GUESSS

Global University Entrepreneurial Spirit Students' Survey

STUDENT ENTREPRENEURSHIP IN SAUDI ARABIA

GUESSS Saudi National Report 2023

EY Building a better working world

جامعة الأميرة نورة بنت عبدالرحمن
Princess Nourah bint Abdulrahman University

Acknowledgements

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Executive Summary

The Saudi Arabia GUESSS report is derived from data collected through the GUESSS – Global University Entrepreneurial Spirit Students Survey – an international initiative led by the Swiss Research Institute of Small Business and Entrepreneurship at the University of St. Gallen and the University of Bern in Switzerland. Coordinated locally by the Business Support and Development Center at Princess Nourah Bint Abdulrahman University, the survey aims to assess entrepreneurship-related attitudes and behaviors among university students. With 3,746 respondents from 39 universities, the Saudi Arabia survey is part of the 10th edition of GUESSS, which involved 57 countries and over 226,000 completed responses worldwide in 2023. This report presents the key findings of the survey, offering insights into Saudi Arabian university students' predispositions, intentions, behaviors, and socio-cultural backgrounds related to entrepreneurship. The key findings of the report are summarized below:

- In regards to Five Years Post-Graduation Career Intentions, a growing interest in entrepreneurship as a career path among students as they progress in their post-graduation journeys.
- It's evident that graduates from Business, Management, Economics, and Law are predominantly inclined towards pursuing entrepreneurial endeavors, with a substantial number venturing into founding their own businesses.
- Graduates from Humanities, Art, and Social Sciences show a lower inclination towards entrepreneurship, with a higher proportion opting for employee roles.
- There is a gender disparity in entrepreneurial aspirations among students, with male students showing a higher inclination towards founding their own businesses, accounting for 61 (13%) out of 412 instances, whereas female students only represented 375 (10%) out of 3334 instances.
- Five years post-graduation, male students continued to outnumber female students in the founder category, with 114 (22%) instances compared to 1,025 (19%) instances, respectively.

- Female students demonstrate a higher prevalence in the employee category, both after graduation and in the long term, suggesting a greater inclination towards traditional employment paths
- Among the surveyed respondents, 1,660 individuals (44.31%) aspire to start businesses, reflecting a keen interest in entrepreneurship. Conversely, 529 respondents (14.12%) are presently self-employed.
- The data reveals that while a substantial majority of respondents have not attended any entrepreneurship-focused courses, there is a notable proportion who have voluntarily or mandatorily engaged with entrepreneurship education. This indicates differing levels of exposure to entrepreneurial concepts and practices among students in Saudi Arabia.
- The data indicates that Saudi students, as surveyed in the current wave of the GUESS Survey, generally exhibit a low level of entrepreneurial intention. This is evidenced by their strong disagreement with most statements in the entrepreneurial intentions scale.
- Despite the overall low entrepreneurial intention, there is a notable proportion of respondents expressing a strong desire to start a business someday (18.89%). Additionally, other statements show significant levels of determination and readiness among respondents to pursue entrepreneurial paths.
- The majority of respondents strongly agreed with their ability to discover new business opportunities (30.30%), create new products (32.53%), think creatively (43.13%), and commercialize ideas (37.99%).
- The majority of the respondents strongly agree that they can grow in positive ways by dealing with difficult situations (42.21%), actively look for ways to replace losses encountered in life (37.25%), believe they can control their reactions to events (38.06%), and seek creative solutions to alter difficult situations (38.42%).

- Among respondents (N=1660), 30.72% are uncertain about their timeline for founding their businesses, indicating a need for clarity in their entrepreneurial journey. Meanwhile, 27.59% plan to start during their studies, 25.12% intend to begin immediately after completing their studies, and 16.56% aim to launch within two years post-graduation, reflecting varied timing preferences for entrepreneurial ventures.
- Student entrepreneurs demonstrate a wide array of economic activities, with manufacturing and construction-related ventures prominently featured in the secondary sector. Furthermore, service-oriented industries such as retail, healthcare, education, and hospitality emerge as significant players in student entrepreneurship. Additionally, an emphasis on knowledge-based services, research and development, information technology, and innovation is evident among businesses operating primarily in the quaternary sector. However, a notable proportion of respondents expressed uncertainty or opted for "Other" regarding their business's primary sector, indicating either a diversity of niche industries or a lack of clarity among respondents about sector classification.
- Among the active entrepreneurs (N=529), the majority (38.61%) started their businesses within the last year, with 30.56% launching their ventures within the past 1 to 2 years. Smaller percentages were seen for businesses established 3 to 4 years ago (16.89%) and over 5 years ago (13.94%).
- The majority of the respondents, constituting 75.58%, indicate that they have not received such funding for their venture, while 24.42% report having received venture capital.
- Students perceive their businesses as excelling in innovativeness and job creation compared to competitors, while other performance dimensions receive average scores, indicating areas for potential improvement.
- The responses show a range of attitudes toward businesses' social and environmental responsibilities, with most acknowledging their importance but some dissent across different aspects.

- The surveyed entrepreneurs engage in a diverse array of business activities, spanning primary, secondary, tertiary, and quaternary sectors, with a notable proportion indicating uncertainty or selecting "Other," highlighting the multifaceted nature of entrepreneurship among respondents.
- The data reveals that a substantial proportion of respondents come from families with self-employed parents, especially where the father is self-employed. This suggests that parental entrepreneurial experience may influence the entrepreneurial intentions and activities of respondents.
- The findings reveal extensive involvement of respondents in their parents' enterprises, characterized by long-standing family businesses, substantial operations, and significant family control, underscoring the multifaceted nature of familial dynamics within these enterprises.
- The evaluation of students' succession intentions reveals a spectrum of attitudes, ranging from determination to hesitation, highlighting the complexity of succession planning and the need for tailored support strategies to ensure the continuity of family businesses.

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1. Introduction

1.1. Overview of The GUESSS Project

The Global University Entrepreneurial Spirit Students' Survey (GUESSS) is a pioneering research endeavor aimed at exploring the entrepreneurial intentions and activities of university students worldwide. Spearheaded by the Swiss Research Institute of Small Business and Entrepreneurship at the University of St. Gallen in collaboration with the University of Bern (Switzerland), the GUESSS project conducts periodic online data collection to capture the dynamic landscape of student entrepreneurship. In its 2023 edition (10th wave), GUESSS amassed responses from over 226,000 students across 57 countries, providing invaluable insights into global entrepreneurial trends and patterns.

1.2. Aim and Purpose of the Report

This report offers specific findings pertaining to Saudi Arabia, thereby enriching our understanding of entrepreneurial dynamics within the realm of higher education. By delving into the nuances of student entrepreneurship in Saudi Arabia, this report aims to inspire researchers, practitioners, and policymakers to further promote and support student entrepreneurial endeavors. The detailed analysis presented herein seeks to inform strategic initiatives and policies aimed at nurturing a vibrant ecosystem for student entrepreneurship in the region.

2. Demographic of students

The Saudi Arabian report is grounded upon the analysis of 3,746 responses obtained from students representing at least 39 distinct higher education institutions, as depicted in Table 1. The dataset showcases a diverse array of universities represented within the sample population. Notably, Princess Nourah Bint AbdulRahman University emerges as the predominant institution, constituting a substantial majority of respondents (62.01%). Other universities demonstrating significant representation include Jazan University (3.84%), University of Business & Technology (2.99%), and Taif University (2.38%). Conversely, certain universities exhibit comparatively lower representation, with several garnering only a minimal number of respondents.

It is important to note that while concerted efforts were made to distribute the survey link across all Saudi universities, the extent of encouragement provided to students to respond, and the timing of dissemination, remain unspecified. This variance in university representation underscores a comprehensive coverage of institutions across the kingdom, albeit with certain universities exhibiting more pronounced presence in the sample. Additionally, the "Other" category (3.12%) encompasses respondents from universities not explicitly listed in the survey.

Table 1: Responses by Higher Education Institutions (%)

		Freq.	Percent
1	Saudi Electronic University	60	1.6
2	Arab Open University	9	0.24
3	University of Business & Technology	112	2.99
4	Imam AbdulRahman Bin Faisal University	69	1.84
5	Imam Mohammed Ibn Saud Islamic University	163	4.35
6	Prince Sultan University	36	0.96
7	Princess Nourah Bint AbdulRahman University	2,323	62.01
8	Al Baha University	19	0.51
9	Northern Border University	2	0.05
10	Taif University	89	2.38
11	Alfaisal University	9	0.24
12	Qassim University	43	1.15
13	Majmaah University	4	0.11
14	Mustaqbal University	2	0.05
15	AlMaarefa University	2	0.05
16	King Saud University	53	1.41
17	King Saud Bin AbdulAziz University for health sciences	5	0.13
18	King AbdulAziz University	33	0.88
19	King Fahd University of Petroleum and Minerals	6	0.16
20	King Faisal University	25	0.67
21	Al-Yamamah University	3	0.08
22	Umm Al-Qura University	82	2.19
23	University of Bisha	9	0.24
24	Tabuk University	7	0.19
25	University of Jeddah	66	1.76
26	Jazan University	144	3.84
27	Hail University	7	0.19
28	University of Hafr Al Batin	27	0.72
29	Dar al-hekma University	9	0.24
30	Dar al uloom University	35	0.93
31	Riyadh Elm University	27	0.72
32	Prince Sattam Bin AbdulAziz University	55	1.47
33	Shaqra University	14	0.37
34	Taibah University	23	0.61
35	Effat University	9	0.24
36	Fahad Bin Sultan University	1	0.03
37	Najran University	12	0.32
38	University of Prince Mugrin	9	0.24
39	Institute of Public Administration	26	0.69
40	Other	117	3.12

2.1. Age and Gender of Students

In terms of gender, more female students participated in GUESSS Saudi Arabia (89%) compared the male respondents (11%). This gender ratio of respondents was expected. In fact, this distribution mimic the trend of the international sample. Furthermore, the mode of data collection could also play a role; for instance, online surveys might appeal more to certain demographics, affecting the gender distribution of respondents. The survey is conducted in environments where women are more accessible or open to participating in research, it could lead to a higher representation of female respondents.

Table 2 illustrates the age distribution of respondents. The majority of the respondents fall within the younger age brackets, with 34.84% aged under 20 and 37.45% falling within the 20-24 age range. These figures are consistent with the previous GUESSS 2021 report, where the majority of respondents were between the <20 and 20-24 age groups (86.03%). This indicates a significant representation of younger individuals in the sample population. The 25-29 age group accounts for 23.89% of respondents, indicating a considerable presence of individuals in their late twenties. However, there is a notable drop in representation among respondents aged 30-34 (1.55%) and those aged 30 and above (2.27%). This indicates a skew towards younger age groups within the sample.

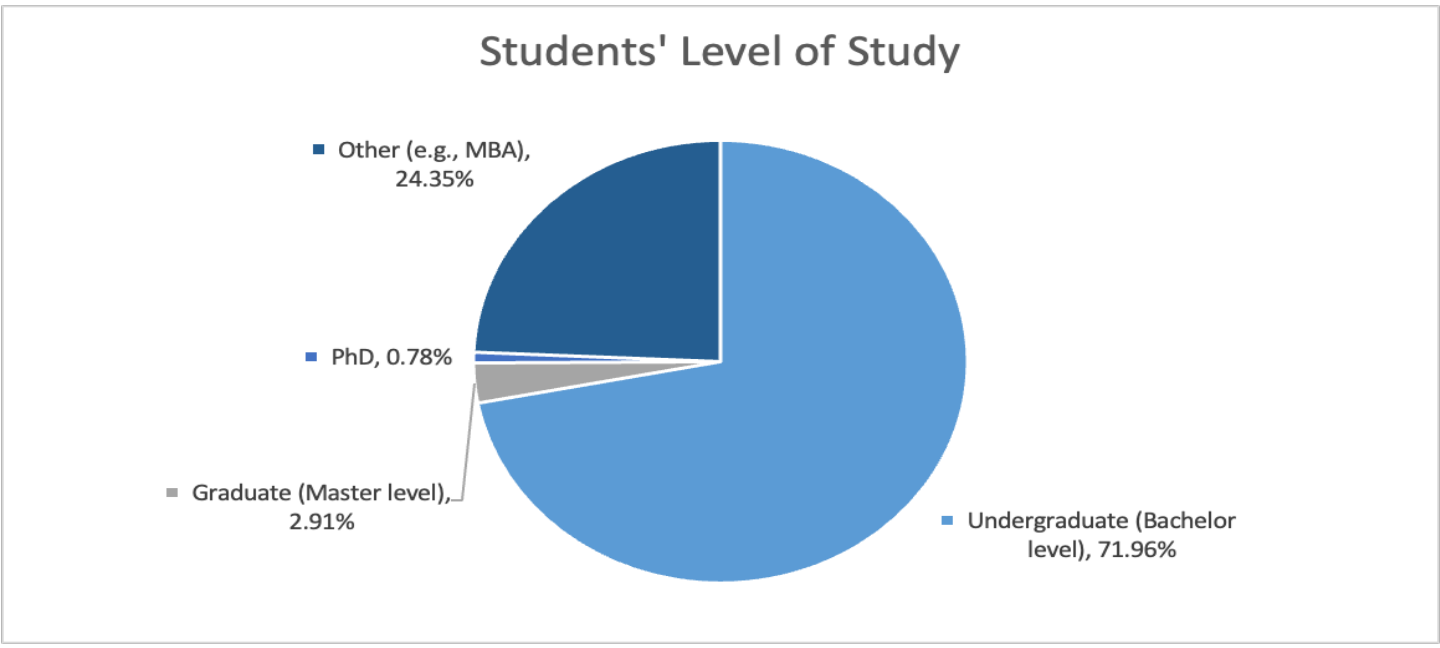
Table 2: Age distribution of respondents

	Freq.	Percent
<20	1,305	34.84
20-24	1,403	37.45
25-29	895	23.89
30-34	58	1.55
30+	85	2.27

2.2. Level of Education and Field of Study

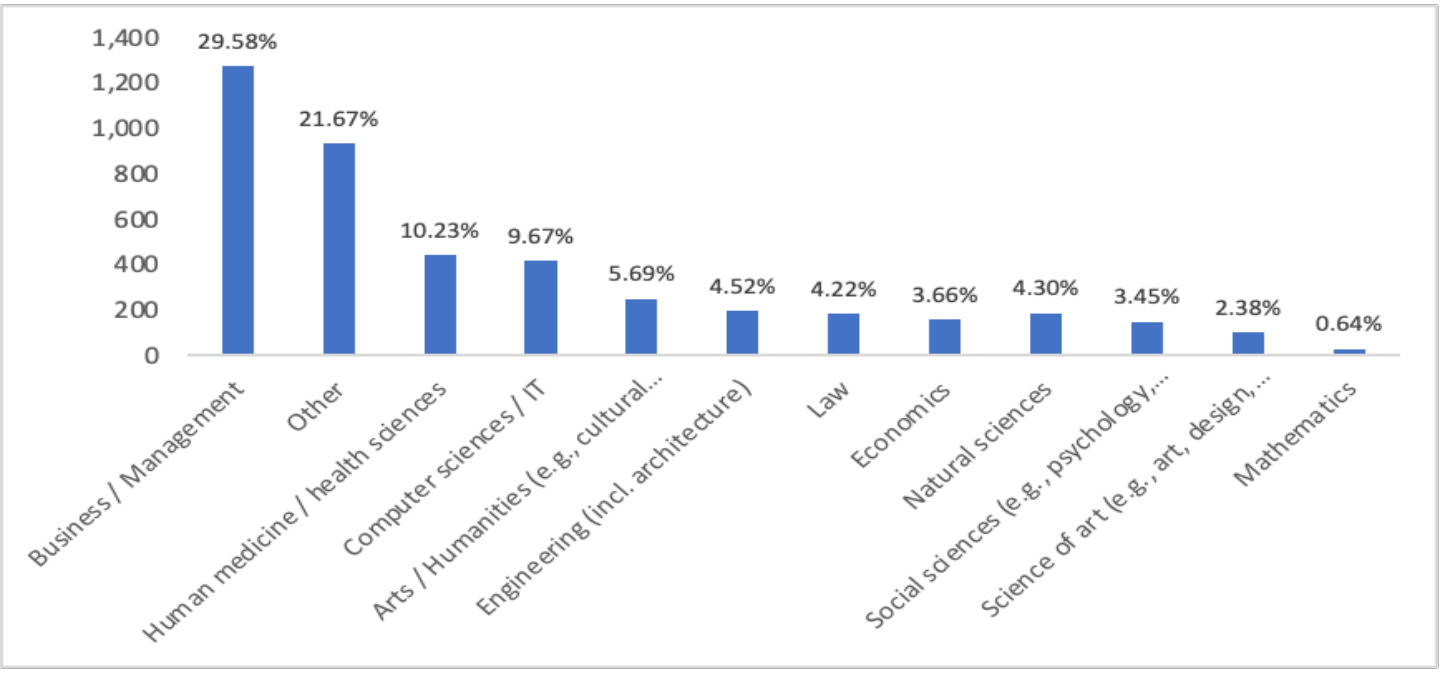
Figure 1 provides a breakdown of the educational levels of respondents. It shows that the majority of respondents, comprising 71.96%, are at the undergraduate (Bachelor level) of education. Conversely, only a small proportion of respondents are at the graduate (Master level) and PhD levels, accounting for 2.91% and 0.78% respectively. These findings closely parallel those of the GUESSS 2021 report, where undergraduate and graduate (Master's and PhD) levels were reported as 88.66% and 3.69% respectively. The category "Other" which includes degrees such as MBA, constitutes 24.35% of the respondents. Overall, the table suggests that the sample is predominantly composed of individuals with undergraduate degrees, with relatively fewer respondents at higher education levels.

Figure 1: Students' Level of Study



As shown in Figure 2 the largest group consists of individuals studying Business/Management, comprising 29.58% of the sample. This indicates a significant representation of individuals pursuing studies related to business and management disciplines. The next most common fields of study include Human Medicine/Health Sciences (10.23%) and Computer Sciences/IT (9.67%), suggesting a considerable presence of respondents in these fields. Additionally, Arts/Humanities (5.69%), Engineering (4.52%), and Social Sciences (3.45%) are also notable categories within the sample. The category "Other" (21.67%) encompasses a diverse range of fields not explicitly listed, underscoring the variability in respondents' areas of study and the broad spectrum of academic disciplines represented in the sample.

Figure 2: Distribution of Saudi Students by Field of Studies



3. Career Choice Intentions

3.1. General Career Intentions

All participants were surveyed regarding their preferred career trajectories immediately following graduation and five years thereafter. Table 4 provides an overview of the distribution of responses across different career path categories. After graduation, the majority of respondents indicated a preference for employment in large businesses, accounting for 36.76% of responses, followed by entrepreneurship at 11.64%, employment in a medium-sized business at 10.76%, and academia at 6.91%. In contrast, a smaller percentage expressed interest in working for small businesses (3.34%) or non-profit organizations (1.44%). Notably, a significant proportion of respondents (22.61%) either selected "Other" or expressed uncertainty about their career paths. Looking ahead to five years post-graduation, the landscape shifted, with entrepreneurship emerging as the most favoured career path at 30.41%, surpassing employment in large businesses and medium-sized business, which decreased to 30.33% and 5.39% respectively. Employment in academia also saw a slight increase to 8.06%, while preferences for small businesses and non-profit organizations remained relatively low, suggesting a growing interest in starting and running businesses among students as they gain more experience and progress in their careers. This shift could reflect evolving aspirations, changing economic conditions, or increased exposure to entrepreneurial opportunities. Interestingly, the proportion of respondents unsure about their future career paths decreased to 16.74%, indicating a clearer direction for many students as they progress in their studies and career aspirations. These insights are valuable for educators, policymakers, and industry stakeholders to better understand and support the evolving career aspirations of students in higher education. In specific, we recommend offering personalized career counselling services to help students explore and clarify their entrepreneurial goals, identify suitable pathways, and develop actionable plans for realizing their aspirations.

Table 3: Post-Graduation and Five Years Post-Graduation Career Intentions (detailed)

	After graduation		5 years post-graduation	
	Freq.	Percent	Freq.	Percent
An employee in a small business (1-49 employees)	125	3.34%	54	1.44%
An employee in a medium-sized business (50-249 employees)	403	10.76%	202	5.39%
An employee in a large business (250 or more employees)	1,377	36.76%	1,136	30.33%
An employee in a non-profit organization	54	1.44%	44	1.17%
An employee in academia (academic career path)	259	6.91%	302	8.06%
An employee in public service	155	4.14%	129	3.44%
A founder (entrepreneur) working in my own business	436	11.64%	1,139	30.41%
A successor in my parents' / family's business	49	1.31%	55	1.47%
A successor in another business	41	1.09%	58	1.55%
Other / do not know yet	847	22.61%	627	16.74%

Aggregating the data into four broad categories (i.e., employee, founder, successor, other/no plans), notable changes are observed in students' career ambitions five years post-graduation (Table 5). Immediately after graduation, the majority of students (63.35%) expressed intentions to become employees, while a smaller percentage aimed to become founders (11.64%) or successors (2.4%). However, five years later, there is a noticeable shift in career preferences, with the percentage of students aspiring to become employees decreasing to 49.84%. In contrast, the proportion of students aiming to become founders significantly increased to 30.41%, representing a substantial jump of 18.77%. Similarly, the percentage of students considering themselves as successors also experienced a slight increase from 2.4% to 3.02%. However, the category of other/no plans saw a decrease from 22.61% to 16.74%, indicating a reduction in uncertainty or a clearer sense of career direction among students over the five-year period. Overall, these changes highlight a growing interest in entrepreneurship as a career path among students as they progress in their post-graduation journeys.

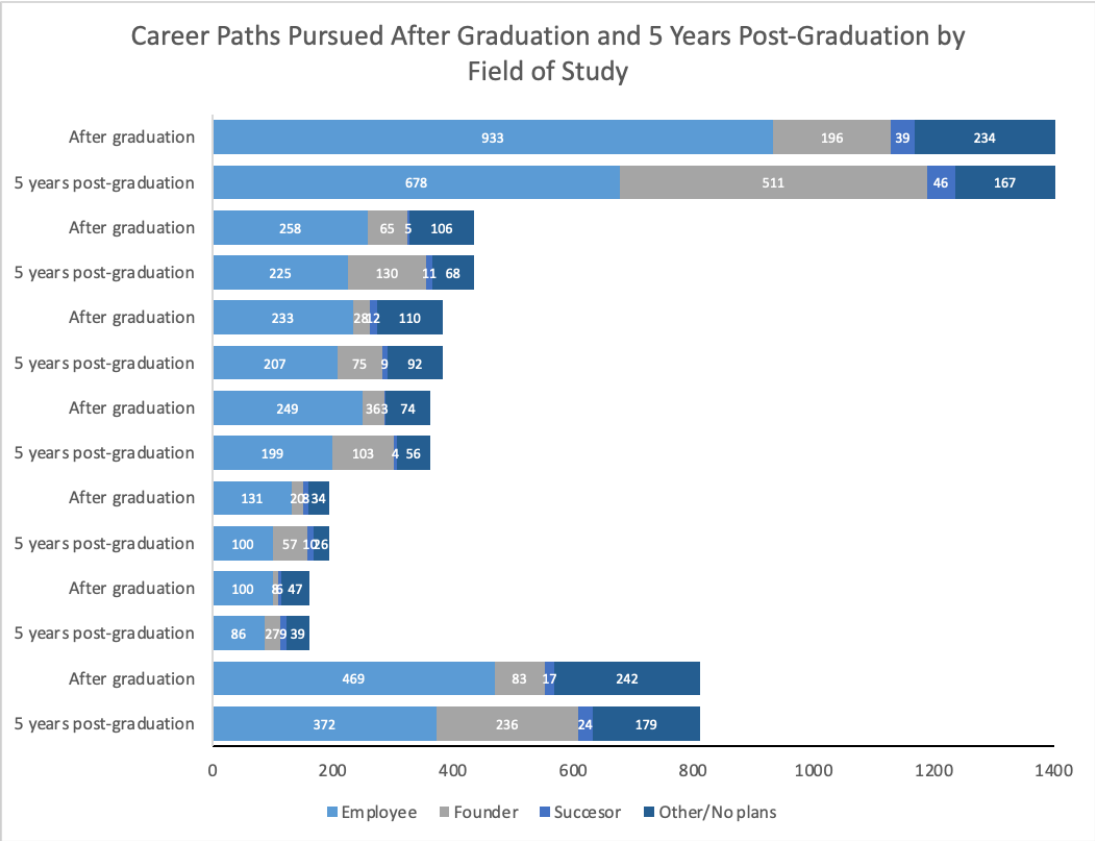
Table 4: Post-Graduation and Five Years Post-Graduation Career Intentions (Broad)

	After graduation		5 years post-graduation		Change
	Freq.	percent	Freq.	percent	percent
Employee	2,373	63.35	1,867	49.84	13.51
Founder	436	11.64	1,139	30.41	18.77
Successor	90	2.4	113	3.02	0.62
Other/No plans	847	22.61	627	16.74	5.87

3.2. Career Aspirations by Field of Study

Figure 3 provides a comprehensive overview of the career paths pursued by graduates from different fields of study both immediately after graduation and five years post-graduation. Upon closer examination, it's evident that graduates from Business, Management, Economics, and Law are predominantly inclined towards pursuing entrepreneurial endeavors, with a substantial number venturing into founding their own businesses. This trend remains consistent even five years after graduation, albeit with a slight increase in the number of founders and a decrease in those pursuing employee roles. In contrast, graduates from Humanities, Art, and Social Sciences show a lower inclination towards entrepreneurship, with a higher proportion opting for employee roles. However, it's worth noting the significant shift in career paths over time, with a notable increase in the number of graduates from this field choosing to become founders five years post-graduation. The data also highlights variations across different fields of study regarding the preference for specific career paths. For instance, graduates from Computer Sciences and IT exhibit a relatively higher tendency towards entrepreneurship compared to those from Natural Sciences, where a larger proportion opt for employee roles. This variation highlights the influence of academic backgrounds and skill sets on career trajectories, emphasizing the need for tailored support and resources to foster entrepreneurial endeavors across diverse disciplines.

Figure 3 : Career Choice Intentions by Field of Study



3.3. Career Aspirations by Gender

As shown in Figures 4 and Figure 5, male students are more likely to pursue entrepreneurial paths both after graduation and five years post-graduation compared to their female counterparts. Specifically, in the category of founders after graduation, male students accounted for 61 (13%) out of 412 instances, whereas female students only represented 375 (10%) out of 3334 instances. Similarly, five years post-graduation, male students continued to outnumber female students in the founder category, with 114 (22%) instances compared to 1,025 (19%) instances, respectively. This trend suggests a gender disparity in entrepreneurial aspirations among students, with male students showing a higher inclination towards founding their own businesses. Additionally, the data indicate that male students are more likely to pursue careers as successors in both time periods, albeit to a lesser extent than entrepreneurship. Conversely, female students demonstrate a higher prevalence in the employee category, both after graduation and in the long term, suggesting a greater inclination towards traditional employment paths.

These findings underscore the importance of addressing gender disparities in entrepreneurial education and support systems to foster greater gender equality in entrepreneurship. The data highlight the importance of fostering an entrepreneurial mindset and providing opportunities for skill development among female students to encourage greater participation in entrepreneurial ventures. By equipping female students with the necessary resources, mentorship, and networking opportunities, institutions can empower them to pursue entrepreneurship with confidence and success.

Figure 4: Career choice intentions Post-Graduation by gender

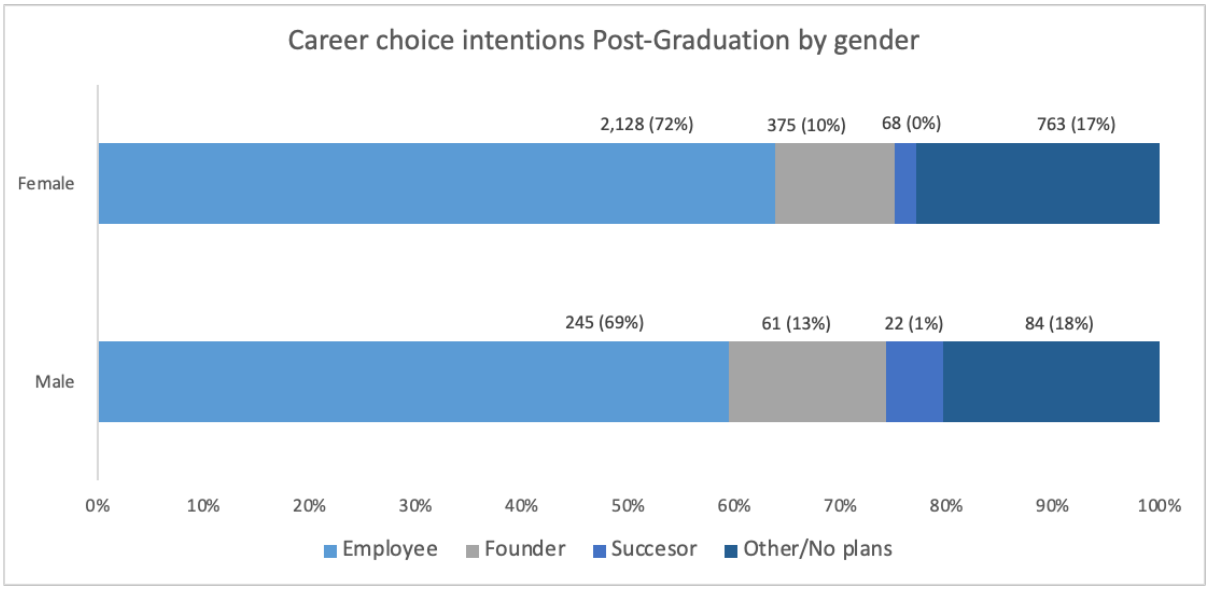
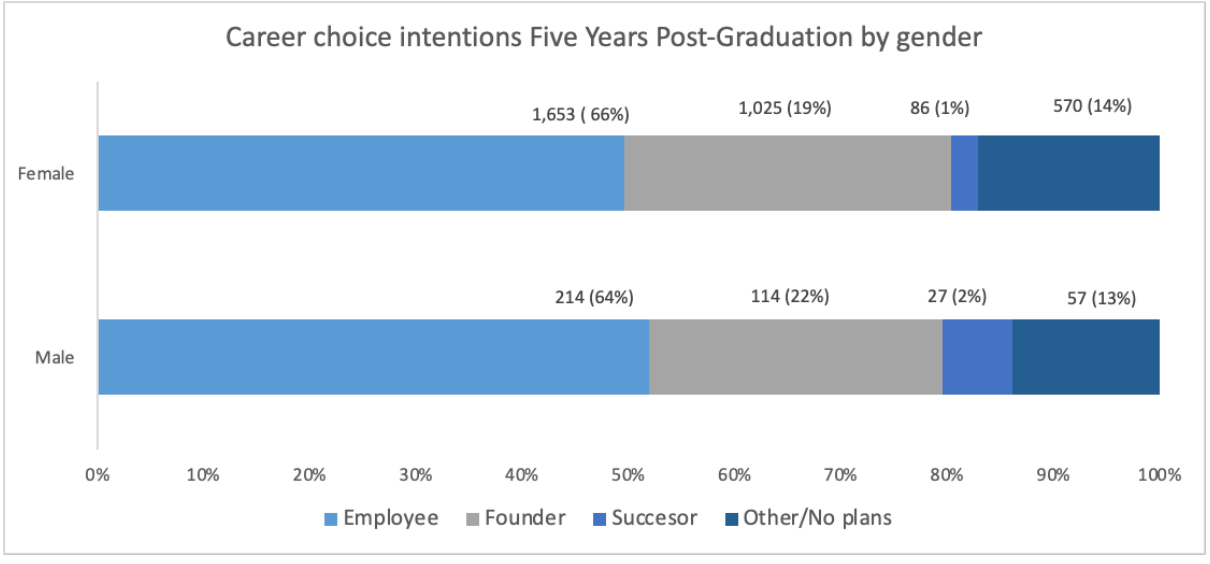


Figure 5: Career choice intentions Five Years Post-Graduation by gender



4. Intentions Towards Entrepreneurial Activities

Table 6 provide insights into the entrepreneurial intentions and activities of the respondents. It indicates that a considerable portion (44.31%) of respondents are actively attempting to start their own businesses or become self-employed. This suggests a significant interest in entrepreneurship among the surveyed population. However, a smaller proportion (14.12%) of respondents are already running their own businesses or are self-employed. This indicates a disparity between entrepreneurial intentions and actual entrepreneurial activity among the respondents. It suggests that while many individuals express an interest in entrepreneurship, a smaller subset has successfully transitioned into entrepreneurship or self-employment. This could imply potential barriers or challenges in translating entrepreneurial intentions into concrete business ventures. Further analysis would be necessary to explore the factors contributing to this gap and to identify strategies to support aspiring entrepreneurs in their entrepreneurial endeavors. A comparative analysis with the GUESSS 2021 report reveals that 51.04% of respondents (N = 1491) self-identify as nascent entrepreneurs, while 9.11% (N = 266) are categorized as active entrepreneurs. This suggests a slight overall uptick in entrepreneurial activity among students over time.

Table 5: Nascent and Active Entrepreneurs in The Saudi Sample

	Freq.	**Percent**	**Freq.**	**Percent**
	Are you currently trying to start your own business / to become self-employed?		Are you already running your own business / are you already self-employed?	
No	2,086	55.69	3,217	85.88
Yes	1,660	44.31	529	14.12

4.1. Intentions to Found A Business by Gender

A comparison was drawn between Nascent and Active Entrepreneur based on their (1) gender (2) field of study (3) level of study, and (4) university location (Table 7)

Table 7 : Comparison Drawn Between Nascent and Active Entrepreneur

	Nascent entrepreneurs		Active entrepreneurs	
	Freq.	precent	Freq.	precent
Gender				
Male	114	7%	103	19%
Female	1103	66%	426	81%
Field of study				
Humanities, Art, and Social sciences	115	7%	64	12%
Medicine and health sciences	460	28%	193	36%
Business, Management, Economics, and Law	121	7%	59	11%
Computer sciences and IT	104	6%	49	9%
Mathematics, Engineering and architecture	61	4%	37	7%
Natural sciences	55	3%	15	3%
Other	261	16%	112	21%
Level of study				
Undergraduate	897	54%	360	68%
Graduate (Master/ PhD)	45	3%	41	8%
Other	275	17%	128	24%
University location				
Middle Region	859	52%	311	59%
Eastern Region	51	3%	31	6%
Western Region	130	8%	79	15%
North Region	5	0%	5	1%
South Region	58	3%	35	7%
Other	33	2%	13	2%

Table 7 shows that among nascent entrepreneurs, there is a relatively imbalanced distribution between males (7%) and females (66%). Similarly, among active entrepreneurs, males represent a smaller proportion (19%) compared to females (81%). This suggests a higher representation of females among both nascent and active entrepreneurs. Similarly, an examination in parallel with the GUESSS 2021 report unveils that 75.56% of female students are nascent entrepreneurs, contrasting with 21.80% of their male counterparts.

4.2. Intentions To Found A Business By Field Of Study

As it is clear in Table 7 that The majority of both nascent and active entrepreneurs come from the field of Medicine and Health Sciences, with 28% and 36%, respectively. This is followed by Humanities, Art, and Social Sciences, Business, Management, Economics, and Law, and Computer Sciences and IT. Comparatively, findings from the GUESSS 2021 report reveal a noteworthy presence of students in the field of Humanities, Art, and Social Sciences, with 29.64% classified as nascent entrepreneurs and 28.95% as active entrepreneurs. Following closely are students in the field of Natural Sciences, where 22.80% are nascent entrepreneurs and 21.05% are active entrepreneurs. Interestingly, the field of Medicine and Health Sciences ranks third, with 11.67% of students classified as nascent entrepreneurs and 12.03% as active entrepreneurs. The distribution across fields of study indicates diversity among entrepreneurs, with individuals from various academic backgrounds venturing into entrepreneurship.

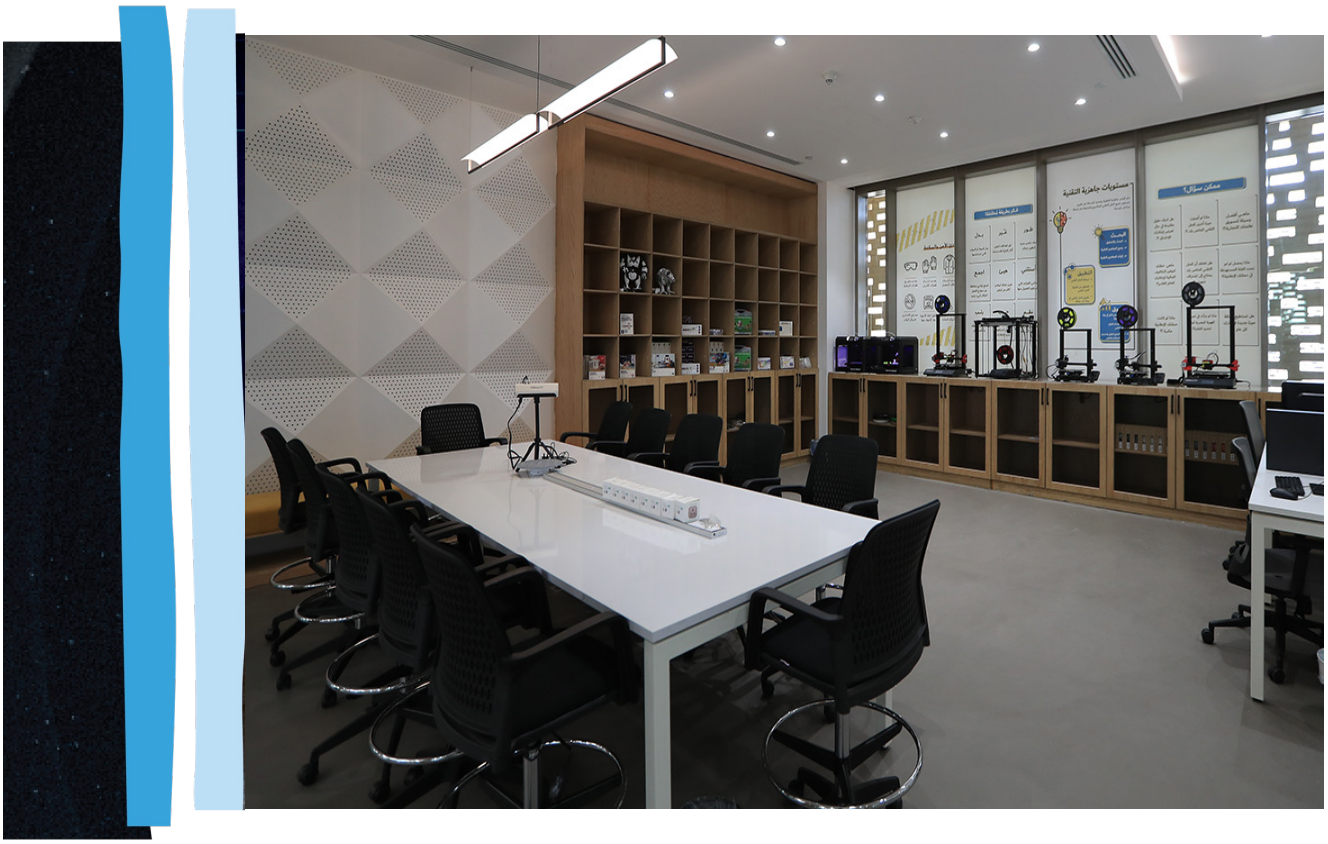
4.3. Intentions To Found A Business By Level Of Study

A significant majority of both nascent (54%) and active (68%) entrepreneurs are at the undergraduate level (referring to Table 7). There are smaller proportions of entrepreneurs at the graduate level (Master/PhD), suggesting that entrepreneurship is not limited to postgraduate students. In contrast, the data from 2021 emphasizes that undergraduate students exhibit a stronger inclination towards entrepreneurship, with 88.73% engaging as nascent entrepreneurs and 85.71% as active entrepreneurs. This variance may stem from the likelihood that graduate students are already employed, which could influence their entrepreneurial pursuits.

4.4. Intentions To Found A Business By University Location

The majority of both nascent (52%) and active (59%) entrepreneurs are located in the Middle Region, indicating a concentration of entrepreneurial activity in this region (referring to Table 7). Other region such as the Western Region also show notable proportions of entrepreneurs. This geographical concentration may suggest the presence of conducive factors such as access to resources, supportive infrastructure, and networking opportunities that foster entrepreneurial endeavors. However, it's imperative to explore the reasons behind this regional concentration further to identify specific drivers and replicate successful initiatives in other regions.

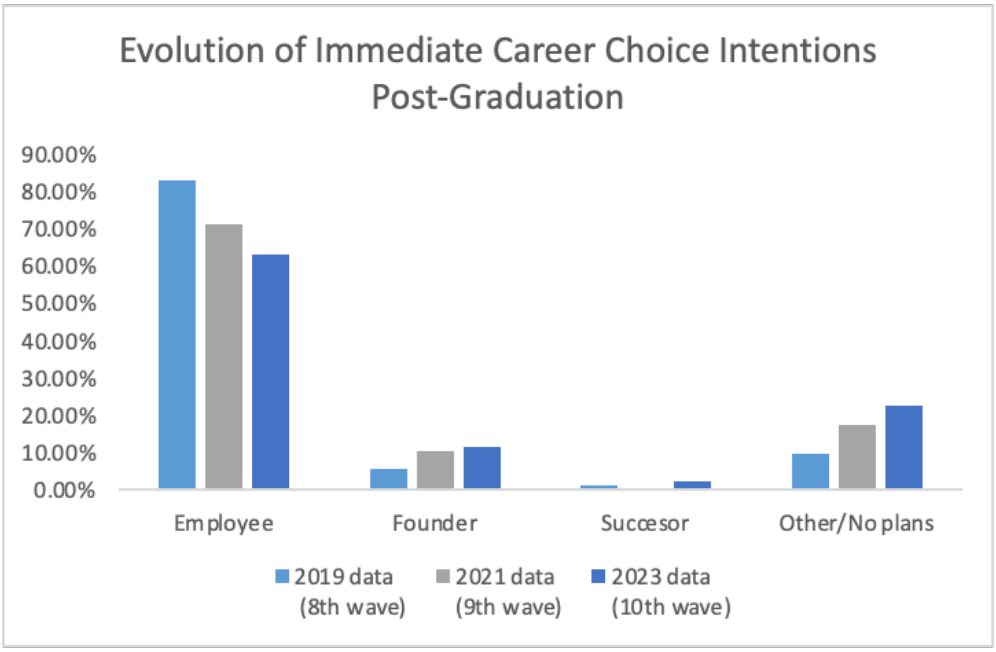
Moreover, while the Middle Region stands out as a hub for entrepreneurial activity, it's crucial to ensure equitable opportunities for entrepreneurship across all regions. This could involve implementing targeted initiatives to support aspiring entrepreneurs in regions with lower representation, such as the Western Region. By addressing potential barriers and providing resources tailored to the unique needs of entrepreneurs in different regions, policymakers and stakeholders can promote more balanced entrepreneurial ecosystems nationwide.



4.5. Evolution Of Career Choice Intentions

Figure 6 illustrates changes in career choices of graduates over the last three data collection waves. It's evident that there has been a notable decline in the percentage of graduates opting for employment post-graduation, decreasing from 83.12% in 2019 to 63.35% in 2023. Conversely, the proportion of graduates opting to become founders has increased consistently, rising from 5.67% in 2019 to 11.64% in 2023. Similarly, the percentage of graduates planning to pursue other paths or having no definitive plans has seen a significant increase over the years, suggesting a shifting trend in career intentions among recent graduates. This data highlights a growing interest in entrepreneurship and a decrease in traditional employment paths among graduates over time. Overall, these findings underscore the evolving preferences of graduates towards entrepreneurship and the need for tailored support and resources to foster entrepreneurial endeavors in higher education institutions.

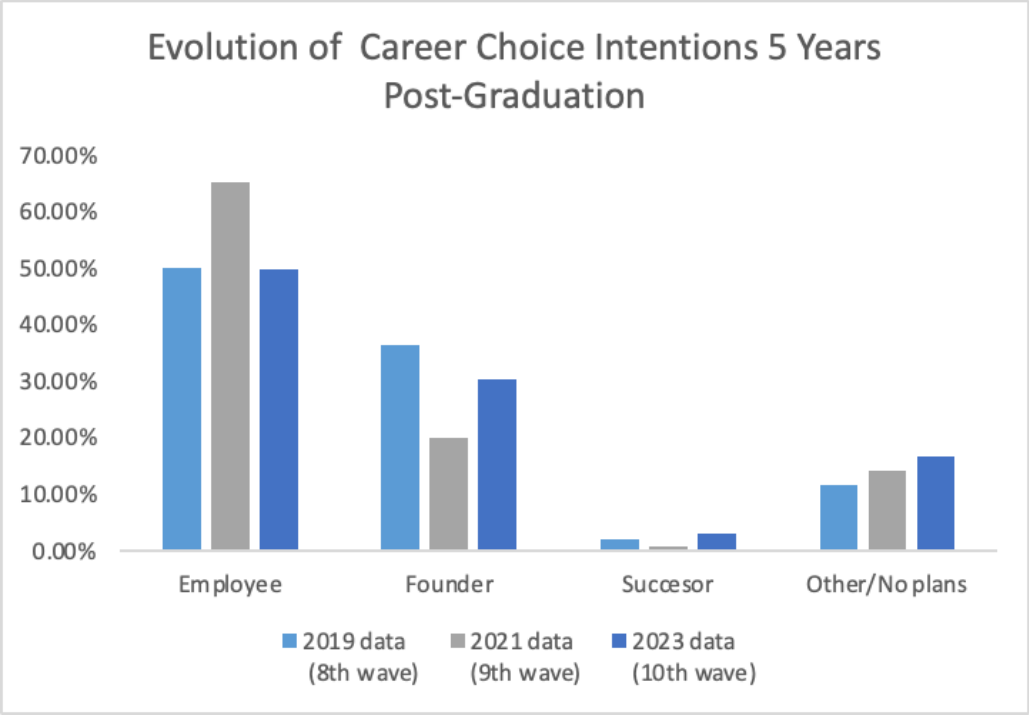
Figure 6: Evolution of Immediate Career Choice Intentions Post-Graduation



The evolution of career choices among graduates five years post-graduation reveals interesting trends (Figure 7). Notably, the percentage of graduates choosing employment as employees initially decreased from 50.04% in 2019 to 49.84% in 2023, experiencing a fluctuation within this timeframe. In contrast, the proportion of graduates opting for entrepreneurial endeavors as founders declined initially from 36.44% in 2019 to 19.86% in 2021 before rising again to 30.41% by 2023, suggesting a shift in interest towards entrepreneurship.

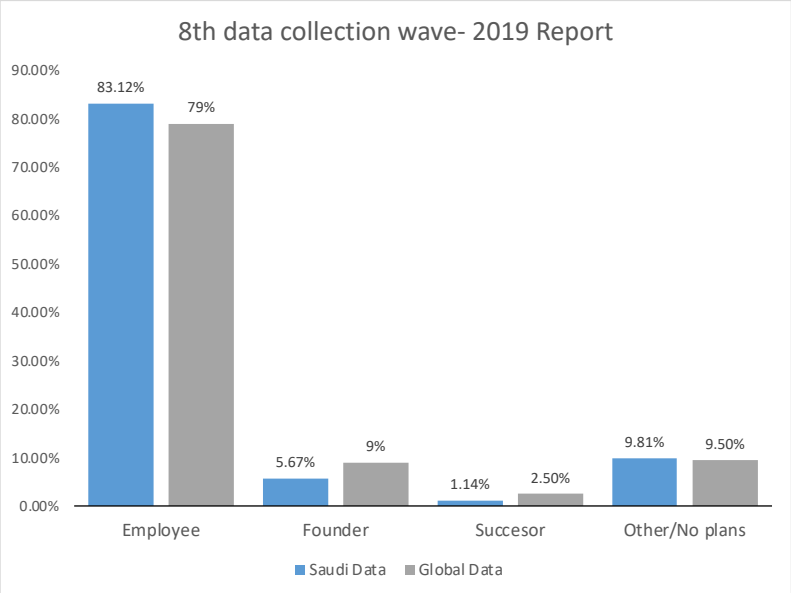
Additionally, the percentage of graduates with other plans or no definitive path increased steadily over the years, reaching 16.74% in 2023. These trends reflect changing preferences and aspirations among graduates as they progress in their careers post-graduation, indicating a dynamic landscape in career choices over time. It underscores the significance of adapting educational and support systems to cater to evolving aspirations and opportunities in the professional landscape.

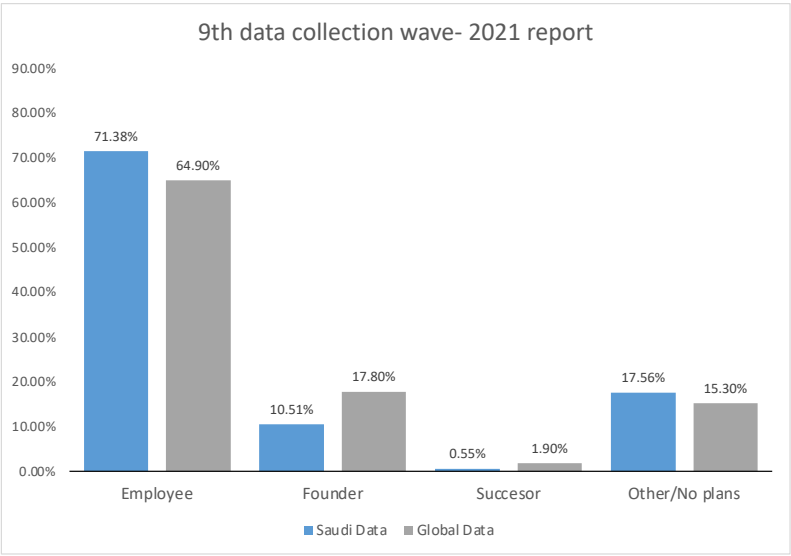
Figure 7: Evolution of Career Choice Intentions 5 Years Post-Graduation

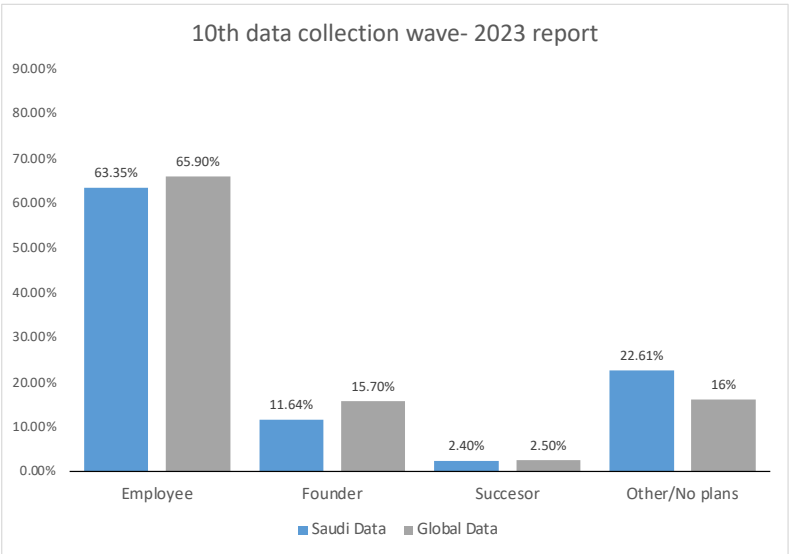


Comparing Saudi data with global data regarding career choices after graduation reveals interesting disparities and similarities (Figure 8). Initially, in 2019, a higher percentage of Saudi graduates opted for employment as employees compared to the global average (83.12% vs. 79%). This trend continued in subsequent years but with a decreasing gap, showing a convergence towards global averages by 2023 (63.35% Saudi vs. 65.90% global). Conversely, the proportion of graduates choosing entrepreneurship (founder role) in Saudi Arabia was consistently lower than the global average across all years, indicating less inclination towards starting their businesses. Notably, the percentage of graduates with other plans or no definitive path after graduation was higher in Saudi Arabia compared to the global average in 2019 and 2021, with the gap narrowing by 2023. Overall, these comparisons highlight both the alignment and divergence in career choices between Saudi Arabia and global trends, suggesting evolving aspirations and opportunities within the Saudi context over time.

Figure 8: Comparison Of The Evolution Of Immediate Career Choice Intentions Post-Graduation Between The Saudi Data And The Global Data



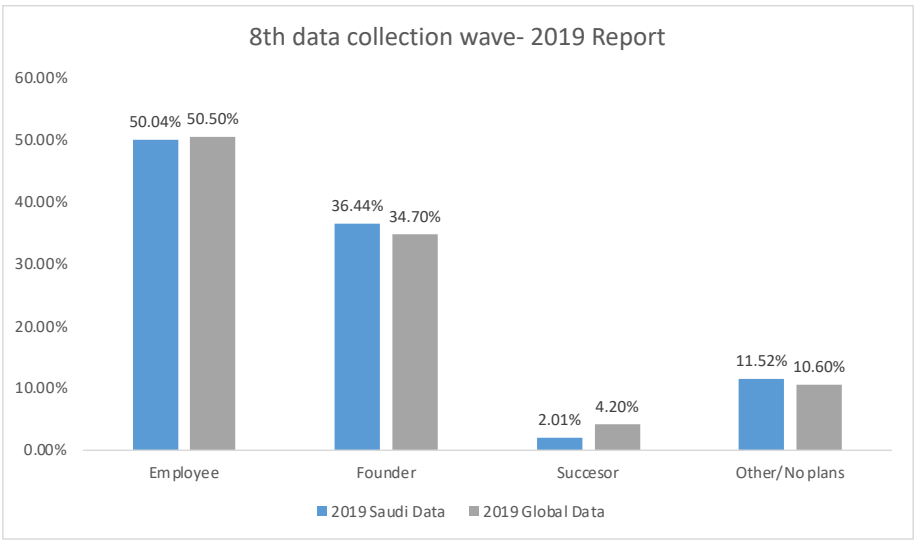


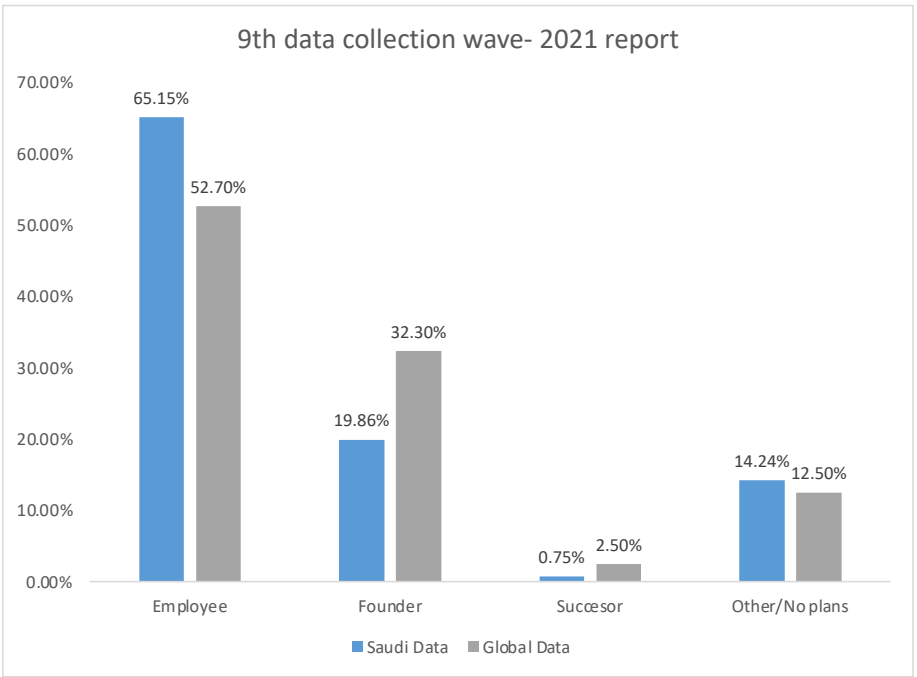


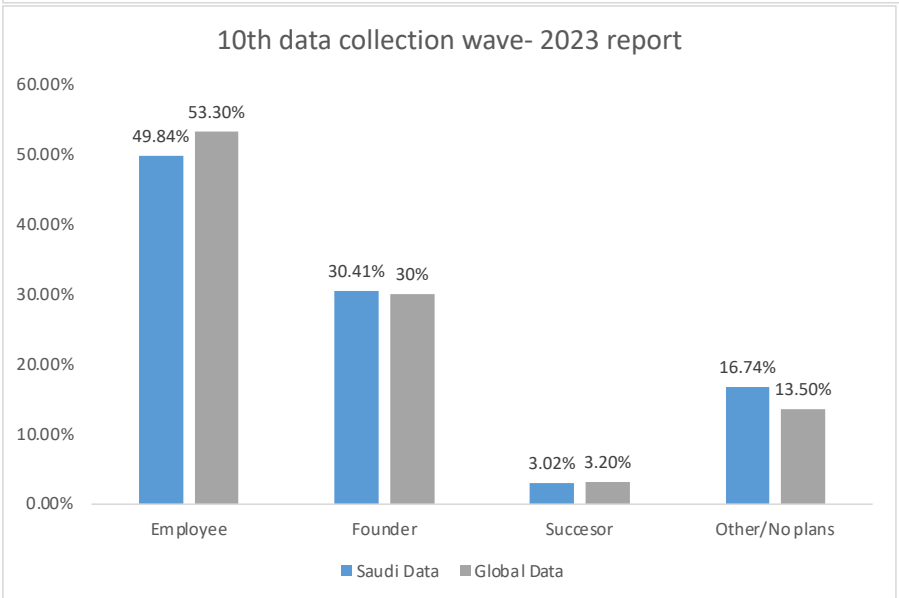
Regarding the career choices five years post-graduation (as shown in Figure 9): In 2019, Saudi Arabia had a higher percentage of graduates becoming founders compared to the global average (36.44% vs. 34.70%), suggesting a more entrepreneurial inclination among Saudi graduates. However, by 2021, this trend reversed, with a decrease in the proportion of founders in Saudi Arabia compared to a slight increase globally. Interestingly, by 2023, Saudi Arabia saw a rebound in the founder category, marginally exceeding the global average. The comparison with the global average provides valuable insights into Saudi Arabia's entrepreneurial ecosystem. While initially outperforming the global average in terms of graduates becoming founders, the subsequent reversal and subsequent rebound highlight the need for continuous monitoring and adaptation to global trends and dynamics in entrepreneurship.

In contrast, the percentage of graduates becoming employees was initially slightly higher in Saudi Arabia compared to the global average in 2021, but by 2023, Saudi Arabia fell slightly below the global average. The proportion of graduates with other plans or no defined path after graduation showed fluctuations but generally remained higher in Saudi Arabia compared to the global average across all years. This highlights the necessity for customized support mechanisms and career guidance initiatives. Solutions such as mentorship programs and career counseling services can play a vital role in helping graduates navigate their post-graduation trajectories more effectively.

Figure 9: Comparison Of The Evolution Of Career Choice Intentions 5 Years Post-Graduation Between The Saudi Data And The Global Data







5. Drivers of entrepreneurial intentions

5.1. University Context

The GUESSS survey captures respondents' perceptions of the entrepreneurial environment at their respective universities using a 7-point scale ranging from "not at all" to "very much" as shown in Figure 10). Notably, a substantial percentage of respondents (ranging from 38.56% to 41.54%) strongly agreed that their university environment inspired them to develop business ideas, encouraged engagement in entrepreneurial activities, and facilitated access to entrepreneurship-related advice and guidance. Conversely, a noteworthy proportion (ranging from 10.10% to 12.68%) felt that their university did not provide a conducive climate for entrepreneurship. This data underscores the critical role of supportive university environments in fostering entrepreneurial aspirations and initiatives among students, emphasizing the positive impact of such environments on entrepreneurial engagement and ideation. These findings suggest potential areas for improvement in terms of institutional support and resources for entrepreneurship education and encouragement at the university level. Further analysis could delve into the factors influencing these perceptions, thereby informing initiatives aimed at enhancing the entrepreneurial ecosystem within universities.

Figure 10: Students' Perception about the Institutional Support for Entrepreneurship in their Universities

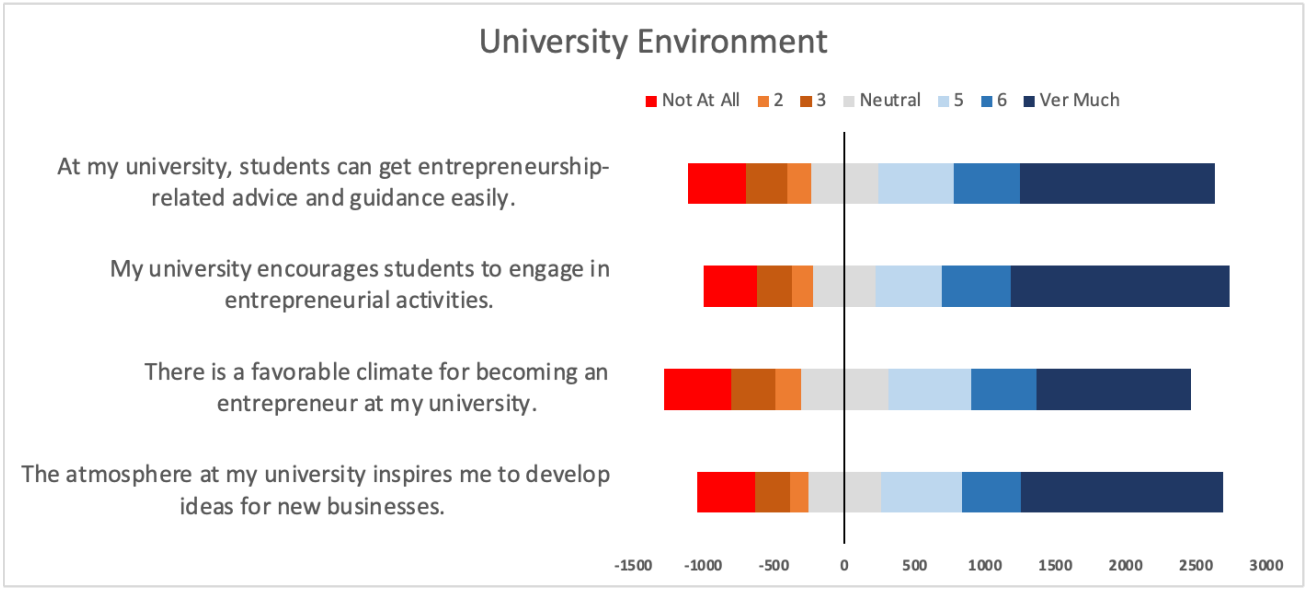
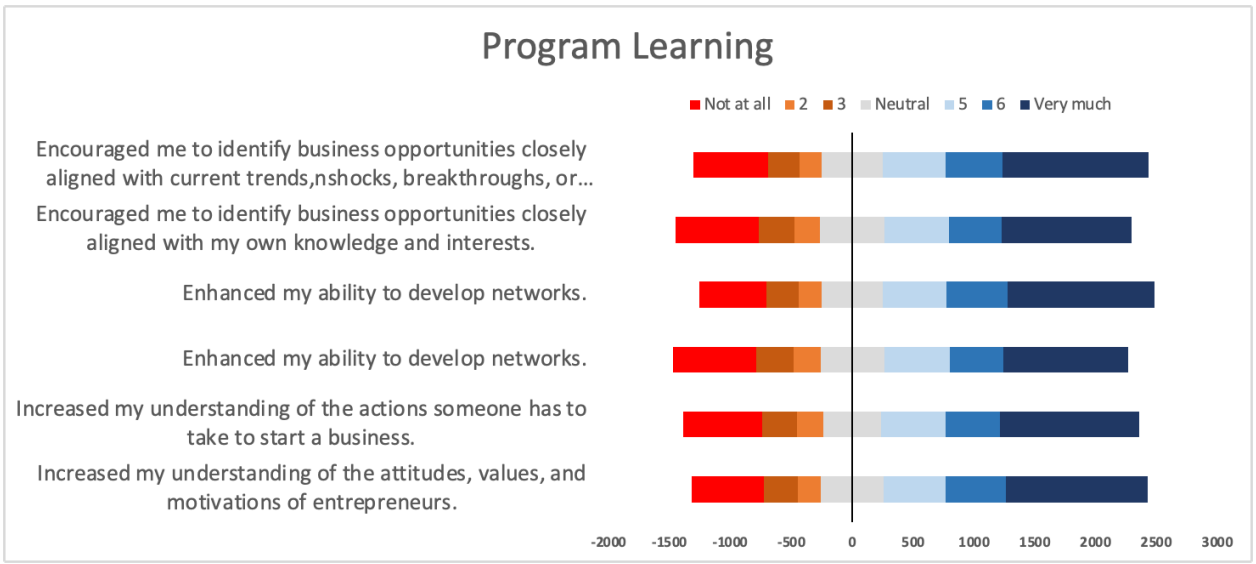


Figure 11 presents responses indicating the perceived impact of program learning on various aspects of entrepreneurship education. Notably, a significant percentage of respondents strongly agreed (31.04% to 32.23%) that their studies very much increased their understanding of entrepreneurial attitudes, actions, practical skills, networking abilities, and the identification of business opportunities. Conversely, there are noticeable percentages (15.88% to 18.34%) representing those who felt that their studies did not sufficiently enhance these aspects. Overall, the data underscores the importance of curriculum design and educational quality in equipping students with the essential knowledge and skills needed for entrepreneurial pursuits, emphasizing the positive impact of effective program learning on entrepreneurial competencies and perceptions. Educators and program developers should prioritize enhancing the learning experiences that cultivate entrepreneurial attitudes, practical skills, and networking abilities to adequately prepare students for the challenges of the entrepreneurial landscape.

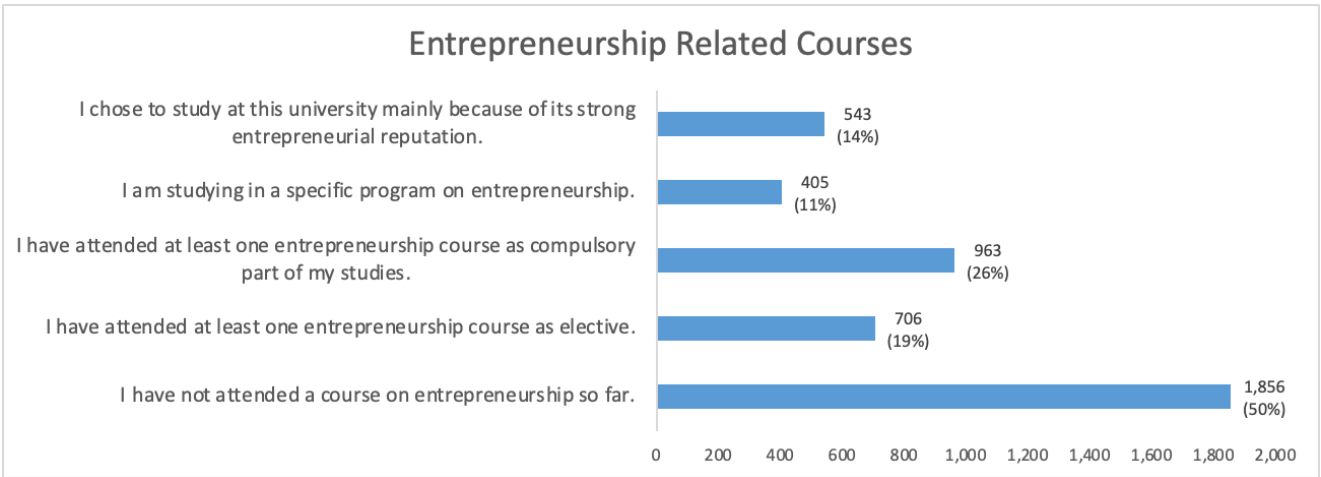
Figure 11: Students' Perception about the Program Learning in their Universities



5.1. Entrepreneurship Education

With regards to entrepreneurship related classes, as seen from (Figure 12) a substantial majority have not attended any course specifically focused on entrepreneurship. However, a notable proportion (19%) have voluntarily taken entrepreneurship courses as electives, while a slightly larger group (26%) have encountered entrepreneurship education as a compulsory component of their studies. Additionally, a smaller percentage (11%) of respondents are enrolled in programs specifically tailored towards entrepreneurship. Interestingly, a significant proportion (14%) of respondents chose their university based on its strong reputation in entrepreneurship, indicating the importance placed on entrepreneurial education and opportunities. These findings highlight varying levels of exposure and interest in entrepreneurship education among the surveyed population, suggesting both voluntary and institutionalized approaches to fostering entrepreneurial knowledge and skills within academic settings. Given that a substantial portion (50%) of respondents have not attended any entrepreneurship courses, policies should focus on increasing access to these courses. This can include offering more elective options, integrating entrepreneurship modules across various disciplines, and providing flexible scheduling to accommodate diverse student interests. Furthermore, policies could advocate for integrating entrepreneurship education into core curriculums across educational institutions. This approach ensures that all students gain foundational entrepreneurial knowledge and skills regardless of their academic focus.

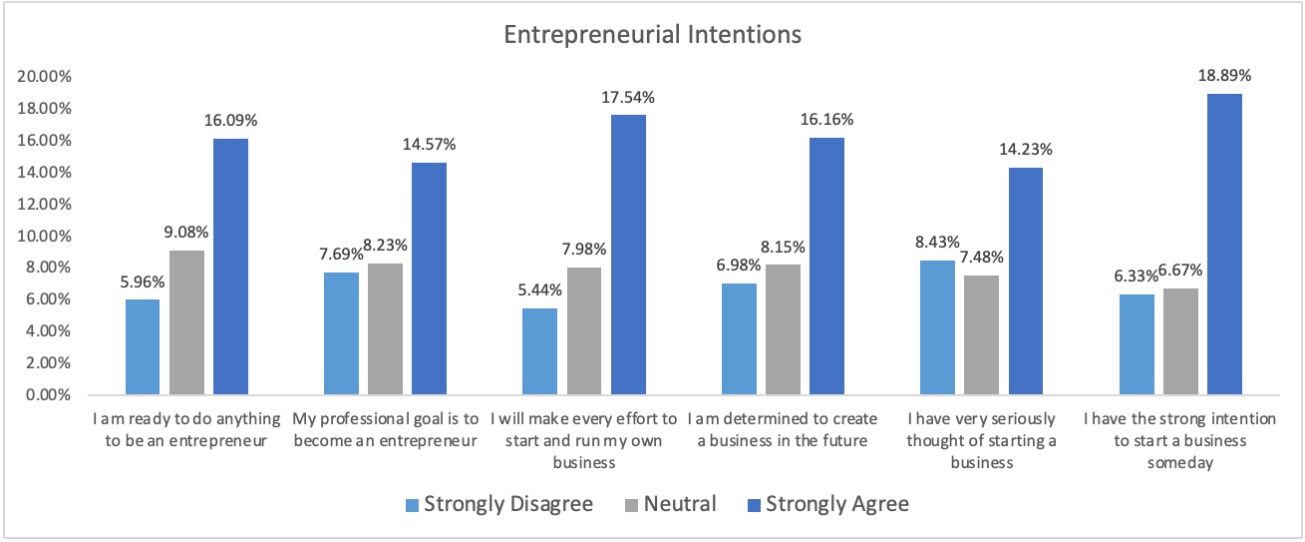
Figure 12: Respondents' Participation in Entrepreneurship Courses During Their Studies



5.2. Intentions and Attitudes towards Entrepreneurship

Figure 13 reveals the students' intentions towards Entrepreneurship. The graphs clearly show that Saudi students in current wave of the GUESS Survey, has in general a low entrepreneurial intention due to the fact that they strongly disagree on most of the statements in the entrepreneurial intentions scale. Across all statements, the highest percentage of respondents strongly agree with having the strong intention to start a business someday (18.89%), indicating a significant proportion of individuals expressing a strong desire to venture into entrepreneurship. Other statements also reveal notable levels of determination and readiness among respondents to pursue entrepreneurial paths, such as making every effort to start and run their own business (17.54%) and being ready to do anything to be an entrepreneur (16.09%). These findings underscore a positive inclination towards entrepreneurship within the surveyed sample, highlighting potential future trends in entrepreneurial activities and initiatives. However, it's essential to consider various factors influencing entrepreneurial intentions, including personal motivations, external support systems, and economic conditions, which can shape individuals' aspirations and actions in the entrepreneurial domain. By doing so, we can pinpoint the key drivers of entrepreneurial aspirations and tailor interventions accordingly. This targeted approach enables us to provide the necessary support and encouragement to foster entrepreneurship effectively.

Figure 13: Students' Self-Rated Entrepreneurial Intentions



5.3. Entrepreneurial Self-Efficacy and Resilience

Entrepreneurial self-efficacy is one of the characteristics that indicate a person's willingness to start a new business. It refers to the individual believing in his abilities and competency in completing the entrepreneurial tasks successfully. To measure the students' self-efficacy, they were asked to indicate the level of agreement on a number of statements measured using a 7-points Likert scale (1=strongly agree; 7=strongly disagree) (Figure 14). For the sake of simplicity, we regroup the responses to show the students evaluation on three levels. Across all statements, the majority of the respondents strongly agreed with their ability to discover new business opportunities (30.30%), create new products (32.53%), think creatively (43.13%), and commercialize ideas (37.99%). Notably, the percentage of respondents who strongly agree with their ability to think creatively is notably higher compared to other self-efficacy statements. These results suggest a generally positive perception of entrepreneurial self-efficacy within the surveyed sample, particularly in the realm of creative thinking. However, it's important to consider potential variations in interpretation and application of these self-efficacy statements within entrepreneurial contexts, which could influence actual entrepreneurial behaviors and outcomes.

Figure 14: Students Response to the Entrepreneurial Self-Efficacy Scale

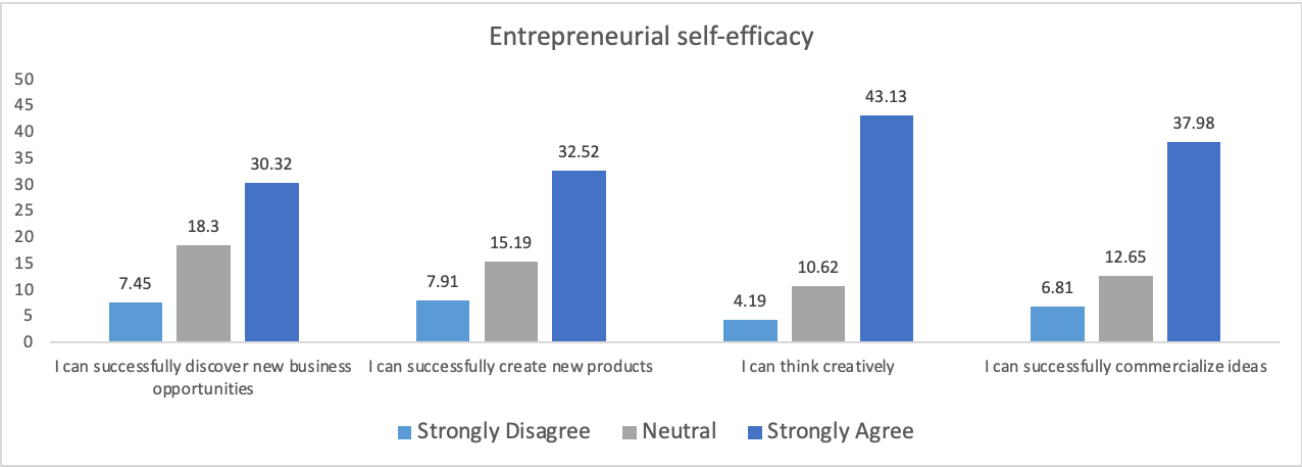
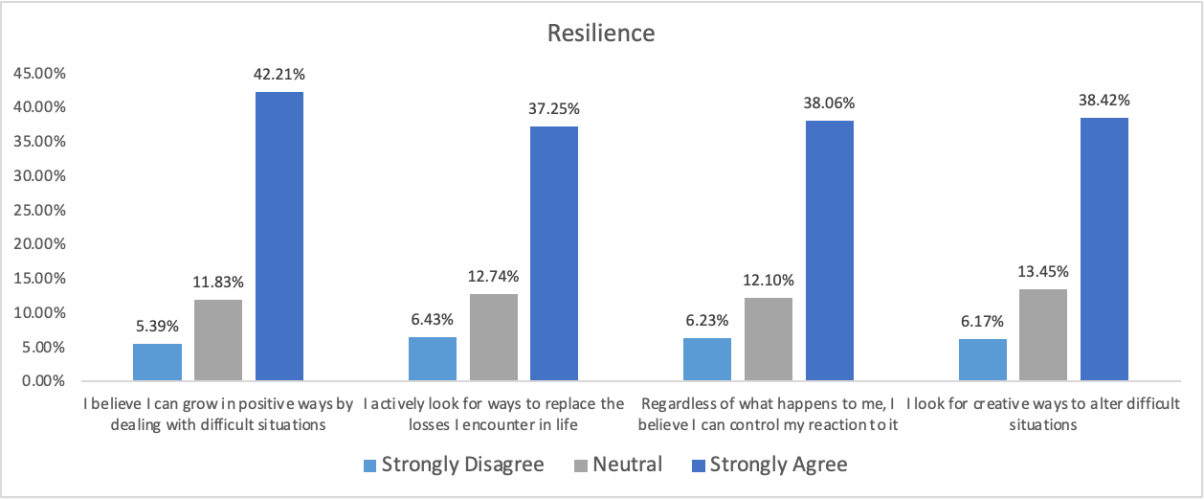


Figure 15 displays the percentage distribution of respondents' levels of resilience based on their responses to various statements. The majority of the respondents strongly agree that they can grow in positive ways by dealing with difficult situations (42.21%), actively look for ways to replace losses encountered in life (37.25%), believe they can control their reactions to events (38.06%), and seek creative solutions to alter difficult situations (38.42%). These findings highlight a generally positive mindset and adaptive behavior among respondents, indicating a high level of resilience across the surveyed population. The results suggest that a significant proportion of individuals possess attitudes and behaviors that facilitate coping and adaptation in the face of challenges, which are essential attributes for success in personal and professional domains. This resilience can be a valuable asset in navigating the uncertainties and obstacles commonly encountered in entrepreneurial endeavors. Individuals with a strong sense of resilience are more likely to persevere through setbacks, learn from failures, and creatively problem-solve, all of which are critical for success in entrepreneurship. Moreover, fostering resilience through targeted interventions and support systems can further enhance individuals' ability to thrive in dynamic and uncertain environments, ultimately contributing to their entrepreneurial success.

Figure 15: Students Response to the Entrepreneurial Resilience Scale

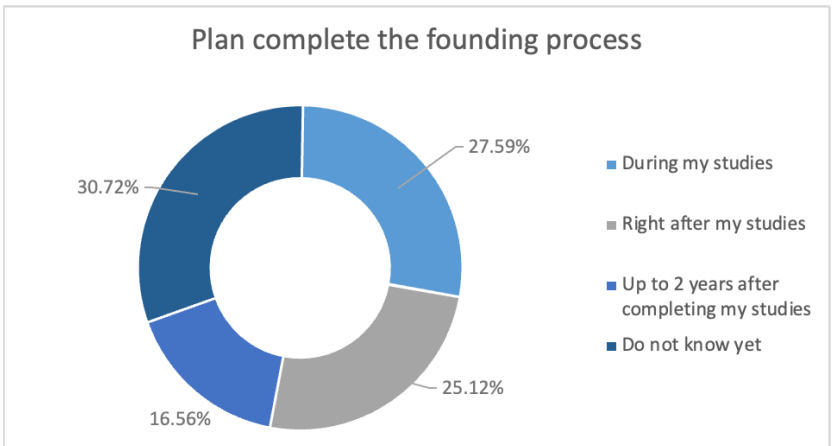


6. Nascent Entrepreneurs

6.1. Timing of Forthcoming Business

An important respondent group are students who are in the process of creating their own business, the so-called nascent entrepreneurs. Among the sample (N=1660, 51.04%) where self-identified as nascent entrepreneurs. The results presented in Figure 16 illustrates the timing preferences of participants regarding when they plan to complete the founding process of their businesses. The options range from during their studies, immediately after completing their studies, within two years after completing their studies, to those who are unsure of their timeline. The highest number of respondents, comprising 30.72%, indicated uncertainty about when they plan to find their businesses, suggesting a need for further clarity or exploration of their entrepreneurial journey. Meanwhile, 27.59% expressed their intention to initiate the founding process during their studies, indicating a proactive approach to entrepreneurship while still in an educational setting. Additionally, 25.12% plan to start their businesses immediately after completing their studies, signifying a readiness to transition from academia to entrepreneurship. Lastly, 16.56% intend to found their businesses within two years post-graduation, suggesting a slightly longer-term perspective on launching their ventures. The results indicate varying timelines among respondents, reflecting their individual readiness and approach to entrepreneurship. While a considerable number express uncertainty about their founding timeline, a notable proportion demonstrates proactive planning by aiming to initiate the process during their studies or immediately after completing their education. These insights shed light on the diverse pathways and perspectives of nascent entrepreneurs, highlighting the need for tailored support and resources to accommodate their unique journey toward entrepreneurship.

Figure 16: Timing of Forthcoming Business



A significant portion of respondents (35.49%) indicated that they do not want their business to become their main occupation after graduation. However, there is a notable proportion (30.02%) who expressed a desire for their business to become their main occupation, suggesting a substantial interest in entrepreneurship among the surveyed individuals. A considerable number of respondents (34.49%) are undecided or unsure about whether they want their business to become their main occupation after graduation, indicating a degree of uncertainty or ambivalence. The majority of respondents (81.49%) have not created another business before, indicating that a significant portion of the surveyed individuals are potentially exploring entrepreneurship for the first time. However, a noteworthy proportion (18.51%) have previous experience in creating another business, suggesting that a subset of respondents already has some entrepreneurial experience or exposure.

6.2. Approximate Ownership in Business

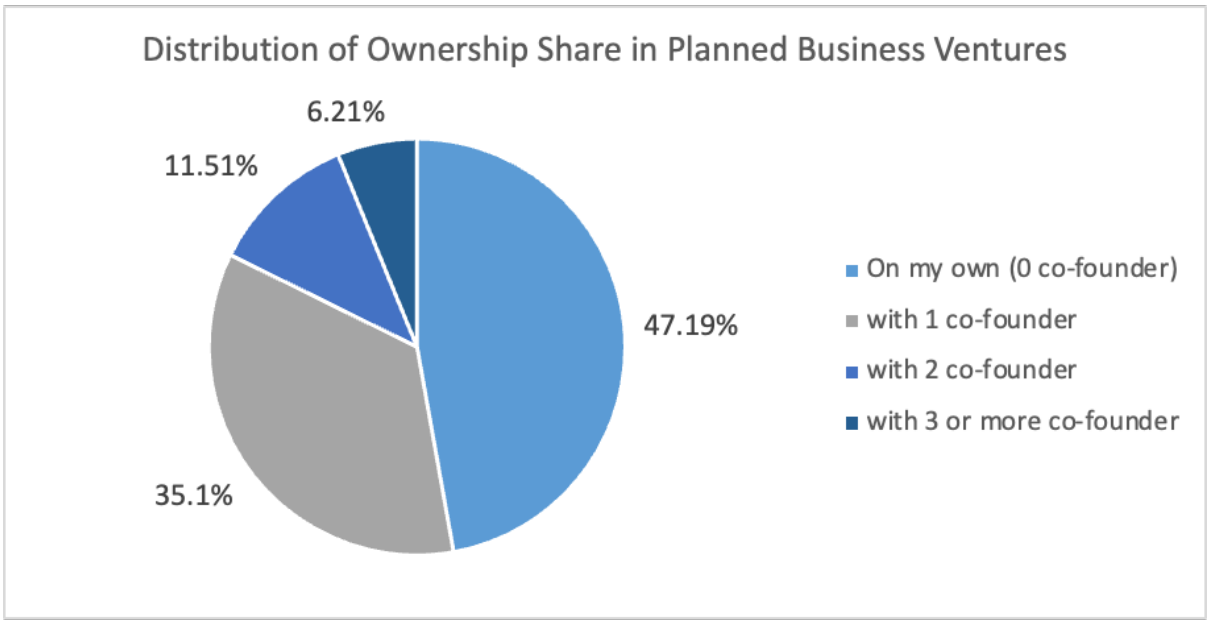
From the nascent student entrepreneur sample; a considerable portion of respondents (62.19%) expect to have a majority ownership share (51-100%) in the new business, indicating a significant level of control and influence over the venture. Another substantial proportion of respondents (30.27%) anticipate having an equal ownership share of 50% in the new business, suggesting a preference for shared ownership and decision-making. A smaller percentage of respondents (7.55%) expect to have a minority ownership share (0-49%) in the new business, indicating a lesser degree of control or ownership stake in the venture. This highlights the importance of considering ownership structures and dynamics in supporting and fostering entrepreneurial ventures among students. (refer to Table 9).

Table 7: Approximate Ownership Share in The Intended Business

		Freq	Percent
1	0-49% (minority owner)	91	7.55%
2	50%	365	30.27%
3	51-100% (majority owner)	750	62.19%

When students were asked whether they were acting alone or with others to found the company, a majority of respondents (47.19%) indicated that they are not planning to start their business with any co-founders, suggesting a preference for sole entrepreneurship or perhaps a lack of suitable partners. A significant portion of respondents (35.1%) intend to start their business with one co-founder, indicating a preference for collaboration and shared responsibility in the entrepreneurial journey. A smaller percentage of respondents (11.51%) plan to start their business with two co-founders, while an even smaller group (6.21%) intends to have three or more co-founders, suggesting varying levels of preference for teamwork and shared decision-making. The findings underscore the importance of considering individual preferences and team dynamics in supporting and nurturing student entrepreneurship initiatives. (Figure 17).

Figure 17: Ownership Share in The Intended Business



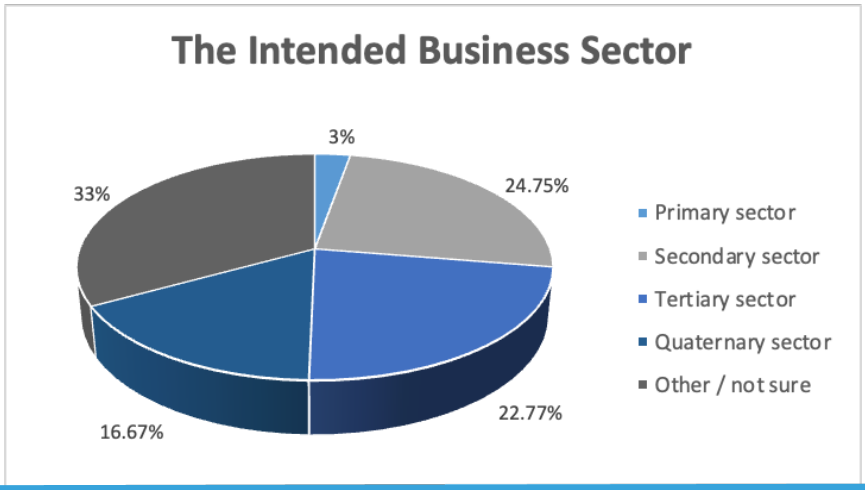
A vast majority of respondents (88.14%) indicated that their business will not be located in the same city where they are currently studying, implying a willingness to explore opportunities beyond their current geographical location. A smaller percentage of respondents (11.86%) plan to establish their business in the same city where they are currently studying, potentially indicating factors such as familiarity with the local market or existing networks in that area..

6.3. The Intended Business Sector

Figure 18 presents data on the main economic sectors in which businesses are predominantly active. The respondents were asked to select from several options, including the primary, secondary, tertiary, and quaternary sectors, or indicate if they were unsure or fell into another category.

- Primary sector: This sector includes industries involved in the extraction and production of natural resources, such as agriculture, mining, and forestry. Only 2.81% of respondents indicated their business operates primarily in this sector.
- Secondary sector: The secondary sector comprises industries involved in manufacturing and construction. A significant portion of respondents (24.75%) reported their business operates within this sector, indicating a substantial presence of manufacturing and construction-related activities.
- Tertiary sector: The tertiary sector encompasses industries that provide services, such as retail, healthcare, education, and hospitality. 22.77% of respondents stated their business operates mainly within this sector, highlighting the importance of service-oriented industries.
- Quaternary sector: The quaternary sector involves industries related to knowledge-based services, research and development, information technology, and innovation. 16.67% of respondents indicated their business operates primarily in this sector, suggesting a notable presence of knowledge-intensive activities.
- Other / not sure: A considerable portion of respondents (33%) either selected "Other" or expressed uncertainty about the primary economic sector of their business. This category encompasses a range of possibilities, from niche industries not covered in the provided options to respondents unsure of their business's sector classification.

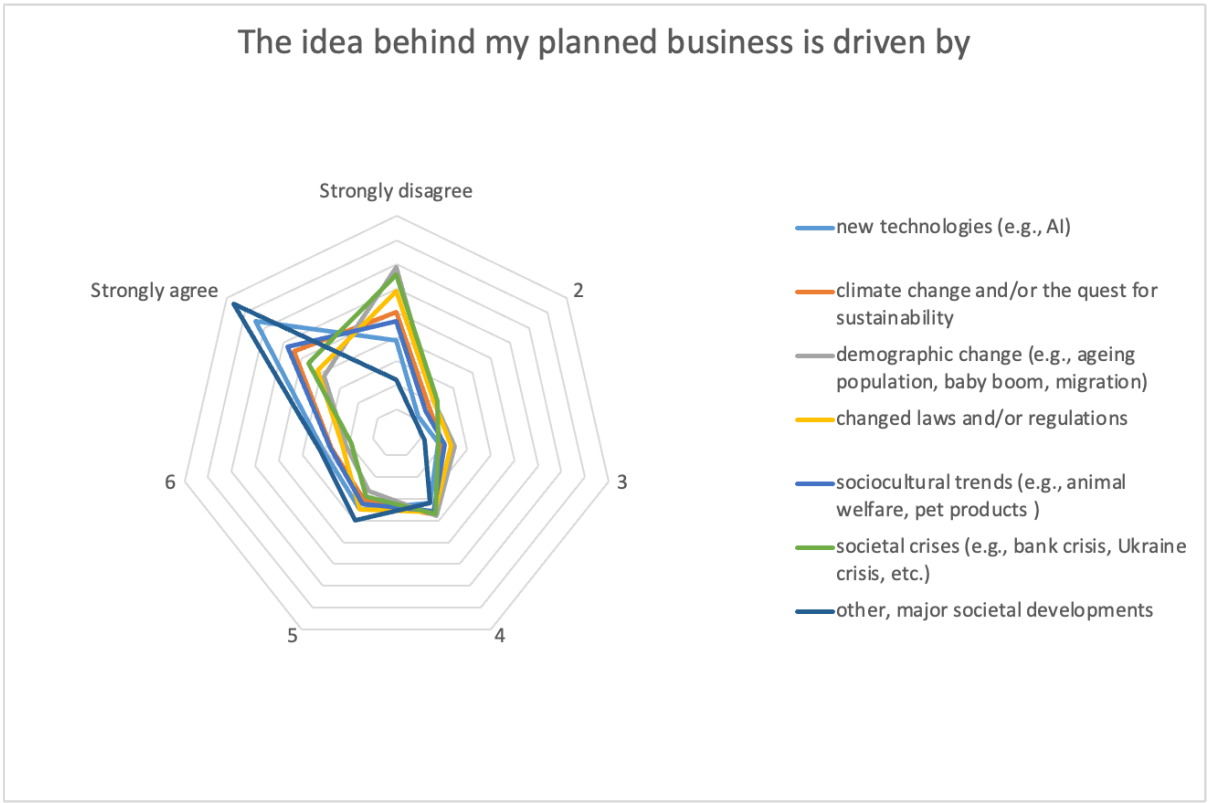
Figure 18: The Intended Business Sector



6.4. The Business Idea

Figure 19 presents respondents' levels of agreement with statements regarding the driving forces behind their planned businesses. Majority of the respondents disagreed or had neutral views regarding their businesses being driven by new technologies, climate change/sustainability, and demographic changes. There was a more evenly distributed range of responses regarding businesses being driven by changed laws/regulations, sociocultural trends, societal crises, and other major societal developments. Notably, a substantial number of respondents strongly agreed that their business ideas were driven by other major societal developments, suggesting a diverse range of motivations beyond the specified categories. Aside from societal factors, other considerations can significantly influence business ideas and ventures. These may include economic conditions, market trends, technological advancements, personal experiences, and industry insights. Additionally, factors such as competitive landscapes, access to resources, regulatory environments, and emerging opportunities can also play pivotal roles in shaping entrepreneurial endeavors.

Figure 19: Drivers of Planned Business Ideas



7. Active Entrepreneurs

7.1. Student Company Information

Apart from examining nascent entrepreneurs, this study also investigated active entrepreneurs, namely students who have initiated businesses. Among our sample, a subset of respondents (N=529) identified themselves as active entrepreneurs. Notably, the majority (38.61%) indicated that their businesses were established less than a year ago, reflecting a significant proportion of recent ventures. Additionally, a substantial portion (30.56%) reported launching their businesses within the past 1 to 2 years. Smaller percentages were observed for businesses established 3 to 4 years ago (16.89%) and those established more than 5 years ago (13.94%). This distribution highlights the prevalence of relatively new ventures among the surveyed entrepreneurs. (see Table 10). Understanding the timing of business establishment provides valuable insights into the entrepreneurial landscape, indicating trends in startup activity and the lifecycle of ventures. The concentration of recent ventures suggests a dynamic environment with ongoing opportunities for new business creation and innovation. Additionally, the distribution across different establishment periods offers a nuanced perspective on entrepreneurial trajectories, showcasing the diverse experiences and journeys of student entrepreneurs.

Table 8: Students Response To "In What Year Did You Establish Your Business?'

	Freq.	Percent
Less than a year	144	38.61%
1 to 2 years ago	114	30.56%
3 to 4 years ago	63	16.89%
More than 5 years ago	52	13.94%

A substantial portion (34.44%) of the active students' entrepreneurs expressed a clear intention for their business to become their main occupation post-graduation. Conversely, 25.49% explicitly state that they do not want their business to become their primary occupation. Notably, a significant proportion (40.08%) are undecided, indicating uncertainty about their post-graduation plans in relation to their business ventures. This distribution reflects the varied aspirations and considerations among the surveyed entrepreneurs regarding the future trajectory of their businesses. Evidently, in the sample, majority of respondents, comprising 47.76%, indicate that they are sole operators, managing their businesses independently. Following closely, 27.97% report having a small team of 1-3 employees, suggesting a prevalent pattern of small-scale operations.

Meanwhile, 17.41% indicate having no employees, implying that they operate as solo entrepreneurs. A smaller proportion, accounting for 6.86%, report having more substantial operations with over 10 employees, while 6.86% fall into the category of having 4-10 employees. Overall, the data highlights the diverse staffing arrangements among the surveyed entrepreneurs, reflecting the varying scales and structures of their businesses. (see Figure 20). Similarly (see Figure 21), A significant portion, constituting 51.04% of respondents, identify themselves as majority owners, holding between 51% and 100% ownership stake in their ventures. Conversely, 25.21% of respondents classify themselves as minority owners, holding ownership shares ranging from 0% to 49%. Interestingly, an almost equal percentage, 23.75%, claim to have precisely 50% ownership, indicating partnerships or shared ownership structures. This distribution underscores the diversity of ownership arrangements among entrepreneurs surveyed, highlighting the various roles and levels of control individuals have within their businesses.

Figure 20: Students Response To “How many employees do you have today (full time equivalents)?”

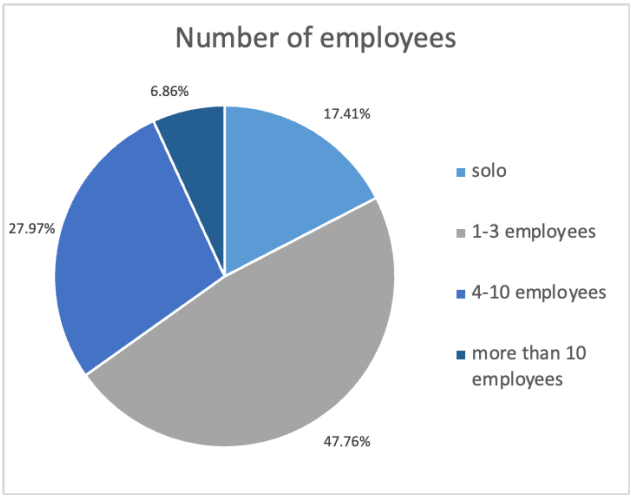
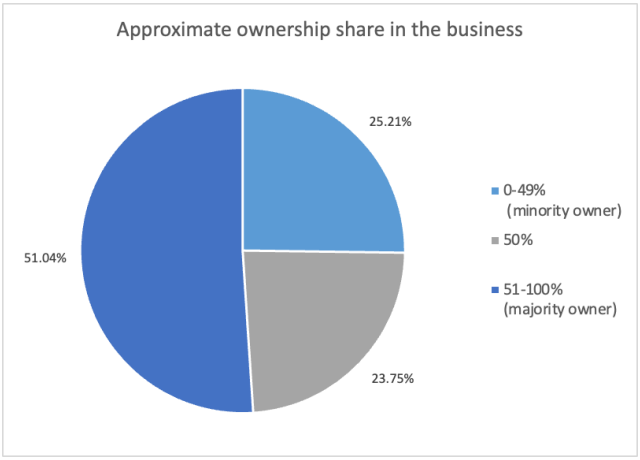


Figure 21: Students response to "What is your ownership share in your business?"



Regarding venture capital funding, the majority of the respondents, constituting 75.58%, indicate that they have not received such funding for their venture, while 24.42% report having received venture capital. The data indicates a significant reliance on sources other than venture capital funding for entrepreneurial ventures, with 75.58% of respondents not having received such funding. This suggests that a majority of student entrepreneurs may be bootstrapping their businesses or relying on alternative financing methods. On the other hand, the 24.42% who have received venture capital funding represent a noteworthy subset of entrepreneurs who have secured external investment to support their ventures.

Concerning the evolution of business ideas, respondents were asked to rate the extent of change from their initial idea. The distribution indicates that the majority of the respondents have experienced some degree of change in their business ideas over time. Specifically, 17.67% report no change from their original idea, while 16.81% indicate a slight change (rated as "1"). A substantial portion of respondents, accounting for 32.33%, report moderate changes (rated as "2"). Additionally, 9.7% of respondents report significant changes (rated as "3"), and 23.49% report changes exceeding three iterations, highlighting the iterative nature of entrepreneurial ideation and adaptation. The majority of the respondents (27.27%) reported not making any changes to their initial idea. Conversely, a substantial portion of respondents reported making one (23.81%), two (22.08%), or three (10.82%) changes. Additionally, 16.02% of respondents reported making more than three changes or pivots to their initial idea. This indicates a significant degree of flexibility and adaptation in response to evolving circumstances or insights gained during the entrepreneurial process.

In term of their performance, the GUESSS survey asks the students to rate their performance against their rivals on 7-points Likert scale ranging from 1=much worse to 7=much better. In particular, the working of the question was as follow “How do you rate the performance of your company compared to your competitors since its establishment in the following dimensions?. As seen in Figure 22, students perceived that their business are doing better in the innovativeness and job creation dimensions compare to the competitors; while other dimensions of performance have average scores below 5 (not excellent, but satisfactory). For sales growth, the highest proportion of respondents (147) rated their company's performance as "much better" compared to competitors, followed by 82 respondents who rated it as a "6" on the scale. Conversely, 28 respondents rated their sales growth as "much worse." In terms of market share growth, 137 respondents rated their company's performance as "much better," while 24 respondents rated it as "much worse." For profit growth, 134 respondents rated their company's performance as "much better," with 25 respondents indicating "much worse" performance. Regarding job creation, the highest proportion of respondents (156) rated their company's performance as "much better," followed by 80 respondents who rated it as a "6" on the scale. A smaller number of respondents (40) rated their performance as "much worse." In terms of innovativeness, most respondents rated their company's performance as "much better" (182), while 17 respondents rated it as "much worse". These insights shed light on students' perceptions of their businesses' performance relative to competitors, emphasizing areas of strength and areas for potential improvement.

Figure 22: Perceived Business Performance

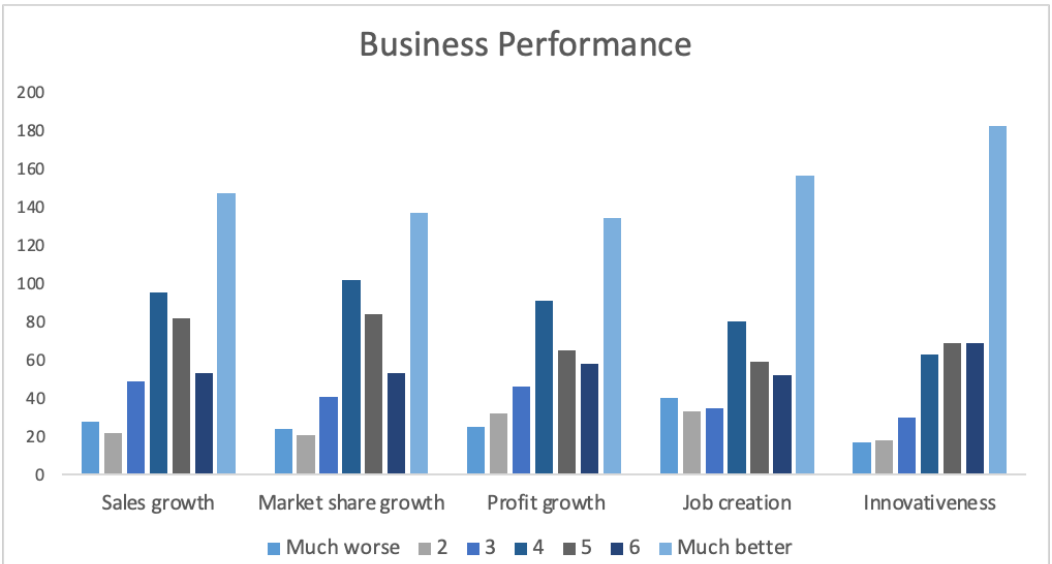
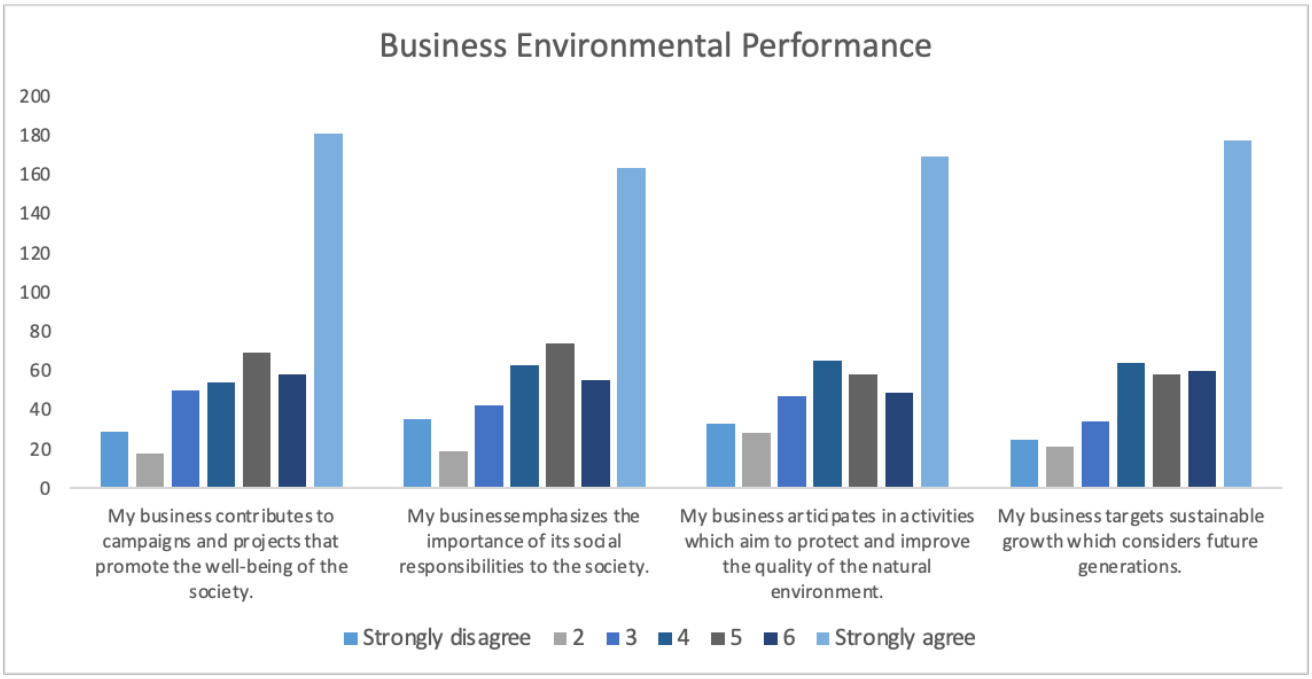


Figure 23 presents respondents' levels of agreement with statements regarding their businesses' social and environmental responsibilities، the responses highlight a spectrum of attitudes toward social and environmental responsibility, with a majority acknowledging their importance but with some variance in the extent of agreement across different aspects:

- Contribution to societal well-being: Responses indicate varying degrees of agreement, with 181 respondents acknowledging their businesses' contributions to campaigns and projects promoting societal well-being. However, 29 respondents expressed dissent.
- Emphasis on social responsibilities: A similar pattern emerges regarding the emphasis on social responsibilities, with 163 respondents indicating the importance of these responsibilities. Conversely, 35 respondents disagreed or strongly disagreed.
- Participation in environmental activities: Responses vary, but a majority recognize their businesses' participation in activities aimed at protecting and improving the quality of the natural environment. However, there are dissenting views, with 33 respondents expressing less agreement.
- Targeting sustainable growth: A considerable number of respondents (177) agree or strongly agree that their businesses target sustainable growth. This indicates a shared commitment to considering future generations in business practices, although some respondents (25) express disagreement.

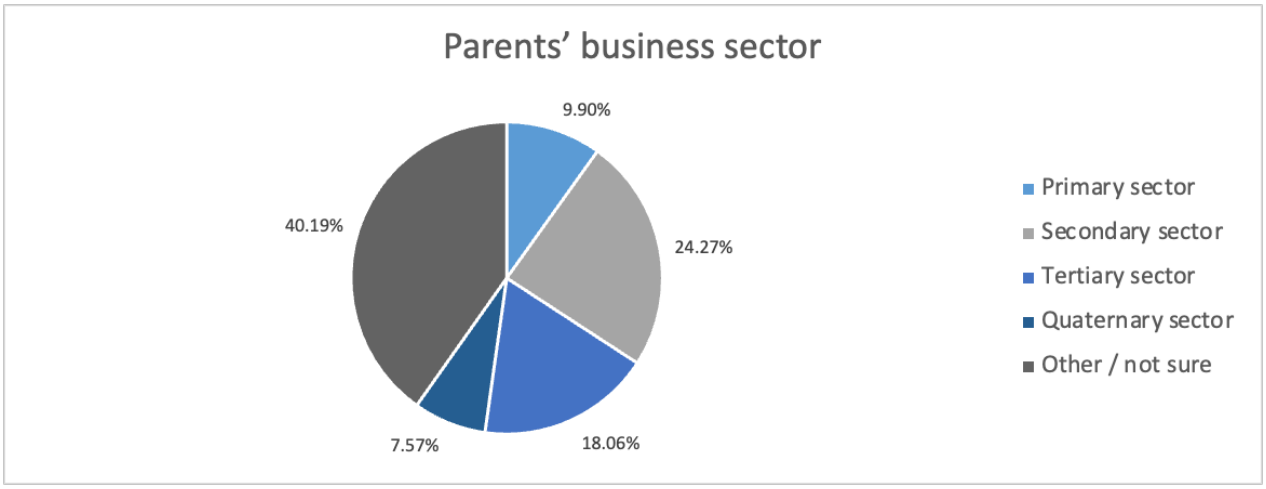
The insights from Figure 23 highlight the nuanced perspectives among student entrepreneurs regarding their businesses' social and environmental responsibilities. While a majority recognize the significance of contributing to societal well-being, emphasizing social responsibilities, participating in environmental activities, and targeting sustainable growth, there are notable variations in the extent of agreement across these dimensions. This suggests a complex interplay of factors shaping students' attitudes and actions toward corporate social responsibility and sustainability in their entrepreneurial endeavors.

Figure 23: Students Response to Business Environmental Performance Questions



The distribution of respondents' primary economic sectors reveals a diverse landscape of business activities (Figure 24). Among the surveyed entrepreneurs, 35 (6.89%) are engaged in the primary sector, utilizing natural resources such as agriculture, forestry, or fishing. The secondary sector sees a higher involvement, with 110 respondents (21.65%) reporting businesses focused on producing goods like manufacturing, processing, or construction. Additionally, 88 respondents (17.32%) operate in the tertiary sector, offering services like tourism, banking, healthcare, or legal services. Furthermore, 78 respondents (15.35%) are active in the quaternary sector, engaging in intellectual activities such as research, IT, education, or consulting. A significant portion, comprising 197 respondents (38.78%), either selected "Other" or were unsure about their primary sector, showcasing the diversity of business activities within the sample. Overall, this distribution underscores the varied economic landscape and highlights the multifaceted nature of entrepreneurship among the surveyed individuals. The diversity of business activities among the surveyed entrepreneurs reflects the dynamic and multifaceted nature of entrepreneurship, with individuals engaging in a range of sectors and industries. This insight underscores the adaptability and versatility required in navigating the entrepreneurial landscape, where opportunities and challenges arise across various economic sectors.

Figure 24: Students Response To "In which economic sector is your business mainly active in?"

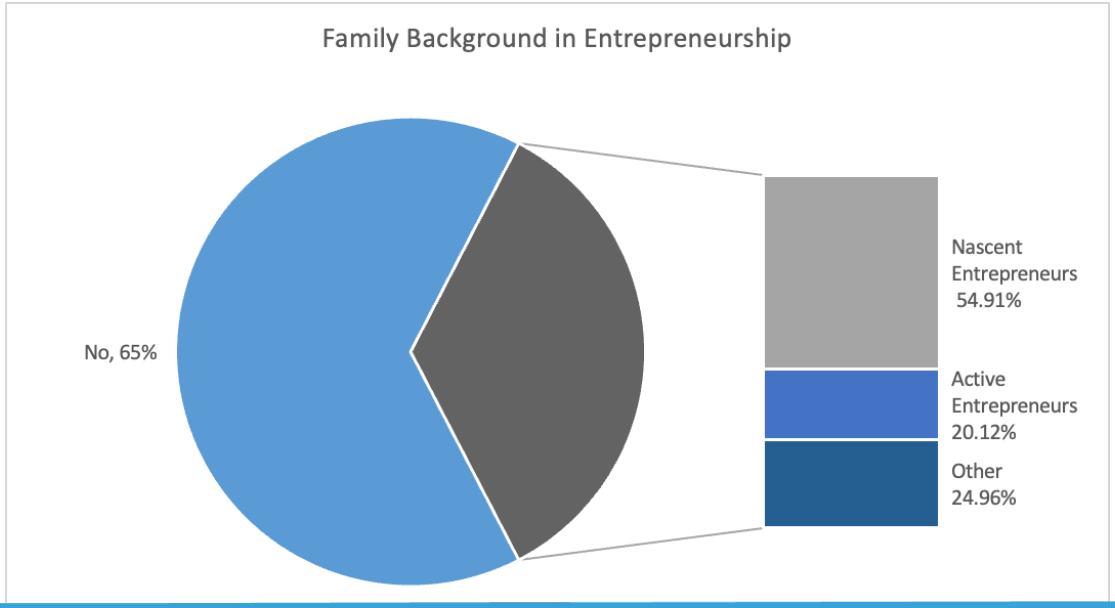


8. Family Business and Succession

8.1. Family background

The majority of the respondents (65%) reported that neither of their parents is self-employed. However, a notable portion of respondents indicated parental involvement in self-employment, with 22.12% reporting that only their father is self-employed, 3.15% indicating only their mother is self-employed, and 9.42% reporting that both parents are self-employed. This distribution suggests that a significant proportion of respondents come from families with self-employed parents, particularly those where the father is self-employed. This information is crucial as it indicates the potential influence of parental entrepreneurial experience on the entrepreneurial intentions and activities of the respondents. Furthermore, Figure 25 allows for a comparison between nascent entrepreneurs (those in the early stages of starting a business) and active nascent entrepreneurs (those who have progressed further in their entrepreneurial activities). The data suggest that having a family background in entrepreneurship may influence entrepreneurial activity. To interpret the significance of these numbers, additional analysis could explore factors such as the success rates, challenges faced, or motivations among entrepreneurs with and without family backgrounds in entrepreneurship. This suggests that familial exposure to entrepreneurship may play a crucial role in shaping an individual's decision to pursue entrepreneurial ventures.

Figure 25: Student's Response To Question " Are your parents self-employed?"

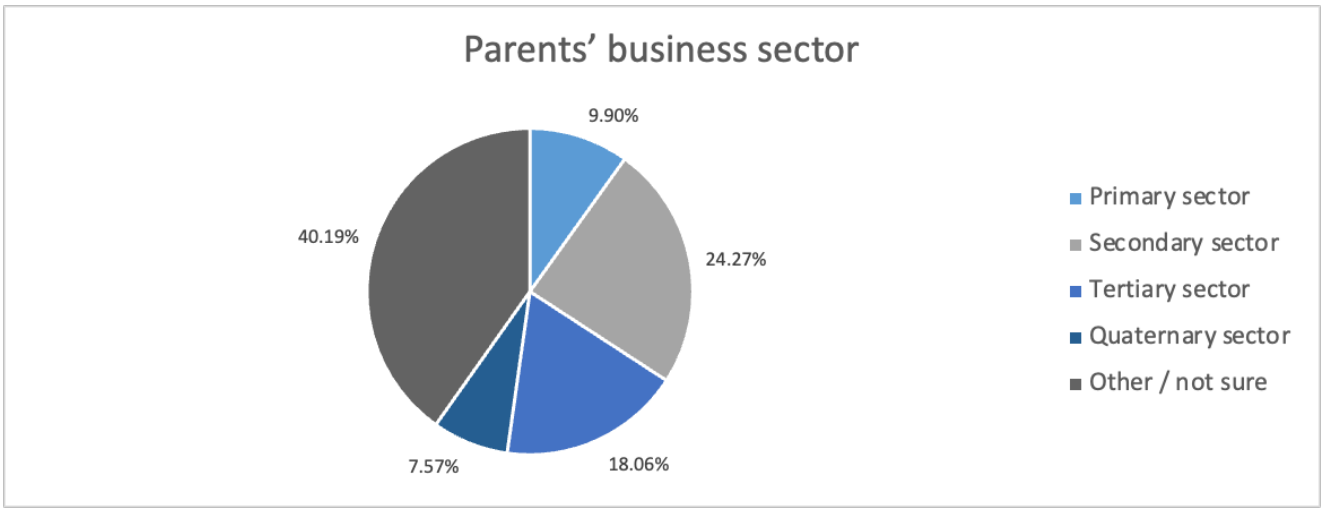


8.2. Family Business Information

The section illustrates various aspects of family businesses and the involvement of respondents in their parents' enterprises. A significant majority of the parent businesses, 91.99%, have been established for 50 years or more, showcasing their longevity and heritage. Regarding the workforce, the majority of businesses (91.99%) have more than 50 employees, suggesting substantial operations. Furthermore, operational leadership primarily rests with the parents, as indicated by 63.88% of respondents. In terms of ownership, the majority of the families (49.69%) hold a majority stake (51-100%) in their businesses, highlighting significant family control. However, personal ownership stakes are less common, with only 21.94% of respondents having a personal ownership stake. Despite this, a considerable portion of respondents (37.4%) regard the business as a "family business," emphasizing the familial significance attached to these enterprises. Regarding employment, 14.42% of respondents have worked for their parents' businesses, indicating familial involvement in operations. Lastly, regarding family demographics, most respondents have two or more older siblings (62.07%), suggesting potential familial dynamics influencing business decisions and succession planning. Generally, these insights shed light on the multifaceted nature of family businesses and the intricate relationships between family members and business operations

Figure 26 illustrates the distribution of respondents' parents' business activities across different economic sectors. The primary sector, involving the utilization of natural resources such as agriculture and forestry, is represented by 51 respondents, comprising 9.9% of the total. Meanwhile, the secondary sector, encompassing the production of goods like manufacturing and construction, is the most prominent, with 125 respondents (24.27%). Additionally, the tertiary sector, which includes service-oriented industries like tourism and banking, accounts for 93 respondents (18.06%). The quaternary sector, which focuses on intellectual activities such as research and IT, is represented by 39 respondents (7.57%). Furthermore, 207 respondents (40.19%) either selected "Other" or expressed uncertainty regarding their parents' business's primary sector. This breakdown highlights the diverse range of economic activities among respondents, reflecting a varied landscape of industries within the sample population.

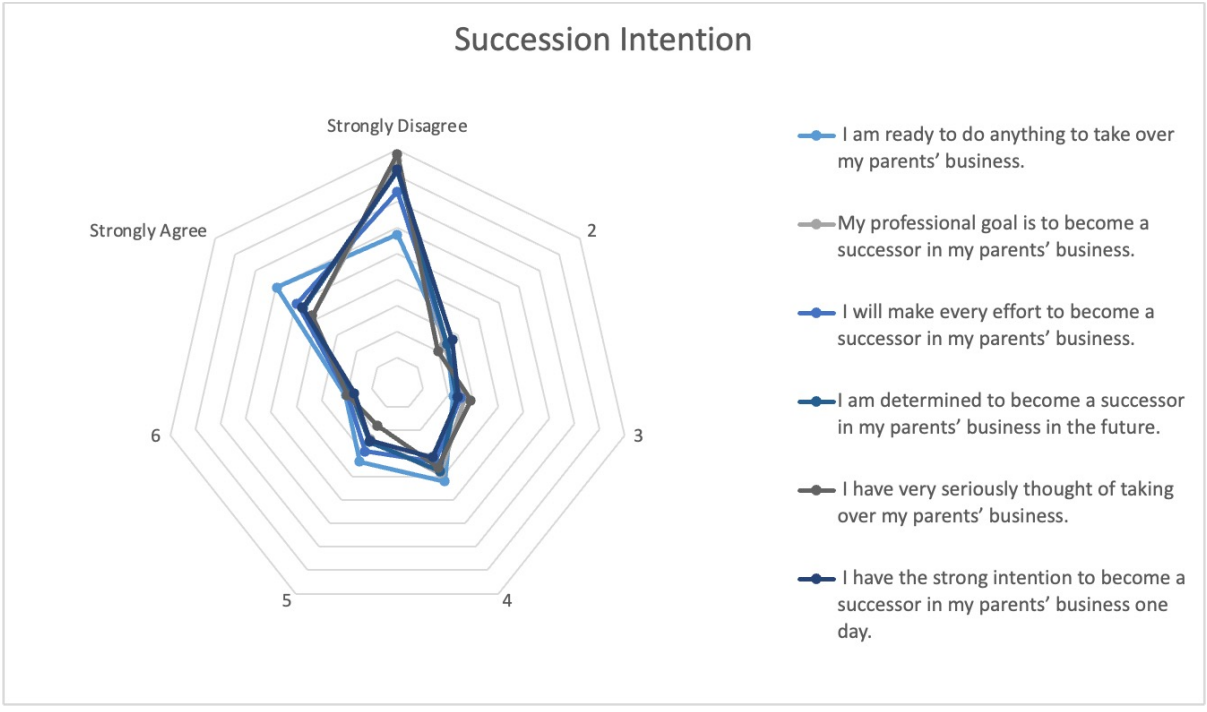
Figure 26: Student's Response To Question
"In Which Economic Sector Is Your Parents' Business Mainly Active In?"



8.3. Family Business Succession Intentions

Finally, students were also asked to evaluate on a 7-points Likert scale (1=strongly agree, 7=strongly disagree) the level of their intentions of succession (i.e. taking on the company). As shown in Figure 27, the findings suggest that, on average, students demonstrate a varying degree of intention towards succession, with the specific scores indicating their level of agreement with the idea. Notably, while some students express determination and readiness to assume leadership roles in the family business, others exhibit hesitancy or lack of intention. These diverse attitudes underscore the complex considerations involved in succession planning and underscore the need for tailored approaches to support aspiring successors. The insights gleaned from this assessment can inform strategies for fostering entrepreneurial succession and ensuring the continuity and success of family businesses. Furthermore, the data could be further analysed to understand the factors influencing these intentions, such as family dynamics, perceived opportunities, or personal aspirations. Overall, this assessment sheds light on the nuanced attitudes of students towards succession in family businesses and can inform future strategies for succession planning and management.

Figure 27: Family Business Succession Intentions



9. Implications and summary

The report provides valuable insights into the diverse timelines and considerations among aspiring entrepreneurs, which can inform educational programs, support services, and resources tailored to their needs at different stages of their entrepreneurial journey.

The report highlighted several policy recommendations. By implementing these policy recommendations, educational institutions and policymakers can foster a more conducive environment for entrepreneurship education, thereby equipping students with the knowledge, skills, and mindset necessary for successful entrepreneurial endeavors.

Students level:

- Cultivating creativity, entrepreneurial spirit, and a growth mindset among students across all academic disciplines is imperative. Entrepreneurial education should be universally recognized and embraced by all students.
- It is essential to create a safe environment for students to share their ideas, ensuring their protection from being plagiarized or replicated during the incubation phase.
- Students should aspire to become social and community leaders by actively engaging with and addressing social challenges, thereby contributing to the prosperity of their countries.
- Providing students with access to regional and global entrepreneurial case studies, encompassing both success stories, failures, and subsequent revivals, can effectively orient them toward identifying and pursuing new opportunities.
- Promoting active learning involves highlighting the valuable lessons learned through failure, empowering students with the autonomy to better prepare for and navigate real-world challenges. Struggles and setbacks serve as invaluable teaching moments.
- Emphasizing self-awareness, self-confidence, and self-esteem fosters an environment conducive to active learning.
- Encouraging students to engage in part-time entrepreneurial endeavors during their academic studies and transition these ventures into full-fledged enterprises post-graduation is advantageous.
- Students should prioritize the enhancement of their skills and competencies to ensure business survival and success. While launching a business may be relatively straightforward, sustaining it amidst evolving business landscapes can pose significant challenges.

University level Support:

- Reevaluate study plans to provide students with the option to choose between cooperative training (option A) or pursuing self-establishment of new startups (option B). This initiative aims to early incentivize entrepreneurial aspirations among students.
- Foster active entrepreneurial learning by embedding real-world contexts into the curriculum. Critical reflection should be integrated into the teaching-learning process to facilitate the synthesis of theory and practice, allowing learners ample space for growth and improvement.
- Enrich classrooms and learning sessions with a culture of curiosity, fostering a conducive environment for questioning opportunities, reflecting on learning outcomes, and establishing continuous connections between theoretical concepts and practical applications from diverse perspectives.
- Implement comprehensive faculty training programs to refine the expertise of educators. Such initiatives enable faculty members to effectively impart knowledge, refine skills, cultivate competencies, shape attitudes, and instill values aligned with global standards. Continuous professional development ensures educators remain updated with the latest advancements in their respective fields, thereby enhancing the overall learning experience and fostering academic excellence.
- Prioritize the development of design thinking skills and technical competencies to address contemporary market demands effectively.
- Expedite the transition to entrepreneurial action by establishing a university-based entrepreneurial ecosystem, facilitating mentorship opportunities, and fostering networking initiatives.
- Facilitate inter-college group projects among students, fostering collaborations across disciplines such as Computer Science, Business, Engineering, and Science. Such interdisciplinary projects broaden students' horizons, enabling them to co-create ventures with enhanced skill sets and facilitating the identification of suitable co-founders.
- Provide support for securing intellectual property rights for student entrepreneurs to safeguard innovative ideas against unauthorized replication.
- Increase awareness among students regarding the range of services offered by the university to address information gaps and ensure access to necessary resources
- Integrate the latest entrepreneurial research into the curriculum to provide students with up-to-date insights and knowledge in the field.

Industry, Private Institutions, and Incubators Support:

- Establish an idea repository and facilitate hackathons to encourage the development of innovative solutions. Encourage industry participation in supporting student-led enterprises as part of their corporate social responsibility initiatives.
- Organize bootcamps specifically designed to provide guidance and support to aspiring student entrepreneurs. These bootcamps can offer practical insights and mentorship from experienced professionals.
- Advocate for the establishment of a Center for Innovation and Business, either at the college or university level, with support from industry partners, private institutions, and incubators. Such a center would serve as a hub for students seeking information, guidance, and resources for their entrepreneurial endeavors.
- Foster collaboration between start-up companies and educational institutions by offering summer training programs and co-op opportunities for students. These initiatives provide valuable hands-on experience and exposure to the start-up environment.
- Implement feedback mechanisms facilitated by industry experts to provide valuable insights and guidance to budding entrepreneurs. Leveraging industry expertise helps students stay informed about current trends and best practices in entrepreneurship.

Government, Public Institutions, and Policy Makers Level Support:

- Foster a conducive environment that promotes a culture of innovation, facilitates market access, and provides access to necessary financial resources.
- Establish a forum or standard body tasked with assessing the challenges faced by struggling entrepreneurs and providing them with guidance to salvage their ventures and shield them from failure. It is crucial to recognize that while students may have insights when initiating a venture, the actual launch provides them with invaluable firsthand experience regarding opportunity costs and survival. Networking and support mechanisms facilitated by such organized bodies of experts can prevent premature closure of ventures and enhance their likelihood of success.
- Conduct in-depth analysis of regional and national entrepreneurship factors and develop policies aimed at promoting economic development through entrepreneurial activities
- Address the gender gap in entrepreneurship by offering support to female entrepreneurs, including venture incubation programs and financial assistance during the early stages of venture establishment.
- Recognize and celebrate the progress and achievements of emerging entrepreneurs as a means of fostering a culture of entrepreneurship and innovation.

Family and Succession level Support:

- The establishment of new enterprises and the long-term sustainability of existing businesses are contingent upon access to resources, emotional support, and financial backing provided by familial networks.
- Engaging in networking, collaborative endeavors, training initiatives, mentorship programs, and the delegation of ownership and managerial responsibilities are pivotal steps in transforming students into proactive entrepreneurs, thereby enhancing the performance of their business ventures.
- Recognizing and comprehensively understanding students' intentions regarding succession in family-owned businesses is imperative for ensuring the continuity and prosperity of these enterprises. By analyzing the multifaceted factors that influence these intentions, including family dynamics and perceived opportunities, stakeholders can devise targeted strategies aimed at fostering a conducive environment for aspiring successors. This profound insight not only contributes significantly to the sustainability of family businesses but also informs broader discussions surrounding entrepreneurship and leadership development.

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