Synergetic Effect of Big Data Analysis on Entrepreneurship

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Abstract – Big data analytics is the name given to the process of examining enormous amount of data so the beneath lying patterns can be uncovered. There can be certain correlations that will be revealed during that process and useful information can be easily derived and subsequently used to make absolutely accurate and consistent decisions. Entrepreneurship essence is based on the successful decisions so this analytics revolutionizes the complete process and this systematic approach provides edge over the rivals. This approach makes use of advanced analytic techniques against very large and diverse data sets to deduce the information that is required immediately. Surveys and analysis over time has shown increased profits in the enterprises all over the world. Profits and performance has shown synergic rise. Research on effective use and implementation of information and communication technologies for development suggests that big data technology can make important contributions in international development of the enterprise.

Keywords: Big Data Analytics, Entrepreneurship, Decision Making, Online Analysis, Synergic Effect.

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I. INTRODUCTION

Big data management techniques and state of the art practices are still evolving, but becoming the part of the big data movement has become an essential step for companies across a wide variety of industries spread all through the globe. Through this paper we delve into experiences of early adopter companies that deployed big data applications and tools and how this integration helped them towards the synergic effect in the performance of the enterprise. Developed economies make wide use of data intensive technologies. The adoption and use of big data analytics in entrepreneurship is helpful and allows efficiencies in terms of productivity, innovation and cost. When analysis is carried out on data sets it leads to discovery of new correlations to find new business trends. Generated data is increasing at an exponential rate which is collected by variety of information sensing devices scattered or used in the enterprise. The world's technological per capita capacity to store information has roughly doubled every 40 months since the 1980s as of 2012 everyday more than 2.5 Exabyte of data are created. Big data analytic techniques can be described using following characteristics:

Volume:

The amount of generated and stored data comprises of the volume. The size of the data determines the value and potential insight and if it can be put under the category of big data.

Variety:

It refers to nature and type of data. This helps the data analyst to effectively use the resulting conclusion.

Variability:

Inconsistency and heterogeneous nature of data is another challenging characteristic.

Veracity: The quality of data that has been collected is also taken into account as it has potential to affect the accurate analysis.

Figure1: Abstract view of big data analtic terms.

II. STRATEGIES USED THAT MADE A POWERFUL IMPACT:

Big Data Strategy:

Advertising department deploys tools using big data analytics: The search advertising company adMarketplace processes billions of ad requests daily in real time using a pay-per-click platform. It is reported that since high level of data customization is offered to advertisers, ad Marketplace approximately processes more than 100 gigabytes of data per hour. The company implements a platform that integrates a traditional data warehouse and a NoSQL database to power the big data environment that feeds its search syndication system. The improvement in the system that this system provides has landed adMarketplace many business giants for clients who include GM, Sony and Wal-Mart. It continues to make new developments in harnessing its massive data store with recent release of a new product, Advertiser 3D.

Successful big data projects in entrepreneurship:

At IBM conference, Sprint which is one of the largest telecommunications companies in America and has over 55 million estimated customers shared its successful big data analytics implementation story which can be used to narrate the goal of using big data to improve and revolutionize the services of enterprise. The company made use of IBM InfoSphere Streams and analytics tools to make sense of the mountains of data created by Sprint network users on a daily basis. The billions and billions of transactions made were analyzed to deduce meaningful information. The results obtained are customer centric in nature so it is also a step that leads towards customer satisfaction. This improves and personalizes the customer experience. This is in a way revolutionizing telecommunications and entrepreneurship in general because it moves the approach from optimization of data to client satisfaction as simultaneous goal. All the enterprises can also take some time to create an enterprise wide big data blueprint. The blueprint throws light on as to how each part of the organization plans to take advantage of big data initiative. The next step of the ladder is to start acquiring or building the skills which are necessary to carry out the planned initiative.

- Amazon.com has to handle several million of backend operations everyday and along with it the queries from more than half a million third party sellers are handled.

- Facebook takes care of 50 billion photos from its user base which are uploaded by about 900 million active users.As of 2015 Google was managing more than 100 billion searches per month.

EMBRACED AT ALL LEVELS:

Regardless of the scale of the industry the performance and popularity of big data analytics has risen. It has been revealed that this technique and approach has been about opportunity to learn from data pattern of the enterprise to make smarter business decisions and along with mighty entrepreneurs small scale enterprises have also embraced the technology. Big data analytics has been changing the business landscape altogether. All entrepreneurs are using it to enhance product quality, improve marketing operations ad further strengthen customer relationships. Now new solutions are coming to the market everyday and some have been specifically created for small businesses.

Knowledge intensive entrepreneurship:

Big data analytics helps entrepreneurs to focus on data as a valuable source that has impact on creation and execution of entrepreneurship which is knowledge intensive in nature. It strengthens the opportunities offered by big data within an entrepreneurial process. The large amount of knowledge distributed on the web and mainly around the social network platforms can allow the conception of an entrepreneurial process which is more aligned with the customers' needs and focuses on the actual trends of the market. The knowledge of current trends is the key to new business opportunities as well as strengthening the traditional concepts of business.

Data driven entrepreneurship:

Big data analytics has transformed the concept of entrepreneurship. As an entrepreneur data of enterprise must be correctly understood. If the data related to the enterprise is not tracked meticulously the business will not reach its full potential. Big data analytics approach makes sure that all these concerns are addressed. As a data driven entrepreneur who focuses on gathering information and using it to drive meaningful business gains reaps lot of rewards. Future of enterprise depends on data and if this expensive asset is ignored then dire consequences emerge.

CONCLUSION:

From all the points that have been highlighted in the paper it can be concluded that big data analytics has the ability to revolutionize the process of entrepreneurship. The successful stories of international giants speak of the synergic effect and impact that big data analytics has had on entrepreneurship. This is the arena where major developments are happening at the exponential rate. Future of Digital world and business enterprises is set to be governed by big data analytics in the future.

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