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Study on Innovations in Digital Technology Startups

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Abstract: *Digital startup means any startup company that makes use of various digital tools & technologies to setup its own business. This concept is redefining the business world. In the present times, such companies are getting strong growth at relatively less cost. The main characteristic of such startup companies is their scalability potential. This paper presents an overview of digital technology start-ups along with characteristics of digital start-ups. Besides this, examples of famous digital startups and top ten technology start-ups have been presented in this paper.*

Keywords: AI, Business, Company, Digital, Model, Startups, Technology, Tools

1. Introduction

Digital technology startups use technology to create new products or services. Some examples of digital technology startups include:

- *Artificial intelligence (AI):* AI platforms like ChatGPT and Gemini can solve problems in a way that's similar to humans.
- *Cloud computing:* Cloud-based services provide a safe way to store and back up data. Food technology: Food tech startups work in areas like food preparation, delivery, agriculture, and vegan solutions. Robotic delivery: Robotic delivery startups use robots to deliver items like groceries and takeout.
- *Customer relationship management (CRM):* CRM systems help startups manage customer interactions and data.
- *Visitor analytics:* Visitor analytics apps help website owners understand their website traffic, user behaviour, and customer needs.
- *AI search engines:* AI search engines like Perplexity AI use conversational search to interpret user queries.

2. Characteristics of Digital Technology Startups

Some of the main characteristics of Digital Technology Startups are listed below:-

- (i) **Innovation:** Digital technology startups provide cutting-edge goods and services that fill gaps in the market or open up new avenues for client value. Innovation is concerned either with product or service.
- (ii) **Repeatability:** Digital start-ups must be able to replicate their business models on a wide scale without altering their organizational structure or product/service offerings.

- (iii) Scalability: Digital entrepreneurs typically use network economies and cloud platforms to their advantage as they expand quickly and massively. This enables them to use fewer resources while reaching a greater number of clients.
- (iv) Uncertainty: Digital startups function within extremely competitive and dynamic settings, where risks are high and the rules of the game are always shifting. As a result, they must be adaptive and flexible, and they regularly test and evaluate their theories about the market and their products.
- (v) Agility: Compared to traditional businesses, digital startups appear to be more flexible. Because of their presumed agility, they can quickly adjust to changes in the market and put new ideas into action based on input from customers.

3. Digital Technology Startups

Some of the leading technology startups make use of latest innovations in the field of technology viz. cloud computing, animation, AI/ML, AR & VR etc. which makes them top business leader in the world. Such types of startups expand very quickly. In the recent years, there is continuous increase in digital startup companies on account of constantly changing demands of public/market. Technology Magazine has recently mentioned some of the leading technological startups to handle increasing demands which are as follows:-

- (i) Wayve: This startup belongs to automobile industry and makes use of AI/ML & deep learning technologies. It focuses on self-driving/automated motor vehicles, instead of manual vehicles. This startup was founded by Alex Kendall and Amar Shah in the year 2017. This company was the first company who deployed autonomous motor vehicles on roads
- (ii) Scale AI: This startup accelerates the development of AI applications. This company targets to deliver high quality information in labelled form at unparalleled quality. The company makes use of Artificial Intelligence and Machine Learning. This startup was founded by Alexandr Wang & Lucy Guo in the year 2016.
- (iii) Inflection AI: This startup was founded in 2022 by Mustafa Suleyman & Reid Hoffman. The company has developed hardware and software applications by making use of the concept of machine learning and Gen AI. Inflection AI's developments are designed to offer developers and businesses greater access to state-of-the-art language models, transforming applications and services for users.
- (iv) DataRobot: This startup was founded in 2012 by Jeremy Achin & Tom de Godoy. DataRobot walk around a unique and collaborative approach to Artificial Intelligence and machine learning. The startup company has the capability to offer classes/on-demand courses through DataRobot University.
- (v) Perplexity AI: This startup was founded in 2022 by Aravind Srinivas, Johnny Ho, Denis Yarats, Andy Konwinski. It provides chatbot service across the world. It aims to answer queries of an individual using natural language predictive text. The answers are generated through various available web sources.
- (vi) Celonis: This startup was founded in 2011 by Alex Rinke, Bastian Nominacher, Martin Klenk. It is a data processing company and it provides software as a service to an individual. This company has helped greatly to reduce carbon emissions. It makes use of data mining and AI technologies to yield great value to its customers. The company has partnership with BMU to increase productivity and quality.
- (vii) OpenAI: This startup was founded by Elon Musk in 2015. This is the company behind the development of ChatGPT. This company makes use of AI and machine learning to provide a detailed answer in respond of a query raised by an individual. The use of ChatGPT is most popular among youth to make assignments/notes.

- (viii) Anthropic: This startup was founded by Dario Amodei and Daniela Amodei. This company has developed Claude, a rival chatbot to ChatGPT. Various big companies funded this startup like Amazon, Google, Salesforce and Zoom. The main characteristic of Claude 3 is that it is capable to understand longer queries from an individual. Moreover, it can answers more questions in a better way in order to meet the requirements of a company.
- (ix) Canva: This startup was founded by Melanie Perkins, Cameron Adams, Cliff Obrecht in 2013. It provides various tools and technologies pertaining to graphical design for creating social media graphics and professional presentations.

There are numerous examples of Digital Startups. Some of the famous Digital Starups which are well known, especially among youth, are as follows:-

- (i) Netflix: Netflix is a digital startup with approximately 210 million active users. This is a video streaming OTT platform whereby an individual can access web series, movies, documentary films and video songs. This concept was founded by Reed Hastings and Marc Randolph in the year 1997 and it has also gained an exponential momentum in the recent past.
- (ii) Spotify: Spotify is a digital startup which is also very popular among youth and even old-aged people. One can access any type of song, bhajan, gazal, music, track, podcast & playlist in any language at any time at a very nominal cost. This concept was founded by Martin Lorentzon and Daniel Ek in the year 2006 and it has also gained an exponential momentum in the recent past. This digital startup has approximately 350 to 400 million active users which is incredible.
- (iii) Airbnb: Airbnb is a digital platform whereby an individual can give rooms/villas/flats/homes on rent to other individuals on commission basis. This concept was founded by Brian Chesky in the year 2008 and it has gained an exponential momentum in the recent past. This digital startup has total valuation of approximately 100 billion dollars which is remarkable.
- (iv) Uber: Uber is a digital startup whereby drivers can register to offer their cabs on rent and an individual can book the cab on rent. This concept was founded by Travis Kalanick and Garrett Camp in the year 2009 and it has also gained an exponential momentum in the recent past. At present, it covers more than 12000 cities in approx. 70 countries.

4. Conclusion & Future Scope

Digital Tools and Technologies have totally changed the way of doing business in the present scenario. Even small startup companies or big companies are using diverse technological platforms like servers, laptops, machine learning, cloud services, AI, AR and VR. Digital technology startups can be a major driver of economic growth and innovation. Government also provide various types of subsidies and tax benefits to setup digital and technology startups. In this paper, an effort has been made to elaborate on prominent characteristics of startups. Apart from this, various technology and digital startups have been discussed. Although startups meet the varying demands of an individual, however, they also face challenges such as cyber attacks and data security. Startups need to take cyber security seriously and implement effective measures to protect their systems and data. This may include investing in cyber security software, training employees, and regularly reviewing and updating security measures.

5. References

- [1] <https://joeducation.eu/>
- [2] <https://technologymagazine.com/>
- [3] Kevin Namiro Kuteesa, Chidiogo Uzoamaka Akpuokwe and Chioma Ann Udeh, "Navigating the digital transformation journey: strategies for startup growth and innovation in the digital era", International Journal of Scholarly Research in Multidisciplinary Studies, 04(02), pp. 38-53.
- [4] Adewusi, A. O., Okoli, U. I., Olorunsogo, T., Adaga, E., Daraojimba, D. O., & Obi, O. C. (2024), "Artificial intelligence in Cybersecurity: Protecting national infrastructure: A USA", World Journal

- of Advanced Research and Reviews, 21(1), pp. 121-128.
- [5] Shashikala. K (2017), “Role Of Technology for Startups”, International Journal Of Innovative Research In Technology, Volume 4 Issue 1, pp. 406-410.
 - [6] Misha, V. (2022), “Indian Startup Ecosystem–Challenges and Opportunities” International Journal of Research in Science, Commerce, Arts, Management and Technology, pp. 7-11.
 - [7] Magaji Abdullahi Usman and Xinbo Sun (2023), “The impact of digital platforms on new startup performance: Strategy as moderator”, Heliyon, Volume 9, Issue 12,

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