THEORETICAL APPROACH: THE IMPACT BUSINESS INTELLIGENCE ON INNOVATION

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Abstract- Demonstrated the use of business intelligence systems to help meet those conditions and their role in finding alternatives in decision-making for changes surrounding the Organization's environment, the business intelligence systems also provide visual presentation of data and information that is important and critical, which allows the Organization to compete, discover and make a decision. The use of business intelligence systems, contribute to, and play an important role in highlighting the creative talents of organizations and add value to their work, to get through the different innovation output that helps them to put new products and services, designing new processes and methods. The use of business intelligence systems, contribute to, and play an important role in highlighting the creative talents of organizations and add value to their work, to get through the different innovation output that helps them to put new products and services, designing new processes and methods(Thus the aim of study explore the impact business intelligence on innovation).

Key words- business intelligence, innovation, BI-NOVATION.

I. INTRODUCTION
The twenty-first century an era of knowledge and information, where studies indicate that information and data are doubly quickly every 18 months, so some organizations have a wealth of data and should be used as intended, to discover knowledge(Somer Dan, Richardson James :2004) And with increased competition between organizations and the challenges they face, the organizations are resorting to the use and development of computer-based information systems and intelligent systems, which enable the Organization to develop its business, products, services and access in the world of competition and excellence(Efraim Turban, et al, 2007) The evolution of information technology and its use give all various fields intelligence, be it artificial intelligence or business intelligence, are all new terminology arose to reflect on the impact of information technology on the activity of the organization which are not able to dispense with this technique(Scheps Swain:2008, it is not just an end in itself but rather a means to help the organization achieve its goals and contribute to the recruitment of business intelligence system properly and effectively guide the level of relationship that wants with its clients, the clients’ data collection and processing for conversion to information that decision makers need at various levels of management to take appropriate decisions of high quality(Mahdi Bahrami, et al), where the interests of both organization and client and shows the impact of these decisions to achieve greater profitability in a more competitive society(Shaker H. Ali El-Sappagh et al.:2011)
Under these modern developments, business intelligence is a form of good management sense to business organizations that creates, produces and markets. They need solid information and completely usable. Data analysis and organizing them in the form of information, became more important in identifying markets and client needs as well as product characteristics(Efraim Turban, et al: 2007) Demonstrated the use of business intelligence systems to help meet those conditions and their role in finding alternatives in decision-making for changes surrounding the Organization’s environment, the business intelligence systems also provide visual presentation of data and information that is important and critical, which allows the Organization to compete, discover and make a decision(Olszak Celina&Ziemba Ewa,2007)

The use of business intelligence systems, contribute to, and play an important role in highlighting the creative talents of organizations and add value to their work, to get through the different innovation output that helps them to put new products and services, designing new processes and methods (Eckerson &Sherman 2008)

II. THEORETICAL FRAMEWORK
The term business intelligence appeared in 1958 by (Hans Peter Luhn), a researcher at the company IBM Computer and software industry, the idea about building an automated system to disseminate information on the level of the Organization, and a definition of the term as a set of concepts and methods to improve business decisions using computer systems support based on facts(Tutunca&Rus:2012), In the years of the 1960s became the use of information systems, based on providing managers or end-users of reports they need, for the purpose of supporting the decision-making process through the use of a management information system, decision support systems, but Used on a small scale within organizations such as production planning, andin the mid-1970s developed companySAS statistical methods such as SPSS , which is a statistical analysis, and resource planning systems (ERP) and customer
relationship management systems (CRM) and the development of the Internet and the emergence of networks (Han Jiawei, Kamber Micheline, 2006). The development of the Internet has led to the production of large amounts of data within organizations, and to take advantage of the vast amount of data, the emergence of so-called data warehousing (DW) and on-line analytical processing (OLAP) and after spreading, it’s heavily used under the name of business intelligence (Han Jiawei, Kamber Micheline, 2006).

The idea of the term business intelligence has been activated by Howard Dresner the employee in the firm Gartner in 1989, when the term business intelligence firstly appeared, so business intelligence was known as the action aiming the user, who reaches information and explores it by a computer and then analyzes this information and develops an understanding, leading to better decision-making (Mahdi Bahramiat, el: 2012).

Business intelligence has become an essential component in the information technology sector, which was considered an old dimension, it has been used as a synonym for decision support and analysis, but now it has become clearer, and his applications became clearly understood to ensure access to information, storage and retrieval and transmission (Wilfred Bonney: 2013) . The instantaneous availability of the right information is abbreviated to decision-makers, while previously the annual inventory is expected to see profit service or product, or wait for the complicated financial studies to determine the most profitable product, this modern concept for business intelligence reflects the quality, accuracy, time and type of reports that help make the right decision at the right time (Wilfred Bonney: 2013).

Researchers didn’t agree on the definition and interpretation of the term business intelligence. Turban has defined it as a combination of methodologies, processes, tools and techniques of the computer processing of data into information, and information with the accumulated experience into knowledge, and knowledge accumulated to intelligence that enables departments to take strategic and operational decisions. He pointed out that it is an integrated approach of the processes (such as the performance of business processes) and main goals through interaction and data access time, and their ability to provide managers with the requisite analyses that analyze current and historical data and compare them with previous time periods (Efraim Turban, et al, 2007).

While (David loshin) that business intelligence is the process and the tools and technology of using sophisticated computers to help transform data into information and information into knowledge and knowledge into strategic plans that help organization in the competition (Loshin David: 2013)

Negas defines it as computer systems that deals with Data collection and storage. It is a process of knowledge management through the use of Analysis tools, to provide information for the decision maker within the Organization to improve competitive advantage, so that these systems provide organizations with timely and effective information and models to help in decision-making, they also provide critical information at the right time that helps speed decision-making as they make the response time for the variables surrounding the Organization faster than (Solomon Negash, Paul Gray, 2003) but Olszak and Ziemba explained that business intelligence systems is currently the most advanced information technology and linked to the customer relationship systems and ERP systems which are the source of internal data to a set of concepts and methods and processes, aimed at improving decision-making within business and support strategies of the Organization, and that the task of business intelligence systems include discovery, integration, data warehousing, and analyze different dimensions so as to collect data from information systems and environmental organizations, such as the external reports and financial channels, diversity databases. (Olszak Celina , Ziemba Ewa, 2007) Azevne added that systems of business intelligence is the collection, access and understanding of the data and then analyze and convert them, to be one of the most important asset of the Organization, so as to convert data into information to improve business performance (Rajtric Irena, 2010). While Wayne Eckerson sees Business intelligence systems as systems that transform the data to a variety of information into products to serve the organization. The business environment is very complex as globalization and constantly changing of the customer demands have the greatest impact on organizations, and give great power to compete, and therefore organizations must turn out into smart organizations (working smarter) in order to gain a competitive advantage, rather than a reaction to the crisis, facing or finding opportunities to work with intelligence organizations to control the data, and have an integrated and valuable information to give workers the power to compete, and the perfect vision of business leadership. To achieve better goals and strategies, and smart organizations should use business intelligence systems, which help them to move quickly to meet customer requirements (Eckerson, at el, 2008).

In general it can be said that business intelligence is the process and the product at the same time: a complex of methods used to develop intelligence on the Organization, a product of information to predict the behaviour of competitors, suppliers and customers (Eckerson, Wayne W., and Richard P. Sherman 2008) Business intelligence is not information technology, applications of information technology in business, but it is essentially an
Competitive intelligence is a section of business intelligence systems, a process of collection and analysis, information management, characterized by precision from competitors and have an influential role in the process of planning and operations and the decision-making. The concept of competitive intelligence has many definitions. It was defined as the ability to extract vital and secret information from competitors, using some general information in order to formulate competitive strategy of the organization. While known society of competitive intelligence professionals defined it as an ethical collection accurate, precise, timely and adequate analysis and dissemination of information with regard to applications, business environment and competitors to the Organization itself(Negash salmon & paul gray:2003) While Tysonsees that competitive intelligence is the information on the competitive situation and performance, capacity and driving forces of the market and information about specific products and technologies. The objective basis of competitive intelligence is monitoring and control of the competitive environment in their competitors and competitive forces and the customer, in order to respond to changes in their environment, so they can prosper and grow and stay competitive, through their ability to predict what will happen and then develop appropriate responses to either gain a competitive advantage or assistance with the formation of the environment(Tsokanas Nikolaos & Fragouli Evangelia, 2012)

III. INNOVATION BASED BUSINESS INTELLIGENCE (BI-INOVATION)

Business intelligence is not information technology or technological application but an integrated package of activities and operations and analytical tools used in business, tools of its article are data and information and their outputs are knowledge and intelligence (Efrain Turban et al, 2008). A business intelligence helps organizations understand the data making it able to predict the effect of the future(Mahdi Bahrami at ,el :2012) We can complete the analysis of the data by collecting information on the operations of Goods marketing , sales organization and customer behavior, after gathering such data (where data collection is ongoing and constantly updated) are stored and organized in a way that facilitates reference and processed, and then the business intelligence technology is used to get detailed and impressive results, and make the business more effective and more efficient, provides business group of accurate information that supports and facilitates decision-making that allows identifying opportunities and predict hazards(Mihaela Muntean at el:2014). Depending on the means to collect evidence and information extraction, processing and utilization of timely business intelligence applications are the
cornerstone of many organizations in particular have a lot of data, so that decision-makers today need for detailed and accurate information is provided by business intelligence structure, which enables them to use advanced tools for data analysis(MihaelaMuntean at el:2014), business intelligence applications take great importance as practical information technology helps the Organization to manage the intangible assets, which are information and knowledge of the most important elements(Lloyd, John:2011)

Business intelligence systems affect the flexibility of the architecture of the Organization so as to make the decision-making process more responsive to changes in the ocean and the bound more rapidly and effectively and accurately supported by tools and techniques enable the resolution of sound decision-making time(MihaelaMuntean at el:2014), and guaranteed to improve competitive advantage, by tracking all aspects affecting it, and all associated parties, analysis of all the basic functionality and constituent support, this is not provided by traditional information systems(Lloyd, John: 2011), and the importance of business intelligence systems to assist decision makers on innovation And entrepreneurship through their capacity to direct and immediate access to information without the need for special training or programming of any kind, get data and information from multiple sources and related activities of the Organization, and knowledge in the form of templates and easy-to-use, increase the ability to view the administrative data to do deep analysis about the work, and make decision makers connected with data to perform analysis required to develop future directions for the organization(Pablo Ortega at el : 2014)

The data and information that enables the discovery of knowledge through innovation incubator where continuously clarify the customer’s requirements and access by competitors and provide services and products as quickly as possible(MuhmmadNofal :2014), it is the use of business intelligence applications and processes help to understand and use information, the basis of work to turn data into information and then into knowledge, with the need for a link between them, starting with data and abstract are facts and data in the selected frame when turning into information, when information experience resulting from the experiences become knowledge That are employed in all areas(Rajtric Irena:2010), it is clear that knowledge is a fundamental element in the value chain begins with references and data and information and to find out which are the basis of innovation, that when placed in the body of the information which if placed on the meaning and interpretation and dissemination of the knowledge and use of cessation of such knowledge generated ideas and create innovation, creativity and entrepreneurship.( Berson Alex, Smith Stephen:2007)

Conclusion

The current era is characterized in the rapid innovation and development of products and services within a very short time. The customer is no longer can be satisfied with a specific need for unsatisfied desires with options available because of the changes occurred to the Organizations environment. For example, the significant increase of competition and tremendous development in information technology and innovative processes. Therefore, it is necessary for the organizations to continue providing new innovative products to satisfy the customers and their needs through adopting modern and advanced techniques, methods and information technology suitable to the nature of the stage. Innovation and renewal are the prime axis of these methods. The most important elements to accelerate the innovation and renewal process, which has short life cycle, are the technology information, especially business smart technology, which contribute and play an important role in highlighting the creative talents of organizations, and adding value to their business, through acquiring various creative outputs, represented in introducing new products and services and design new methods. The investment of the smart business of an organization properly and effectively would guide the level of desirable relationship between the organization and clients. Collecting and processing the customers’ data to be converted into information benefit the decision makers at various levels of management to take appropriate decisions to the benefit of the Organization’s interest and work. The substantial impact of such decisions is the increase profitability in a more competitive community. In light of these recent developments the business intelligence is a good management sense type. So as the business organization could innovate, produce and market, surely they need reliable, full and usable information. The analysis and organization of data in the form of information has become more important in identifying markets and knowing clients’ needs in addition to the products characteristics.

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