

A Study Of The Impact Of Business Intelligence On The Finance Function

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ABSTRACT

In the fast paced and data driven business world, the importance of efficient business decision making is growing by leaps and bounds. Technology is transforming the way business organisations operate business. It has given rise to some very powerful Business Intelligence tools. Although the entire organisation is making use of BI tools, but its use is very important in the finance function of the business. BI tools are helpful in the operational efficiency by providing a robust mechanism to prepare data driven information and reporting, financial planning and financial analysis. Since there is always an increasing need for making quicker decisions in response to rapidly changing market and customer demands, a variety of data is considered not only for the organizational purpose but for external business environment such as market competition and other non-financial report. It is evident that the focus has been changed from reporting to monitoring to reviewing and providing strategic understandings, acumen, and analysis to support all the function in the organisation. The BI environments have been implemented on a large scale to deliver a wide range of standard reports. It is imperative to maintain the quality of financial reporting meant for internal and external stakeholders and it needs to adhere to high standards.

Keywords: Business Intelligence, Financial reporting.

INTRODUCTION

Finance is one of the most important functions of organizations in today's highly competitive business environment. In fact, taking timely and logical decisions, finance function plays a key role in establishing and sustaining successful businesses. Increasing complexities in business and information overload have made many business organizations to come up with sophisticated tools and technologies to assist in finance function. This has posed pressure on the organisations to meet the demands for latest and current technology which can provide individualised business solutions (Nilsson and Ritzen, 2014)

Business intelligence (BI) is one such tool that helps organizations in analyzing information and taking effective business decisions.

According to Andy Morris (2021) "BI is the technology driven process that enables businesses to organize, analyze and contextualize information from around the company. To support decision-making, a BI system needs high-quality data inputs. Your financial accounting suite is a key source for shared, accessible data that can be supplemented with BI-driven reporting, predictive analysis, data mining and third-party feeds".

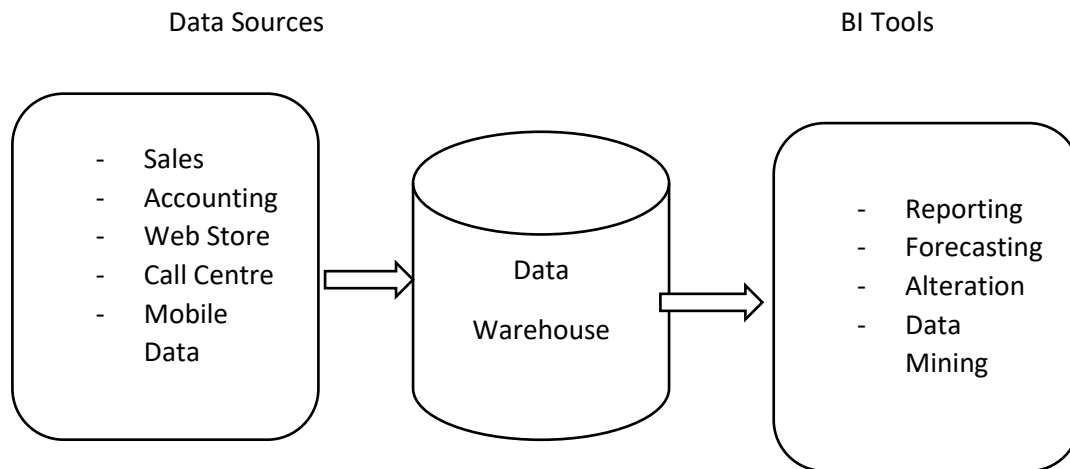
Business intelligence is an umbrella term that covers the skills, processes, methods, technologies, applications and practices which are used to collect, process and analyze heterogeneous and distributed data. It is based on numerous activities such as identifying, collecting, extracting, cleaning and analyzing data. Business intelligence helps organizations to optimize resource usage, improve performance and perform productive analysis.

During the last decade, significant numbers of organisations of varying sizes and within a broad range of industrial sectors, from manufacturing to health services to the financial sector, have been implementing systems for BI in order to support decision makers and help achieve improvements in the performance of organisations (Kappelman et al., 2016).

Most of the BI tools are available in the form of ready to use software such as **Microsoft Power BI**, **SAP Business Objects**,

Tableau, Datapin etc. These softwares enable business analysts and decision makers to screen and analyse data and reach a conclusion rather than depending on probabilities.

Though BI holds enormous potential, its real-world implementation is determined by technical and organisational complexities and challenges. In such a scenario clean and consistent data become imperative for the organisation. Data for BI can be collected from different sources such as point of sales (POS), accounting records, web stores, inventory, call centers, social media and mobile data as shown in figure 1.



Conceptual Framework of Business Intelligence (BI)

BI is the art of making decisions based on information knowledge and experience. With the advancement and involvement of computers in our daily life, gradually various computer-based techniques have improved the BI processes. Computers are data processing machines that take input in the form of data and process it to generate meaningful information as depicted in figure 2. Nowadays, BI is regarded as a separate discipline encompassing elements of information technology, strategy, managerial accounting, corporate analysis and marketing. It enables gathering, analysing, disseminating and acting based on the business information, aimed at facilitating the resolution of management problems and making the best business decisions (Balaban&Ristić, 2006).BI tools make use of the computers to turn data into information and the information is further used to gain

knowledge and drive appropriate conclusion for making business decisions. This results in data transparency, consistency and information reliability.

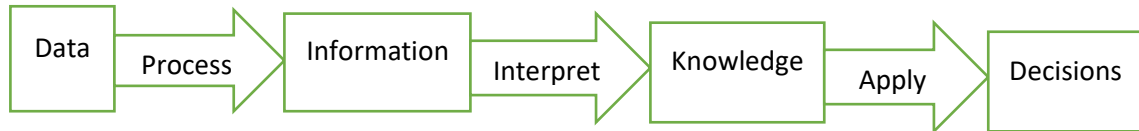


Figure 2

1. Determinants of BI in an Organisation

1.1 Technological advancement

Increase in electronic connectivity between people and organizations through the internet and intranet has generated and explosion of data volumes. In addition to this hardware with high processing speeds help in carrying out complicated calculations quickly. Availability of more and better calculated data can help in crafting better decisions if handled properly (Olivia R et al, 2009).

Here BI tools are required to make analysis and presentation of the data more comprehensible. This in turn facilitates deployment of business intelligence capabilities throughout the organization.

1.2 Competitive market

This decision making is a crucial task in this competitive business environment. For the success of the business decision makers need to perform competitive analysis of its business processes metrics and dimensions such as quality cost and time. "In order to make full use of the enormous potential generated in the basic information system on a daily basis, they require upgrades in the form of business intelligence systems" (Bogdon U, Durkovic E, 2011). Many organizations work in multiple industries and in collaboration with other industries as well. The decision makers therefore need a system that does not only provide information but also a decision platform to drive the growth.

1.3 Need for quick reflexes

According to Larissa Terpeluk (2003), financial integration has made the market highly volatile. Being extremely competitive, any opportunity that arises in the market closes very soon. The decision makers need to take extreme care in these matters. They have limited time to react and respond to such situations.

A business intelligence tool in such scenarios can provide guidance in taking fruitful decisions. It helps in measuring the key performance indicators (KPIs).

KPIs are the predefined targets to be achieved to meet the ultimate objective of the organization. Play more over it minimizes the conversion time of data to information operational time and delivery timeliness of the information. Effective VI Solutions can handle all these delays.

2. Application of BI in Finance

At the advent of latest technology, the functioning of the organization is bound to transform. Finance industry has to adapt the technology to make use best of it for transforming the whole industry. This has become possible because of fast paced Internet and the rise of mobile devices and applications. As a matter of fact, the financial institutions face escalating competition, changing customer demands, and the necessity for strong control and the risk management in a vibrant market (Amstar A, 2016). Among many new business decision making tools, technology is credit with developing a powerful tool, business intelligence (BI) tool. It has been in use by the banking and finance industry to exploit the customer database for gaining insights which eventually lead to smarter business management practices and efficient business decision making

By analyzing organizational data with the help of BI solutions, efficiencies of the finance department can be improved and streamlined not only to boost sales and marketing strategies and develop better customer service programs but also to lower risk by developing suitable risk management processes.

2.1 Risk management

In a constantly changing and uncertain financial world there is a need to rely more on fact-based actionable information gleaned from ever increasing data assets, to reduce risk wherever possible. There are such ways generated by BI solution that can lessen the risk of incurring losses in business.

- Quick and effective identification and reduction of incidence of fraudulent activities such as credit card fraud by tracking the transaction history of a customer
- Calculating the probability of a customer defaulting on a loan and estimating that recovery cost.
- Estimating the risk of customer loans accurately on the basis of the earning capacity and financial assets of the borrower as well as the existing economic climate.
- Enabling the financial institutions to quickly identify potential delinquency cases and act early as a preventive measure by analyzing credit portfolios of customers.

2.2 Improving operational efficiencies and increasing profits

Ongoing costs can be reduced and existing resources and expertise can be maximized by analyzing operational processes and activities to understand growth patterns. This helps in making the best use of repeatability, developing effective sales and marketing campaigns by means of correct and detailed customer segmentation and analyzing and serving customer segments as per profit, costs and services used.

2.3 Customer segmentation

With the help of a world class BI solution, financial institutions can be accurately segment their customer customer-base to carry out certain functions as given below:

2.4 Effective modification of products and services

It is imperative to understand the financial needs and opinions of customers and consequently develop implement and offer new market leading financial products and services.

2.5 (Effective customer profiling)

- Analyze the data retained in the core financial institutions database and then on the basis of a range or buying capacity of customer segments and their geographies, find out the best profitable customer profile.

For example, Capillary Customer Intelligence is a web-based product of capillary solutions. Product helps in analyzing customers' data to understand them better. The product enables an organization to gain insights into sales, marketing and service activities while maintaining good relationships with existing customers and targeting new ones.

2.6 Enhancing customer satisfaction through understanding and transparency

Customer satisfaction ratings can be further increased by the financial institutions by proactively utilizing the store data to provide clients with a better insight into their individual transitional operations. This would allow them to manage their finances more effectively with a real time understanding of expenditures and payments. This helps the customers to keep track record of their earnings and expenditure patterns.

2.7 Securing current customers and decreasing attrition rate

Existing customers can be effectively retained by using data mining and analyzing techniques, which identify the reasons of customers switching to a competitor. This helps in implementing new processes and methods to reduce customer attrition rate and

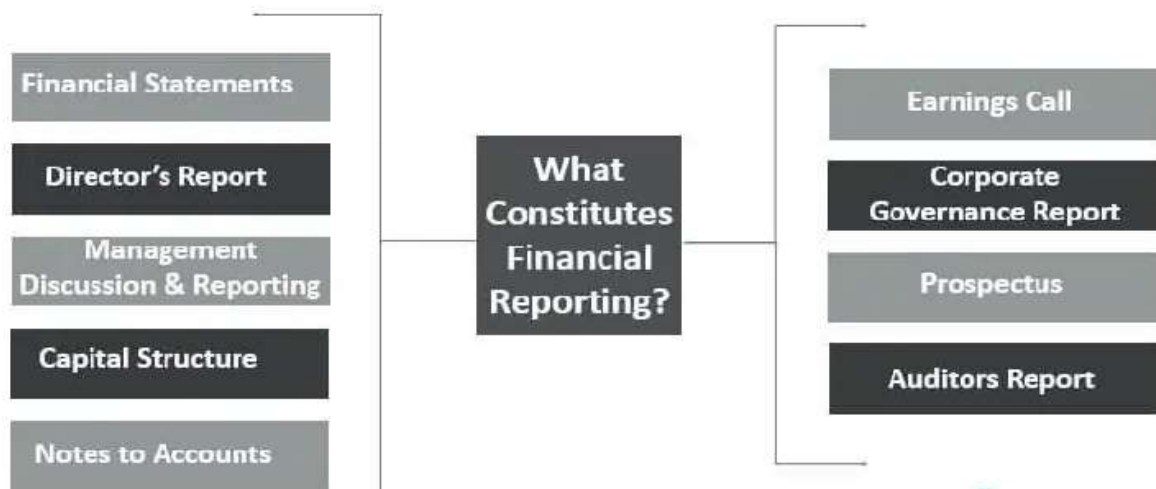
increase customer acquisition by tailoring products or services according to customers' needs.

3. Financial reporting

Financial reporting refers to the disclosure of company's financial information and other important activities to all the stakeholders be it shareholders, creditors, financial institutions, regulatory bodies etc to make them aware about the company's actual financial position (Madhuri Thakur, 2019)

Financial reports are documents or records that allow you to track and review the financial status of your business.

Financial Reporting



Source: Wall Street Mojo

The month-end financial reports (balance sheet, Income statement and cash flow statement) provided by the accounting or enterprise resource planning (ERP) system and help organizations in decision making. Sometimes in a small and mid-market business, a financial report of the ERP or accounting system do not provide adequate information to help in decision making. Therefore, when requests for financial information (other than standard financial

reports) from the ERP system are put by these decisions makers, the 'Export to Excel' function becomes the default financial reporting solution.

This needs to outdated information, list of time, unnecessary exposure to human errors and even what some people call the spreadsheet hell which is the situation when companies find themselves overloaded with the reams of spreadsheets cobbled together for reporting, analysis and forecasting.

Month-end financial reporting is not new, what is new is the idea that the primary data exists in the ERP or accounting system for automated financial reporting that quickly and easily provides much more than the basic financial information. Most finance departments are still struggling to go with the reporting demands despite the abundant IT reporting tools available. We often depend on spreadsheets to fulfill these demands. A robust information model helps in an easy yet powerful reporting. Does real time nature of the single ledger system and the financial information models flexibility provide the most genuinely responsive system available in today's market. It is important to provide users with the reporting and BI capabilities that match their technology references and needs.

The following are the main features of financial reporting system:

3.1 Drag and drop report builder:

This feature helps in creating sophisticated reports and analyzing them with ease.

3.2 Choice of dimensions in rows and columns:

This feature enables choose the right value of various dimensions, such as business unit, department, region, product, customer, project, matrix, assumptions and time and drag them into the relevant rules and columns of the report builder.

3.3Filters:

These limit the data displayed in the report by filtering it by any dimensions, such as a specific sales territory, business units or sales channels.

3.4Annotations:

This feature allows you to include collaborative explanations, comments and questions on reports. These annotations can be weaved either within the body of the report or as foot notes.

3.5Automatic security lined set of reports:

This feature ensures that specific reports are visible only to the users authorized to access them.

4. Financial planning

Financial planning refers to the collaborative process that links a client and a financial consultant. This integrates relevant aspects of the financial circumstances of the client to maximize the client's ability to meet life goals (V L Bogan, CC Geczy, J E Grable. 2020). It is basically a scheduling for using financial resources, such as raising of funds, deciding the amount of fund and insurance low cost and lowest in the raised fine in the race to finance. In the short terms funds may be required to meet operational and working capital requirements, such as paying for the use of current liabilities and sales made on credit. In the long term finance is required to carry out mergers and acquisitions, expansion and diversification of the organization.

Finance professionals state that they find problems in collecting data from various sources and performing the analysis needed to answer questions about corporate performance in the financial sector. Therefore, financial institutions are advancing towards the adoption of VI solution. SST Insurance such as the acquisition of Google's by IBM and the purchase of high-paying by Oracle in the

BI tools market have been dominated by larger suppliers who are trying to expand their food in the finance department.

CFOs and finance directors are now beginning to play more prevalent rule in defining their organizations plans and strategies. BI tools help them in performing the following functions:

- Financial planning, good getting and forecasting.
- Financial consolidations and reporting.
- Analytics and dashboards.
- Financial governance, risk management and compliance.

Business Intelligence solutions enable organizations to forecast their cash requirements and predict the profit and loss in the next three, six, nine and twelve months.

The BI system provides the basis on which an organization can prepare financial plans for the future.

Discussion and Conclusion

This research paper is an attempt to understand the mechanism through Business Intelligence contributes to innovative approach to business problems by managing finance functions efficiently in a business organisation. There is an increasing demand to develop new and advance technology to take on complex business problems. The need for automated enterprise management, more efficient business process operations and control in the contemporary business organisations has become inevitable. Since finance function in an organisation is believed to be the most crucial function as it deals with all the activities relating to financing and investment. This function is responsible for extracting and producing a variety of data for varying period. The data is converted to reports for external and internal audiences. BI enables the finance department to provide vital information

mandated for numerous compliances. It customises various internal reports for the departmental requirements. The effectiveness of the finance function is driven by the factors such as diversity of the data collected and how easily the decision makers can interpret and use the data. In spite of utilizing the data for appropriate and efficient decision making, the finance department is still limited in the ability to use BI for summarising and reporting.

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