



IMPACT OF TECHNOLOGY ON THE ENTREPRENEURIAL ATTITUDE OF UNDERGRADUATE LEARNERS

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Abstract

In an era marked by rapid technological advancements and the increasing importance of entrepreneurship in the global economy, understanding the relationship between technology and entrepreneurial mindset among students is crucial. The impact of technology on the entrepreneurial attitude of undergraduate learners is multifaceted. Firstly, technology plays a significant role in shaping the awareness and knowledge of entrepreneurship, as it provides easy access to resources, online courses, and information about successful entrepreneurs and startups. Secondly, technology facilitates networking and collaboration opportunities, allowing students to connect with like-minded individuals, mentors, and potential business partners globally. Thirdly, digital tools and platforms enable students to experiment with entrepreneurial ideas and develop prototype products or services more efficiently and cost-effectively. These factors collectively contribute to a more favorable disposition towards entrepreneurship.

This study tries to understand the perception of undergraduate learners towards the relationship between technology and their entrepreneurial attitude. To achieve the purpose of this study, the non-probability sampling method was used for the selection of undergraduate learners, and a structured questionnaire was used for the collection of primary data. To analyze the data, descriptive statistics and a chi-square test were employed. The result of the study presented that there is a positive impact of technology on the entrepreneurial attitude of undergraduate learners.

However, there are potential challenges and risks associated with technology's influence on entrepreneurial attitudes. These include concerns about information overload, the digital divide, overreliance on technology, and the pressure to conform to digitally-driven entrepreneurial trends or fear of competition in an increasingly crowded digital marketplace.

Keywords: *Entrepreneurial attitude, Entrepreneurship Education, Technology*

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Introduction:

In this new digital era, the relationship between technology and entrepreneurship has become increasingly intertwined. The emergence of new digital

tools, platforms, and resources has not only transformed traditional business landscapes but has also influenced the way individuals perceive and approach entrepreneurial endeavors. The

undergraduate learners who constitute the next generation of entrepreneurs and innovators are positively inclined toward digital technology. This research endeavors to explore the impact of technology on the entrepreneurial attitude of undergraduate students, shedding light on how their interactions with technology shape their mindset, aspirations, and readiness to engage in entrepreneurial activities.

Entrepreneurship: Entrepreneurship is the process by which an entrepreneur initiates, organizes, operates a business and also bears the risk of uncertainty in order to earn profit.

Entrepreneurial attitude: Entrepreneurial attitude is also referred to as entrepreneurial mindset. It encompasses a set of cognitive, affective, and behavioral characteristics that incline individuals to think and act in ways conducive to entrepreneurship. The entrepreneurial attitude leads to promoting an entrepreneurial ecosystem that encourages new venture creation and economic growth.

Entrepreneurship Education: Entrepreneurship education aims to empower students with the knowledge, skills, and motivation needed to foster entrepreneurial success across diverse circumstances. Its primary objective is to nurture an entrepreneurial mindset and cultivate the competencies required for individuals to recognize and benefit from the opportunities, make informed risk assessments, and create innovative solutions to complex challenges.

Technology: Technology refers to the techniques, systems, and processes developed through scientific knowledge and applied to practical purposes

Undergraduate Learners: Undergraduate learners refer to students pursuing their first degree at a college or university. They are in the early stages of their academic journey and have not yet received any bachelor's degree.

Problem Statements:

1. The extent to which technological resources and

tools contribute to the development of essential entrepreneurial skills such as creativity, problem-solving, and risk-taking among undergraduate learners.

2. The challenges encountered by undergraduate learners in fostering entrepreneurial endeavors.

By addressing these questions, this research aims to provide valuable insights into the evolving landscape of entrepreneurship education and the changing dynamics of entrepreneurial attitudes among undergraduate learners. Understanding the impact of technology on these attitudes is not only relevant for educators but also for policymakers, business leaders, and society at large, as it can inform strategies for fostering a more innovative and entrepreneurial workforce in an increasingly digital world.

Review of Literature:

- Naqvi, S. et al. (2023) in their study aimed to explore the opinion of the participants of a private HEI in Muscat, Oman, about the course titled Entrepreneurship and New Venture Creation (ENVC). The participants opined that the course enhanced their understanding of fundamental business and entrepreneurship principles, cultivated entrepreneurial ambitions, and noted improvements in critical thinking, creativity, and innovation skills. Additionally, participants expressed a strong desire for experiential learning opportunities, emphasizing the need for industrial entrepreneurship training to complement their theoretical knowledge and foster practical expertise.
- Monllor, J. and Soto-Simeone, A. (2020) in their study attempted to investigate the importance of exposure to digital fabrication technology plays in the development of students' entrepreneurial self-efficacy (ESE) and intentions. The study revealed that the practical experience with digital manufacturing technology in universities had a

positive impact on students' confidence in their technological and entrepreneurial abilities.

- Chen, J. et al. (2022) in their research paper aimed to explore the effect of mobile-based business simulation games in entrepreneurship education. The research showed that the flow experience in the mobile business simulation games had a positive impact on entrepreneurial attitudes and self-efficacy.
- Saha, Moumita. (2022) in her doctoral research attempted to study the factors motivating the management students to become entrepreneurs. She was of the opinion that education acts as a tool to create an innovative mentality and entrepreneurial mindset among young students. The researcher advocates that the quality of entrepreneurship courses can be enhanced through the incorporation of innovative pedagogical methods extending beyond traditional classroom. The study revealed that activities such as business plan games, simulations, role-playing games, and experiential learning, foster a more engaging and immersive educational experience.
- Arora, Sandeep. (2013) in his doctoral research attempted to study the Role of Information Communication Technology ICT in online management programmes. The study showcased that online learning allows a variety of different interactive teaching-learning methodologies. Online learning enables an experiential learning process which is widely becoming the academic culture of management institutions. However, not all students prefer online learning. Hence, blended learning was recommended by the researcher for enhanced and effective implementation of management programmes.
- Malach, J. and Kysil, N. (2019) in their research article envisaged the inclusion of digital tools in formal entrepreneurship education for the

development of entrepreneurial competencies. The researchers were of the opinion that an Entrepreneurial Digital Learning Environment (EDLE) equipped with digital tools for formal and informal learning of entrepreneurial skills will enhance entrepreneurship. The researchers also mentioned that a blended learning strategy would lead to effective entrepreneurship education.

Objectives:

1. To assess the current levels of technology exposure and engagement among undergraduate learners.
2. To examine the perceptions and beliefs of undergraduate learners regarding the role of technology in creating entrepreneurial attitudes of the learners.
3. To investigate the extent to which technology facilitates the acquisition and development of entrepreneurial skills among undergraduate learners.
4. To identify the challenges that undergraduate learners encounter in their pursuit of entrepreneurial endeavors.

Hypothesis:

- (1) Impact of technology on entrepreneurial attitudes.

Null Hypothesis (H₂₀): There is no positive impact of technology on the entrepreneurial attitude among undergraduate learners.

Alternative Hypothesis (H₂₁): There is positive impact of technology on the entrepreneurial attitude among undergraduate learners.
- (2) The influence of demographic factors on the entrepreneurial attitude of undergraduate learners.

Null Hypothesis (H₂₀): The entrepreneurial attitude of undergraduate learners is not influenced by demographic factors such as gender, family background, etc.

Alternative Hypothesis (H₂₁): The entrepreneurial attitude of undergraduate learners is influenced by demographic factors such as gender, family

background, etc.

Methodology:

For the purpose of this study, secondary data was collected from editorials, magazines, journals, and digital sources. A structured questionnaire was framed

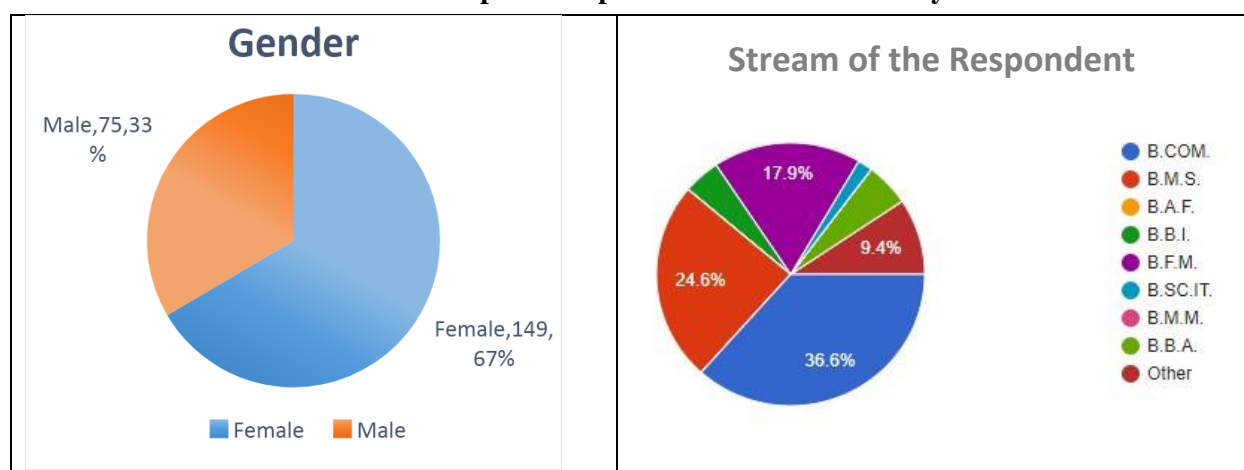
Data Analysis and Interpretation:

to collect primary data. Non-probability sampling methods like judgmental and convenient techniques were used to select the samples. The primary data was collected from a sample size of 224 representing undergraduate learners from different streams.

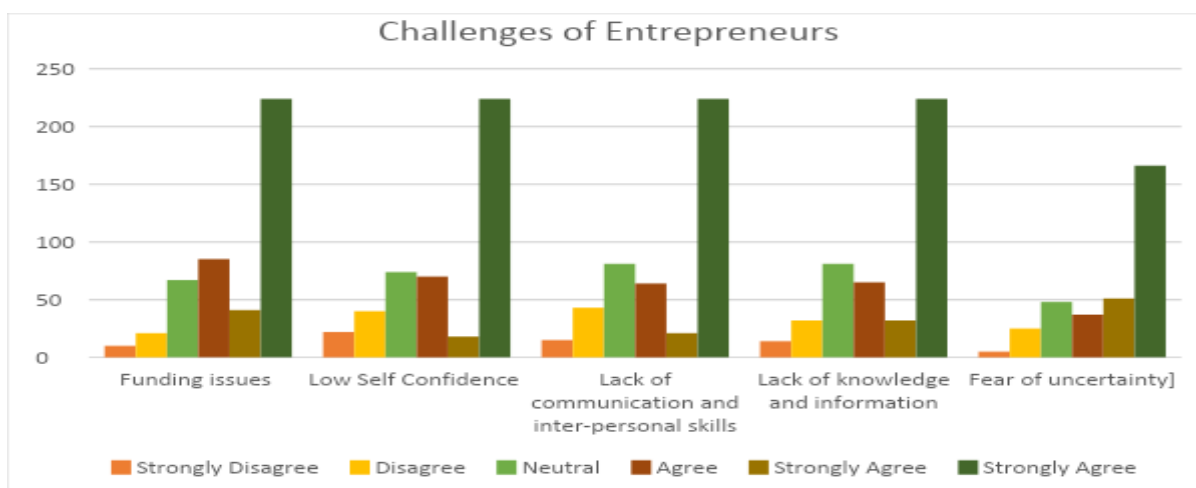
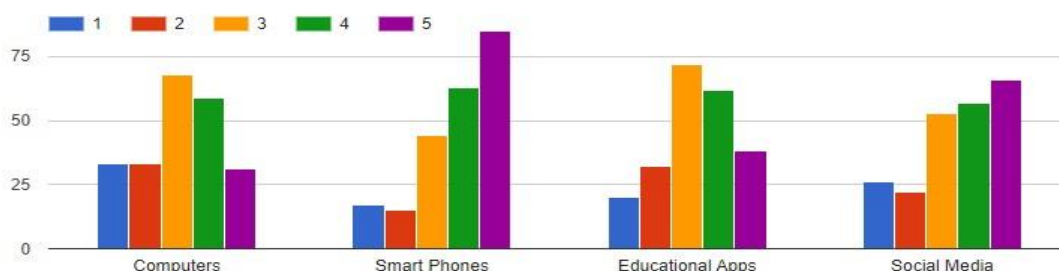
Table No. 1 - Demographic Profile of the Respondents

Particulars	Category	Frequency
Gender	Female	149
	Male	75
Age	22 years	03
	21 years	12
	20 years	56
	19 years	55
	18 years	61
	17 years	37
Stream of the Respondent (Bachelor of Commerce)	B.Com.	82
	B.M.S.	55
	B.B.I.	10
	B.F.M.	40
Stream of the Respondent (Bachelor of Business Administration)	B.B.A.	12
Stream of the Respondent (Bachelor of Science (IT))	B.Sc. (I.T.)	04
Stream of the Respondent (Others - Bachelor of Pharmacy)	Pharma Tech (B. Pharm. + MBA) (SPPSPTM, NMIMS)	21
Class in which the respondent belongs to	First Year	89
	Second Year	41
	Third Year	94

Table No. 2 – Graphical Representation of the Primary Data



Please rate your level of ability in using technology (e.g., computers, smartphones, software apps, social media) on a scale from 1 (lowest level of ability) to 5 (highest level of ability).

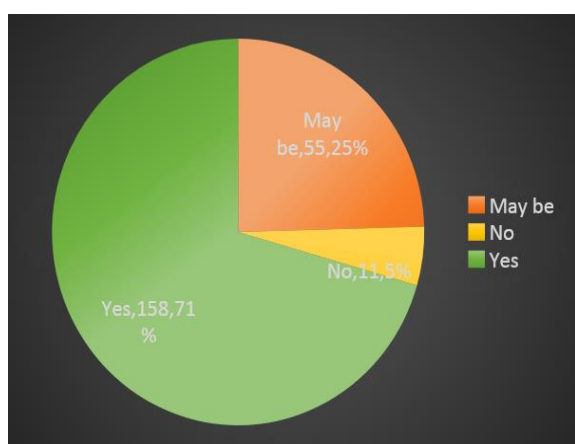


Source: Primary Data

The graphical representation clearly shows that the undergraduate learners are very efficient in using technology. The undergraduate learners are aware about the challenges faced by the entrepreneurs. These learners also have an understanding of how to use the technology to achieve entrepreneurial goals.

Table No. 3 - Impact of technology on entrepreneurial attitudes.

Is there an impact of technology on entrepreneurial attitudes?



Yes	158
No	11
May be	55

The graphical representation clearly depicts that technology has an impact on the entrepreneurial attitude of the undergraduate learners.

When examining the impact of technology on entrepreneurial attitudes across different undergraduate disciplines, the following findings emerge:

Impact of technology on entrepreneurial attitude	Yes	No	May be	Grand Total
B.B.A.	9	NIL	3	12
B.B.I.	5	1	4	10
B.COM.	63	4	15	82
B.F.M.	25	1	14	40
B.M.S.	33	5	17	55
B.SC.IT.	4	NIL	NIL	4
Others	19	NIL	2	21
Grand Total	158	11	55	224

A chi-square test of independence was performed to examine the relationship between the impact of technology on the entrepreneurial attitudes of undergraduate learners belonging to different disciplines. The result of the test indicates that there is **no significant relationship** between the impact of technology on entrepreneurial attitudes across different undergraduate disciplines as indicated by chi-square, $P= 0.310092936 > 0.05$. Thus, the null hypothesis is selected.

Table No. 4 - The influence of demographic factors such as gender, family background, etc. on the entrepreneurial attitude of undergraduate learners.

Table No. 4 (A) – Demographic factor - Gender

Impact of technology on entrepreneurial attitude	Yes	No	May be	Grand Total
Female	103	7	39	149
Male	55	4	16	75
Grand Total	158	11	55	224

A chi-square test of independence was performed to examine the influence of gender on the entrepreneurial attitude of undergraduate learners. The result of the test indicates that there is no influence of gender on the entrepreneurial attitude of the undergraduate learners as indicated by chi-square, $P= 0.725309765 > 0.05$. Thus, the null hypothesis is selected.

Table No. 4 (B) – Demographic factor – Family Background

Impact of technology on entrepreneurial attitude	Yes	No	May be	Grand Total
Business Background	53	4	28	85
Non-Business Background	50	14	75	139
Grand Total	103	18	55	224

A chi-square test of independence was performed to examine the influence of family background (business or non-business) on the entrepreneurial attitude of undergraduate learners. The result of the test indicates that there is a **significant influence** of family background on the entrepreneurial attitude of undergraduate learners as indicated by chi-square, $P= 0.000569951 < 0.05$. Thus, the null hypothesis is rejected.

Findings:

The research findings are evident in highlighting the pivotal role of technological intervention in entrepreneurial education, emphasizing its favorable influence on entrepreneurial attitudes. While gender does not emerge as a significant factor affecting entrepreneurial attitudes, it is worth noting that family background does exert a noticeable impact in this regard.

Suggestions:

Entrepreneurship education is no doubt a catalyst for developing an entrepreneurial attitude among young learners. However, only having a theoretical approach or listening to the success stories of entrepreneurs will not grow entrepreneurship.

While being tech-savvy offers advantages, it is essential to complement these skills with a well-rounded entrepreneurial education that includes business acumen, critical thinking, and problem-solving. A combination of technical expertise and a strong entrepreneurial mindset can empower undergraduate learners to succeed in the competitive world of entrepreneurship.

The benefits of **Digital Tools for Entrepreneurship** include -

- Innovative and accessible resources for aspiring entrepreneurs.
- Enhance learning, foster creativity, and develop essential entrepreneurial skills.
- Flexible, interactive, and experiential learning.
- Networking opportunities and global perspective.
- Data-driven decision making

Some digital tools commonly used in entrepreneurship education include – Online Courses and Learning Platforms, Virtual Incubators and Accelerators, Business Plan Software, Market Research Tools, Prototyping and Design Tools, Financial Management and Accounting Software, Crowdfunding Platforms, E-Commerce Platforms, Customer Relationship

Management (CRM) Software, Networking and Mentorship Platforms, Social Media and Digital Marketing Tools, Legal and Compliance Tools, Pitch Deck and Presentation Tools, etc. These digital tools empower learners by offering accessible resources for planning, commencing, and upscaling their entrepreneurial ventures.

Limitations:

- The study was limited to undergraduate learners from a selected few colleges in Mumbai.
- The sample size used for the study was limited. Hence, the results cannot be generalized universally.
- The accuracy of the figures and data is subject to the respondent's opinion.

References:

- Naqvi, S., Matriano, M.T.D.G. and Alimi, J.T. (2023), "Student and faculty perceptions on an entrepreneurship course: an exploratory study from Oman", *Journal of Science and Technology Policy Management*, Vol. 14 No. 5, pp. 885-911. <https://doi.org/10.1108/JSTPM-08-2021-0128> ISSN: 2053-4620 retrieved on 5th September, 2023 from <https://www.emerald.com/insight/content/doi/10.1108/JSTPM-08-2021-0128/full/html>
- Monllor, J. and Soto-Simeone, A. (2020), "The impact that exposure to digital fabrication technology has on student entrepreneurial intentions", *International Journal of Entrepreneurial Behavior & Research*, Vol. 26 No. 7, pp. 1505-1523. <https://doi.org/10.1108/IJEER-04-2019-0201> ISSN: 1355-2554 retrieved on 8th September, 2023 from <https://www.emerald.com/insight/content/doi/10.1108/IJEER-04-2019-0201/full/html>

- Chen, J., Tang, L., Tian, H., Ou, R., Wang, J. and Chen, Q. (2022), "The effect of mobile business simulation games in entrepreneurship education: a quasi-experiment", *Library Hi Tech*, Vol. ahead-of-print No. ahead-of-print. <https://doi.org/10.1108/LHT-12-2021-0509> ISSN: 0737-8831 retrieved on 9th September, 2023 from <https://www.emerald.com/insight/content/doi/10.1108/LHT-12-2021-0509/full/html>
- Saha, Moumita (2022). "Impact of management education on entrepreneurial motivation a study in West Bengal", [Doctoral Dissertation, Maulana Abul Kalam Azad University of Technology]. Retrieved from <http://shodhgang.inflibnet.ac.in/hdl.handle.net/10603/464493> dated 6th September, 2023.
- Arora, Sandeep (2013). "Role of Information Communication Technology ICT in online management programmes", [Doctoral Dissertation, Maharshi Dayanand University]. Retrieved from <http://shodhgang.inflibnet.ac.in/hdl.handle.net/10603/129387> dated 10th September, 2023.
- Malach, J. and Kysil, N. (2019). "Application of Digital Tools for the Development of Entrepreneurship Competencies", *European Conference on e-Learning* (pp. 378-383) (7th and 8th November 2019) Academic Conferences and Publishing International Limited
DOI: 10.34190/EEL.19.078 Retrieved from <https://www.proquest.com/openview/89861f1e066a374e2c97b3f5e2f479cc/1?cbl=1796419&pq-origsite=gscholar#:~:text=The%20use%20of%20digital%20tools,a%20business%20in%20the%20future.> Dated 17th September, 2023.

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