, in addition to internal weaknesses, must be focused on threats in the form of political and security situation and socio-cultural aspects. union. This approach will continuously change and improve companies, primarily based on experiential learning, which will result in the continuous development of innovations, the implementation of which further encourages their development and survival in a constant changing market.

2   The role of bi systems in organizations

The business environment in which today's companies operate is dynamic and uncertain. The companies themselves have to adapt to continuous changes in the market, existing technologies and available labor. In order for a company to be able to operate in the domestic/foreign market, it must be guided by the strategic planning of the organization that touches on the various areas that give the organization a competitive advantage. Such plans allow the company to better target consumers, attract top employees, have the best suppliers, which will lead on return on investment. At the moment when business intelligence systems are implemented, one cannot avoid misunderstanding the goals of the organization in the sense that the actions of all employees will go in the same direction. The motivation of companies in choosing the market that will best suit their capabilities while providing the best basis for starting a successful business in a particular market and continuous monitoring and knowledge of their capabilities and resources, lies in gathering quality information and conducting detailed and accurate analysis of target market conditions.

It is the task of every company to provide its employees with the possibility of timely access to information and their effective analysis, which will enable the company to make a valid decision and take appropriate action.

Based on these activities, the value of business intelligence comes to the fore, emphasizing abstract thinking and innovative ways of solving problems in a timely manner, because appropriate actions are taken to improve business goals and overcome any threatening event of business interruption. This is possible only when the right business processes are implemented, intended for the systematic collection and analysis of information with the aim of laying a quality basis for business decisions. Every company fights on a defensive or offensive mode where the defensive mode is characterized by an approach that focuses companies on reducing their own costs, number of employees, concentrating on the most profitable items and customers waiting for better times in the future. On the other hand, the offensive approach allows the company to focus on finding new markets or increase its market share while competition is weakened, thus defining areas where they can provide certain improvements, redefine market positions and determine valid measures to neutralize competition. as well as discovering new potential for its further development. In order for an organization to be successful in its business, it must adopt its own long-term and short-term business strategy and thus increase the success of investments in the company itself. It is inevitable that such an approach entails a large amount of data (Big data) that needs to be collected and analyzed. Such an amount of available data is increasingly becoming a necessity for a company to remain competitive by expecting such data to be extracted, refined and provided for further efficient use. "Manual" review and drawing conclusions at the scientific and analytical level is not possible if we take into account the increasing pace and scope of changes in the external environment of the company where such a quantity of data can not be adapted to one individual company. unsatisfactory.

Numerous companies are developing data capitalization, which combines competitive advantage with the efficient use of large amounts of data as a driver of the desire for existing companies to become data-driven. It is known that the output productivity of such companies is 5-6 percent higher than organizations that do not use these models, so organizational settings and the list of activities performed by the company are trying to reduce and previous research shows that

the complexity of the system is one of the main problems. unnecessary complexity will have a significant negative factor in business. Part of such complexity can be reduced by using ICT technology by using best practices in terms of advanced techniques, methods, processes and activities, which are able to contribute to a positive work result. With the advent of ICT, BI, cloud and the development of advanced flexible software over the past two decades, the prerequisites for progress in the business segment as well as enabling real-time query correction by users and data sources have been achieved. The development of ICT is increasingly playing an important role in the lives of individuals and organizations, changing all segments of our lives so far, and as such is tailored to each potential entrepreneur.

According to scientists, by investing in BI systems, companies will contribute to safer business development, and the exponential growth of the Internet and the use of advanced technologies has simplified and expanded the reach of BI platforms themselves, which become key systems for business companies while ICT technology itself has entered the third generation of its operation, thus enabling access to an increasing number of devices. It is estimated that 22 billion devices were connected in the world in 2018, while 50 billion networked devices are expected in 2030.

(Source: https://www.statista.com/statistics/802690/worldwide-connected-devices-by-access-technology/). The figure shows a graph: Howson, C. 2008) from which the relationship of BI utilization to areas of activity in enterprises is visible.
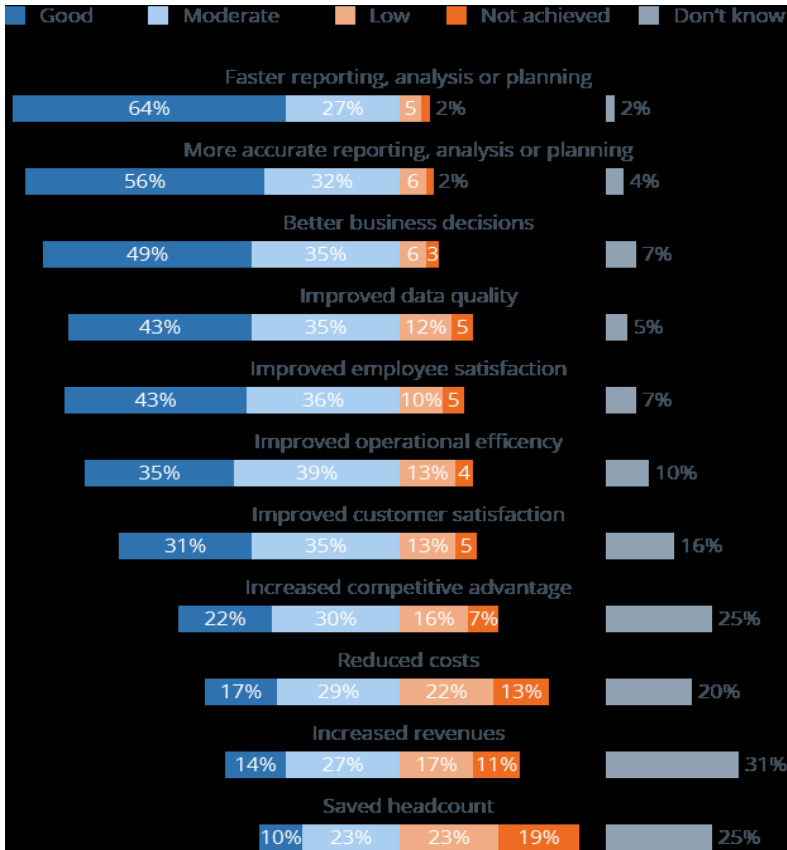
Graph 1: Achieved advantages by establishing BI
Source: https://bi-survey.com/benefits-business-intelligence

Systems are developed through software packages that are compatible with knowledge bases and artificial intelligence methods that enable the simulation of business decision making while companies combine methodologies, technologies and platforms for storage, mining and data processing evolving from information management to intelligent BI management companies. based on new professional systems that help make decisions that are most likely to be successful in future business. Previous research and analysis of business intelligence indicate that its application in companies is a matter of rational choice, which brings them a number of benefits through increased decision-making efficiency, greater competitiveness but also significantly faster revenue growth compared to companies that do not apply it. The quality of the analysis of the above is determined by the collection of business information about the external

environment, since it represents the totality of information, cognitive and action skills of the company. Such an analysis can be divided into four basic phases. The first phase is related to scanning the business environment and is based on data collection, the second phase is focused on formulating a strategy or development of long-term plans, the third is related to the implementation and the fourth to evaluating or monitoring the implementation of business strategy. Every business success and gaining a competitive advantage requires constant engagement at all levels that affect the business, which means continuous monitoring of the market, competition and the environment in which you operate or want to do business. Source: https://hrcak.srce.hr/84678

It is important to point out that most companies that have an institutionalized business intelligence department or implement some activities from this system have significant benefits in terms of forecasting and managing risks, identifying profitable market niches, strengths and weaknesses of competitors, developing new profitable products, monitoring external factors on business, increasing productivity, better communication and collaboration within the company, managing end-customer relationships and profiling business partners. In order for companies to become leaders in such circumstances, they must adapt to a new culture of cooperation with customers, suppliers and even competitors, which creates the need to form a new professional profile of business professionals (entrepreneurs, business managers, economists, financiers, etc.) who meet the requirements of post-industrial economies with appropriate competencies reflecting the ability of people and organizations to work effectively with information that includes monitoring the environment with the characteristics needed to prepare administrative decisions, generalize and systematize information sources and interpret data obtained in the context of developed business solutions.

Table 1: Comparative analysis of categories of data collected by companies that apply some business intelligence activities or have an institutionalized business intelligence department
Source: https://hrcak.srce.hr/205067

Data collected by empirical research (%)	Data collection measure	
	2010./2011.	2017.
Finding new consumers	94	98
Potential business opportunities and opportunities	96	98
Customers of their own products and services	97	96
Placement of products and services	97	96
Legal regulation (business)	93	96
New products, services and service prices	98	95
Potential business partners	95	95
Competitive strategies and financial conditions	91	93
Trends in science and technology	83	91
Economic situation	91	89
Securrrity situation	53	71
Personnel structure and potential competitors	68	67
General political situation	54	56
Sociocultural aspects	55	49

3   Information and innovation - the base of modern business

Business inteligence - BI is defined as business intelligence reporting activity in the business world planned, organized and implemented by business entities, which involves the legal collection of public and publicly available data by ethical means through the conversion of data into ready-made business intelligence analysis (business knowledge) to support managers in making and implementing the best possible business decisions to maintain its position in the business environment, avoid any threats and ultimately for overall qualitative progress. (Source: https://hrcak.srce.hr/84678).

Although the collection of large amounts of digital data has already become a standard procedure, the use of data for new services and the development of the most acceptable business models remain challenging challenges. Data is able to create value for the company and the innovation of business models of data-

based services can affect different parts of the business and is accompanied by certain challenges related to data, so it is necessary to reach for tools that can process, analyze and store such data. management who can further make adequate business decisions. Such tools are derived from the concept of business intelligence and we are talking about segments such as ERP, CRM, OLAP, accounting applications, Office tools and many other free or commercial applications. Nowadays, data and analytics are on a par with capital and people as the basic assets of an organization, so its task is to find a wide range of alternatives for obtaining them in order to innovate its existing business.

Innovation is one of the most important components of SME development, which is being developed in parallel with ICT and BI. In today's business world, companies must be based on innovation and diversity compared to competitors. Given the uncertainty of such companies, the innovation itself may also be uncertain both due to pressures from the environment and due to scarce resources in terms of money or lack of quality and educated staff. However, unlike large companies, SMEs have an advantage in terms of flexibility, simple organization, differentiation of products or services that allows faster adaptation to new needs or expectations of customers. There is a wide range of factors that influence the development of innovation, ie the innovative strength of the company. Among the internal factors, the share of highly educated workers and the positive impact of their active engagement on the innovation efficiency of companies most often stand out. In addition to the above, it is worth mentioning the technological competencies through investment in research and development and the strategy and organization of the company itself. External factors that determine the success of innovation strategies can be classified into three categories, namely cooperation with other companies, connection with knowledge centers and access to finance.

Companies whose top management is focused on business intelligence and is willing to enter into entrepreneurial activities with a well-developed system of encouraging entrepreneurial activities, can be expected that the existing corporate culture will undergo many changes because innovation will become an integral part of the evaluation process within companies. The development of innovations will form new business units, new business opportunities within

Internet technologies, as innovations will create new markets, new jobs and new business opportunities in them.

Furthermore, in order to make it easier to operate and operate in the market, companies connect into strategic alliances, thus achieving efficiency in minimizing costs, strengthening technology and cooperation in research and development. Connection with knowledge centers implies access to knowledge created outside the company, with professional consultants, universities and research centers in the first place, thus achieving significant innovation results achieved by companies with strong links to external sources of knowledge, but also continuously implementing their own research. Recent research on companies' innovation activities should mention their innovative activities, which may result in an increase in market share, which leads to an increase in revenue and a decrease in material costs per unit of product, which has a positive effect on total profit. (Galović 2016) In addition to the direct impact on profit growth through increased revenues and reduced expenditures, the effects of innovation can lead to improved business results, so products that are not harmful to the environment and contain improved health and safety aspects will meet the requirements much better increasingly sophisticated consumer needs, thus creating a positive image and as a result, positive business results, survival in the market and continuous performance of their activities. The importance of SMEs stems from the fact that their contribution to national economies is continuously growing and in the Republic of Croatia together they make up about 99% of the total number of business entities and have a share of over half of the value of GDP (Source: CEPOR, 2015, str. 14).

Business intelligence uses technologies, processes and applications to analyze mainly internal, structured data and business processes in order to solve applied business tasks through budget planning, profitability management, preparation of various types of management reports, which BI began to offer methodologies adequate to these requirements. For this reason, companies are actively looking for ways to optimize business processes and in order to achieve this, it is necessary to determine methods and techniques of data collection that are actually categories of data in a particular business entity that are of particular interest to business intelligence activities. identify ways in which they will be able to successfully enter the domestic or foreign competitive market. In parallel with

their search, BI technology providers create software for this type of task, directing them to assess the effectiveness of different business areas in terms of assessing achievable goals, assessing resource efficiency, business, investment and financing, business modeling and evaluation of investment projects. When we talk about business intelligence in companies, it can be assumed that most of it is focused on collecting data related to competitors, potential business associates or their consumers of goods and services, either existing or consumers to be acquired. It is important to point out that only half of Croatian companies that use business intelligence are not focused only on segments of the study but also on researching the general political situation, security situation and socio-cultural aspect of the environment in which they operate, which is a necessity. importance in the European Union.

The development of the Internet and the higher speed of data transfer, has enabled a revolution in the optimization and rationalization of business processes as well as introducing customers to the market. Therefore, companies are expected to have mobility with 24-hour employee hours, and since users offer the ability to change their queries and data sources in real time, solutions are visible in the cloud, intelligent applications, software and mobile devices where continuous by investing in intelligent systems, it will enable companies to develop their business more securely, and further networking will enable the development of other fields important to society, such as medicine, education, scientific research and other fields of such character that are necessary for the development of society as a whole. The rapid development of information and communication technologies and the socialization of business generate the problem of creating information support for the economic system of the company, whose solution for the future rises in the field of business intelligence technologies, depending on the availability of experts able to develop and perform effective work. organization management. For most companies, this problem is still relevant due to multiple approaches to its solution.

The development of management, business people, entrepreneurs and post-industrial society in general, there is a need to develop new methods for preparation and implementation of management decisions based on BI, not only creating qualitative conditions for existing companies, but also set fundamentally different tasks that require finding new innovative solutions to ensure

competitiveness. This type of economy leads to the emergence of new types of organizations, business forms, the transformation of hierarchical models in the form of a flexible structure. Furthermore, an important feature of the post-industrial economy is the shift of competition to the global level on the one hand, and to the level of the individual on the other. Competition becomes multilevel, penetrating the internal environment of the organization where it should be competitive at all levels of the external and internal environment. In the external environment, the role of company interaction with its partners in the format of the entrepreneurial ecosystem and networks becomes the most important subject of the new economy. In the internal environment, employees have an increasingly important influence on the company's competitiveness, as well as mechanisms for the implementation of knowledge exchange between them and the development of collective solutions. Nowadays, we are witnessing the emergence of a single global information space, and the strengthening of the intellectual nature through the introduction of new production and management technologies is a decisive factor in increasing the efficiency of enterprises. Speed and quality of response are the competencies of modern economists and analysts who indicate the ability to collect and process large amounts of data in real time to provide all participants with relevant information in a "customized" format through the process of preparation, adoption and implementation of management decisions. Therefore, BI technologies have broad prospects for application in modern business practice or post-industrial period and their success is determined by the growing demand of business users - owners and managers of companies of all sizes and business profiles who understand the value of business intelligence in improving business efficiency and ultimately - long-term success. companies.

In most economies, both developed and developing, industrialization is considered a necessary step towards economic development. The new risks to industrialization are linked to the results of economic and social changes related to the transition to a post-industrial society. Contemporary progress has generated important questions and challenges to conventional sociological and organizational theories, and such events are related to the "postmodern conditions" of a dynamic environment and postindustrial society, with the central theme of research based on innovation, information and knowledge. The result is visible in a society directly related to value adjustments in the post-industrial

mode of production and the modern concept of industrialization should represent an approach to post-industrial society, providing a framework for practical application and explaining the modern process of creating value for the company.

4 Business intelligence systems in small and medium enterprises

Small businesses can use BI to increase their budget efficiency which is a significant document in small business as it provides a printout of how to balance different goals through maximizing the limited resources available. Furthermore, business intelligence can help small businesses solve competition problems. Today, companies operate in a dynamic environment, where competition seems to drive all strategic business plans, which is a challenge that SMEs face on a daily basis and the need to turn them into small proactive and agile companies involved in the process by which organizations gather information about competitors. and customers using them in decision making and planning thereby improving their performance. The information that SMEs receive from business intelligence can be used for future strategic planning that helps prevent any threatening competition.

SMEs lag behind in adopting intelligent business systems because they are considered effective only for large companies that invest significantly in the organization's technologies with the necessary resources to install, maintain and employ highly qualified staff needed to work in BI technologies while SMEs generally have scarce resources. However, SMEs can use those technologies that are not complex and do not require a high level of management expertise. One of the economically feasible technologies for small and medium enterprises are spreadsheets that can process simple data in terms of their storage or financial analysis, which performs quality customer management by combining data in a simple and fast way. There are various factors that influence the planning of SMEs and the main cause is price. Although ready-made BI tools are available, their adoption is usually a time-consuming process due to the lack of detailed knowledge in terms of selecting the most appropriate solution to meet business needs. Creating a BI is often a task that requires a good knowledge and understanding of database modeling and data warehousing and such technical expertise is often not available to most SMEs. In short, the challenges can be narrowed down to two main factors: the costs involved and the lack of

knowledge among the available resources for handling complex BI tools. Although these factors are legitimate barriers for SMEs in adopting BI solutions, they should not prove harmful in promoting the application of BI solutions in SMEs. In order to overcome the issue of the budget of the company itself, it is necessary to identify cheap and free BI solutions.

There are different approaches to the introduction of BI solutions and they can differ significantly depending on the budget and knowledge of the company in the BI area. In other words, companies are able to afford one of several available BI solutions through a larger budget and knowledge, and as such a BI solution may include training and support of staff or hiring a dedicated team to implement and support the system. The following are the main components for implementing a BI solution

The main components of BI solutions (Source: https://files.eric.ed.gov/fulltext/ED571586.pdf

- Data warehouse,
- ETL procedure (extraction, transformation and loading),
- Business intelligence platforms

Data warehouse

A data warehouse is a repository designed to accept data collected from transactional systems, operational data stores, and external sources. The data warehouse includes this data in a concise form that is acceptable for analysis and reporting based on predefined business needs. The data warehouse allows us to obtain integrated data in a short period of time from which we can track trends and predict future events by presenting a database in which business data is collected and stored, but also a source of information that will be later processed and used in business intelligence reports. . The data warehouse should be designed in a way that easily adapts to changes in business having the ability to accept new data and changes in the hierarchy and relationships between data. The data warehouse should contain data from all functional parts of the company which would meet the needs of users for information at both strategic and operational level, and in addition to internal sources, the data warehouse is able

to collect structured and unstructured data and information from external sources.

Extract-Transform-Load – ETL

Extract-Transform-Load – ETL is defined as a set of processes used to extract, transform, and load data from one or more operational databases into a data warehouse. The process begins with preparations involving conversion, synchronization, and purification of data where the extraction phase aims to convert data collected from different sources into a unique format suitable for data transformation. Data pentage is used to aggregate data to be used at a later stage while synchronization and loading are important to avoid data inconsistency if the same attribute in the data warehouse has different values.

Business intelligence platforms

Business intelligence platforms are tools that help end users to analyze business through data processing, find out what happened in the past, why a particular business event occurred, have an insight into what is currently happening and try to predict future events. To succeed in a fast-moving business world, today's organizations must be data-driven and promote a data-based culture. To do this, leaders need a modern business intelligence platform that helps everyone see and understand their data. Business intelligence platforms are more than business intelligence software packages.

Advantages and disadvantages of business intelligence (Source: https://hrcak.srce.hr/160236)

Advantages:

- facilitation of the decision-making process
- the unique structure of reporting enables faster and more efficient decision-making and contributes to the improvement of business processes
- conducting a data analysis, it is possible to use collected data in the best way and increase the satisfaction of all users

- providing users only with the information they need and timely expressed information that leads to better communication and

- providing opportunities to increase the value of information as a resource. However, some

Disadvantages:

- the high cost of implementation of BI systems,

- in order to obtain useful results, it takes a long period of time to do a data analysis

- expensive and long training in their use and

- lack of adequate professional employees that can work in a BI environment in individual companies.

5 Application of the system in restructuring companies according to the activity

An important segment of any business intelligence system is the profitability monitoring system. Depending on the activities it performs, the profitability of the company can be analyzed taking into account three main business segments: manufacturing, engineering and logistics.

Production

The goal of each company is to allocate as many costs per unit of product as possible to determine which types of products or services are most cost-effective, that is, which products or services contribute the most to covering the costs they should focus on to maximize earnings. In some cases, this is extremely difficult to achieve because individual costs will not be allocated to a particular product or the allocation is made based on the estimated utilization of certain resources. However, the more precise the cost allocation, the more realistic the view of the company's business, e.g., average profitability per product or market. Business intelligence systems are the most important tools for implementing and analyzing such information and since a company uses data from different sources, a BI system proves necessary to integrate such data. Before integrating production data, it is difficult to monitor actual profitability, as one data source contains data

on raw material utilization or working time while the other contains data on revenues generated by product category. The task of the BI system is to integrate the specified data and display them in a joint report.

Logistics

In the analyzed company, logistics was previously only an ancillary activity where most of the logistics activities were related to the transport of goods and the use of specialized vehicles as tools for construction work. The existing transaction system provided very little data on the performance of transport units, which prevented any analysis. Services were invoiced using prices based on estimated costs per vehicle category, but a comparison of revenue and actual costs was only possible at the total revenue and expenditure level. With the advent of business intelligence systems, the possibility of collecting additional data was made, which enabled the analysis of the company's performance and the comparison of prices with the competition in such a way that data related to logistics systems could be monitored.

Engineering

The Engineering Unit is responsible for construction works and related activities, such as contracting projects, monitoring project implementation, supply of goods, coordination of logistics services, coordination of employee activities and similar activities. The data needed to track the projects and activities of the engineering business unit was stored in different sources, so it was necessary to integrate the data and create new databases that would include information about the company's operations that had not been previously monitored. BI systems and data storage capabilities enable the collection of all business-relevant data as well as quick and easy access to data that is converted into data needed for analysis. It is important to identify the specifics applicable to a particular company that are relevant to its management process. The BI system enables monitoring of product and customer profitability, and it is up to the company to identify categories and production processes that are less profitable and start implementing measures to improve and reengineer certain business processes in its business unit. The role of the team responsible for business intelligence system

development is to create platforms for data collection and integration by providing relevant information for relevant responses in the form of reports.

6   Overview of croatian companies in relation to global competitors

With the accession of the Republic of Croatia to the European Union, Croatian companies have faced strong competition and all other challenges posed by doing business in open markets. The task of these companies is to increase competitiveness and take their position in developed globalized markets through the differentiation of their products and services and / or by creating a cost advantage. For many companies in Croatia, this requires restructuring through which a comparative advantage can be achieved. During the restructuring process, it is important to apply a qualitative and quantitative approach in business analysis to identify key weaknesses and problems. The main tool in business analysis, which is the basis for making business decisions during the restructuring process, is the business intelligence system that allows companies to obtain information on factors affecting business during the restructuring process, business intelligence synergy, business process strategies and improvements achieved by implementing certain measure during the restructuring process. The increasing intensity of competition in global markets and the global economic crisis are negatively affecting the profitability of Croatian companies at the global level. There are several reasons in this context. One of the most important is that Croatian products are at a lower level of competitiveness in terms of price and quality compared to products coming from the international market. Therefore, it is of great importance to restructure Croatian companies, ensuring increased competitiveness and business efficiency. Such conditions require management to restructure the company to achieve efficiency and affect every aspect of success in its field and the use of BI technology and the development of business intelligence systems will play a significant role in achieving maximum effects of its restructuring.

Conclusion:

This paper presents an overview of business intelligence and its condition today, as well as certain predictions for the future. The implementation of BI systems is an endless project and as the competition becomes more aggressive, the environment and the future more unpredictable, analytical systems face increasingly complex requirements. At the time of the Industrial Revolution, human knowledge adapted to the work of machines, existing processes and products, while increasing the productivity of human labor. In today's market, supply is much higher than demand, which means that competitive advantage is not affected by a number of products but by their quality. This is causing the evolution of the economy from an industrial to a knowledge economy that encompasses ICT, BI and innovation. In the modern economy, knowledge has become the most important business resource, and modern business is becoming dependent on the concept of BI as a process of collecting significant external and internal data and turning it into useful information for business decisions.

Almost every company can benefit from the use of business intelligence, but there are not always the right conditions for its successful implementation and application. This is not only about the technical prerequisites, but also about the issues of corporate culture and the way in which business intelligence is approached. Today, the spread of business intelligence in start-ups has increased significantly than in previous years, so today almost 83 percent of SMEs use some BI solutions while the remaining 17 percent use operating systems (such as ERP, CRM or SCM) and Excel where there is a lack of functionality in terms of preparation and distribution of reports and analysis, planning and integration of different plans.

BI system tools are tailored to each business item and their needs. Companies that apply BI concepts in their business activities establish better control over information, make quality decisions and through this create a competitive advantage and new forms of revenue. In the future, BI systems will be present in all companies and their activities and the emergence of an improved cloud business information system will provide companies with better and more secure business opportunities. It is assumed that mobility will become the first prerequisite for quality business activities. The global market with an active big

data trend will experience rapid and steady growth and this business segment is expected to create 100,000 new jobs, which is a major motivating factor for young people looking for work in the future. Software implementation and training time will become shorter due to rapid changes in marketing and cloud solutions, intelligent applications, software and mobile devices will become the future of BI systems. Their further implementation will ensure better and safer business development. Today's BI systems are still under development. Therefore, there is no definite vision of what exactly our future will be like.

By increasing market globalization, strong competition, increasing speed with changes in market conditions and customer needs, all market participants face new challenges, so their task is to adapt to new market conditions with flexible and fast responses to changes. In order to achieve this, it is necessary for them to know the current corporate and market situations, which will provide the management with the information necessary for their planning and decision-making. This means that the traditional way of collecting and analyzing data such as spreadsheets no longer brings added value, but such a way of management makes it impossible to adequately manage time and allocate costs, often much higher than planned. To achieve this, such solutions have implemented predictive analytics, a very sophisticated element for predicting a company's future by giving a roadmap of where the data will be located and how the data will behave. In the current digital age, there is no time for intensive manual calculations, but modern software, supported by artificial intelligence, will ensure that users receive notifications every time a business anomaly occurs.

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