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## DATA ANALYTICS – A PATH WAY FOR FINANCIAL AND OPERATIONAL EFFICIENCY

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### ABSTRACT

The current business world is heading towards a new digital era which results in new business avenues, new business models and a thorough revamp of the existing business processes and control mechanisms. Such a scale of change demands the enterprises to prioritise the business initiatives with due considerations to the current vogue of customer delight, social media marketing and a clamor for data. These demands of the business will have a coherent impact on the competitiveness and success of the organization which is made possible with a visible application of digital systems all around, which will traverse the entire processes involved. In this context, it is also equally important to highlight the importance of data analytics as a constitutive segment of any business houses in the globe. From conventional and traditional systems overshadowing the businesses in the bygone times, there has been a paradigm shift in the way the business objectives are to be accomplished. The gravity of the data and its analytical reverberations have gone deep into the grass root level of each business units and are no doubt, deemed as stimulating factors of economical and operational efficiencies of these enterprises. The entire management hence are committed towards superintending the data in the most efficient manner and to take business advantages at all levels, say it be financial, operational or risk management. As every business in the world, now a days, focuses deeply on enhancing the revenue and profitability, and also to ensure persistency in generating qualitative financials, must pay due time and attention to exploit the big data professionally, by engaging data partners if required.

**Keywords:** Big Data, Data Management, Operational Value, Financial Efficiency, Business Intelligence, Risk Mitigation, Unification of Data.

### INTRODUCTION

Data Analytics is a discipline that uses data to arrive at conclusions by examining the raw data of various forms and the data technologists use these data to bring in, business intelligence, forecasting and business trends, to succor business houses to run on the track and as well to arrive at more concrete, result oriented decisions. The information gathered through data analytics sow the seeds for business growth in many ways, which include cost optimization, increase in the productivity, innovation and development of new products or services, glamorous marketing, contrive growth strategies and navigating revenue generations. There are four important categories of data analytics:

- Descriptive
- Dignostics
- Predictive
- Prescriptive

#### Descriptive Analytics

These types of analytics are used in dashboards, reporting and business intelligence tools. The technologists will be extracting reports like periodical revenue and expenses along with the respective break ups, upon the demand from the management. The current business performances are assessed through these analytics and this will help the business to compare the activities of the business in the past and in the present.

#### Diagnostic Analytics

Diagnosis refers to the examination of past performances of the business. These analytics will be helping to understand the business outcomes in the yester years and the reasons for those outcomes as well. Historical data are made as the basis invariably, for a perfect evaluation and assessment of future data to dissect the performances. The management will be able to ascertain the causation of specific events arose in the past.

#### Predictive Analytics

This type of analytics are most common as part of any businesses. The predictive analytics are used to identify statistical models, trends, and correlations which can assist the management planning for future events. These analytics will be aiding the management to forecast the outcomes against the trends.



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## Prescriptive Analytics

The companies use artificial intelligence and big data not only for prediction of the outcomes but also for putting ones finger on the type of actions to be taken against the outcomes. The use of these types of analytics will be in terms of running scenarios in anticipating the outcomes.

## The Need of Data Analytics in Business

The consistency in achieving higher business efficiency, by optimizing its performances is the key for success to any business. Bringing off persistency in qualitative earnings will be by default through strategically guided business decisions for many big enterprises. Data analytics is vital for the above-mentioned stratagems. For business consumption, the data analytics techniques are being automated into mechanical processes and algorithms which invariably will be working over the raw data. Understanding more precisely, the customers of the respective business and their needs can expressively be completed only through analysis of big data. To project the future outcomes, many business entities use data visualization and no doubt these insights will in turn help in identifying patterns to prioritize data collection and arriving concrete decisions for the future. As the risk factors associated with the businesses, which results into inefficiencies are perennial in the business systems, bringing down the same to the acceptable levels require an in depth root cause analysis, which are imaginable only through effective data analytics.

The frequent and spontaneous changes cropping up in the market can never be ignored by the business houses. Their timely response towards the same can only help business win over their competitors in the system. Certain changes will give way for new commercial opportunities in the market. Detecting such opportunities and responding more quickly with calculated decisions are achieved with the help of data analytics, through which a strong potential for taking the market advantage in turn are attained as well. Effective data analytics will be the most influential factor for new product developments or adding new features to the existing line of products. These regular professional exercises will be leading the entity towards captivating harmonious customer experience and delight.

## Using Data Analytics to deliver the Operational value.

Delivering the value is considered as the basic motto behind leading the analytics in operational decision making. The above fact highlights, the need of a very strong blend, the business operations to have with information and technology systems. The finance function and the IT functions of the business together can carve out a common platform for efficient and effective data management. As the businesses currently are marching towards attaining a core value in each element of its transactions, investments in technologies become inevitable. The organizations apparently are focusing towards increased investments in technologies and reporting more and more steps towards such digital investments to achieve qualitatively their objectives. These investment initiatives are progressively helping the management in managing their functional roles and responsibilities. The functionaries, with the base and support of the digital systems & data will be able to curb the silo mentality within the organization and can help to reap many benefits. To make the new digital data driven environment of the business work emphatically for the enterprise, the involvement of the management is central and instrumental. As their roles in the organizations are shifting from the narrow cost controller's perspective to a broad growth initiator, data analytics gains its importance. With the robust data management systems, the corporate will be able to ensure earnings quality and achieving persistency in earnings reporting, which is a cardinal market driving process. Moreover, they can sharpen their focus towards the following key result areas as well:

- Strategic decision making
- Architecting the business value across the organization
- Great care on Cost optimisation at all levels of the business
- Management of risks and complexity

## The most beneficial business constituent

The Data analytics benefit the commercial potentialities of any profit focused establishments in many ways. Certain aspects which thrust on these said benefits are inevitable to be understood from the business growth perspective.

**The Business Intelligence**, which encompasses a wide range of business functions are undoubtedly useful for carrying through advancements in operations and further its economic viability. This business intelligence frequently will be spotting the trends in the markets to conceive and implement new innovative business patterns, which boost financial conducts. The paradigm of London Stock Exchange, which makes more cash flows by producing data when compared to the cash flows from facilitation of securities trading, highlights and substantiates the above point.



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The role of **Market Intelligence and dynamics** needs a focused attention by the business owners which otherwise might put the enterprises into a competitive disadvantage and can even lead into missing market opportunities. Accessing both structured and unstructured data becomes inexorable for unconstrained reactions to switching trends. Taking no notice of the actions from the consistently evolving competitors will have a direct impact on businesses. A perfect exploitation of the market intelligence will direct the entities towards arriving at unique, competitive prices for ensuring margins. Unquestionably, this becomes incredibly serviceable information to help positioning the business in the market as against their competitor's contributions.

**Streamlining operations** is the need of the hour for the entities in order to enhance operational and financial efficiencies, which are attained through gathering and analyzing the data. An optimal inventory system can be designed to power the inventory dominated retail segments so that beefing up the efficiency through application of most dominant inventory techniques are made possible. Ascertaining market demands are highly integral to the success of the operations of the above segments and effective data analytics set the seal on the same.

Achieving an **Efficacious cost management** will be emerging towards colorfully illustrious bottom lines and cash flows. The supply chain operations of the businesses are highly complex which attracts huge costs and no doubt will even end up with cost overruns which in turn tear off the financial appositeness, if managed this specific activity miserably. Hence adopting a perfect mechanism to navigate such supply chain complexities towards more efficient routing becomes inescapable.

The risk factors associated with any businesses are practically not possible to be brought to null. The same can be brought down to a level acceptable to the business depending upon its respective risk appetite. Hence **Risk Mitigation** efforts must be a focused approach driven by those who are charged with the responsibility of governance which are ultimately put in effect through effective data management.

The **Unification of Data**, which means putting together all the data from various sources, is indispensable to draw or arrive at all business operational and financial conclusions. A single unified data will set to provide the business houses with an out and out view of their facts for business foresight. This unification of data will be resulting into bringing down the IT overheads, lowering the cost of data storage, and minimizing the efforts required for data management.

### Data Analytics, an undoubted mechanism to increase Earnings and Business growth

The fraud risk factors are posing greater challenges to the business world nowadays. Data analytics can effectively be used to deter and prevent frauds in an organization. Detecting potential signs of frauds, which would collapse the operational and thereby the financial performances of the business invariably, is intelligently to be carried out. The Financial Technology, better known as Fintech, describes the novelty technology, which aims towards beefing up and automating the use of financial services, are used to descry frauds in an organization. According to **Forrester Consulting**, the data driven organisations are 58% more likely to beat revenue goals. The data savvy enterprises are visibly manifesting better business performances by riding over their competitors who are not using their data very well.

**McKinsey**, the global management consulting company is of the opinion that leveraging upon the data will paramount to improved operations. McKinsey plunged into the data practices followed in the telecom sector and found that only 5% of the telecom companies are taking anchorage on their data potential. The consulting group is of the opinion that the operators can no doubt enhance customer satisfaction by as much as 30% and revenue as much as by 10% with robust data analytics from the data already existing with them.

**Netflix**, another giant of the sector, perfectly manages its customer churn rates through data gathering and analysis. The vast data base is flawlessly utilized to predict the contents, which the users are most likely to be interested. The personalized recommendations from various data points, contribute towards 80% of viewing on the services streamed by the company. The company is successful in generating, an annual revenue of over \$1 billion through customer retentions.

Another remarkable observation will be with respect to **Amazon**, which practically with a rationalized operation, engineered one trillion dollars of revenue annually. The company attributes its lion's share of retail success to big data analysis, which compares the purchases data with the user behavior and thereby anticipates the market trends and needs.



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An in depth study conducted by **Bain & Company** on over 400 businesses across the globe, observed that the enterprises with most developed data analytics techniques exercised an enviable command over the market and have a larger market share. The important findings of their study are:

- 36% of the companies surveyed had a dedicated data insight team
- Only 19% of the companies were having high quality consistent data
- 23% of the companies were having clear strategies for using analytics effectively
- 38% of the companies are found to be using analytical tools
- Such Organisations are twice as likely to be in their respective sector's top 25% in terms of profitability
- These enterprises are 5 times or more likely to make faster operational and strategic decisions than their competitors
- The business houses which are not perfectly exploiting the big data are certain to fall behind

Another study conducted by **University of Texas** subscribed to the views of Bain & Company. This study was focusing towards data sets of fortune 1000 corporations and measured the impact such data analytics had on their top and the bottom lines. Some paramount findings of the University further include:

- Most business houses were successful in increasing the profit by over \$2 billion per year by making use of just 10% of the available data
- By making the data more accessible, the return on equity was increased by 16%
- Due to deployment of advanced reporting, the return on investment increased by 0.7%, which is at par to \$2.87 million of additional revenue.
- These business organization apparently had only a lower investment towards the data gathering and analytics to achieve the above significant results.

When it comes to the Indian scenarios, certain companies are observed to be professionally adopting matured strategies to manage the data and have seen the results, mentioned as below:

- Matured Data Strategy resulted into a growth in profit by 8% every year, on an average
- Many Indian organisations, lost \$52939, annually due to missed opportunities arising on account of poor handling of data
- 100% of the Decision makers of the companies which were subject for the survey, opined that better management of data has impacted on the overall performances on the positive note.

### The real challenges

The data analytics, as it as such complex and effective management of the same to ensure efficiency even pose so many challenges to the business world. The most significant challenge will be the existence of the knowledge gap within the organisations. Though the entities are spending money and efforts to gather data, it has been observed that 60% or more of such data ultimately goes unutilized or unanalyzed. In most of the cases, the management or the employee crew are not even aware regarding the existence of the data internally and are not able to capitalize upon such hidden treasure. Due to this, a concentrated business decisions at many times are never being arrived at or the decisions whatever taken never are being proven to be delivering the results in line with their anticipations.

Another challenge observed is moving the data from the warehouse or one application to another one, is totally time consuming and hence not properly even be ventured by the people who always runs short of time to achieve their respective goals. These time-consuming efforts required will hinder the agility and ability to analyze the data effectively within the business. Syncing, replicating and hosting the data, set a serious challenge and this in reality becomes a concern to the management.

For every business unit, having crucial set of data is prime, as the possibility to exploit and reap benefits out of it, literally demands the data availability. The organization should visualize legibly and should extract clean, clear and qualitative data. This exercise is not doubt laborious and the existing manpower who are already loaded with organizational goal accomplishing activities, cannot divert their time and efforts towards the data management. This requires an organization to find out effective data partner, whose gracious presence can turn around the operations. Finding a right partner in this regard is a greater challenge and once this happens, it can adopt a lens approach and access pragmatic insights which in finality will streamline the operations, bring down the overheads and enhance the earnings quality.

The other set of challenges could be in the form of disconnected systems and processes, lack of business insights, too much of manual tasks, inaccuracy of budgeting and forecasting and lack of real time informations. The real confront would be the





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complexities that are associated with the legacy systems, managing the rising needs of the stakeholders and the business risk factors. The Accenture Strategy High Performance Finance Research conducted during 2014, reveals that the complexity in all forms are the biggest challenge a business faces. Moreover, transformation strategies and data analytics strategies can also pose a different challenge.

## CONCLUSION

In brief, the roles and responsibilities of the business in totality are undergoing a change in line with the current business needs and it becomes almost crucial for the enterprises to accept and conceive these paradigm shifts. It is also equally important for the business to look critically into the challenges which are being faced by them in the process of managing the data and work towards converting these challenges into an opportunity to enhance the financial performances of the business. More than as an efficient strategist, the management's transformation as an operational controller is inevitably required in the current business world and this could be achieved by way of involving actively into managing the leveraging upon the big data qualitatively. Big bottom line savings, delivering real time benefits, accuracy in forecasts and improving cohesion must be the sightedness, in addition to putting solid efforts to overcome the challenges.

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