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"ENHANCING AI STARTUP COMPETITIVENESS: A DECISION-MAKING FRAMEWORK BASED ON MECHANISM-BASED VIEW THEORY AND ANALYTIC HIERARCHY PROCESS (AHP)"

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ABSTRACT

AI-driven startups exhibit four defining characteristics: they are small-scale enterprises, integrate AI technologies, embrace digital transformation, and leverage big data to enhance their competitiveness. This study seeks to identify the critical factors influencing the competitiveness of AI-based startups and proposes a decision-making framework to enhance both technological and business competitiveness in the digital age. To achieve this, a hierarchical conceptual framework was developed, incorporating four key evaluation dimensions derived from the mechanism-based view theory. Through a comprehensive literature review, 16 influential factors were identified, focusing on digital transformation, technological implementation, and business competitiveness. The study employed the Analytic Hierarchy Process (AHP) to analyze data collected from expert surveys in North Gujarat. The findings indicate that the subject area plays a pivotal role in determining the business competitiveness of AI startups, with strategic mindset emerging as the most influential factor for success. When comparing two expert groups—'AI specialists' and 'startup professionals'—AI experts prioritized the subject domain, while startup experts considered the external environment more critical. Notable differences were observed across other evaluated factors. These insights contribute to a deeper understanding of the key elements necessary for strengthening AI startup competitiveness and fostering their growth in the evolving digital landscape.

Keywords: *AI-Driven Start-Ups, Big Data, AHP, Comparative Analysis, AI Specialist*

INTRODUCTION

Artificial Intelligence (AI) has emerged as a transformative force in modern technology and business, enabling machines to perform tasks that traditionally required human reasoning. With its ability to process vast amounts of data, generate insights, and optimize operations, AI has become a crucial asset for businesses striving to stay competitive in an increasingly dynamic market. Its rapid advancement has not only captured the interest of researchers and tech experts but has also revolutionized the way startups drive innovation.

In recent years, companies across various industries have actively pursued digital transformation strategies, leveraging AI to enhance workforce capabilities and improve service offerings. AI-driven business models have gained momentum as organizations seek innovative approaches to succeed in the digital era. Technologies such as natural language processing, machine learning, and deep learning have reshaped data analysis, improving business management, strategic planning, and operational efficiency.

As AI integration accelerates, it has become a key driver of business innovation, with AI-powered value chains playing a crucial role in maintaining a competitive edge. However, despite growing interest, many organizations struggle with implementing AI effectively due to the complexities involved. While digital transformation requirements differ by industry, fundamental aspects such as data acquisition and advanced AI adoption remain universally important. Businesses must navigate these challenges strategically to fully harness AI's potential.

Since 2020, AI has gained global recognition as a driver of economic growth, leading to increased investments in AI startups. According to a CB Insights Report (2023), the top 100 AI startups worldwide secured $10.1 billion in funding, marking a 48% market expansion compared to the previous year. The U.S. led with 77 startups in the top 100, followed by China, the U.K., and Israel. Eleven of these companies achieved unicorn status, reflecting AI’s growing influence across industries such as enterprise technology, healthcare, automation, finance, and retail.

AI startups often create economic value through mergers and acquisitions with major tech companies like Google and Apple. However, to establish themselves as independent unicorns, AI startups must develop sustainable business models alongside cutting-edge technologies. Effective management strategies and competitive positioning are essential for long-term success in an evolving digital landscape.

While research has extensively covered startup success and digital transformation separately, limited studies have examined the intersection of these factors. Some elements that drive startup success may conflict with AI adoption, posing unique challenges. This study aims to identify key determinants of AI startup competitiveness by employing the Analytic Hierarchy Process (AHP) to evaluate critical success factors. By providing actionable insights, this research will help AI entrepreneurs enhance their technological capabilities and business strategies in an increasingly AI-driven world.

1.1 AI Technology

Artificial Intelligence (AI) is a rapidly evolving field that enables machines to mimic human intelligence, allowing them to learn, reason, and make decisions. AI encompasses various technologies, including machine learning, natural language processing, deep learning, and computer vision, which are transforming industries such as healthcare, finance, manufacturing, and retail.

AI plays a crucial role in automating processes, improving efficiency, and enhancing decision-making by analyzing large volumes of data. It powers applications like virtual assistants, recommendation systems, self-driving cars, and predictive analytics. As AI continues to advance, its integration into business strategies is becoming essential for companies seeking innovation and competitive advantage in the digital era.

1.2 Start-Up

A startup is a young and innovative business venture designed to develop and scale a unique product or

service in a competitive market. Unlike traditional businesses, startups focus on rapid growth, technological innovation, and scalable business models. They often operate in uncertain environments, requiring agility, risk-taking, and continuous adaptation.

Startups play a vital role in driving economic growth, fostering job creation, and introducing disruptive solutions across various industries. With access to venture capital, accelerators, and digital transformation tools, startups have the potential to reshape industries and create significant market impact.

Department of Industrial Policy and Promotion (DIPP) define a startup as an entity incorporated or registered in India with following parameters:

- It must not be established more than seven years, (for Biotechnology Startups not prior to ten years)
- Annual turnover not exceeding INR 25Cr in any preceding financial year, and
- Working towards innovation, development or improvement of products or processes or services,
- It is a scalable business model with a high potential of employment generation or wealth creation.

1.3 Start-Up Landscape and the Need for AI Integration:

The integration of Artificial Intelligence (AI) is revolutionizing the startup ecosystem, enhancing innovation, efficiency, and adaptability. As startups face challenges like resource constraints and the need for scalability, AI provides predictive insights, streamlines operations, and supports strategic decision-making. AI-driven automation optimizes routine tasks, allowing entrepreneurs to focus on high-impact initiatives. Its applications, from data-driven marketing to enhanced customer engagement, offer startups a competitive edge. As technology advances, AI is becoming a cornerstone of sustainable growth, urging startups to embrace its potential to navigate challenges and drive long-term success in an evolving business landscape.

ANALYTIC HIERARCHY PROCESS (AHP) MODEL

The Analytic Hierarchy Process (AHP) model is a structured and effective decision-making approach that is particularly useful for evaluating multi-criteria problems. Developed by Dr. Thomas L. Saaty (1980), AHP has been extensively applied in various domains, including technology-driven entrepreneurship. In the context of AI-driven startups, where multiple factors influence competitiveness, the AHP model provides a systematic framework for assessing and prioritizing key determinants.

This study applies AHP to analyze the critical factors that enhance the competitiveness of AI-based startups in the digital age. By incorporating a hierarchical evaluation structure, AHP enables the ranking of various factors, such as digital transformation, technological adoption, business strategy, and market dynamics. Through expert-driven data analysis, this model helps in understanding the relative importance of these factors, ultimately aiding AI startup founders and policymakers in making informed decisions. The application of AHP in this research contributes to a deeper understanding of the strategic elements necessary to strengthen AI startups, ensuring their sustained growth and innovation in an increasingly competitive digital landscape.

REVIEW OF LITERATURE

- **James Bessen et al. (2023)** examined The Business of AI Startups, focusing on how resource-constrained startups create and commercialize AI products. By analyzing survey data collected over the past five years, the study documented key aspects such as business models, product development strategies, suppliers, partners, and customer segments. The research contributed to ongoing discussions on whether AI products complement or replace human labor, the use of different AI frameworks, data protection strategies, the industries and geographies AI startups target for sales.

- **Pati, Jyotirmayee; Parida, Prasanta Kumar; Mohapatra, Debashish; Jena, Surendra Kumar (2024)** conducted a comparative analysis of the impact of Artificial Intelligence (AI) on startup business models, focusing on AI adoption, business model innovation, and performance metrics. Through surveys and structured interviews with 100 startups across various industries, the study utilized Exploratory Factor Analysis (EFA) to establish correlations between AI integration and business model performance. The findings revealed that AI adoption significantly enhances business model innovation, leading to improved performance metrics. The study emphasized the need for startups to incorporate AI technologies to maintain competitiveness and provided strategic recommendations for leveraging AI-driven innovation in dynamic business environments.

❖ RESEARCH GAP

From the above Review of Literature on topic on Analytical Hierarchy Process in various sector like Constructing, Mathematics, Management, Finance, Environment etc. but still no one has carried out research on Analytical Hierarchy Process in AI Startup. So, here researcher has try out to fill the gap and present a research paper on ***"Enhancing AI Startup Competitiveness: A Decision-Making Framework Based on Mechanism-Based View Theory and Analytic Hierarchy Process (AHP)"***

❖ OBJECTIVES

The research has focused on the following objectives:

- To study the key performance indicators practiced in selected AI Startup Sector in Gujarat.
- To examine the Key Performance Indicators of Balanced Scorecard in Performance Measurement in selected AI Startup Sector in Gujarat.

❖ RESEARCH METHODOLOGY

This research methodology was a process related step to solving the above problems. The stages of the research are described as follows:

1) Initial Observation, Problem Formulation, and Study Objectives;
2) Literature Review;
3) Performance Measurement in AI Start-ups: Balanced Scorecard and Analytic Hierarchy Process;
4) Data Collection and Processing: For the measurement of hospital performance and the evaluation of selected **AI Start-ups** in Gujarat, data collection and processing were conducted using the Analytic Hierarchy Process (AHP) method. The process began with the identification of strategic objectives and key performance indicators (KPIs) within each performance perspective. A structured pairwise comparison questionnaire was administered to key stakeholders, including Directors, General Managers, Team Leads, developers, and other staff members of the AI Start-ups. Based on the insights gathered, a hierarchical structure was developed to illustrate the relationships between the criteria and their respective sub-criteria. Following this, data collection at the AI Start-ups was carried out in alignment with the defined strategic objectives and KPIs. This structured approach enabled the use of AHP for prioritizing and evaluating performance across the identified perspectives.
5) Analysis of research results contained analysis based on the results of data processing.

❖ DATA COLLECTION AND ANALYSIS

MULTI CRITERIA DECISION MAKING

Decision Making is the process to choose among alternatives based on multiple criteria. In each of these decisions, deep in our mind; have several factors or criteria on what to consider and also having several alternatives choices that is decide. On group decision making these criteria and alternatives are more noticeable and must be determined first before give any judgment score. The Purpose of Criteria and Alternatives are very prejudiced; with AHP trying to make decision as balanced as possible quantify these individual opinions into subjective values. The values are number within any certain range; say from 1 to 10 or -5 to 5. The values can be any number with order (ordinal number) and you can even put different range for each factor. Higher value indicates higher level of the factor or preferable values. **Table 1.1** exhibits the scale.

Table 1.1: 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)

- **PAIR WISE COMPARASION**

Now take in to consideration of Paired Comparison which is easier to realize the values of important criteria and its sub criteria, which criteria is most important than the other and how much it affects *in comparison* with the each other.

- **MAKING COMPARISON MATRIX**

Make Comparison Matrix from the Comparisons for Criteria and Sub-Criteria, thus considering Matrixes. The Diagonal elements of the Matrix are always 1 and we only need to fill up the upper Triangular Matrix. How to fill up the upper Triangular Matrix is using the following rules:

*1. If the judgment value is on the **left** side of 1, we put the **Actual Judgment** Value.*
2. *If the judgment value is on the **right** side of 1, we put the **Reciprocal** Value.*

Notice that the entire elements in the Comparison Matrix are either positive or $a_{ij} > 0$.

PRIORITY VECTORS

Having a Comparison Matrix, would like to compute Priority Vector, which is the normalized Eigen Vector of the Matrix, which is to be finds with following Steps.

The Priority Vector is obtained from normalized Eigen Vector of the Matrix. CI and CR is Consistency Index and Consistency Ratio respectively,

CI Formula

$$CI = \frac{\lambda_{max} - n}{n-1}$$

CR Formula

$$CR = \frac{CI}{RI}$$

Table 1.2: 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

Every Business Persons are all basically decision makers, in order to develop good judgments to make decisions about these occurrences. The need and purpose of the decision, the criteria of the decision, their sub criteria, stakeholders and groups affected and the alternative actions to take. Two important issues in Outline of Evaluation Indicators for Dimensions of the BSC are: How to Aggregate Sub-Criteria or Criteria into a Perspective for the entire dimensions and How to construct a factor choice from individual Perspective. The Mutual belongings play an important role in combining the judgments of several factors to obtain a single judgment for the Perspectives. It has been proved that the Geometric Mean, not the frequently used Arithmetic Mean, is the only way to do that. The Criteria may be intangible, and have no measurements to serve as a guide to rank the alternatives, and creating priorities for the criteria themselves. These four dimensions of criteria are suggested by the AHP method and exhibit measures. (Allio, 2006)

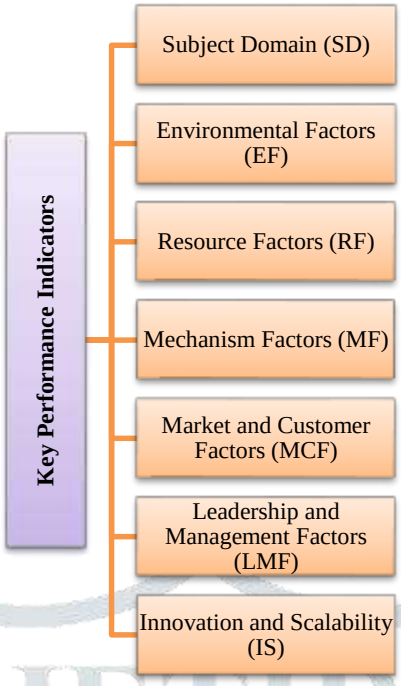


Figure 1.1: KPI's Initial Group of Criteria for AI Start-Up's

After the Hierarchy has been recognized, the Criteria 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 for Banking & NBFCs **(Figure 1.1)**. **Table 1.3** shows the Relative Weight data between the criteria that have been determined by Respondents.

	SD	EF	RF	MF	MCF	LMF	IS
SD	1	2	8	4	3	9	8
EF	0.500	1	7	3	6	5	3
RF	0.125	0.143	1	2	5	5	3
MF	0.250	0.333	0.500	1	4	2	2
MCF	0.333	0.167	0.200	0.250	1	3	1
LMF	0.111	0.200	0.200	0.500	0.333	1	1
IS	0.125	0.333	0.333	0.500	1	1	1

Table 1.3: Comparison Matrix for All BSC's Perspectives for Selected AI Start-Ups

In order to interpret and give relative weights to each criterion, it is necessary to normalize the previous comparison matrix. The Normalization is made by dividing each table value by the total the total column value **(Table 1.4).**

Results

	SD	EF	RF	MF	MCF	LMF	IS
SD	0.409	0.479	0.464	0.232	0.174	0.346	0.421
EF	0.205	0.239	0.406	0.174	0.348	0.192	0.158
RF	0.051	0.034	0.058	0.116	0.290	0.192	0.158
MF	0.102	0.080	0.029	0.058	0.232	0.077	0.105
MCF	0.136	0.040	0.012	0.015	0.058	0.115	0.053
LMF	0.045	0.048	0.012	0.029	0.019	0.038	0.053
IS	0.051	0.080	0.019	0.029	0.058	0.038	0.053

Table 1.4: Comparison Matrix for KPI's Group of Criteria after Normalization for Selected AI Start-Ups

The Contribution of each criterion to the Bank & NBFCs goal is determined by calculations made using the priority vector (or Eigenvector). The Eigen Vector shows the Relative Weights between each criterion it is obtained in an approximate manner by calculating the arithmetic average of all criteria, it is observe that the sum of all values from the vector is always equal to one (1).

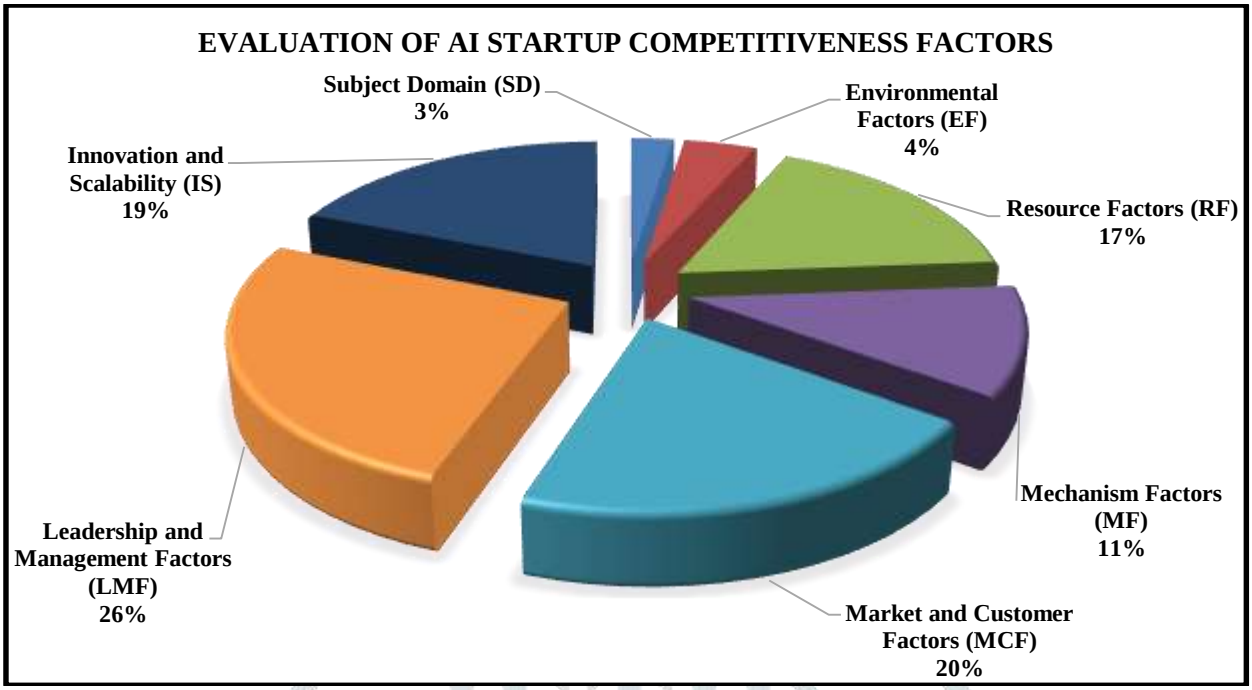
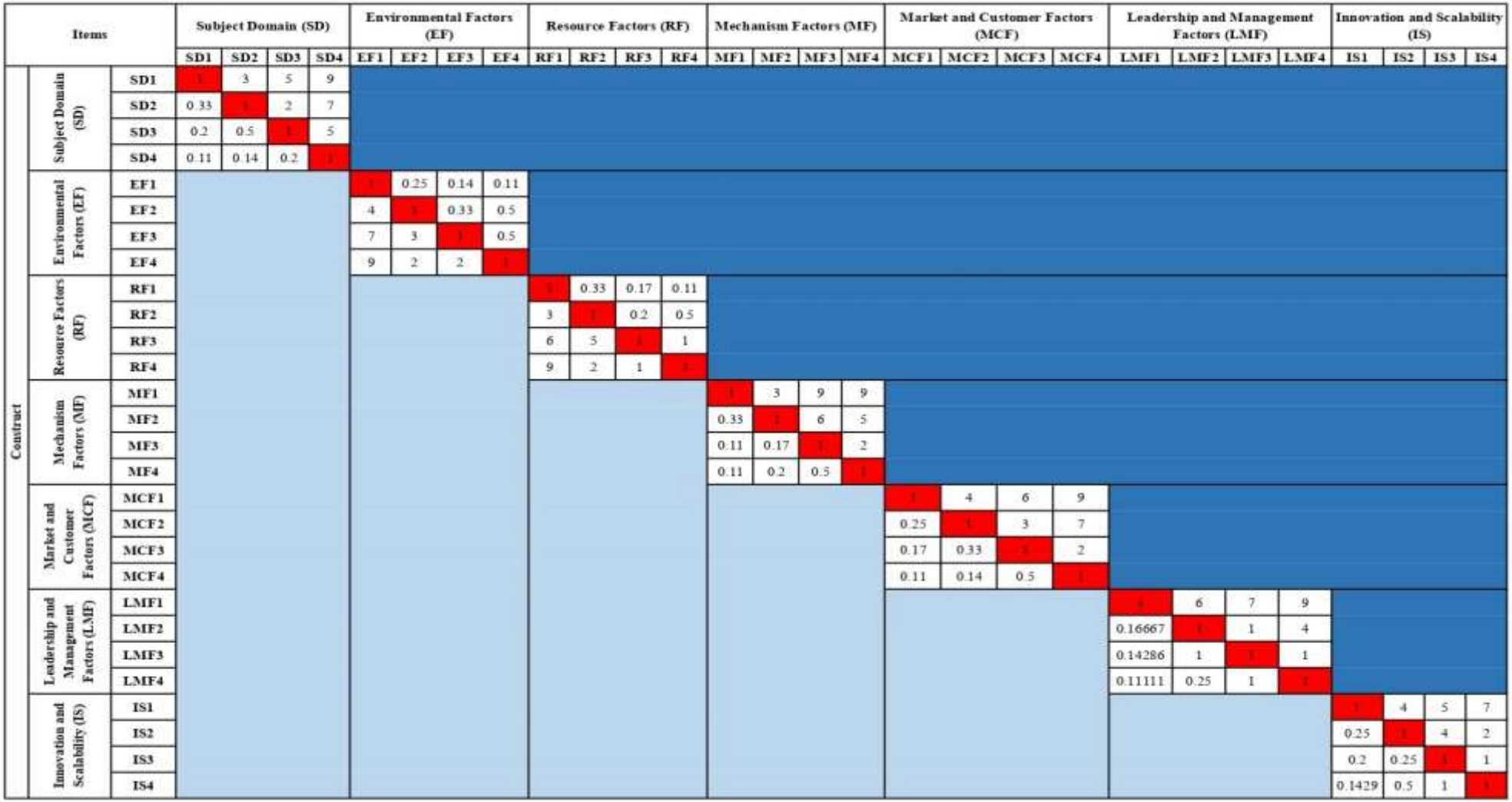


Figure 1.2: Eigen Vector Calculation for KPIs' Initial Group of Selected AI Start-Ups



Items			Subject Domain (SD)				Environmental Factors (EF)				Resource Factors (RF)				Mechanism Factors (MF)				Market and Customer Factors (MCF)				Leadership and Management Factors (LMF)				Innovation and Scalability (IS)			
			SD1	SD2	SD3	SD4	EF1	EF2	EF3	EF4	RF1	RF2	RF3	RF4	MF1	MF2	MF3	MF4	MCF1	MCF2	MCF3	MCF4	LMF1	LMF2	LMF3	LMF4	IS1	IS2	IS3	IS4
Construct	Subject Domain (SD)	SD1	1	3	5	9																								
		SD2	0.33	1	2	7																								
		SD3	0.2	0.5	1	5																								
		SD4	0.11	0.14	0.2	1																								
	Environmental Factors (EF)	EF1					1	0.25	0.14	0.11																				
		EF2					4	1	0.33	0.5																				
		EF3					7	3	1	0.5																				
		EF4					9	2	2	1																				
	Resource Factors (RF)	RF1									1	0.33	0.17	0.11																
		RF2									3	1	0.2	0.5																
		RF3									6	5	1	1																
		RF4									9	2	1	1																
	Mechanism Factors (MF)	MF1													1	3	9	9												
		MF2													0.33	1	6	5												
		MF3													0.11	0.17	1	2												
		MF4													0.11	0.2	0.5	1												
	Market and Customer Factors (MCF)	MCF1																	1	4	6	9								
		MCF2																	0.25	1	3	7								
		MCF3																	0.17	0.33	1	2								
		MCF4																	0.11	0.14	0.5	1								
	Leadership and Management Factors (LMF)	LMF1																					1	6	7	9				
		LMF2																					0.16667	1	1	4				
		LMF3																					0.14286	1	1	1				
		LMF4																					0.11111	0.25	1	1				
	Innovation and Scalability (IS)	IS1																									1	4	5	7
		IS2																									0.25	1	4	2
		IS3																									0.2	0.25	1	1
		IS4																									0.1429	0.5	1	1

Source: Processed Data

Table 1.5: Comparison Matrix for All BSC's Perspectives Sub Criteria

		Subject Domain (SD)				Environmental Factors (EF)				Resource Factors (RF)				Mechanism Factors (MF)				Market and Customer Factors (MCF)				Leadership and Management Factors (LMF)				Innovation and Scalability (IS)			
		SD1	SD2	SD3	SD4	EF1	EF2	EF3	EF4	RF1	RF2	RF3	RF4	MF1	MF2	MF3	MF4	MCF1	MCF2	MCF3	MCF4	LMF1	LMF2	LMF3	LMF4	IS1	IS2	IS3	IS4
1	Eigen Vector	0.57	0.25	0.14	0.04																								
2	Sum	1.64	4.64	8.20	22.00																								
3	1 * 2	0.93	1.14	1.19	0.92																								
		1.0000																											
4	Max. Value	4.1832																											
1	Eigen Vector					0.05	0.17	0.33	0.45																				
2	Sum					21.00	6.25	3.48	2.11																				
3	1 * 2					0.95	1.07	1.16	0.95																				
						1.0000																							
4	Max. Value					4.1310																							
1	Eigen Vector									0.05	0.14	0.43	0.38																
2	Sum									19.00	8.33	2.37	2.61																
3	1 * 2									0.98	1.15	1.02	0.99																
										1.0000																			
4	Max. Value									4.1410																			
1	Eigen Vector													0.60	0.28	0.07	0.05												
2	Sum													1.56	4.37	16.50	17.00												
3	1 * 2													0.94	1.20	1.19	0.88												
														1.0000															
4	Max. Value													4.2015															
1	Eigen Vector																	0.61	0.25	0.09	0.05								
2	Sum																	1.53	5.48	10.50	19.00								
3	1 * 2																	0.93	1.37	0.98	0.95								
																		1.0000											
4	Max. Value																	4.2160											
1	Eigen Vector																					0.68	0.15	0.10	0.07				
2	Sum																					1.42	8.25	10.00	15.00				
3	1 * 2																					*0.97*	*1.25*	*0.97*	*1.03*				
																						1.0000							
4	Max. Value																					4.2212							
1	Eigen Vector																									0.60	0.22	0.09	0.09
2	Sum																									1.59	5.75	11.00	11.00
3	1 * 2																									*0.96*	*1.26*	*0.96*	*0.99*
																										1.0000			
4	Max. Value																									4.1718			

Source: Processed Data

Table 1.6: Eigen Vector Value max λ for all BSC's Sub Criteria

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.

Table 1.7: Summary on the basis of Priority Vector Value

	Layer	Eigen Value max λ from a Comparison Matrix	CI	CR	Accepted/ Rejected	Remarks
1	**Key Performance Indicators**	7.5327	0.5327	6.73%	**Accepted**	Note: **RI for n = 4 is 0.90 & n = 7 is 1.32, CI and CR is Consistency Index and Consistency Ratio.** CR < 10%, hence subjective evaluation about its importance is consistent and acceptable.
2	**Subject Domain (SD)**	4.1832	0.1832	6.78%	**Accepted**	
	Environmental Factors (EF)	4.1310	0.1310	4.85%	**Accepted**	
	Resource Factors (RF)	4.1410	0.1410	5.21%	**Accepted**	
	Mechanism Factors (MF)	4.2015	0.2015	7.47%	**Accepted**	
	Market and Customer Factors (MCF)	4.2160	0.2160	8.00%	**Accepted**	
	Leadership and Management Factors (LMF)	4.2212	0.2212	8.19%	**Accepted**	
	Innovation and Scalability (IS)	4.1718	0.1718	6.36%	**Accepted**	

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 1.11**. It must be sum of the weights of all twenty eight (28) factors is equal to 1.

Table 1.8–Analysis Hierarchy of criteria for the AI Start-Ups with global priorities for each criterion

Construct	Weighting	Statement		Relative Weighting	Global Weights	Ranks
Subject Domain (SD)	0.0243	**SD1**	Strategic Decision Making Ability	0.0451	0.0011	***28***
		SD2	Technical Knowledge of Decision Makers	0.1272	0.0031	**26**
		SD3	Risk-Taking Ability of Decision-Makers	0.2247	0.0055	***23***
		SD4	***Field Experience of Decision-Makers***	***0.6029***	***0.0147***	***15***
Environmental Factors (EF)	0.0416	***EF1***	***AI Technology Maturity***	***0.6395***	***0.0266***	***14***
		EF2	Government Regulations Challenges	0.1903	0.0079	***22***
		EF3	Competitive Pressure	0.1059	0.0044	***25***
		EF4	Government Support	0.0643	0.0027	***27***
Resource Factors (RF)	0.1716	***RF1***	***Mastery of Technology***	***0.5880***	***0.1009***	***3***
		RF2	Financial Investment	0.2579	0.0443	***11***
		RF3	High-Quality Technology	0.0732	0.0126	***17***
		RF4	Patent Protection	0.0808	0.0139	***16***
Mechanism Factors (MF)	0.1120	**MF1**	Technology Support	0.0395	0.0044	***24***
		MF2	Reward and Recognition Systems	0.1108	0.0124	***18***
		MF3	Innovative Culture	0.4185	0.0469	***10***
		MF4	***Dynamic Capability***	***0.4312***	***0.0483***	***9***
Market and Customer Factors (MCF)	**0.2024**	**MCF1**	Customer Adoption of AI Products	0.0420	0.0085	***21***
		MCF2	Market Trend Understanding	0.1500	0.0304	***13***
		MCF3	Customer Engagement Strategies	0.2880	0.0583	***8***
		MCF4	***Brand Reputation***	***0.5200***	***0.1052***	***2***
Leadership and Management Factors (LMF)	***0.2589***	**LMF1**	Leadership Vision and Adaptability	0.0410	0.0106	***19***
		LMF2	Entrepreneurial Mindset	0.2380	0.0616	***7***
		LMF3	Effective Team Management	0.2880	0.0746	***4***
		LMF4	***Industry Collaboration and Mentorship***	***0.4326***	***0.1120***	***1***
Innovation and Scalability (IS)	*0.1892*	**IS1**	Continuous Research and Development	0.0543	0.0103	***20***
		IS2	Efficient Scaling Operations	0.1960	0.0371	***12***
		IS3	***Experimentation With AI Models***	***0.3750***	***0.0710***	***5***
		IS4	Access To Cloud And AI Tools	0.3748	0.0709	***6***

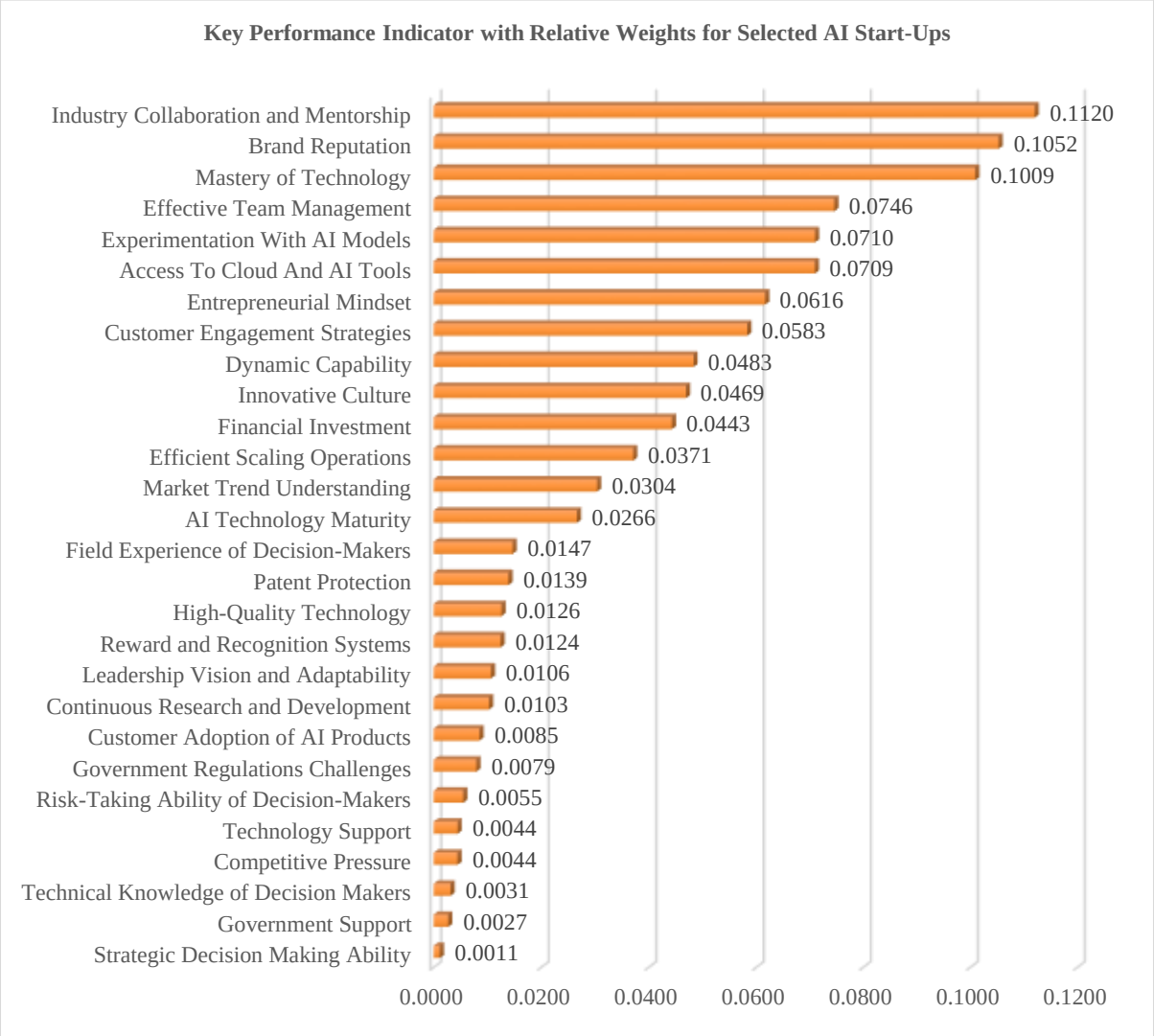


Figure 1.3: Key Performance Indicator with Relative Weights for Selected AI Start-Ups

CONCLUSION

KEY INSIGHTS:

1. **Top Influential Factors:**
   - **Industry Collaboration and Mentorship (0.1120)** is the most critical KPI, emphasizing the value of external guidance and ecosystem connections.
   - **Brand Reputation (0.1052)** and **Mastery of Technology (0.1009)** closely follow, highlighting the significance of trust and technical expertise in AI startups.
2. **Core Operational Strengths:**
   - **Effective Team Management (0.0746)** and **Experimentation with AI Models (0.0710)** reflect the need for both strong internal leadership and technical innovation.
   - **Access to Cloud and AI Tools (0.0709)** shows that infrastructure availability remains a fundamental driver of performance.
3. **Strategic and Cultural Factors:**
   - **Entrepreneurial Mindset (0.0616)**, **Customer Engagement Strategies (0.0583)**, and **Dynamic Capability (0.0483)** illustrate the importance of adaptability, customer focus, and proactive thinking.
4. **Lower Influence Indicators:**
   - Factors such as **Government Support (0.0027)**, **Technical Knowledge of Decision Makers (0.0031)**, and **Strategic Decision Making Ability (0.0011)** carry minimal weight, indicating that external policy support and certain individual capabilities are perceived as less crucial compared to collaborative and organizational strengths.

CONCLUSION

The findings suggest that **external collaboration, reputation, and deep technological capability** are paramount for AI startup success. Organizational effectiveness and innovation also play significant roles. In contrast, while traditional factors like government support or regulatory challenges are present, they are **considered less impactful** in driving competitive advantage. This prioritization can guide startup founders, investors, and policymakers to **focus resources and strategy** on the most influential areas to ensure growth and sustainability in the AI ecosystem.

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