# Business Intelligence: As a Strategic Tool for Organization Development (A Literature Review)

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Abstract: Business intelligence is a type of software that can harness the power of data within the organization. It offers a better way to sort, compare and review data in order for organizations to make a smart decision. Today the organization by the use of business intelligence they can use strategic business decisions that increase productivity, improve revenue, enhance growth. Business intelligence helps the organization to analyze data and make business with the speed in action and reaction. Erstwhile ten years with the approach to business management in the whole world has changed immensely and the organization has been able through knowledge and data conversation shaping the correct information. Business intelligence is a tool that helps organizations improve decision making by tracking, processing, storing and analyzing data and transforming it into insight.

Business intelligence is a tool which gives business requirement up to mark. Nowadays many organizations that have a system to collect data and other information, business intelligence helps them to make a strategic decision and get competitive advantages.

Keywords: Business intelligence, Development organization, Strategy.

#### I. Introduction

In today's world that is highly competitive involved in quality business intelligence has led the organization to gain a competitive advantage over other organization. Business intelligence makes better decision making effective utilization of resources, improve quality. According to M. Biere (2003), Business intelligence helps extract crucial facts from a vast amount of unstructured data and transform them into useful information that makes organization strategic decisions, improved operational efficiency, and business productivity. The objective of business intelligence in an organization can efficiently, effectively and automatically in-depth knowledge of all factors such as mi-

cro and macro-environmental factors. B. O. Hostmann (2007) stated in his research that business intelligence facilitates the functional organization such as processing offline analysis, data mining, business analysis, business research network, and knowledge management and other related activities. Nowadays organizations took advantages of business intelligence of its competitors to change their business strategy to use and important resources efficiently.

Business intelligence makes a powerful business report and data analysis which improves the performance and effectiveness of the organization.

# II. THE CONCEPT OF BUSINESS INTELLIGENCE

H. Wilensky (1967) stated the concept of business intelligence given by Richard Miller Deven's in 1965. Later in 1958, Hans Peter Luhn a researcher at IBM used business intelligence "an automatic system... developed to disseminate information to the various sections of any industrial, scientific, or government organization." later in 1989 Haward Dresener proposed business intelligence as an umbrella term to describe concept and methods to improve business decision making by using fact-based support system (Source Wikipedia). Business intelligence has a large impact on the effectiveness and efficiency of organization M. Michael (2009). Business intelligence can be divided into 5 parts: 1) Memory, 2) Organization learning, 3) Corporate communication 4) Reasoning, and 5) Product intelligence T. Matsuda (2009). According to Soloman, Nagesh and Paul gray business intelligence as a system that combines:-

- Data gathering
- Data storage
- Knowledge management

With analysis to evaluate complex corporate and competitive information with the objective of improving the timeliness and the quality of the input to the decision process K. Albrecht (2009).

# III. Main Features of Business Intelligence

Business intelligence software is a suite of tools design to the source, sort, consolidate, analysis and present complex data into a digestible report for insight. Organization use business intelligence for strategic goals such as:

- Identified SWOT
- Deploy resources
- Cost efficiency
- Generate insight for quick decision

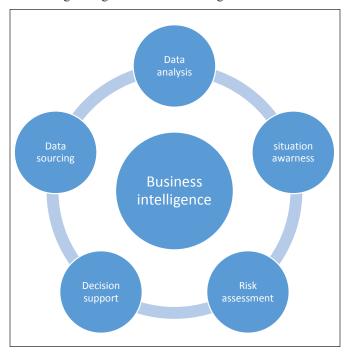
Benefits of business software intelligence

- Gain insight for growth
- Address urgent issues
- Ground data is immediate
- Get the big picture
- See the future components of business intelligence-(diagram include)

# IV. PROCESS OF BUSINESS INTELLIGENCE

Business is the process of transforming related business data into information, information into knowledge and with repetitive identification turning knowledge into intelligence. P. Karbhari (2006) stated in his research that business intelligence is a wide category of application and technologies for collecting, storing, analyzing and providing access to data to help the organization to make a better decision.

Business intelligence supports the activities: decision support system (DSS) querying and reporting, online analytical processing (OLAP), statistical data analysis, forecasting, and data mining. 5 stages of business intelligence are as follows:-



- Data Sourcing Business intelligence is about extracting information from multiple sources of data. The data might be text documents e.g. memos or report or email messages, photographs and images, sounds, formatted tables, web pages, and URL list. The key to data sourcing is to obtain information in electronic form. So a typical source of data might include: scanners, digital cameras, database querying, web searches, computer files access, etc.
- Data Analysis Business intelligence is about to synthesizing useful knowledge from collections of data. It is about estimating current trends, integrating and summarizing disparate information, validating models of understanding and predicting missing information or future trends. The process of data analysis is also called data mining or knowledge discovery.
- Situation Awareness Business intelligence is about filtering out irrelevant information, and setting the remaining information in the context of the business and its environment. The user needs the key items of information relevant to his or her needs and summarises that is a synthesis of all relevant data (market forces and government policy etc).
- Risk Assessment Business is about discovering what possible action might be taken, or decision made, at different times. It is about helping you're weighing up the current and future risk, cost or benefits of taking one action over another or making one decision versus another.
- Decision Support Business intelligence is about using information wisely. It aims to provide warning you of important events. Such as takeovers, market changes, and poor staff performance, so that you can take preventive action.

# V. Benefits of Business Intelligence

Business intelligence refers to a piece of information refers to an information system that converts data into knowledge with the intent to provide analytical information to users. (L. Barash et al., 2007). X. Xuezhong et al. (2009) explained that business intelligence is an umbrella term that includes the application, infrastructure, tools and best practices that enables access to analysis soft information to improve and optimize decision and performance.

- A Single Version of the Truth Organizations has numbers of systems that follow the same information such as CRM, financial operating systems and they have its own list of customers with the help of business intelligence. All the information can be combined without checking the different list of sources.
- Data Persistence Any information can be available at any point of time, it means if the data is updated or deleted it can be easily recovered at any time.

- Performance Once the data is stored in the data warehouse before analysis data is processed and analyzed in a timely manner.
- Flexibility The possibilities for reporting and analysis are never-ending. Business intelligence design with flexibility in mind so the solution can be recovered when needed.
- Efficient HRM Where human resource is not able to do complex analysis of the whole data sources. Business intelligence solved this automatically.

Business intelligence tools into daily operations of an organization can change decision making, increase in operational efficiency and improve in cost-effectiveness D. Loshin (2003).

#### VI. JUSTIFY THE USE OF BUSINESS INTELLIGENCE

The purpose of business intelligence in a business is to help executive business managers and other operational activities better and inform business decision. Organization use business intelligence to cut cost, identify new business and spot inefficient business process Jaiswal et al. (2003). Z. Sheng et al. (2005) stated in their research that business intelligence refers to the tools, technology, application, practices use to collect, integrate, analyze and present organization raw data into actionable business information. Business intelligence is a technology-driven process which includes various activities such as:

- Data mining
- Online analytical processing
- Querying
- Reporting

# VII. POTENTIAL BENEFITS OF BUSINESS INTELLIGENCE

Here are some other benefits of using business intelligence:-

- Accelerating and improving decision making.
- Optimizing internal business processes.
- Increasing operational efficiency.
- Driving new revenue.
- Gaining competitive advantages over business rivals.
- Identifying market trends.
- Supporting business problems that need to be addressed.

# REFERENCES

- [1] M. Biere, *Business Intelligence for the Enterprise*, Prentice-Hall PTR, Indianapolis, 2003.
- [2] B. O. Hostmann, "Business intelligence trends, with Gartner analyst," 2007. [Online]. Available: http://searchdatamanagement.techtarget.com/
- [3] H. Wilensky, Organizational Intelligence: Knowledge and Policy in Government and Industry, New York: Basic Books, 1967.
- [4] M. Michael, *The Intelligence Advantage: Organizing for Complexity*, Chengdu: The Press of Sichuan People, 2009.
- [5] T. Matsuda, "Organizational intelligence: Coordination of human intelligence and machine intelligenc," In P. Bourgine, and B. Walliser, (eds.), *Economics and Cognitive Science*, Pergamon Press, 2009.
- [6] K. Albrecht, "Organizational intelligence & knowledge management: Thinking outside the silos," 2009. [Online]. Available: http://www.KarlAlbrecht.com
- [7] https://cdn.softwaretestinghelp.com/wp-content/qa/uploads/2016/08/BI.jpg
- [8] P. Karbhari, "SOA trends: Service oriented business intelligence," White Paper, 2006. [Online]. Available: www.technologyexecutivesclub.com
- [9] L. Barash, and G. Bartolini, "A service-oriented architecture for business intelligence," *IEEE International Conference on Service-Oriented Computing and Applications*, 2007.
- [10] X. Xuezhong, and T. Qian, "Organizational intelligence and its impact on organizational innovation," School of Management Nanjing University, 2009.
- [11] D. Loshin, Business Intelligence: The Savvy Manager's Guide: Getting Onboard with Emerging IT, Morgan Kaufmann Publishers, San Francisco, CA, 2003.
- [12] Jaiswal, and M. Mita, Management Information Systems, Oxford University Press, pp. 382-398, 2004.
- [13] T. Moss, and S. Atre, Business Intelligence Roadmap: The Complete Project Lifecycle for Decision Support Applications, Addison Wesley Longman, Reading, MA, 2003.
- [14] Z. Sheng, "Measuring index system and method of organizational intelligence," School of Economics University of Jinan, 2005.

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