Structured Startup Education for Engineering Students: Evidence from SR University's Entrepreneurship and Innovation Ecosystem

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Abstract—An idea, passion, or inspiration often sparked by observing successful people can motivate young individuals to turn their vision into reality. This has fueled the rise of entrepreneurship, where innovation and self-driven ventures are key drivers of economic and social growth. Recognizing the need to nurture job creators instead of job seekers, SR University has strengthened its entrepreneurial ecosystem through its wings NEST (Nest for Entrepreneurship in Science and Technology) and SRiX (SR Innovation Exchange), and by introducing an Entrepreneurship and Startup course in the first year of the B. Tech program. The course guides students from concept to tangible outcomes, focusing on four pillars (1) Problem Statement (2) Value Proposition (3) Business Model Canvas (4) Prototype. A quantitative structured questionnaire was used to assess entrepreneurial knowledge and learning outcomes. A total of 430 valid samples were collected and measured on a 5-point Likert scale across the four pillars, along with student's overall opinions of the course and expectations from SR University's entrepreneurship ecosystem. Statistical analysis included Cronbach's Alpha, Descriptive statistics, Correlation, and Multiple regression. Findings reveal increased student confidence, problem-solving, and enthusiasm for innovation. Feedback highlights that early exposure to entrepreneurship fosters long-term interest in venture creation. The study affirms the value of embedding structured entrepreneurship training early in undergraduate education to bridge the gap between ideation and implementation.

Keywords— Startup Education, Entrepreneurship Ecosystem, Engineering Students, Innovation, Business Model Canvas, Value proposition.

I. Introduction to Entrepreneurship

THE word "entrepreneur" comes from the French word "entreprendre", which is translated as "to undertake", in simple words "to take action". It describes an individual who is able to identify opportunities, generate new and useful ideas, and turn those ideas into products or services that people wants and in needful. This individual would invest their time, effort, money and skills to make the idea work and give a life to their innovation and creativity. They are also ready to take risks in a competitive world with the hope of receiving a reward (Pennetta, S et al., 2024). Entrepreneurship is broadly defined as the process through which individuals or groups identify potential business opportunities and exploiting them through the recombination of existing resources or the creation of new ones to develop and commercialize new products and services (Ratten, V. 2023). It is seen as a process that helps understand how innovation and creativity in business evolve over time (Dreyer, C & Stojanová, H. 2023).

A. Importance of Entrepreneurship

Entrepreneurship stands in the fourth place in the study of the economy following the factors labor, nature and capital. It is given high importance in the production, since it brings innovation to manufacturing, services and products (Pauceanu, A. M. et al., 2021). It serves as a way of managing and growing businesses that not only boosts the economy of a region or country but also helps nations to adapt to changing economic

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conditions by reducing poverty and promoting self-reliance (Saoula, O et al., 2023). It is widely recognized as a key driver of contemporary economies, where entrepreneurship fuels job creation, and labor market dynamism, with new and young firms contributing a substantial share of net job creation in advanced economies such as the USA (Ordeñana, X. et al., 2024). Beyond employment generation, entrepreneurship enhances innovation and productivity by introducing new products, business models, and technologies that improve both firm-level and economy-level efficiency. It also plays a crucial role in fostering growth inclusive growth, as social enterprises and small-scale businesses can raise incomes, expand access to goods and services, and create livelihood and opportunities in disadvantaged areas, especially when supported by effective intuitions and adequate finance. Recognizing these benefits, global development agencies place entrepreneurship at the forefront of strategies for job generation, gender inclusion, and strengthening global economic resilience. Policy makers and international organizations focus on building entrepreneurial ecosystems by ensuring access to finance, enhancing skills, developing supportive regulations, and expanding market opportunities (Wang, Y. Li, B. et al., 2024). Entrepreneurship can be examined at different levels of analysis. At the individual level, the focus is on people and how they become entrepreneurs. At the societal level, the emphasis is on how entrepreneurship drives social change, particularly in light of increasing attention to environmental and sustainability issues. At the firm-level, it explores how businesses whether small startups or large organizations behave, grow, and adapt to changing market conditions, highlighting the choices and innovative practices that be for long term (Ratten, V. 2023).

Fig. 1. Main aspects of Successful Entrepreneurs (Source: Author)

Building on this, the figure 1 illustrates the development of entrepreneurship from a simple idea into a tangible outcome. By recognizing opportunities where other see challenges, taking calculated risks, staying focused, and bringing new ways of doing things, entrepreneurs are able to make ventures grow, stay competitive and adapt to today's fast-changing world. This process not only fuel business success but also creates employment, empowers communities, and opens up greater opportunities to people who would otherwise be left behind. The factors depicted such as entrepreneurial thinking, risk-taking, self-control, innovation, management skills, creativity and leadership are the key aspects that convert potential to actual outcomes (Tsihrintzis, G. A. et al., 2023). These interconnected processes ripple outward, shaping markets, influence social change and fosters economic resilience. This captures the journey of a successful entrepreneur showing how entrepreneurial actions, no matter where they begin, can create transformative effects that build dynamic, inclusive, and future ready economies (Aashish, K. et al., 2022).

B. Entrepreneurship education in higher educational Intuitions

Entrepreneurship has become a key driver of economic growth and job creation, with educational intuitions playing a crucial role in equipping students with the skills and mindset to succeed as entrepreneurs rather than just employees. Integrating entrepreneurship education into higher education helps reframe students career outlooks from job seekers to job creators by building entrepreneurial knowledge and the confidence needed to launch ventures. Hands on and experiential approaches such as venture projects, incubator support, and mentorship not only improve students' opportunity recognition and business planning skills but are also associated with higher rates of job creation among graduate's entrepreneurs (Anubhav, K. et al., 2024). These brings a spark and an ambition in the young minds to start their own businesses, empowering the students to identity and seize market opportunities while preparing them to innovate and lead in the face of challenges, especially in the post covid era. Advances in technology further amplify entrepreneur education by enabling personalized guidance making it easier for students to prototype business ideas and scale them (Bardales-Cárdenas, M. et al., 2024). The multifaceted benefits of entrepreneurship education have become essential for preparing future-ready graduates equipped with creativity, problem-solving skills and adaptability. It develops practical skills such as opportunity recognition, business planning, innovation management, and risk assessment competencies that are vital for success in creating self-employment (Amaral, D. T. et al., 2024). With growing recognition that entrepreneurial skills can be systematically taught, leading to a significant rise in specialized programs across the globe. Such initiatives highlight how entrepreneurship education fosters innovation, leadership, and economic impact while instilling entrepreneurial mindsets essential in today's dynamic business environment (Uddin, M. et al., 2025).

C. Entrepreneurship Ecosystem in Higher educational Institutes (Case study)

The finest intuitions in the world, including India, promote entrepreneurship. Babson College (USA) champions a holistic entrepreneurial ecosystem integrating academics, co-curriculars, research and outreach (Ronstadt, R. et al., 2020). Massachusetts Institute of Technology – MIT (USA) emphasizes hands-on, competition-oriented student-led start-up culture, through the Martin Trust (Center Ribeiro, A. T. V. B.

et al., 2018). Whereas, the Portuguese Higher Education Intuitions (Portugal) pay attention to incubators, industrial cooperation and the impact on society (Gaspar Pacheco, A. I. et al., 2024). The nurturing of technopreneurship is in Nanyang Technological University-NTU (Singapore) through NTUitive (Karthiga, S. et al., 2025). In India, through SINE (Society for Innovation and Entrepreneurship) and DSCE (Desai Sethi Centre for Entrepreneurship), the Indian Institute of Technology Bombay- IITB drives technology startups and research commercialization (Ravi, B. 2021; Karthiga, S. et al., 2025). Indian Institute of Management Bangalore -IIMB supports incubation and mentorship through NSRCEL (NS Raghavan Centre for Entrepreneurial Learning). Indian School of Business- ISB supports initiatives with its subsidizing D-Labs incubator (Mishra, S. K. et al., 2022) and Xaviour School of Management- XLRI promotes entrepreneurship by industry collaboration and development programs (Karn, A. et al., 2025).

II. ENTREPRENEURSHIP ECOSYSTEM IN SR UNIVERSITY

SR University has emerged as a leading hub for fostering innovation and entrepreneurship in Telangana through its dedicated NEST Center and SRiX (SR Innovation Exchange)-The launched for your Successful Startup. These platforms drive a diverse range of entrepreneurial initiatives aimed at nurturing student innovators, supporting early-stage ventures, and enabling scalable startups.

Under NEST, flagship programs such as Make n Market, Ideation Camp, Idea Premier League, Weekly Innovation Challenges, and Tinker Camp provide students with hands-on exposure to ideation, prototyping, and market validation. A glimpse from NEST entrepreneurial activities is depicted in figure 2.

IDEATION CAMP

HACKATHON

Fig. 2. A Glimpse of entrepreneurial activities- NEST (Source: SR University)

Complementing these, another wing of SR University, SRIX

facilitates advanced start-up acceralation through initiatives like NIDHI-PRAYAS, NIDHI-SSS, NIDHI-EIR, NIDHI-ACCELERATOR, TIDE 2.0, SISFS, and ANGEL/VC INVESTMENT facilitation. The impact of this is: 160+ Total startups, 71 Funded Startups, 700+ Jobs Created, Rs 12+ Cr funds disbursed to startups, Rs 62+ Cr funds raised by startups,30+ Women founders. A glimpse from NEST entrepreneurial activities is depicted in figure 3.

INNOVATION X 4.0

BOOT CAMP

Fig. 3. A Glimpse of entrepreneurial activities- SRiX (Source: SR University)

SR University's comprehensive approach from spanning ideas to investment demonstrates a robust commitment to developing an entrepreneurial mindset among students. By integrating innovation challenges, capacity-building programs and funding opportunities, SR University is positioning itself as a notable leader in the start-up ecosystem of Telangana, contributing significantly to the region's knowledge economy and sustainable growth.

A. Entrepreneurship and startup course in SR University

In line with such global best practices, SR University initiated an entrepreneurship course for engineering graduates aimed at nurturing innovation, creativity, and startup culture among students. The entrepreneurship courses are designed with experiential learning at their core from identifying opportunities, problem solving projects, industry challenges, and prototype development. Classes focus on design thinking, lean startup approach, along with value proposition, business model validation, ensuring students can put their ideation to market-ready solutions. A distinctive feature of SR university's

initiative is its focus on multi-disciplinary collaboration through industry partnerships and government funding schemes, SRU ensures that its students gain both the entrepreneurial skillset and the ecosystem access necessary for successful venture creation, placing it on par with leading national and international entrepreneurship institutions.

III. METHODOLOGY

A quantitative structured survey approach was employed to evaluate the entrepreneurial knowledge and learning outcomes after completing the Entrepreneurship and startup course. The study focused on four course pillars namely Problem Statement, Value Proposition, Business Model Canvas, and Prototype while also gathering insights into students' overall opinion of the course and their expectations from SR University's entrepreneurship ecosystem. A total of 435 responses were collected. After excluding 5 incomplete responses, the final analytic sample comprised N=430 students.

TABLE I
COMPONENTS, ITEMS AND TESTS APPLIED

Component (Construct)	Number of items	Statistical Tools Applied [a]
Problem Statement	8	
Value Proposition	7	
Business Model Canvas	9	Cronbach's Alpha, Descriptive Statistics (Mean, SD), Correlation, Multiple Regression
Prototype	9	
Start-up Course (Overall Opinion)	4	

A structured questionnaire using a 5-point Likert scale, measured the following constructs Problem statement (8 items), Value proposition (7 items), Business Model Canvas (9 items), and Start-up course- Overall opinion (4 items). (TABLE I) shows the components and number of items along with the statistical tools applied.

IV. OBJECTIVES

1. To evaluate students' ability to identify and articulate startup-relevant problem statements and analyze their market relevance and impact.

2. To assess student understanding and application of entrepreneurial concepts such as value proposition design, business modelling, and prototyping.

3. To examine the level of student engagement and participation in startup-related classroom and group activities.

V. DATA ANALYSIS

A. Analysis of Reliability

Using Cronbach's alpha, a reliability analysis was performed to evaluate the internal consistency of the items used for each factor.

TABLE II
CRONBACH ALPHA RESULTS

Factor Name	Cronbach's Alpha (Value)	N of Items	No of Valid Cases (N)
Statement of Problem	.908	8	430
Value Proposition	.847	7	430
Business Model Canvas	.903	9	430
Prototype	.898	9	430
Startup Course (Over all Opinion)	.984	4	430

The findings showed that every factor had high levels of reliability: Problem Statement (8 items; α =.91), Value Proposition (7 items; α =.85), Business Model Canvas (9 items; α =.90), Nine items in the prototype (α =.90) Course for Startup (4 items; α =.98). Every factor Cronbach's alpha value is higher than the generally recognized cutoff point of .70, indicating that the scales have good to excellent internal consistency. Responses from 430 valid cases for each factor served as the basis for the analysis. The (TABLE II) shows the Cronbach alpha analysis results.

Participants' perceptions of the startup course's five main components were assessed using descriptive analyses. For every item, mean scores and standard deviations were computed.

Objective 1: To evaluate students' ability to identify and articulate startup-relevant problem statements and analyze their market relevance and impact.

B. Statement of the Problem

In entrepreneurship problem doesn't mean as a problem. Any aspect or activity which consumes the Time, Money and physical and mental effort of the user or buyer is called as a problem. In other words, it can be a Need/Opportunity/problem for which a person is willing to pay.

In this task, the students are supposed to identify a problem or need or opportunity for which the user/buyer is willing to pay. Students are supposed to work individually/group on this task and after discussing in the team, select one best.

Need/Opportunity/problem which is worth solving. The responses of the students for the task Statement of the Problem (SoP) item wise shown in (TABLE III).

TABLE III
STATEMENT OF THE PROBLEM ANALYSIS

Statement of the Problem	N	Mean	Std. Deviation
SoP1_Clearly articulated the problem statement	430	4.24	0.854
SoP2 The scope and boundaries of the problem	430	4.06	0.812
SoP3_ problem relevant and significant to your proposed startup	430	4.29	0.831
SoP4_ A root cause analysis to the problem?	430	3.77	0.811
SoP5 Identified a clear market gap or need	430	4.27	0.853
SoP6_ problem align with current or emerging market trends and changes	430	4.24	0.898
SoP7_ Assessed the potential impact of the problem on various stakeholders	430	3.97	0.881
SoP8_ Exercise on problem time-sensitive, attention and resolution	430	4.38	0.804

The items under this construct were generally well-received by the participants. With mean scores ranging from M = 3.77 to M = 4.38, students appeared to be comfortable recognising and evaluating the issue at the heart of their startup ideas. SoP8 received the highest rating (M = 4.38, SD = 0.804), suggesting that teams firmly believed they could handle urgent issues that needed to be resolved right away. Compared to other items, SoP4 had the lowest mean (M = 3.77, SD = 0.811), indicating a comparatively low level of confidence in performing root cause analysis. Overall, the results indicate that students were able to contextualize and articulate the problem in a clear manner; however, additional support may be needed for the analytical depth of the root cause assessment.

Objective 2: To assess student understanding and application of entrepreneurial concepts such as value proposition design, business modelling, and prototyping.

C. Value Proposition

Conducting a feasibility study is a crucial step in evaluating the viability of a new idea. It helps to determine whether the idea is worth pursuing, and if so, what resources and strategies will be necessary to turn it into a successful business venture and help you develop a realistic plan for implementing it successfully.

The opinion of the students regarding values proposition task were analysed item wise and shown in the (TABLE IV).

TABLE IV
VALUE PROPOSITION ANALYSIS

Value Proposition	N	Mean	Std. Deviation
VP1_ Articulate clearly the value proposition of the given business model	430	4.42	0.656
VP2_ value proposition meets the target customer segments	430	3.45	0.582
VP3_ Value proposition unique compared to competitors in the market	430	4.41	0.682
VP4_ Value proposition aligns of the business	430	4.42	0.634
VP5_ Value proposition easily communicated through various channels.	430	3.67	0.643
VP6_ value proposition address and solve specific problems	430	4.51	0.636
VP7_ Value quantified and demonstrated to customers	430	3.96	0.664

With means ranging from M = 3.45 to M = 4.51, the Value Proposition construct was rated as moderately high. VP6 ("Does the value proposition address and solve specific problems...") received the highest rating (M = 4.51, SD = 0.636), emphasizing the offerings' perceived practical relevance and customer-centricity. VP2 received the lowest rating (M = 3.45, SD = 0.582), suggesting that students had a harder time catering to the particular requirements of target customer segments. This pattern implies that although students were comfortable articulating and expressing value, they encountered difficulties when it came to customizing offerings for particular market niches.

D. Canvas for Business Models

A business model describes how we can create, deliver, and capture value. In this assignment the students are supposed to build their "Business Model Canvas".

The understandability of the students to frame the BMC item wise as depicted in the (TABLE V).

TABLE V
ANALYSIS OF BUSINESS MODEL CANVAS

Business Model Canvas	N	Mean	Std. Deviation
BMC1_ Target customer segments for a given business model?	430	4.2	0.851
BMC2_ value propositions offered by the business model.	430	4.28	0.867
BMC3_ business model utilizes various channels to reach its customers?	430	4.24	0.855
BMC4_ Build and maintain customer relationships within the business model.	430	3.87	0.833
BMC5_ Business model generates revenue sources from its value propositions?	430	4.24	0.866
BMC6_ key resources critical to the success of the business model.	430	3.99	0.848
BMC7_ key activities performed within the business model.	430	4.23	0.837
BMC8_ business model leverage external partnerships for mutual benefit?	430	4.22	0.844
BMC9_ business model showcase unique aspects in its customer segments, value propositions, or other components?	430	4.35	0.824

The mean values for this construct ranged from M = 3.87 to M = 4.35, indicating consistently positive responses. BMC9 received the highest rating (M = 4.35, SD = 0.824), indicating broad consensus that the business models demonstrated originality and creativity. The lowest rating for BMC4 ("Strategies to build and maintain customer relationships") was M = 3.87, SD = 0.833, indicating that students might have found the relational component of business modelling more challenging. According to these findings, students could interact with the business model's strategic and structural components in an efficient manner, though their relationship-building techniques could use some work.

E. Prototype

In this assignment the students are directed to create a prototype and advised to develop prototype by following the specified conditions.

➢ Choose appropriate prototyping method.
➢ Clear demonstration of prototype and
➢ Use of language to communicate the prototype concept.

The elicited responses of the students for the task of prototype development as shown item wise in the (TABLE VI).

TABLE VI
ANALYSIS OF PROTOTYPE

Prototype	N	Mean	Std. Deviation
PT1_Is your prototype well-defined of your product or service?	430	4.5	0.658

	N	Mean	Std. Dev
PT2_ demonstrate the core functionalities of the intended product or service?	430	4.49	0.632
PT3_ demonstrate the core functionalities of the intended product or service?	430	3.58	0.642
PT4_User-friendly is the prototype	430	4.51	0.668
PT5_ implementing the prototype into a fully functional product or service?	430	4.43	0.665
PT6_ prototype adapt to the preferences of potential users?	430	4.49	0.613
PT7_ technical viability of the prototype	430	4.01	0.632
PT8_ risks associated with the prototype development and implementation	430	4.35	0.798

With mean values ranging from M = 3.58 to M = 4.51, the Prototype construct obtained the highest overall scores among the components. The highest ratings (M = 4.49–4.51) were given to items PT1, PT2, PT4, and PT6, indicating that students strongly agreed that their prototypes were clear, useful, easy to use, and sensitive to user needs. Despite appearing to be a duplicate item from PT2, PT3 received the lowest rating (M = 3.58, SD = 0.642), perhaps necessitating instrument clarification. According to the results, students had a favourable opinion of their prototyping skills, especially when it came to usability and adaptability.

Objective 3: To examine the level of student engagement and participation in startup-related classroom and group activities.

F. Overall opinion for Startups Course
The startup course received generally positive feedback from the students. The result is presented in (TABLE VII).

TABLE VII
OVERALL OPINION FOR STARTUPS COURSE

Startup Course Overall Opinion	N	Mean	Std. Deviation
STOP_1The startup course significantly helped me understand how to create a real-world startup	430	4.12	0.964
STOP_2The course improved my understanding of startup processes.	430	3.87	1.027
STOP_3 I would recommend this course to others	430	4.02	0.988

STOP1 received the highest rating (M = 4.12, SD = 0.964), suggesting that the course successfully promoted comprehension of actual startup creation. STOP2 scored the lowest (M = 3.87, SD = 1.027), indicating a comparatively lower (though still favorable) perceived improvement in comprehension of startup procedures. These findings corroborate the notion that the majority of students would suggest the course to others and that it was well received (STOP3, M = 4.02).

According to the descriptive statistics, students thought they were doing well in areas like problem identification, value creation, business modelling, and prototyping. Strong general confidence and satisfaction with the startup course's learning objectives are demonstrated by the high average scores and comparatively low standard deviations. Nonetheless, certain domains—like customer segmentation, relationship-building

tactics, and root cause analysis—may profit from focused curriculum improvement or instructional support.

VI. CORRELATION MATRIX

The (TABLE VIII) shows the results of pearson correlation analysis.

TABLE VIII
PEARSON CORRELATION ANALYSIS

	SoP	VP	BMC	PT	STOP
SoP	1				
VP	.701**	1			
BMC	.730**	.745**	1		
PT	.655**	.722**	.768**	1	
STOP	.735**	.693**	.762**	.689**	1

Five important factors were examined using a Pearson correlation analysis: Startup Course (STOP), Value Proposition (VP), Business Model Canvas (BMC), Prototype (PT), and Statement of Problem (SoP). All variables showed significant positive correlations, according to the results, which were based on data from 430 participants. There was a significant correlation between SoP and PT (r =.66, p <.01), BMC (r =.73, p <.01), VP (r =.70, p <.01), and STOP (r =.74, p <.01). There were noteworthy positive correlations between VP and STOP (r =.69, p <.01), PT (r =.72, p <.01), and BMC (r =.75, p <.01). There was a positive correlation between BMC and both PT (r =.77, p <.01) and STOP (r =.76, p <.01). There was a significant correlation between PT and STOP (r =.69, p <.01). Improved performance in one area (such as problem identification) is likely to improve performance in other areas (such as value articulation, modelling, prototyping, and course engagement), according to the pattern of strong and significant correlations. The conceptual integration of these domains within frameworks for entrepreneurship and innovation education is supported by these findings.

VII. MULTIPLE REGRESSION ANALYSIS PREDICTING STUDENTS' OVERALL SATISFACTION WITH THE STARTUP COURSE (N = 430)

The (TABLE IX) shows the multiple regression analysis.

TABLE IX
MULTIPLE REGRESSION ANALYSIS

Predictor	B	SE B	β	t	p
(Constant)	2.15	0.452	—	4.757	< .001
Statement of the Problem	0.32	0.045	0.41	7.111	< .001
Value Proposition	0.275	0.05	0.32	5.5	< .001
Business Model Canvas	0.24	0.048	0.3	5	< .001
Prototype	0.195	0.052	0.215	3.75	< .001

Analysis of Multiple Regression: The degree to which the four components—Value Proposition, Business Model Canvas, Prototype, and Statement of the Problem—predict students' general satisfaction with the Startup Course was investigated using a multiple linear regression analysis. Data from 430

students served as the basis for the analysis.

Coefficients of Regression: The contributions of each of the four predictors to the model were statistically significant (p <.001):

The strongest predictor of satisfaction was the statement of the problem (β =.41, t(425) = 7.11, p <.001), indicating that students who were more adept at expressing and comprehending the problem expressed greater course satisfaction. Value Proposition also significantly predicted satisfaction (β =.32, t(425) = 5.50, p <.001), suggesting that a clear definition of the value offering made a significant contribution to a positive student experience. Business Model Canvas demonstrated a significant positive effect, β =.30, t(425) = 5.00, p <.001, indicating that students' satisfaction was increased by proficiency in business model structuring. The effect of prototype was moderate but significant (β =.215, t(425) = 3.75, p <.001), suggesting that student satisfaction was positively correlated with prototyping activities as well.

VIII. SUMMARY MODEL
The (TABLE X) depicts the model summary.

TABLE X
SUMMARY MODEL

Model	1
R	0.772
R Square	0.595
Adjusted R Square	0.591
Std. Error of the Estimate	1.185
R Square Change	0.595
F Change	155.8
df1	4
df2	425
Sig. F Change	0
Durbin-Watson	2.013

Model Summary: The set of predictors consistently explains variance in students' course satisfaction, as demonstrated by the statistically significant regression model (F(4, 425) = 155.80, p <.001). With an adjusted R^2 of.591, the model accounted for roughly 59.5% of the variation in overall course satisfaction (R^2 =.595). There was no discernible autocorrelation in the residuals, according to the Durbin-Watson statistic of 2.013.

All of these findings suggest that students' satisfaction with the startup course is significantly influenced by their capacity to use entrepreneurial tools, particularly problem definition and value creation. The significance of these instructional elements in entrepreneurship education is highlighted by the high R^2 value (59.5%), which indicates a significant explanatory power.

IX. FINDINGS
A. *Statement of the Problem:* The results indicate that students were able to contextualise and articulate the problem in a clear manner; however, additional support may be needed for the analytical depth of the root cause assessment.

B. *Value Proposition:* The pattern implies that although students were comfortable articulating and expressing value, they encountered difficulties when it came to customising offerings for particular market niches.

C. *Business Model Canvas:* According to these findings, students could interact with the business model's strategic and structural components in an efficient manner, though their relationship-building techniques could use some work.

D. *Prototype:* According to the results, students had a favorable opinion of their prototyping skills, especially when it came to usability and adaptability.

X. SUGGESTS/RECOMMENDATION FROM STUDENTS
The (TABLE XI) represents the suggests received from the students about the course and the justifications to the suggests.

TABLE XI
SUGGESTS AND JUSTIFICATION

Student Suggestions	Justification
Introduce new technologies and innovation models for students	Introduced innovation models Viz., NIDHI-PRAYAS, NIDHI-SSS, NIDHI-EIR, NIDHI-ACCELERATOR, TIDE 2.0, SISFS, Make n Market, Ideation Camp,
Include interactive workshops or Q&A sessions with experienced entrepreneurs	Idea Premier League, Weekly Innovation Challenges, and Tinker Camp provide students with hands-on exposure to ideation, prototyping, and market validation
Establish a university hub or group to promote and raise awareness about startups	SRix & NEST available in the campus
Highlight the role of the course in enabling students to create businesses in diverse ways	Idea Premier League, Weekly Innovation Challenges, and Tinker Camp
Provide real-time web application examples to boost student interest and engagement	Srix web-based engagement programs
Provide financial and marketing support for student products with potential for success	ANGEL/VC INVESTMENT facilitation.
Effective way to learn innovatively and prepare for future earning opportunities.	Srix is doing the same.
Increase student–faculty interaction to discuss business ideas and models.	Idea Premier League, Weekly Innovation Challenges, and Tinker Camp

XI. CONCLUSION AND FUTURE DIRECTIONS
Entrepreneurship education is vital for developing the mindset and capabilities required to turn creative ideas into practical, market-ready ventures. When such programs are introduced early in a student's academic journey, they can spark innovation, encourage independence, and equip future graduates to navigate and excel in a rapidly changing economy. This study highlights the effectiveness of SR University's structured Entrepreneurship and Startup course in building entrepreneurial skills among first-year B. Tech students. Centered around four key components they are Problem Statement, Value Proposition, Business Model Canvas, and Prototype. The course systematically led students from initial concept development to concrete outcomes. The findings

showed notable improvements in students' confidence, problem-solving abilities, and readiness to innovate, strengthened by the university's strong-support system through NEST and SRiX. These results reinforce the value of early exposure to entrepreneurial learning, combined with mentorship and guided pathways, in shaping individuals to become job creators instead of job seekers. Over time, such initiatives hold the potential to make a significant contribution to economic development by producing a new wave of entrepreneurs capable of transforming ideas into meaningful, impactful solutions. Future research could explore the long-term effects entrepreneurship education on venture creation, sustainability, and scalability. Examining the role of funding access and industry partnerships could provide deeper insights into strengthening entrepreneurial ecosystem in educational intuitions.

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