DATA DRIVEN ENTREPRENEURSHIP – A STRATEGIC TOOL FOR BUSINESS DECISION

Abstract

The entrepreneurship is the process of starting and running a business with an aim to grow and develop the economy. Innovation is a contribution by entrepreneur. Data Driven means an organization that is data centric. Data Driven Business Models are more complicated for established business rather than start up business. Data Driven Entrepreneurship are those ventures which collect data and analysis the methods and technologies so that it can build new ventures. It is model which is based on facts, figures and data so that it can guide strategic decision of the business to achieve its goals, objectives and initiatives. It helps the entrepreneur to make better decision. This paper will decision on the principles of data analytics in the startup stage of the business.

Keywords: Entrepreneur; Entrepreneurship; Data Driven; Startup Analytics; Data Generation; Data Acquisition

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I. INTRODUCTION

The Entrepreneur is derived from the French Verb "entreprendre" which means "to do something". Entrepreneurship is the process of identifying opportunities and creating new businesses or ventures to pursue those opportunities. Entrepreneurs are individuals who take calculated risks to bring innovative ideas, products, or services to the market. It involves various activities such as business planning, securing funding, marketing, and managing the operations of a startup or small business. Successful entrepreneurship can lead to economic growth, job creation, and innovation in various industries.

Entrepreneurship is important for several reasons:

- **1. Innovation:** Entrepreneurs often drive innovation by identifying new opportunities and developing creative solutions to address them.
- **2. Economic Growth:** Entrepreneurial ventures contribute to economic growth by creating jobs, generating income, and stimulating investment in new industries.
- **3. Job Creation:** Startups and small businesses are significant job creators, helping reduce unemployment rates and providing opportunities for individuals to work and earn income.
- **4. Wealth Creation:** Successful entrepreneurs can accumulate wealth and create financial security for themselves and their families.
- **5. Market Competition:** Entrepreneurship fosters healthy competition, which can lead to better products, services, and pricing for consumers.
- **6. Social Impact:** Entrepreneurs can address social and environmental challenges through socially responsible businesses and initiatives.
- 7. **Regional Development:** Entrepreneurship can revitalize communities and regions by attracting investment and generating economic activity.
- **8.** Flexibility and Adaptability: Entrepreneurs are often more adaptable and able to pivot quickly, which is crucial in rapidly changing business environments.
- **9.** Cultural Influence: Entrepreneurial success stories can inspire others and shape cultural attitudes towards innovation and risk-taking.
- **10. Problem Solving:** Entrepreneurs identify problems and work towards solutions, contributing to the improvement of society as a whole.

Overall, entrepreneurship plays a vital role in driving economic and societal progress by fostering innovation, creating jobs, and addressing various challenges

Data-driven entrepreneurship is a business approach that leverages data and analytics to make informed decisions and create value. It involves using data to identify market opportunities, optimize operations, and enhance customer experiences. Data-driven entrepreneurs collect, analyze, and interpret data to gain insights, make predictions, and drive innovation in their businesses. This approach can lead to more

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effective decision-making, improved competitiveness, and better outcomes for startups and established companies alike.

Data has to be one of the competitive advantages in business decision making. To understand the scope and nature of uncertainty that helps in entrepreneurial decisions is a primary focus of entrepreneurship, Knight (1921); McKelvie et.al. (2011). A data driven technique and technologies has not only transform the uncertainty but it shows the ways of dealing with such uncertainty suggested by Dean et al. (2007); Yoo et al. (2010). The collection and analysis of data to evaluate a business opportunities are not only an easy process. The reasons are as follows: -

- Due to the shortage of 4Rs in the entrepreneurial operations. The 4Rs are Resources, Routine, Reputation and Regulations. These are the internal constraints which influence the entrepreneurial outcome and its process. (Joglekar and Levesque (2013); Jogleskar et al. (2017)).
- An Entrepreneur's opportunity is based on individual risk preference (Mc Kelvie et al. (2011); Mullins and Forlani (2005)).
- The Entrepreneurial process outcome is based on external factors which also include economic conditions of entrepreneur (Shephard et al. (2015)).
- On specific external market factors like financial market, regulatory bodies have limited or no control (Fehrenbacher (2016)).

With the help of the big data the entrepreneur gets benefits in decision making and unlocking the business potentials. The open data initiatives companies like Microsoft which help the business with their empire of data.

In decision making if we use data it helps in cost reduction in relation to operational efficiency. In today's dynamic business environment, the startup of any business faces a multiple problem. Some of the factors which become a barrier in the startup while using data analytics are less focus on product development, experts in data analytics, amount of data, less focus on market penetration, less focus on product delivery, and in short-run the customer validation.

II. DATA IN ENTREPREURIAL DECISION

Data Analytics play a crucial role from introduction of product life cycle stage. When a business or any product are launched, a big data is used for decision. A product testing shows an accurate picture before it gets into the actual product. When a product is tested in a small circle it helps a product to test and then it brings to the general users. As the digital economy has the brought the world in a virtual planet which helps any product to test from a large crowd of consumers. The market analysis and identification of non-economic and economic signals are enabled through a stock of data.

The two clients of Mixpanel are taken for identifying the use of data driven. Mixpanel is a company which tracks mobile usage and web to target product development. One of the clients of Mixpanel, the company name Docusign, uses data analytics tools so that it can boost and globally reach. Another company name Kast from Mixpanel for service provision.

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The following are the areas where Data Analytics are applied:

III. APPLICATION OF DATA THROUGH ANALYTICAL CONCEPT

- 1. **Product Design:** With the help of data analytics, the entrepreneur can design the product as per the requirements of the user. The consumer data are collected from the social media, emails, etc.
- **2. Management Reputation:** The rating of the company is being collected in the big data. This helps any company to build or to improve any management reputation.
- **3.** Chatbots: A Chatbot is a software agent of conventional which is used for communication of human in a language based on ANN. The Self-service which is included in 24x7 full online care, global languages, cost-saving for call centers, as well as interactive and intelligent user experiences.
- **4. Prevention of Fraud:** Data analytics helps for prevention of fraud. Fraud detection tools like regression, decision making tree, deep learning, etc.

IV. STRATEGICAL FRAMEWORK OF DATA ANALYTICS

The strategical framework for data analytics is as follows:

- 1. Understanding the business
- 2. Collection of Data
- 3. Understanding the Data
- 4. Organization of Data
- 5. Model Preparation
- 6. Evaluation
- 7. Deployment

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