African Journal of Biological Sciences

Journal homepage: http://www.afjbs.com

Research Paper   **Open Access**

"A Study of Business Start – Up in Gujarat Amongst PG & UG Students to Become Entrepreneurs Using AHP Model"

Ms. Avani Patel[1], Dr. Kinchit Shah[2]

[1]Research Scholar, Faculty of Commerce, Sankalchand Patel University, Visnagar, Gujarat
[2]Assistant Professor, MJS Godhani Shri Mahila Arts and Commerce College, Junagadh, Gujarat

Article Info

ABSTRACT:

Gujarat, a state in western India, has emerged as a thriving hub for entrepreneurship and business innovation. Known for its enterprising spirit, strong work ethic, and favorable business environment, Gujarat has become an attractive destination for both aspiring and established entrepreneurs. Gujarat offers abundant entrepreneurial opportunities but faces challenges like competition, rural infrastructure development, and environmental sustainability. Nevertheless, the state's strong commitment to nurturing innovation makes it an appealing choice for aspiring entrepreneurs and organizations. This research paper explores the motivations and challenges faced by UG and PG students in Gujarat who aspire to become entrepreneurs. The study gathered data from 54 students enrolled at Sankalchand Patel University. The study employs the AHP model to analyze the data. By delving into the minds of these aspiring business leaders, we aim to gain valuable insights into what drives them to pursue entrepreneurship and the obstacles they encounter on their journey. Understanding these factors is crucial for fostering a supportive environment that encourages the growth of future entrepreneurs in Gujarat.

Keywords: Business Start-ups, PG & UG University Students, Young Entrepreneurs, AHP.

1. Introduction

India has emerged as a thriving hub for startups, driven by its sizable population, expanding middle class, and technological advancements. With a young and skilled workforce, coupled with government support and investor interest, the startup ecosystem is flourishing. Entrepreneurship is now a central focus in India, backed by government programs and incentives for small and medium enterprises, aimed at fostering economic growth and creating employment opportunities, particularly for graduates. Despite these efforts, there remains a gap in our understanding of the motivations and challenges faced by students, especially at the postgraduate level, when starting their ownventures. To support and empower future entrepreneurs, it is crucial to gain insights into why and how ventures are established and operated. This study aims to explore undergraduate students' perceptions of entrepreneurship, including motivators, obstacles, government support, and assess potential differences in entrepreneurial intentions based on factors such as gender, birth order, and work experience. Gujarat, within India, stands out as a dynamic region known for its entrepreneurial culture and business-friendly environment, attracting numerous successful entrepreneurs and startups across various sectors.

Motivational factors
Proper motivation is important for new business owners or future entrepreneurs to go into business. Understanding what's driving an individual to start a business is an important component of assessing oneself and his/her business-readiness. Understanding a person's motivations as well as 'drivers' to start up business will help an individual makes a better decision about starting a business and can also help him/her knows if this is the right time to start a business. Motivation, in this instance, can be categorized into intrinsic and extrinsic motivation. To be motivated means to be moved to do something. Therefore, a person that has high desire and enthusiastic 'towards an end is considered motivated' whilst a person that has 'no impetus or inspiration to act is thus characterized as unmotivated' (Ryan and Deci, 2000, pg54).

Environmental Factors
Environmental factors significantly influence entrepreneurs' decisions to start businesses. Favorable economic conditions, with low inflation rates and access to capital, provide the necessary financial resources and consumer demand for startups (Audretsch & Keilbach, 2004; Carree & Thurik, 2008). Location advantages, such as access to markets and a supportive ecosystem, are crucial for infrastructure (Florida, 1995; Porter, 1998).

Challenges or obstacles for sustaining a new venture
Even though studies have been concentrated much on motivational and environmental factors in starting up and sustaining a business, the dark side of operating and maintaining, in particular a novel business, is also critical to ensure its survival. Substantial research has been attempted to identify and explain challenges or obstacles encountered by entrepreneurs while starting up their new ventures. Growing evidence suggests that it is a normal process for any novel entrepreneurs to face the challenges or obstacles during the early stage of establishing new ventures. Therefore, entrepreneurs should be ready in nature to take those challenges or obstacles with open mind.

Government's Support
Government support for aspiring entrepreneurs in India plays a pivotal role in fostering economic growth and job creation. Similar to other countries, the small and medium-sized

enterprises (SMEs) sector in India is a vital contributor to the nation's GDP and employment. According to the World Bank, SMEs in India contribute to around 30% of the country's GDP and employ over 110 million people (World Bank, 2019). Recognizing the importance of entrepreneurship, the Indian government has introduced various initiatives and policies to support the development of SMEs and encourage entrepreneurship.

Analytical Hierarchy Process (AHP) Model
The AHP model is a powerful and versatile tool for decision-making and data analysis, particularly suited for complex and multi-criteria problems. Introduced by Dr. Thomas L. Saaty (1980), it has been widely adopted in various domains, including entrepreneurship research. This model offers a structured framework to evaluate and prioritize different factors and criteria, making it particularly well-suited for our investigation into the motivations and challenges faced by PG and UG students in Gujarat regarding entrepreneurship. The AHP model's ability to weigh and rank these factors will provide invaluable insights into the decision-making processes of students aspiring to become entrepreneurs in Gujarat, there by contributing to a richer understanding of entrepreneurship within this region.

Review of Literature:
Understanding what drives individuals to start a business is pivotal, and this motivation can be categorized into intrinsic and extrinsic factors **(Ryan and Deci, 2000)**.
Liang and Dunn (2007) conducted a study on entrepreneurial motivations among university students and found that factors like personal fulfillment, independence, and a desire to create something unique were significant motivators for aspiring entrepreneurs.
Kuratko and Hodgetts (2007) explored the obstacles that entrepreneurs encounter in sustaining their businesses. Their research highlighted challenges related to resource management, market competition, and adaptability.

2. Research Methodology:

Need of the Study:
This study aims to delve into the motivations and challenges faced by these students, employing a mix of interviews, surveys, and literature analysis to provide comprehensive insights. It acknowledges the unique characteristics of Gujarat, both as a limitation and an opportunity, recognizing that nurturing entrepreneurship among students in this diverse region can contribute not only to its local economy but also to the broader potential for market expansion and innovation, mirroring the success of Indian start-ups in the global context.

Research Gap:
From the previous research studies it is found that many researchers has been done research on the PG & UG students in Business Start-Up in the state other than the Gujarat state. Previous research has focused on Environments and Factors Influencing Entrepreneurial Development, student's attitudes towards entrepreneurship, gender-wise entrepreneurship etc. So, here researcher has attempt to fill the gap with the subject, **"A Study amongst PG & UG students in Business Start-Up in Gujarat: Motivation & Challenges to Become Entrepreneurs".**

Objectives of the Study
The research has focused on the following objectives:
1.   To study the key performance indicators practiced in Business Start-Up.

2.   To examine the Key Performance Indicators of Balanced Scorecard in Business Start-Up.

Hypothetical Case Application
In this section a detailed hypothetical example of how the AHP can be used in Balanced Scorecard Technique about selection in Key factors with reference to their criteria and sub – criteria. (www.balancescorecard.org) (www.bscol.com)

Research Design
This Study adopts the opinion of (Kaplan & Norton, 1992) regarding the BSC, referring to the literature and suggestions from various scholars in the determination of the hierarchical structure of KPI of the Campus Start-Up Ecosystem. The ultimate goal of this structure is to identify KPI to improve the performance of usage of Business Start-Up Ecosystem.

Sampling Design
➢ SAMPLING FRAME: Smt. S. S. Patel Nootan Science & Commerce College, Sankalchand Patel University, Visnagar
➢ SAMPLING UNIT: B.Com and M.Com students
➢ SAMPLING SIZE:
➢ SAMPLING METHOD: Non–Probability, Convenience Random Sampling Method

Faculty	No. of Actual Students	No. of Students taken as Sample
B.Com	325	42
M.Com	125	12
Total	**450**	**54**

3.   **Dataanalysis and Interpretation**

Table1: Demographic Profile

DemographicProfile		Frequency	Percentage
	Male	35	64.8
	Female	19	35.2
	18 to 23	54	100
	24 to 29	0	0
	30 to 35	0	0
	Urban	28	51.9
	Rural	26	48.1
	Only Child	3	5.6
	Second Child	19	35.2
	Eldest	17	31.5
	Youngest	8	14.8
	None of above	7	13
	Business Management	1	1.9
	Commerce	53	98.1
	Yes	49	90.7
	No	5	9.3
	Yes	31	57.4
	No	11	20.3
	Not Decided	12	22.3
	Self-Employed	38	70.3
	Employed	16	29.7

Graph1.1: Intentions Behind to become an Entrepreneur after UG/ PG

Intentions Behind to become an Entrepreneur after UG/PG
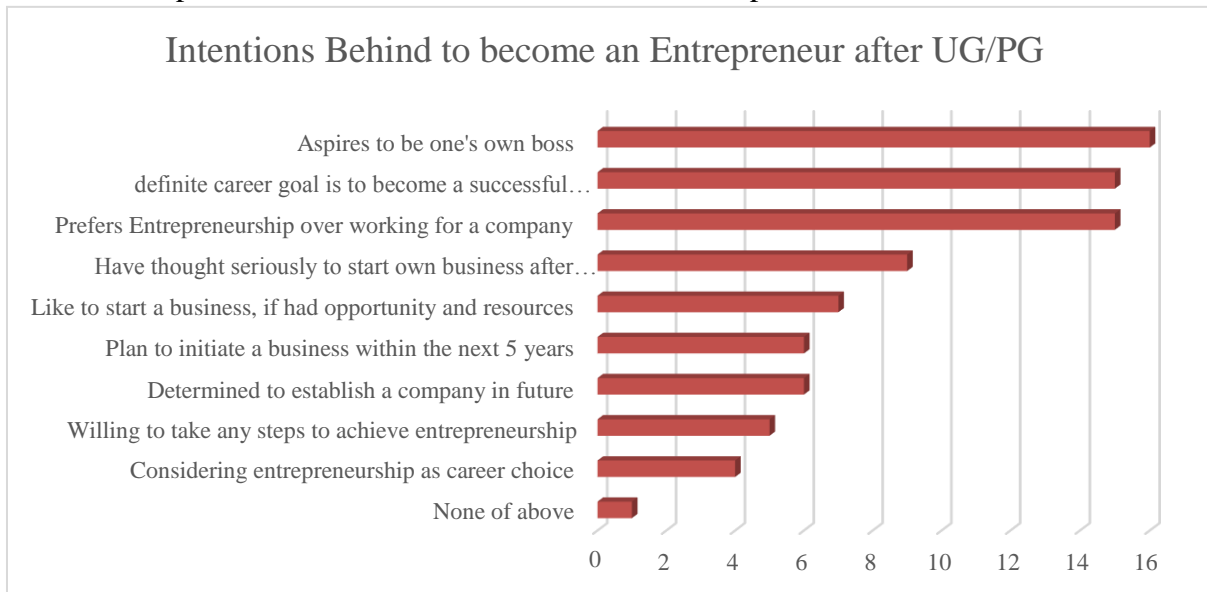
Figure1.1: Key Factors of Business Start – Up (Layer1)

BusinessStart– Up			
EF	**MF**	**OC**	**GS**

After the Hierarchy has been perceived, the Attribute must be evaluated in pairs so as to determine the relative importance between them and their Relative Weight to the Global Goal. The Evaluation begins by determining the Relative Weight of the initial criteria groups of Attributes of Players **(Figure 1.1)**. **Table 1.1** shows the Relative Weight data between the attribute that have been determined by Respondents. (Ozceylan, 2016)

Table1.1: Comparison for Key Factors of Business Start - Up for UG & PG Students (Layer1)

Construct	EF	MF	OC	GS
EF	1	0.1250	0.1111	0.1667
MF	8	1	3	2
OC	9	0.3333	1	1
GS	6	0.5000	1	1

Source: Processed Data

Table1.2: Eigen Vector Value max λ

EigenVector	0.0418	0.4777	0.2452	0.2353
Sum	24.0000	1.9583	5.1111	4.1667
1*2	1.0034	0.9356	1.2533	0.9801
Eigen Value max λ	**4.1725**			

Source: Processed Data

Summary on The Basis of Priority Vector Value
For this research the researcher has structured layer 1 and layer 2 for key performance indicators. The summary of these findings has been included here with this table.

Table1.3: Summary on the basis of Priority Vector Value for Strategy Map

	Layer		Eigen Value max λ from a Comparison Matrix	CI	CR	Accepted / Rejected	Remarks
1	Construct		4.1725	0.1725	**5.75%**	Accepted	—
2	Environmental Factors		7.6456	0.6456	**8.15%**	Accepted	
	Motivational Factors	Intrinsic Rewards	6.5600	0.5600	**9.03%**	Accepted	
		Extrinsic Rewards	3.0967	0.0967	**8.34%**	Accepted	
		Independence /Autonomy	6.0691	0.0691	**1.11%**	Accepted	
		Family Security	3.0692	0.0692	**5.97%**	Accepted	
		Change Management	3.0845	0.0845	**7.29%**	Accepted	
	Obstacles & Challenges	Exogenous Factors	3.0590	0.0590	**5.08%**	Accepted	
		Personal	3.0150	0.0150	**1.29%**	Accepted	
		Financial and Operational	3.0270	0.0270	**2.32%**	Accepted	
	Government Support		6.3703	0.3703	**5.97%**	Accepted	

Source: Processed Data

Note: RI for n = 7 is 1.32, n = 6 is 1.24, n = 4 is 0.90, and n = 3 is 0.58, CI and CR is Consistency Index and Consistency Ratio.**CR < 10%, hence subjective evaluation about its importance is consistent and acceptable.**

The Global Priority for each Criterion is determined by the result of the multiplication of each priority on the first level by its respective priority on the second level. The results are shown on the hierarchy depicted on **Table 1.4**. It must be sum of the weights of all Forty Three (43) factors is equal to 1.

Table1.4 – AHP of criteria for Business Start-Up for PG & UG Students

C	W		Statement	RW	GW
EF	0.6811	EF1-7	FAVORABLE ECONOMIC CONDITION	0.0239	0.0163
			LOCATION ADVANTAGES	0.0496	0.0338
			EXPERIENCE OF THE TEAM	0.0737	0.0502
			AVAILABILITY OF TALENT	0.1150	0.0783
			MARKET/ INDUSTRY DEMAND	0.1205	0.0821
			LOW BARRIERS TO ENTRY	**0.3256**	**0.2218**
			EASE OF DOING BUSINESS	0.2916	0.1986
MF	0.0555	IR1-6	TO ENJOY THE EXCITEMENT	0.0349	0.0019
			TO MEET THE CHALLENGE	0.0754	0.0042
			TO PROVE I CAN DO IT	0.1192	0.0066
			TO OBTAIN PERSONAL GROWTH	0.1619	0.0090
			TO GAIN PUBLIC RECOGNITION	0.2130	0.0118

				W	RW
			TO BE FREE FROM CORPORATE BUREAUCRACY	**0.3956**	**0.0220**
		ER1-3	TO INCREASE MY PERSONAL INCOME	0.0790	0.0044
			TO INCREASE MY INCOME OPPORTUNITY	0.2249	0.0125
			TO ACQUIRE PERSONAL WEALTH	**0.6961**	**0.0386**
		IA1-6	TO BE MY OWN BOSS	0.0333	0.0018
			TO OBTAIN SELF-EMPLOYMENT	0.0955	0.0053
			TO ACQUIRE PERSONAL SECURITY	0.0942	0.0052
			TO ALLOW FOR EARLY RETIREMENT	0.1805	0.0100
			TO MAINTAIN MY PERSONAL FREEDOM	0.2669	0.0148
			TO CONTROL MY OWN DESTINY	**0.3296**	**0.0183**
		FS1-3	TO BUILD A BUSINESS TO PASS ON	0.0786	0.0044
			TO SECURE FUTURE FOR FAMILY MEMBERS	0.3009	0.0167
			TO TAKE UP FAMILY BUSINESS	**0.6206**	**0.0344**
		CM 1-3	TO DEVELOP NEW IDEAS, INNOVATIONS AN INITIATIVES	0.0733	0.0041
			TO RESPOND TO CHANGE	0.2158	0.0120
			TO RECOGNIZE AND EXPLOIT OPPORTUNITIES	**0.7109**	**0.0395**
OC	0.145	**EF1-3**	HIGH INTEREST RATE	0.1093	0.0158
			HIGH LABOUR COST	**0.4632**	**0.0672**
			STRICT GOVERNMENT REGULATIONS	0.4276	0.0620
		EFP1-3	STRESS	0.0805	0.0117
			FEAR OF FAILURE	0.2508	0.0364
			LACK OF BUSINESS SKILLS	**0.6687**	**0.0970**
		EFPFO1-3	HIGH OPERATING EXPENSES	0.0780	0.0113
			LACK OF WORKING CAPITAL/ INVESTMENT	0.2272	0.0329
			FUND	**0.6949**	**0.1008**
GS	0.1184	**GS1-6**	GOVERNMENT SUPPORT OF INNOVATION	0.0532	0.0063
			PROVIDES TRAINING AND DEVELOPMENT VIA SEMINAR/ WORKSHOP	0.1658	0.0196
			PROVIDES GUIDANCE AND EXPERTISE	0.1275	0.0151
			PROVIDES FINANCIAL ASSISTANCE	0.1268	0.0150
			DEREGULATION IN VARIOUS SECTORS	0.2341	0.0277
			TAX INCENTIVES	**0.2926**	**0.0346**

Source: Processed Data *** C= Construct, W= Weighting, RW= Relative Weighting, GW = Global Weighting**

4. Conclusion:

The significance of entrepreneurship in bolstering the Indian economy is gaining increasing recognition. This study not only underscores the critical role of entrepreneurship but also serves as a blue print for both educational institutions and the government to foster a more entrepreneurially-driven and proactive generation of university students capable of initiating businesses upon graduation. India must prioritize and invest in comprehensive entrepreneurship education. Equipping students with a diverse range of entrepreneurial knowledge and skills will stimulate greater interest in entrepreneurship. The findings from this research, along with the utilization of tools like the Analytic Hierarchy Process (AHP) model, can serve as a guiding light for India's efforts to create an enabling environment for

budding entrepreneurs. By implementing policies that promote entrepreneurship, simplifying regulations, and offering financial support, India can tap into the potential of its youth, channeling their innovative ideas and ambitions into entrepreneurial ventures that will contribute significantly to the nation's economic growth, job creation, and overall prosperity. In conclusion, India has the opportunity to harness the entrepreneurial spirit of its university students, thereby fortifying its economy and positioning itself as a global entrepreneurial hub.

5. References:

1. Small Industries Development Bank of India (SIDBI). (n.d.). About Us. Retrieved from https://www.sidbi.in/en/about-us.
2. Saaty, T. L. (1980). The Analytic Hierarchy Process: Planning, Priority Setting, Resource Allocation. McGraw-Hill.
3. Gnyawali, D.R., &Fogel, D.S. (1994). Environments for Entrepreneurship Development: Key Dimensions and Research Implications. Entrepreneurship Theory and Practice, 18(4), 43-62.
4. Fogel, D. S. (2001). Factors Influencing Entrepreneurial Development in Hungary: An Empirical Analysis. Journal of Developmental Entrepreneurship, 6(4), 361-374.
5. Kristiansen, S., & Indarti, N. (2004). Entrepreneurial intention among Indonesian and Norwegian students, Journal of Enterprising Culture, 12(1), 55-78.
6. Lee, S M, Lim, S, Pathak, R D, Chang, D & Li, W. (2006). Influences on student's attitudes towards entrepreneurship: A multi-country study, The International Entrepreneurship and Management Journal, 2(3), 351-366.
7. Government of India. (n.d.). National Skill Development Corporation (NSDC). Retrieved from https://www.nsdcindia.org/
8. Kumar, A. (2009). Role of SMEs in Economic Growth of India. Journal of Commerce, 1(2), 116-123.
9. Thandi, H., & Sharma, R. (2004), 'MBA students' preparedness for entrepreneurial efforts', Tertiary Education and Management, 10, 209-226.
10. Zahariah, M. Z., Amalina, M. A., & Erlane, K. G. (2010). Entrepreneurship intention among Malaysian business students. Canadian Social Science, 6(3), 33-44.

APPENDICES
APPENDIX 1:

Table1: Scales for Pair-Wise Comparison

Preferences Expressed in Numeric Variables	Preferences Expressed in Linguistic Variables
1	Equal Importance
3	Moderate Importance
5	Strong Importance
7	Very Strong Importance
9	Extreme Importance
2,4,6,8	Intermediate Values between Adjacent Scale Values

Source: (Satty, 1980)

APPENDIX 2:

Table 2: Random Consistency Index Table (RI)

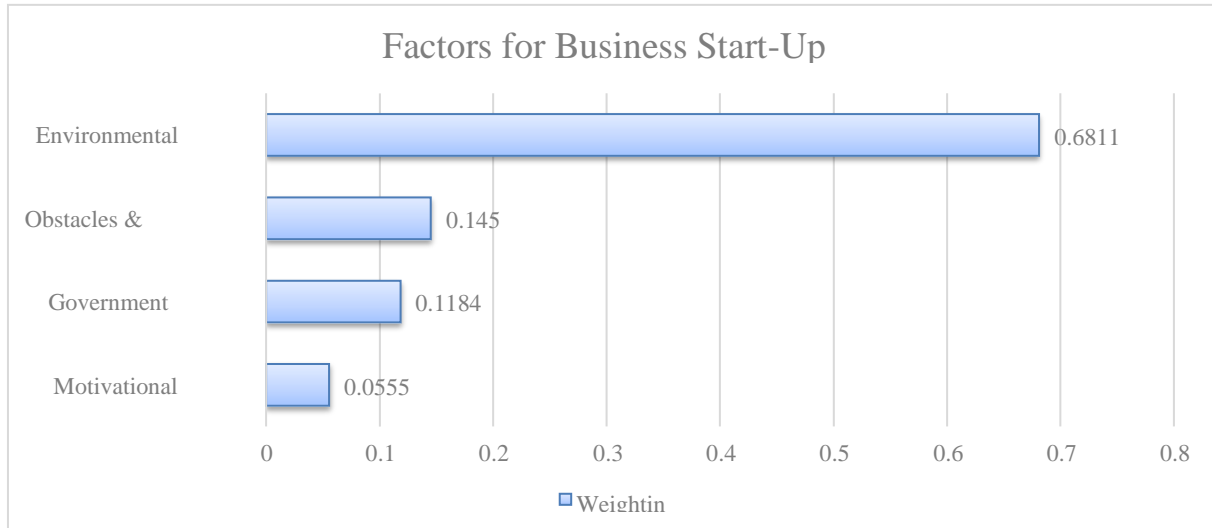| N	1	2	3	4	5	6	7	8	9	10
RI	0	0	0.58	0.90	1.12	1.24	1.32	1.41	1.45	1.49

APPENDIX 3:

Figure 1.2: Result of Key Factors of Business Start-Up (Layer 1)