A Study on the Need for Organizations to Exhibit Business Intelligence

Mohammad Shahid Kamal

Research Scholar (Computer Science), CMJ University, Shillong, Meghalaya

Abstract— Business intelligence is the latest buzzword in the domain of business and organizations have understood and incorporated it as part of the system. From the cost perspective it is on the higher side, but if implemented is bound to be a success. In this paper an insight on the term business intelligence, the utility component of it, why the organizations need it in the world of today along with why certain multinational giants which have embedded as part and parcel of their system is also illustrated in details. In the final analysis the future holds good for this concept and the rewards are bound to come in the coming few years.

Index Terms— Business Intelligence

---◆-------------------------------------

1. INTRODUCTION

Business intelligence applications have been one of the fastest growing applications in the early years of the 20th century. They incorporate a set of tools as well as techniques to enable the retrieval, manipulation as well as the storage of data. A key feature of business intelligence is the widely capable reporting capabilities. It has become a persuasive business tool and approach since the origin of the 1990's (DeVille, 2006).

In the recent times business intelligence has given rise to the identification of business analytics. By the analytics factor it means that so much data is available at the disposal of the management that they have to make sense of the data in the first place. This should pave way for effective decision making which contributes to the rise of the business in terms of profits.

Figure 1: Business intelligence systems in organizations

Business intelligence is a broad term that encompasses a wide range of process, tools along with applications for gathering. It deals with presenting information about a business or an industry. Based on the facts their main aim is to facilitate decision making by levering the data. With the emergence of new technologies as well as applications in business intelligence the domain of business intelligence has undergone a sea change and very much part of our

lives. Typical examples would be the field of fraud detection, inventory management as well as real time marketing (Castellanos, 2009).

The business intelligence system consists of a number of databases which includes historical data along with a number of applications to analyze the data in the first place. A typical business intelligence system would include operational databases as well as the data warehouses which incidentally happens to be the heart of the business intelligence support system (Doom, 2009).

WHAT IS BUSINESS INTELLIGENCE?

Business intelligence is a situate of procedures, methodologies along with technologies that renovate raw data into consequential as well as constructive information. The domain of business intelligence can handle large amount of information and identify potential opportunities. If use is made of this opportunities along with an effective marketing strategy is build, no doubt the business can achieve competitive advantage of sorts. It is neither a product or a system, but an architecture as well as a collection of integrated decisional as well as support oriented applications that provides the business community easy access to business data.

Business intelligence is defined as a category of presentations, applications as well as systems that helps the users to make sense from a mountain of data. To someone unfamiliar with the concept of business intelligence, lot of questions remain unanswered in the first place. In a way business intelligence does not have an explicit definition, and this gives people little trouble while comprehending initially (Czernicki, 2009).

Figure 2: Business Intelligence

One could also refer business intelligence as an umbrella not only just for applications, but also for the intangible support systems that are vibrant and keep on changing. So it is quiet difficult to grasp the definition of the term business intelligence correctly, until and unless the context is evaluated in the full context.

In fact the definition of business intelligence is not that simple also. If one had to define internet how they would define it in the first place and one might have been using the internet for decades but may find it difficult to explain it in the correct manner. From the organizational point of view business intelligence is all the more important as if it is carefully applied can contribute to the increase in the profits.

One of the biggest time and energy savers is information architecture and this is particularly all the more when we apply business rules in the data, we get the same information in the data base of ours. This generally means we have to define it and create a common business rule for it once and forever. In fact we can reuse the information in thousands of ways, but we only need to define it once and forever. As an organization one has to define and commit to one definition of the data and apply these rules to the BI programme to ensure that everyone who is uses it is using the same data. Another important trait which is all the more important is the flexibility factor as the general notion is that things which are not rigid are termed as weak. In a way the platform should be designed in such a way that the servers can meet the enhanced demand of services in a big way. So it is quite clear that flexibility is the urgent need of the hour (Madsen, 2012).

UTILITY OF BUSINESS INTELLIGENCE

Companies are more interested in the concept of business intelligence to analyze the effectiveness of cross selling and to sell new products through marketing as well as targeted packaging. An ideal example in this regard would be the telecommunications company which are offering more services in the form of traditional as well as long distance calls (Stackowiak, Rayman & Greenwald, 2007).

In fact other areas of interest would include understanding the life time value of the customers and the response of the customers to the various promotion campaigns. It needs to be understood that the list of commercial business are extensive in nature.

The integration of business intelligence as well as the presentation software's like power point has added a new dimension in the domain of business intelligence. This has made data entry solutions more useful to the users. The business intelligence solutions provide data warehouse

solutions which can be assessed easily and business decisions made instantly. On the other hand the assessed data should be filtered as well as analyzed by the infrastructure which will make it more useful for the user. Companies should enhance the flow of information as the data is reported and presented in a systematic manner (Blokdijk, 2008).

Most of the companies even the midsized ones have a large amount of data lying in their databases as well as their transaction supporting systems. So the main aim of business intelligence is to look at the following facts

- Data from multiple points of view needs to be viewed from a single source. An example in this regard would be viewing the sales figure with the shipping expenses

- The ability to quickly summarize data from different sources. An example would be the total payroll spend with the total sales for a given time period

- The ability to compare the data over a given period of time. This could be in terms of months as well as years to see how the data has changed over time

- The ability to ask questions like "What if" which is based on historical facts and figures. An example would be if one is expecting a 10 % rise in the sales figures what would be the rise in the corresponding expenses (Jones, 2010).

It has been observed that business intelligence as well as decision trees go hand in hand. They have a host of features in the field of engineering as well as science. Perhaps the greatest utility of decision trees is that they can communicate in a visual way and the desired impact can be felt immediately. So it is quite clear they are easy to produce as well as understand also. One of the greatest specialities in this regard is to present things in a step by step fashion (DeVille, 2006).

WHY ORGANIZATIONS NEED BUSINESS INTELLIGENCE

The economy is driven by cut throat completion with landscape changing at a rapid pace. So it becomes quiet necessary to make sound business decisions based on the correct data. If a proper business intelligence system is implemented correct business decisions can be made. It is a sound decision system as well as a database which provides the professionals with accurate information for taking proper business decisions. In this regard data about the organization details along with the profiles of the

customers are generally provided. To be precise if all the information is at the disposal decision making becomes a pretty easy task.

These days business intelligence has become indispensable to the fast growing business environment in several companies. The enterprise business intelligence is responsible for harnessing the raw data into usable form for the company. This will help the company as well as the management in ascertaining the current marketing trends, assess the behaviour of the customers and will contribute to make business decisions intelligently. In the last few years the wings of business intelligence has expanded its wings to the back office needs like productivity as well as efficiency. However it should be kept in mind that the companies cannot extract all the information without the presence of a data warehouse (Blokdijk, 2008).

The capability of the companies to acquire information is becoming all the more critical due to the reduced business cycle. The pressures associated with the competition forces several organizations to create and evolve decisions based on the business data available. Business intelligence can turn valuable data into information fast, and this can formulate as well as add millions to the profits of the company and on the other side of the coin makes it easier for the management to decide well on the issues of the organization.

This brings us to the fundamental question on why does organization need business intelligence. The answer is simple, as to survive in the world of cut throat competition one must develop a winning strategy. In fact in order to develop a winning strategy one must be able to anticipate the future conditions and in this regard understanding the past would be the key.

Organizations grow and prosper as they gain a better understanding of the environment. Most of the managers would want to track the daily transactions to ascertain on how the business is performing in terms of profits. By synchronization into the operational database, the management can work on strategies to develop goals for the organization. Given the competitive pressures involved managers are always on the lookout for competitive advantage through product development as well as maintenance. Managers understand the fact that the business climate is dynamic and it requires prompt action on the part of the managers to remain competitive of sorts. Different managerial levels require different decision support systems. So the companies and software vendors address the multi level support decision systems by creating independent applications to fit the needs of the particular areas (Rob and Colonel, 2009).

In the rapidly changing world of business consumers are demanding quicker as well as more efficient services from the companies. To stay competitive companies must meet or exceed the expectations of the customers. Companies have to rely heavily on the business intelligence systems to have a glance into the future as well as stay ahead of the trends. The instant" internet experience will create the framework of business intelligence in the future, but in the midst of this the business process will have to exploit and accommodate the real time flows of business data. So it is quite clear that the future capabilities of business intelligence will increase in the same way as the expectations of the customers (Ranjan, 2009).

The organizations need data not only to survive, but also compete. How the organizations transfer the data into actions is the crux of business intelligence. The basic questions which an organization asks while referring to business intelligence is like a newspaper headline- when, where and how. The ability of the organization to ask questions and get immediate answers is the critical factor for the success of the organization. In some organizations there is a small group of people who understand the data, where it originates and how it can be exploited for enterprise benefits. These people are the gatekeepers of the data of the organization. On the other hand different departments may require additional information, customer understanding as well as vintage points that could exploit and transform the data into actions. The organizations need a way to place the analytical power of the gatekeepers to a large audience (Aanderud and Hall, 2012)

Managers need the right information at the right time in the right place. This is the mantra for the modern management practices. In today's world business cycles are compressed, faster as well as more informed and better decision making is therefore a competitive advantage of sorts. So the organizations have to be smarter in approach and paying careful attention to the business intelligence is a necessary aspect of doing business in the first place. So it is a matter of no surprise that organizations are championing business intelligence. The executives as well as the managers need business intelligence solutions to manage the business in a better way. Organizations along with enterprises that fail to implement business intelligence face the distant disadvantage of competitive advantage. To be successful organizations must have a holistic approach to business intelligence (Turban, 2007).

The ultimate goal of business intelligence is to provide the managers with information about the business in time to allow them to make decisions that can solve problems or can take advantage of opportunities in the first place. Not only the decision makers are provided with information about events, the business intelligence system allows them to explore the underlying data in order to understand the problem in a better way. Business intelligence is needed in the world of today because of the fast pace of change of globalization, innovation, competition as well as the regulations in place (Sauter, 2010).

EXAMPLES OF ORGANIZATIONS WHERE BUSINESS INTELLIGENCE HAS PRODUCED THE DESIRED RESULTS.

Business can optimize the investment in the ERP system by closing the loop between the ERP systems and the business intelligence systems. The loop is determined when the company finds valuable information from the ERP system and it closes when the company discovers those feedbacks back into the ERP systems to continuously improve the process of business. An example of such a module would be an online company which can ascertain the behavioural patterns of the customers and then update the operational systems with the recommended products. This is all the more convenient as next time when the customer visits the operational system would tailor the web page to meet the requirements of the customers (Leon, 2008).

Management information system providers like SAS, IBM as well as Oracle encourage real time reporting that allows the decision makers to stay connected with the dynamic changes in the business. An example in this regard would be the University of Minnesota which uses a dashboard from IBM to monitor the enrolment process. It also allows understanding on how the tuition is monitored along with the corresponding costs of instructions by closely applying the law of demand as well as supply courses.

The information produced in MIS reports is commonly referred to as business intelligence. In fact it is a contemporary term for MIS designed to meet the specific needs of the business. It has become a buzzword in the world of business because of the ability of making the business moving forward. So it is quite clear that good business intelligence makes way for smarter decision making along with providing the business a competitive advantage of sorts. Such is the importance that many corporations have adopted the term business intelligence to label their systems. In this regard Oracle has a separate division known as Oracle Business intelligence as well as Microsoft has SQL server business intelligence (Kenneth, Baldauf, and Stair, 2011).

Business intelligence and IT professionals become equally exasperated with each other as they tend to be opposites. However the degree to which the Business intelligence can foster a partnership with the domain of IT is the key to the

success of the organization. Research points to the fact that 55 % of the masses believe that this partnership is crucial for the growth of the business which is followed by the executive level support which stands at 53 %. In fact for the success emergence of business intelligence opposites attract (Howson, 2008).
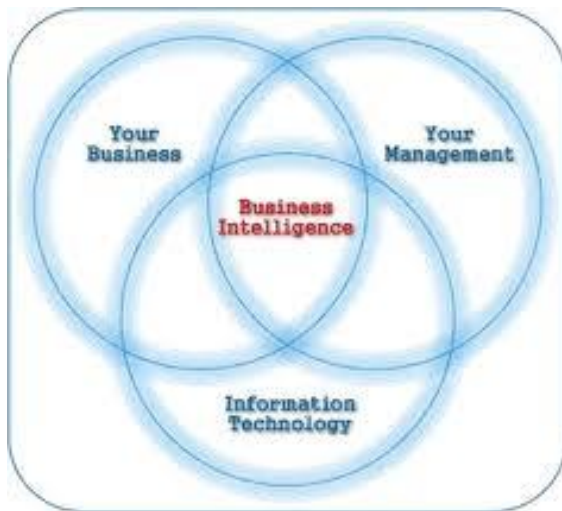

Figure 3: Business intelligence in the domain of IT.

The generic act of 1988 in the Philippines aims to promote the use of generic drugs by making it mandatory that the name of the particular pharmaceutical company should appear on the package of each and every drug (IBP USA, 2008).

CONCLUSIONS

Most of the business houses will tend to benefit from the business intelligence software's. It is used to tackle a wide range of unruly data. These data could be in the form of identification of top customers as well as fine tuning the pricing options. From the organization point of view they could be restaurant chains as well as retail professional teams. The difficult part in this regard is that business intelligence tends to costly and can only be implemented by large corporations. The positive aspect in this regard is that some medium sized companies are providing business intelligence at an affordable price.

All said and done the expenses incurred in business intelligence is all the more worth if the organization has sufficient funds at their disposal. They can provide considerable value when the benefit is considered they may have for an organization. The business environment is volatile and one needs to analyze and present the correct information in the right manner at the right place. This will pave way for correct business decisions. Business intelligence takes into consideration the human element and it will benefit the professionals.

REFERENCES

1. De Ville, B. (2006). Decision Tree for Business Intelligence and Data Mining: Using Sas Enterprise Manager. NC: SAS Institute.

2. Castellanos, M. (2009). Enabling Real-Time Business Intelligence: Third International Workshop, BIRTE. Berlin: Springer

3. Doom, C. (2009). An Introduction to Business Information Management. Malde: ASP

4. Czernicki, B. (2009). Next-Generation Business Intelligence Software with Silverlight 3. NY: Springer.

5. Madsen, L. (2012). Healthcare Business Intelligence: A Guide to Empowering Successful Data. NJ: Wiley

6. Stackowiak, R., Rayman, J., and Greenwald, R. (2007). Oracle Data Warehousing & Business Intelligence Solutions. NJ: Wiley.

7. Blokdijk, G. (2008). Business Intelligence 100 Success Secrets - 100 Most Asked Questions.

8. Jones, D. (2010). The Shorcut Guide to Achieving Business Intelligence in Midsize Companies. USA: Realtime

9. Rob, P., and Coronel, C. (2009). Database Systems: Design, Implementation, and Management. USA: Thomson

10. Ranjan, J. (2009). Advances In Data Management. Delhi: Macmilian.

11. Aanderud, T., and Hall, A. (2012). Building Business Intelligence Using SAS: Content Development Examples.

12. Turban, E. (2007). Decision Support And Business Intelligence Systems, 8/E. New Delhi: Pearson

13. Sauter, V. (2010). Decision Support Systems for Business Intelligence. NJ: Wiley.

14. Leon, A. (2008). Erp Demystified, 2/E. New Delhi: Tata McGraw.

15. Baldauf, K., and Stair, R. (2011). Succeeding with Technology. NY: Cengage.

16.   Howson, C. (2008). Successful Business Intell.
        New Delhi: Tata McGraw

17.   Ibp Usa (2008). Philippines Business Intelligence
        Report. USA International Business Publications