



# An Investigation of the Effect of Entrepreneurial Ecosystem on Startups Success through the Mediating Effect of Self Efficacy, Entrepreneurial Attitude and Entrepreneurial Intention: Applied Study on the Egyptian Startups Entrepreneurs

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## Abstract

*The study's objective is to look at the effects of the entrepreneurial ecosystem (access to government policies and regulations, financial support, government programmes and support for assisting new and growing firms, education and training for entrepreneurship, research and development transfer, market openness and barriers to entry as issues for entrepreneurship, commercial and professional infrastructure for entrepreneurs, access to physical infrastructure for entrepreneurship, cultural and social norms) on startup organisation success through the mediating roles of self-efficacy, entrepreneurial attitude, and entrepreneurial intention. For this research, the interpretivism philosophy was chosen, and both the inductive approach and mixed analysis were chosen to enable the researcher to fulfill the goals of the ongoing study.*

*Furthermore, the researcher developed interviews and questionnaires as a tool to collect primary data from startup owners and employees in Egypt. Therefore, we found partial support for the impact of entrepreneurial ecosystem dimensions on self-efficacy, entrepreneurial attitude, and entrepreneurial intention. We also found support for the influence of self-efficacy on startup organisational success and performance. The study also confirmed the impact of entrepreneurial attitude and intention on the success and performance of startups. The study concluded that there was partial support for the influence of the entrepreneurial ecosystem on startup organisation success. Finally, the study found partial support for the mediating effect of self-efficacy on the relationship between the factors of the entrepreneurial ecosystem and startup organisational success. Partially supported was the mediating effect of entrepreneurial attitude on the relationship between the factors of the entrepreneurial ecosystem and startup organisational success. The relationship between the entrepreneurial ecosystem and startup organisational success received partial support from the mediating effect of entrepreneurial intention.*

**Keywords:** *Entrepreneurial Ecosystem, Startups Success, Self-Efficacy, Entrepreneurial Attitude, Entrepreneurial Intention.*

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## Introduction

Entrepreneurship refers to distinctive, lasting successes that require a stable environment, constant development, and innovation to provide new products and services through knowledge acquisition (Frederick et al., 2018).

Entrepreneurs create jobs, boost competitiveness, and boost production, all of which result in increased growth and innovation. They also create value for products and services, significantly enhancing the economy's development (Hessels and Naudé, 2019). Entrepreneurship plays a significant role in the development and growth of the economy through innovation and creativity, which create new and additional value for the products and services provided by the organization (Coulibaly et al., 2018).

According Research on entrepreneurship reveals that environmental factors, including cultural, social, legal, political, and technological aspects, can impact an entrepreneur's development. The entrepreneurship ecosystem includes government, investors, professionals, universities, and networks (Hermanto, 2017). Entrepreneurial ecosystems are dynamic, constantly changing systems that foster successful entrepreneurship within a region, according to regional development literature. (Cavallo et al., 2021; Tiba et al., 2021). Policymakers worldwide are recognizing technology startups as a way to promote innovation, create new goods and services, and create jobs, often in a supportive entrepreneurial ecosystem (Subrahmanya, 2017). Globally, high-tech start-ups and entrepreneurial ecosystems are rapidly expanding, but their success rate has not increased. This highlights the importance of competitiveness and the need to investigate factors affecting these ecosystems. (Subrahmanya, 2022). Start-up entrepreneurial ecosystem companies transform innovative ideas into replicable working models, exploiting market opportunities by replicating and developing them (Ghezzi and Cavallo, 2020). Egypt's entrepreneurial scene is one of the most promising ecosystems in the area, and it has been growing and developing at a very fast rate over the past several years, in part due to the country's economic prosperity (Hattab, 2023). The Egyptian entrepreneurial scene is experiencing positive trends due to the increasing number of businesses entering the market and improving the entrepreneurial ecosystem (Elsheerbiny, 2019).

Therefore, the current study aims to develop a framework that investigates the effect of the entrepreneurial ecosystem on startups' success.

## Literature Review & Theoretical Framework

### *Entrepreneurship Ecosystem*

Researchers are unsure of a common definition of entrepreneurial ecosystems, which involves exploring, assessing, and seizing opportunities for product and service development, often limiting it to high-growth start-ups (Wurth et al., 2022).

Ecosystems are biotic communities with physical surroundings, interactions, and co-evolution. Community ecology involves diverse organisations and institutions, supporting emergence, growth, and survival as larger systems (Wurth et al., 2022).

Building on previous research and studies on the institutions and resources of such ecosystems, researchers proposed an integrative model of entrepreneurial ecosystems, consisting of ten operational constructs (Mack and Mayer, 2016; Stam and Spigel, 2016; Stam and Ven, 2018). An entrepreneurial ecosystem comprises finance, human capital, government support, infrastructure, culture, education, professional services, networks, mentors, knowledge, and access to all.

### *Entrepreneurial Ecosystem and Startup Organisation Success*

Entrepreneurial ecosystems are interdependent regional groups promoting successful entrepreneurship that consist of people, businesses, and governing bodies. They are complex, dynamic systems that constantly evolve (Ghezzi and Cavallo, 2020; Tiba et al., 2021).

Startups serve as network brokers in the entrepreneurial ecosystem, connecting venture capitalists and other startups. Entrepreneurial support organisations help develop a dense financial network but often lack promising businesses (Rijnsoever, 2022).

According to India's study, key entrepreneurial ecosystem components, including government, industry, and universities, form an industrial cluster, followed by an information technology and biotechnology cluster, and an R&D cluster (Subrahmanya, 2017).

The University of Toronto's study on student start-ups highlights the importance of student entrepreneurs as economic change agents, highlighting the role of universities as breeding grounds for innovation (Breznitz and Zhang, 2019).

Using Latent Dirichlet Allocation, we created a ranking of entrepreneurial ecosystems based on sustainability startups, analysing 19,997 companies in the 28 largest identified entrepreneurial ecosystems. Boston had the highest proportion of sustainability startups, followed by Houston, Seattle, and Lagos (Tiba et al., 2021).

An entrepreneurial ecosystem supports local entrepreneurship, fostering early-stage businesses. Age and ecosystem percentage negatively correlate, with older, creative start-ups relying more on their local ecosystem (Gueguen et al., 2021).

The Indian startup ecosystem has experienced rapid growth over the past 20 years, despite being in its infancy due to a lack of active investors and incubators. The government is actively supporting the development of this vital engine for innovation and growth (Garg and Gupta, 2021).

The study explores the connection between Italian small and medium enterprises and innovative startups, revealing a unique entrepreneurial ecosystem where these businesses cluster and valuing their relationships (Cavallo et al., 2021).

### ***The Egyptian Entrepreneurial Ecosystem***

Prosperous new businesses offer employment, stability, innovation, and competition, while the institutional environment, including conventions, laws, and values, significantly influences entrepreneurial activity in a country (Mahrous, 2019). Recent research has focused on the institutional dynamics of entrepreneurship in developing and emerging nations, examining the influence of formal and informal networking on the establishment of new ventures (El Dahshan et al., 2018).

The article highlights Egypt's thriving entrepreneurial scene, positive economic and societal impacts, job creation, reduced unemployment, and strengthening equality and equity, all of which attract increased support. (Kirby and Ibrahim, 2017).

The Micro, Small, and Medium Enterprise Development Agency, venture capital funds, and educational programmes are fostering positive trends in the entrepreneurial ecosystem, promoting the growth of entrepreneurs and their businesses in a favourable environment (Ismail, 2016).

Between 2010 and 2015, Egypt saw a two-fold increase in business start-ups but nearly doubled closures due to financing issues, with 42.4% of early-stage entrepreneurs starting small businesses (Mansour et al., 2018). According to the GEM Egypt Report for 2021/2022, there is a high level of entrepreneurial knowledge and interest among Egyptian youth, with 83% valuing entrepreneurship and 87% valuing social prestige. Media coverage and interest in launching a firm are high.

Pelegrini and Moraes (2022) analysed the linkages between the university ecosystem, self-efficacy, and entrepreneurial intention in a developing country. 467 questionnaires collected from Brazilian students at 70 universities examined the relationship. The university ecosystem positively influenced self-efficacy and entrepreneurial intention. Moreover, self-efficacy had a significant influence on entrepreneurial intention. Drawing on earlier research.

Darmawan and Martdianty (2022) analysed the effect of the entrepreneurial ecosystem on entrepreneurial intention, as well as the role of entrepreneurial self-efficacy and perceived behavioural control in moderating this connection. They used data from 426 undergraduate students from four different universities in the Greater Jakarta region. We processed the data using the structural equation modelling (SEM) method, and found that entrepreneurial self-efficacy and perceived behavioural control fully mediate the relationship between entrepreneurial ecosystem and entrepreneurial intention, without any direct influence from the entrepreneurial ecosystem on entrepreneurial intention. Moreover, the increased entrepreneurial intent among undergraduate students can lead to an increase in national entrepreneurship.

Caliendo et al. (2023) examined the relationship between self-efficacy and startup performance through a representative sample of 1,405 German business founders. The findings revealed statistically substantial and economically significant benefits of high self-efficacy ratings on start-up survival and entrepreneurial revenue, which become even stronger when concentrating on the growth-oriented outcome of innovation. Furthermore, the study found a similar distribution of broadened self-efficacy among female and male business founders, with a slightly larger impact on female entrepreneurs. Drawing on earlier research, the investigation can explore hypotheses.

Tajpour and Hosseini (2021) looked at the influence of entrepreneurial intention on performance development in digital start-ups as mediated via social media. 199 questionnaires collected from digital start-ups tested this relationship. The findings showed that entrepreneurial intention components had a positive influence on the performance of digital start-ups. Sperber and Linder (2019) delved into the varying ways men and women perceive the support the entrepreneurial ecosystem provides for their initial activities, and how these perceptions influence the management of the new venture. The results demonstrated that while men are more confident than women, women often deploy more resources than men in order to get around the support limit.

Breznitz and Zhang (2019) investigated the growth of student start-ups at the University of Toronto and supported students' entrepreneurial endeavours. Entrepreneurs are economic change agents whose job it is to combine different economic resources, according to the entrepreneurial ecosystem approach. In the US and many other nations, universities are increasingly serving as breeding grounds for innovation and entrepreneurship. Even though we know significantly less about the size of student start-ups than faculty spin-offs, the data we do have suggests that student enterprises play a significant role in universities' economic output.

Hillemane (2020) elucidated that the significance of entrepreneurial ecosystems for tech start-ups is steadily increasing. This is because a tech startup within a supportive entrepreneurial ecosystem is more likely to emerge early, achieve stability, and achieve success.

Tiba et al. (2021) ranked entrepreneurial ecosystems by the number of sustainable startups in each one. They did this by using Latent Dirichlet Allocation to look at the websites of 19,997 companies in the 28 largest entrepreneurial ecosystems that the Startup Genome project had found. The findings indicated that in these entrepreneurial ecosystems, Boston has the highest proportion of sustainability startups, followed by Houston, Seattle, and Lagos, in that order.

The review indicates that no studies have examined the direct correlation between the entrepreneurial ecosystem and the success of a startup organisation. As a result, the purpose of this study is to investigate the relationship between the entrepreneurial ecosystem and a startup organization's success. Previous studies suggest that there may be a research gap in this area. Identified as follows:

- Few studies have examined the direct relationship between the entrepreneurial ecosystem and startup organisations' success.
- Previous studies did not investigate the mediation effect of entrepreneurial self-efficacy, entrepreneurial intention, and entrepreneurial attitude in the relationship between the entrepreneurial ecosystem and startup success.

- Reviewing the previous literature revealed that most studies concentrated on developed countries, with only a few examining the entrepreneurial ecosystem in developing countries. Furthermore, no prior research has analyzed the impact of the entrepreneurial ecosystem on the success of startup organizations, particularly in Egypt.

### Research Problem and Questions:

Many countries, especially those in the industrialized world, have recognized entrepreneurship as a viable solution to social and economic issues, and emerging markets have confirmed this. However, most previous research on entrepreneurial ecosystems has concentrated on industrialised countries, with developing countries, particularly those in the Middle East, receiving little attention. "There are significant differences in institutional infrastructure between emerging and developed economies. As a result, the main issue is that the establishment of entrepreneurial ambitions in developing countries differs greatly from that in industrialised countries; thus, resolving this problem in developing countries will assist these countries in overcoming the recent recession, as well as improving economic stability and enhancing economic development.

Therefore, the current research investigates the function of the entrepreneurial ecosystem on entrepreneurial intention in Egypt through the mediating impact of self-efficacy and entrepreneurial attitude. Consequently, this research will address the following questions within its framework:

- How do entrepreneurial ecosystem dimensions influence self-efficacy?
- To what extent do aspects of the entrepreneurial ecosystem affect entrepreneurial attitudes?
- How do the dimensions of the entrepreneurial ecosystem impact entrepreneurial intention?
- What is the impact of self-efficacy on startup organization success?
- What is the effect of entrepreneurial attitude on startup organisation success?
- How does entrepreneurial intention influence the success of startup organizations?
- What impact do entrepreneurial ecosystem dimensions have on organizational success and performance?

### Research Objectives

The study aims to investigate the impact of the entrepreneurial ecosystem on startup organisation success through the mediating roles of self-efficacy, entrepreneurial attitude, and entrepreneurial intention. We developed the following objectives in order to achieve this goal:

- Examine how entrepreneurial ecosystem dimensions affect self-efficacy.
- Examine how the entrepreneurial ecosystem and its dimensions affect entrepreneurial attitude.
- Test the effect of entrepreneurial ecosystem dimensions on entrepreneurial intention.
- Examine the impact of self-efficacy on startup organisations' success.
- Examine the impact of entrepreneurial attitude on startup organisation success.
- Examine the impact of entrepreneurial intention on startup organisations' success.
- Examine the impact of the entrepreneurial ecosystem on the success of startup organizations.

### Research Hypothesis

- H1: There is a significant influence of entrepreneurial ecosystem dimensions on self-efficacy.
- H2: There is a significant influence of entrepreneurial ecosystem dimensions on entrepreneurial attitude.
- H3: There is a significant influence of entrepreneurial ecosystem dimensions on entrepreneurial intention.
- H4: There is a significant influence of self-efficacy on startup organisational success and performance.
- H5: There is a significant influence of entrepreneurial attitudes on startup organisational success and performance.

- H6: There is a significant influence of entrepreneurial intention on startup organisational success and performance.
- H7: There is a significant influence between the entrepreneurial ecosystem and the success of start-up organisations.
- H8: Self-efficacy mediates the relationship between the factors of the entrepreneurial ecosystem and startup organisational success.
- H9: Entrepreneurial Attitude Mediates the Relationship Between the Factors of Entrepreneurial Ecosystem and Startup Organisational Success
- H10: The entrepreneurial intention mediates the relationship between the entrepreneurial ecosystem and startup organisational success.

## Research Justifications

This research contributes to the study of several variables by investigating the impact of entrepreneurial ecosystems on entrepreneurial intention. While previous studies have explored this relationship, they have not extensively linked entrepreneurial ecosystems to organisational success and performance, entrepreneurial intention through self-efficacy, or entrepreneurial attitude. As a result, this study contributes to examining different and varied dimensions of the entrepreneurial ecosystem and their impact on self-efficacy and entrepreneurial attitude as mediating variables.

Moreover, industrialized countries conducted the majority of earlier research examining these variables and their relationships to address economic and social issues. Conversely, though, there is a lack of studies that focus on the entrepreneurial ecosystem in the Middle East. Furthermore, the establishment of entrepreneurial ambitions in developing nations differs greatly from that in industrialized countries.

## Research Design

This study aims to identify the ways in which the entrepreneurial ecosystem influences the success of startup companies. Because this ecosystem is still developing, it is only possible to quantify its impact through a comprehensive discussion with an organization. As a result, this study adopted the mixed-methods approach methodology, which is a research methodology in its own right. According to Creswell and Plano Clark (2018), a mixed-methods research design is one that has its own philosophical assumptions and methods of inquiry. It includes philosophical assumptions as a methodology to provide directions for the collection and analysis of data from multiple sources in a single study. The most recent study used the exploratory sequential design, which is a research approach consisting of three phases in which the researcher operates based on the constructivist premise. In the first stage, a researcher thoroughly investigates a problem, and as they progress to the subsequent stage, they adopt the post-positivist principle to ascertain and quantify the variable and statistical pattern (He, 2018). This methodology first involves the collection and analysis of qualitative data, followed by the collection and testing of quantitative data. This design starts with the gathering and examination of qualitative data. Based on the qualitative findings, researchers create quantitative measures or instruments. Subsequently, the researchers quantitatively examine the identified variable and analyse how the quantitative data supports and expands upon the qualitative findings (Creswell & Plano Clark, 2018).

## Research Variables

- **Independent variable:** entrepreneurial ecosystem (access to financial support, government policies and regulations, government programmes and support for assisting new and growing firms, education and training for entrepreneurship, research and development transfer, commercial and professional infrastructure for entrepreneurs, market openness/barriers to entry as an issue for entrepreneurship, access to physical infrastructure for entrepreneurship, cultural and social norms).
- **Dependent variable:** startup success.



- **Mediator variables:** self-efficacy, entrepreneurial attitude, and entrepreneurial intention

### Population

The population of this study consists of Egyptian startups.

### Sample

The research sample was a purposive sample of employees and owners of startup companies in Egypt.

### Data Collection Procedures:

As the recent study follows an exploratory sequential design, the data collection procedures consisted of two phases, as follows:

- 1- **Phase one: Qualitative study:** Semi-structured interviews conducted with entrepreneurs of startup companies in Egypt, encompassing sectors such as IT, customer service, food, and transportation. We followed the methodology for semi-structured in-person and online interviews with the managers of some Egyptian startups after reaching out to them. We conducted a total of 20 interviews from the start of the second quarter of 2023 to the end of the third quarter. Due to data duplication, we stopped the interviews at a sample of 20, and we analysed the data using NVivo software.
- 2- **Phase 2: quantitative study:** After identifying the key themes of the entrepreneurial ecosystem, startup success factors, entrepreneurial characteristics, and entrepreneurial challenges, we developed a quantitative survey to measure the variables that emerged from the qualitative stage.

### Data Analysis

#### 1<sup>st</sup> Phase: Qualitative Study:

The research uses both thematic and content analyses to analyze interview responses, aiming to establish objective content of information sources and source access (Terry et al., 2017). Content analysis identifies specific words, themes, or concepts in qualitative data, allowing researchers to measure their occurrence, significance, and connections (Kyngäs, 2020). From the analysis, as shown by figure (1) the study framework is developed.

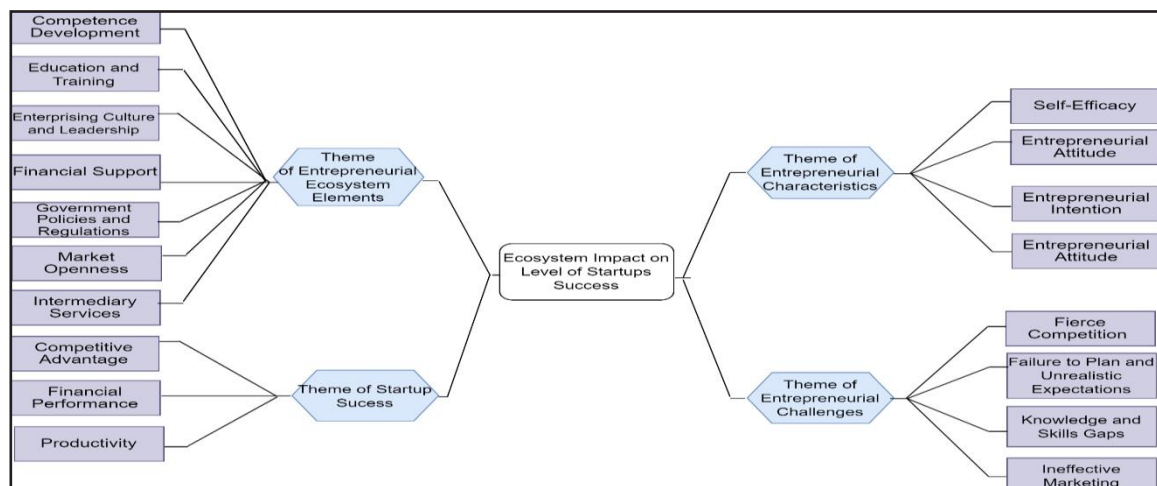


Figure 1: Results of Analysis

#### 2<sup>nd</sup> Phase: Quantitative Study

This section is segmented into six sections. The 1st section is dedicated to elucidating the construction of research variables through a rigorous examination of data validity and reliability; the 2nd section expounds upon the confirmatory factor analysis applied to the research variables, encompassing the mea-

surement model essential for structural equation modelling; the 3rd section provides comprehensive insight into the respondents' profiles and furnishes a detailed examination of the study variables, comprising the distribution of responses for each variable post-construction. The fourth section addresses the validation of the normality assumption, a prerequisite for parametric analysis. Section 5 presents the examination of the multicollinearity assumption, which ensures the avoidance of redundancy within the model. The sixth section delves into the use of structural equation modeling to test the research hypotheses.

## Testing Validity and Reliability

Validity in this study is assessed through two primary metrics. The first metric is the Average Variance Extracted (AVE), which signifies the average shared variance among each latent factor. An AVE result exceeding 0.5 is indicative of satisfactory validity. The second metric involves examining the factor loading of each item or statement, which should be equal to or greater than 0.4 (Cheung et al., 2023).

Reliability, on the other hand, is evaluated by assessing the stability and consistency of each factor represented by a group of statements. This assessment is conducted using Cronbach's Alpha, a widely used a measure of reliability. The Cronbach's Alpha coefficient ranges from 0 to 1, with higher scores denoting greater reliability. When Alpha coefficients surpass or equal 0.7, it implies a satisfactory level of reliability. As shown in Table 1 the validity and reliability measures for the variables were in acceptable range.

**Table 1: Validity and Reliability**

Variables	KMO	AVE %	Cronbach's $\alpha$	Items	Factor Loading	Variables	KMO	AVE %	Cronbach's $\alpha$	Items	Factor Loading
Access to financial support	.947	86.536	.969	AFS1	.859	Competence Development	.876	87.977	.954	CDV1	.874
				AFS2	.872					CDV2	.880
				AFS3	.869					CDV3	.880
				AFS4	.864					CDV4	.885
				AFS5	.865	Intermediary Services	.876	87.259	.951	INS1	.870
Government policies and regulations	.960	83.333	.967	AFS6	.864					INS2	.878
				GPR1	.837					INS3	.877
				GPR2	.818					INS4	.865
				GPR3	.836	Self-Efficacy	.870	85.531	.944	SEC1	.858
				GPR4	.829					SEC2	.856
				GPR5	.844					SEC3	.858
				GPR6	.829					SEC4	.849
Education and training for entrepreneurship	.947	85.434	.966	GPR7	.840	Entrepreneurial Attitude	.917	83.622	.951	EAT1	.830
				ETE1	.855					EAT2	.849
				ETE2	.856					EAT3	.838
				ETE3	.854					EAT4	.834
				ETE4	.856					EAT5	.830
				ETE5	.854	Entrepreneurial Intentions	.944	83.990	.962	EIN1	.829
				ETE6	.851					EIN2	.833
Research and development transfer	.948	86.575	.969	RDT1	.869					EIN3	.850
				RDT2	.869					EIN4	.853
				RDT3	.858					EIN5	.841
				RDT4	.862					EIN6	.833
				RDT5	.872	Startup Organizational Success	.985	79.981	.979	SOS1	.799
				RDT6	.864					SOS2	.812
Market openness/barriers to entry for entrepreneurship	.948	85.337	.966	OPE1	.852					SOS3	.806
				OPE2	.843					SOS4	.787
				OPE3	.861					SOS5	.816
				OPE4	.854					SOS6	.810
				OPE5	.842					SOS7	.786
				OPE6	.868					SOS8	.806
Cultural and social norms	.918	86.184	.960	CSN1	.857					SOS9	.795
				CSN2	.877					SOS10	.788
				CSN3	.873					SOS11	.815
				CSN4	.855					SOS12	.792
				CSN5	.848					SOS13	.785



## Confirmatory Factor Analysis

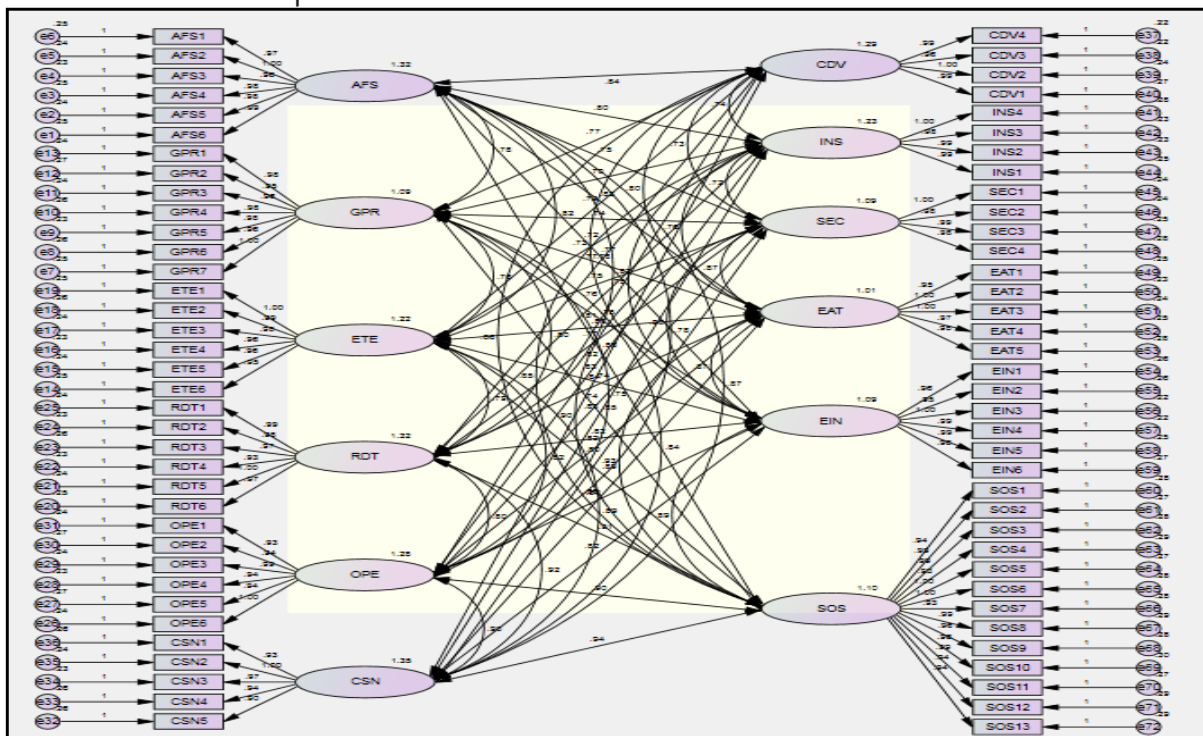
Confirmatory Factor Analysis (CFA) symbolizes an essential preliminary take action to validate the factor structure established by the researcher as a measurement scale for each dimension before proceeding with structural equation modeling (SEM) (Brown and Moore, 2012).

As mentioned in Table 2 fit indices and thresholds for measurement model in indicator values from the CFA and compare them to recommended thresholds, all were in the acceptable range.

Figure (2), shows the application of confirmatory factor analysis, with the factor loadings prominently displayed as arrows. These arrows signify strong factor loadings, as indicated by values exceeding 0.4. For a more detailed presentation of these factor loadings, please refer to Table 3, where the numerical values are provided.

**Table 2: Fit Indices & Thresholds for Measurement Model**

Measure	Results	Threshold
Chi-square/df	1.059	< 2 excellent; < 3 good; < 5 sometimes permissible
P-value	0.000	> 0.05
GFI	0.867	> 0.90
AGFI	0.856	> 0.90
NFI	0.942	> 0.90
TLI	0.996	> 0.95
CFI	0.997	> 0.90
RMR	0.026	< 0.08
RMSEA	0.011	< 0.05



**Figure 2: CFA for the Measurement Model**

## Descriptive Analysis

Descriptive statistics is an important tool for clarification and clear understanding of the characteristics inherent within a specific dataset. It accomplishes this by offering concise summaries of the samples and outlining the methods for quantifying the data. This form of analysis primarily encompasses three key categories: frequency analysis, which counts the occurrences of each variable; measurements of central tendency, such as averages, which offer a representative value for the dataset; and measures of variability, including the standard deviation, which assess the extent to which scores deviate from the mean (Loeb et al., 2017).

Table 4 shows the respondent profile. In terms of Business Start, the majority of respondents (35.2%) have been in business for 1 year, followed by 33% who have been in business for less than one year. Customer Acquisition reveals that a significant portion (66.6%) targets youth, while 21.5% target kids, 9.3%

target old people, and 2.7% target all of these groups. When it comes to Media Targeting, social media is the most popular choice, with 54.4% of respondents using it, followed by phone (33%) and television (12.6%). In terms of Age, the largest group falls between 30 and less than 40 years old (41.2%), followed by those aged 22-less than 30 (29.4%). Regarding Gender, 76.8% of respondents are male, while 23.2% are female. Finally, for Education Level, the highest proportion (44.5%) have a Bachelor's degree, then Master's degree (33.2%), Other (12.2%), and Doctorate degree (10.2%).

Table 5 provides insight into the research data's key variables by presenting their respective the standard deviations and means. A closer examination of the table reveals the specific the standard deviations and means. values for these variables for research as outlined below. It could be claimed that the average responses for Access to financial support has a mean score of 3.3540, indicating a moderate level of perceived importance among respondents, with a standard deviation of 1.24170 suggesting some variability in opinions. Government policies and regulations have a mean score of 3.2743, indicating a similar moderate level of importance, with a standard deviation of 1.24937. Education and training for entrepreneurship also have a moderate average rating of 3.2500, with a standard deviation of 1.16751.

Among the psychological factors, Self-Efficacy possesses the most average score of 3.6150, indicating that respondents generally perceive it as important, with a relatively low standard deviation of 1.11929, suggesting a more consistent opinion. Entrepreneurial Attitude and Entrepreneurial Intentions both have mean scores in the moderate range, with mean scores of 3.3717 and 3.3805, and standard deviations of 1.12180 and 1.12476, respectively. Finally, Startup Organizational Success has a mean score of 3.4358, reflecting a moderate level of perceived importance, with a standard deviation of 1.16026.

**Table 4: Respondent Profile**

	Frequency	Percent	Total
Business Start			
Less than one year	149	33.0	452
1 year	159	35.2	
2 years	53	11.7	
3 years	45	10.0	
More than 3 years	46	10.2	
Customer Acquisition			
Kids	97	21.5	452
Youth	301	66.6	
Old People	42	9.3	
All of them	12	2.7	
Media Targeting			
Television	57	12.6	452
Phone	149	33.0	
Social media	246	54.4	
Age			
22-Less than 30	133	29.4	452
30- Less than 40	186	41.2	
40- Less than 50	54	11.9	
50- Less than 60	34	7.5	
60 or older	45	10.0	
Gender			
Male	347	76.8	452
Female	105	23.2	
Education Level			
Bachelor's degree	201	44.5	452
Master's degree	150	33.2	
Doctorate degree	46	10.2	
Other	55	12.2	

## Normality Testing for the Research Variables

One fundamental assumption in data analysis pertains to the normality of the dataset. The determination of whether a dataset adheres to a normal distribution is pivotal, as it informs the choice between parametric and non-parametric analytical techniques. In essence, the assessment of data normality serves as a crucial preliminary step for inferential analysis, guiding researchers in selecting the appropriate statistical tests to address their research hypotheses (Buja et al., 2009).

**Table 5: Descriptive Analysis for the Research Variables**

Research Variable	N	Mean	Std. Deviation	Frequency				
				1	2	3	4	5
Access to financial support	452	3.3540	1.24170	36	89	105	123	99
Government policies and regulations	452	3.2743	1.24937	44	84	119	114	91
Education and training for entrepreneurship	452	3.2500	1.16751	42	71	139	132	68
Research and development transfer	452	3.2655	1.22623	42	81	132	109	88
Market openness/barriers to entry for entrepreneurship	452	3.3097	1.17874	35	80	127	130	80
Cultural and social norms	452	3.2743	1.24582	43	84	123	110	92
Competence Development	452	3.2588	1.21768	42	83	125	120	82
Intermediary Services	452	3.3031	1.19448	30	96	121	117	88
Self-Efficacy	452	3.6150	1.11929	11	76	109	136	120
Entrepreneurial Attitude	452	3.3717	1.12180	42	45	128	177	60
Entrepreneurial Intentions	452	3.3805	1.12476	42	45	125	179	61
Startup Organizational Success	452	3.4358	1.16026	45	42	107	187	71

The Kolmogorov-Smirnov test of normality, a widely adopted method, is often employed for scrutinizing the normality of a dataset, particularly when dealing with samples comprising more than 50 observations. This formal test assesses whether the data follows a normal distribution, with the P-value serving as a pivotal indicator. If the P-value exceeds 0.05, it suggests conformity with a normal distribution (Chicheportiche and Bouchaud, 2012). For an in-depth exploration of the formal testing of the normality assumption in this study, please refer to Table 6, which showcases the results obtained through the Kolmogorov-Smirnov test of normality for the research variables.

Given the formal test results indicating non-normal distribution, a supplementary informal assessment is employed to gauge the approximate normality of the dataset. This informal assessment is illustrated in Table 7, revealing that the skewness and kurtosis values fall within the acceptable range of  $\pm 1$ . This alignment with the  $\pm 1$  threshold suggests that the data under examination exhibit characteristics of normality. Consequently, the application of parametric tests becomes suitable for elucidating the relationships among the research variables.

### Testing Multicollinearity Assumption

This segment delves into the examination and validation of the multicollinearity presumption among the independent variables employed in the model. This assumption holds significant importance as it serves to prevent the redundancy of information within the studied model. Multicollinearity arises when two or more predictors within a model exhibit high levels of correlation with one another. This phenomenon can lead to challenges in discerning which factors account for the explained variance in the criterion. Additionally, it may introduce technical complexities in computing a multiple regression model, ultimately providing superfluous information pertaining to the criterion (Kyriazos and Poga, 2023).

The assessment of Variance Inflation Factors (VIFs), as presented in Table (8) for the independent variables within the research model, sheds light on the multicollinearity status. The findings reveal that all VIFs associated with the research variables are below the threshold of 5. This observation signifies that there is no evident issue of multicollinearity among the independent variables under consideration (Kalnins, 2018).

**Table 6: Formal Testing of Normality**

Research Variables	Kolmogorov-Smirnov <sup>a</sup>		
	Statistic	df	Sig.
Access to financial support	.190	452	.000
Government policies and regulations	.173	452	.000
Education and training for entrepreneurship	.182	452	.000
Research and development transfer	.161	452	.000
Market openness/barriers to entry for entrepreneurship	.186	452	.000
Cultural and social norms	.167	452	.000
Competence Development	.176	452	.000
Intermediary Services	.174	452	.000
Self-Efficacy	.201	452	.000
Entrepreneurial Attitude	.237	452	.000
Entrepreneurial Intentions	.240	452	.000
Startup Organizational Success	.257	452	.000

**Table 7: Informal Testing of Normality**

	Skewness		Kurtosis	
	Statistic	Std. Error	Statistic	Std. Error
Access to financial support	-.256	.115	-.984	.229
Government policies and regulations	-.209	.115	-.956	.229
Education and training for entrepreneurship	-.279	.115	-.686	.229
Research and development transfer	-.184	.115	-.890	.229
Market openness/barriers to entry for entrepreneurship	-.253	.115	-.791	.229
Cultural and social norms	-.193	.115	-.950	.229
Competence Development	-.210	.115	-.882	.229
Intermediary Services	-.147	.115	-.946	.229
Self-Efficacy	-.343	.115	-.885	.229
Entrepreneurial Attitude	-.600	.115	-.268	.229
Entrepreneurial Intentions	-.611	.115	-.267	.229
Startup Organizational Success	-.682	.115	-.279	.229

**Table 8: VIF Values for Research Variables**

Independent Variables	VIF
Access to financial support	2.508
Government policies and regulations	2.376
Education and training for entrepreneurship	2.320
Research and development transfer	2.412
Market openness/barriers to entry for entrepreneurship	2.374
Cultural and social norms	2.547
Competence Development	2.272
Intermediary Services	2.295
Self-Efficacy	3.988
Entrepreneurial Attitude	4.656
Entrepreneurial Intentions	3.974

## Testing Research Hypotheses

Within this section, the research hypotheses are subject to examination through correlation analysis and path analysis conducted within the framework of structural equation modeling (SEM). The Structural Equation Modeling (SEM) analysis was employed for assessing the impact of various research variables. SEM is preferred due to its neutrality and lack of reliance on data normality distribution, as demonstrated in Table 6-10, which presents the SEM results for the research variables. The findings are outlined as follows:

- **The first hypothesis**, which examines the significant influence of Entrepreneurial Ecosystem Dimensions on Self-Efficacy, comprises eight sub-hypotheses with the following results:
  - The first sub-hypothesis, which investigates the effect of Access to Financial Support on Self-Efficacy, the analysis revealed an insignificance as the P-value exceeds 0.05.
  - The second sub-hypothesis, which assesses the influence of Government policies and regulations on Self-Efficacy, it was noted that there is indeed a significant effect, with the P-value being less than 0.05, and the estimate measuring at 0.208.
  - The third sub-hypothesis, which assesses the influence of Education and Training for Entrepreneurship on Self-Efficacy, it was noted that there is indeed a significant effect, with the P-value being less than 0.05, and the estimate measuring at 0.146.
  - The fourth sub-hypothesis, which assesses the influence of Research and Development Transfer on Self-Efficacy, it was noted that there is indeed a significant effect, with the P-value being less than 0.05, and the approximate measuring at 0.123.
  - The fifth sub-hypothesis, which investigates the impact of Market Openness/Barriers to Entry for Entrepreneurship on Self-Efficacy, the analysis revealed an insignificance as the P-value exceeds 0.05.
  - The sixth sub-hypothesis, which investigates the impact of Cultural and Social Norms on Self-Efficacy, the analysis revealed an insignificance as the P-value exceeds 0.05.
  - The seventh sub-hypothesis, which investigates the impact of Competence Development on Self-Efficacy, the analysis revealed an insignificance as the P-value exceeds 0.05.
  - The eighth sub-hypothesis, which assesses the influence of Intermediary Services on Self-Efficacy, it was observed that there is indeed a significant effect, with the P-value being less than 0.05, and the approximate measuring at 0.120. Additionally, the R-squared value stands at 0.616, indicating that approximately 61.6% of the variance in Self-Efficacy can be accounted for by the independent variables. Consequently, the first hypothesis, "There is a significant influence of Entrepreneurial Ecosystem Dimensions on Self-Efficacy," is partially support.
- **The second hypothesis**, which examines the significant influence of Entrepreneurial Ecosystem Dimensions on Entrepreneurial Attitude, comprises eight sub-hypotheses with the following results:
  - For the first sub-hypothesis of the second overarching hypothesis, which investigates the link between Access to financial support and Entrepreneurial Attitude, it is evident that Access to Financial Support significantly influences Entrepreneurial Attitude. The P-value is less than 0.05, with an approximate of 0.127.
  - For the second sub-hypothesis within the same overarching hypothesis, evaluating the influence of Government policies and regulations on Entrepreneurial Attitude, it is clear that Government Policies and Regulations wield a significant effect on Entrepreneurial Attitude. The P-value is less than 0.05, and the approximate is 0.168.
  - Moving on to the third sub-hypothesis of this overarching hypothesis, probing the impact of Education and training for entrepreneurship on Entrepreneurial Attitude, we can observe a significant effect. The P-value falls below 0.05, and the approximate is 0.110.
  - Within this context, the fourth sub-hypothesis, which delves into the influence of Research and de-

velopment transfer on Entrepreneurial Attitude, demonstrates a significant effect. The P-value is less than 0.05, and the approximate stands at 0.157.

- Likewise, the fifth sub-hypothesis examining the influence of Market openness/barriers to entry for entrepreneurship on Entrepreneurial Attitude reveals a significant effect. The P-value is less than 0.05, with an approximate of 0.118.
- However, shifting our focus to the sixth sub-hypothesis, which explores the influence of Cultural and social norms on Entrepreneurial Attitude, we find an insignificant effect. The P-value exceeds 0.05.
- Conversely, the seventh sub-hypothesis evaluating the impact of Competence Development on Entrepreneurial Attitude uncovers a significant effect. The P-value is less than 0.05, and the estimate is 0.108.
- Lastly, in the eighth sub-hypothesis of this overarching hypothesis, which investigates the influence of Intermediary Services on Entrepreneurial Attitude, there is indeed a significant effect. The P-value is less than 0.05, and the approximate is 0.086. Additionally, the R-squared value stands at 0.769, indicating that approximately 76.9% of the variance in Entrepreneurial Attitude can be accounted for by the independent variables. Consequently, the second hypothesis, "There is a significant influence of Entrepreneurial Ecosystem Dimensions on Entrepreneurial Attitude," is partially support.

- ***The third hypothesis***, which examines the significant influence of Entrepreneurial Ecosystem Dimensions on Entrepreneurial Intentions, comprises eight sub-hypotheses with the following results:

- The first sub-hypothesis within the third hypothesis, examining the impact of Access to financial support on Entrepreneurial Intentions, reveals a statistically significant effect. The P-value is less than 0.05, and the estimate stands at 0.092.
- Moving on to the second sub-hypothesis in the third hypothesis, which investigates the influence of Government policies and regulations on Entrepreneurial Intentions, it is evident that there is indeed a significant effect. The P-value is less than 0.05, and the approximate measures at 0.191.
- However, when assessing the third sub-hypothesis of the third hypothesis, which explores the impact of Education and training for entrepreneurship on Entrepreneurial Intentions, the results indicate an insignificant effect. The P-value exceeds 0.05.
- Shifting to the fourth sub-hypothesis in the third hypothesis, which delves into the influence of Research and development transfer on Entrepreneurial Intentions, it becomes apparent that there is a statistically significant effect. The P-value is less than 0.05, and the approximate equals 0.180.
- Examining the fifth sub-hypothesis within the third hypothesis, focusing on the influence of Market openness/barriers to entry for entrepreneurship on Entrepreneurial Intentions, it is evident that there is a significant effect. The P-value is less than 0.05, and the approximate stands at 0.162.
- Turning to the sixth sub-hypothesis in the third hypothesis, which investigates the impact of Cultural and social norms on Entrepreneurial Intentions, the results reveal an insignificant effect. The P-value exceeds 0.05.
- Similarly, when scrutinizing the seventh sub-hypothesis of the third hypothesis, which assesses the influence of Competence Development on Entrepreneurial Intentions, the findings suggest an insignificant effect. The P-value exceeds 0.05.
- Finally, for the eighth sub-hypothesis within the third hypothesis, which explores the influence of Intermediary Services on Entrepreneurial Intentions, the analysis indicates a statistically significant effect. The P-value is less than 0.05, and the estimate measures at 0.127. Additionally, the R-squared value stands at 0.653, indicating that approximately 65.3% of the variance in Entrepreneurial Intentions can be accounted for by the independent variables. Consequently, the third hypothesis, "There is a significant influence of Entrepreneurial Ecosystem Dimensions on Entrepreneurial Intentions," is partially support.



- **The fourth hypothesis**, which explores the impact of Self-Efficacy on Startup Organizational Success and Performance, reveals a noteworthy finding. There is indeed a significant effect of Self-Efficacy on Startup Organizational Success, as indicated by a P-value less than 0.05, with an approximate of 0.172. Therefore, the fourth hypothesis "There is a significant influence of Self-Efficacy on Startup Organizational Success and Performance" is supported.
- **The fifth hypothesis**, which explores the effect of of Entrepreneurial Attitude on Startup Organizational Success and Performance, reveals a noteworthy finding. There is indeed a significant effect of Entrepreneurial Attitude on Startup Organizational Success, as indicated by a P-value less than 0.05, with an approximate of 0.241. Therefore, the fifth hypothesis "There is a significant influence of Entrepreneurial Attitude on Startup Organizational Success and Performance" is supported.
- **The sixth hypothesis**, which explores the impact of Entrepreneurial Intention on Startup Organizational Success and Performance, reveals a noteworthy finding. There is indeed a significant effect of Entrepreneurial Intention on Startup Organizational Success, as indicated by a P-value less than 0.05, with an approximate of 0.078. Therefore, the sixth hypothesis "There is a significant impact of Entrepreneurial Intention on Startup Organizational Success and Performance" is supported.
- **The seventh hypothesis** "There is a significant influence of Entrepreneurial Ecosystem Dimensions on Startup Organizational Success", consist of eight sub hypotheses and the results are as follow,
  - For the first sub-hypothesis of the seventh hypothesis, which investigates the influence of Access to financial support on Startup Organizational Success, the findings indicate an insignificant effect. This is evidenced by a P-value exceeding 0.05.
  - In the case of the third sub-hypothesis of the seventh hypothesis, assessing the influence of Education and training for entrepreneurship on Startup Organizational Success, the analysis points to a significant effect. The P-value is less than 0.05, and the approximate stands at 0.121.
  - The fourth sub-hypothesis of the seventh hypothesis examines the influence of Research and development transfer on Startup Organizational Success. The analysis demonstrates a significant effect, with a P-value less than 0.05 and an estimate of 0.085.
  - The fifth sub-hypothesis of the seventh hypothesis investigates the influence of Market openness/ barriers to entry for entrepreneurship on Startup Organizational Success. The results indicate a significant effect, with a P-value less than 0.05 and an approximate of 0.078.
  - Moving on to the sixth sub-hypothesis of the seventh hypothesis, which explores the influence of Cultural and social norms on Startup Organizational Success, the findings suggest an insignificant effect. The P-value exceeds 0.05.
  - As for the seventh sub-hypothesis of the seventh hypothesis, which assesses the influence of Competence Development on Startup Organizational Success, the analysis reveals a significant effect. The P-value is less than 0.05, and the approximate is 0.062.
  - Lastly, the eighth sub-hypothesis of the seventh hypothesis examines the influence of Intermediary Services on Startup Organizational Success. The results point to a significant effect, with a P-value less than 0.05 and an estimate of 0.104. Additionally, the R-squared value stands at 0.875, indicating that approximately 87.5% of the variance in Startup Organizational Success can be accounted for by the independent variables. Consequently, the seventh hypothesis, "There is a significant influence of Entrepreneurial Ecosystem Dimensions on Startup Organizational Success," is partially support.
- **The eighth hypothesis** investigates the mediating role of Self-Efficacy in the relationship between Entrepreneurial Ecosystem factors and Startup Organizational Success.
  - Considering the results of the previous research , it is evident that Self-Efficacy has a substantial and direct influence on Startup Organizational Success. This implies that Self-Efficacy directly influences the success of startups.

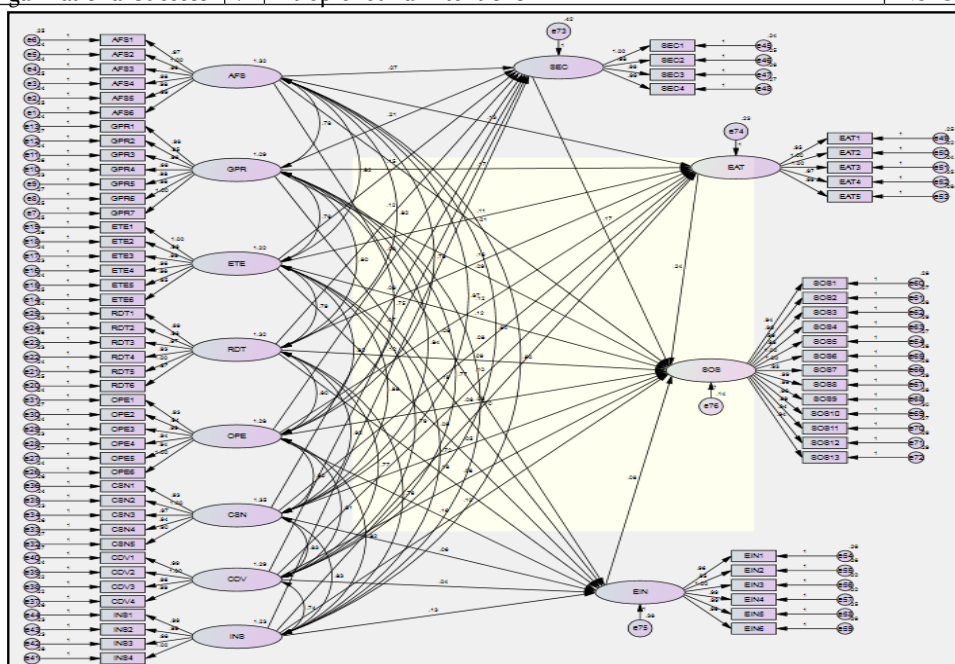


- Moreover, the study reveals that Government Policies and Regulations, Education and Training for Entrepreneurship, Research and Development Transfer, and Intermediary Services significantly affect Self-Efficacy. This suggests that Self-Efficacy can act as a mediator, influencing the relationship between these factors and Startup Organizational Success.
- Furthermore, it can be observed that Self-Efficacy plays a partial mediating role in the connection between Government Policies and Regulations, Education and Training for Entrepreneurship, Research and Development Transfer, Intermediary Services, and Startup Organizational Success. Importantly, the effect remains significant even in the presence of Self-Efficacy.
- **The ninth hypothesis** explores whether “Entrepreneurial Attitude mediates the relationship between the factors of Entrepreneurial Ecosystem and Startup Organizational Success.” The analysis indicates the following:
  - Firstly, it’s worth noting a significant direct effect of Entrepreneurial Attitude on Startup Organizational Success, suggesting that Entrepreneurial Attitude has a direct impact on the success of startup organizations.
  - Furthermore, there are also significant effects observed for Access to Financial Support, Government Policies and Regulations, Education and Training for Entrepreneurship, Research and Development Transfer, Market Openness/Barriers to Entry for Entrepreneurship, Competence Development, and Intermediary Services on Entrepreneurial Attitude. These findings suggest that these factors influence Entrepreneurial Attitude.
  - In the context of mediation, Entrepreneurial Attitude partially mediates the relationship between Access to Financial Support, Government Policies and Regulations, Education and Training for Entrepreneurship, Research and Development Transfer, Market Openness/Barriers to Entry for Entrepreneurship, Competence Development, Intermediary Services, and Startup Organizational Success. This implies that even when considering the mediating role of Entrepreneurial Attitude, these factors still exhibit a significant impact on Startup Organizational Success.
- The tenth hypothesis, focusing on the mediating role of Entrepreneurial Intention in the relationship between the Entrepreneurial Ecosystem and Startup Organizational Success, presents the following observations:
  - Initially, there exists a significant direct effect of Entrepreneurial Intentions on Startup Organizational Success, indicating a direct impact of Entrepreneurial Intentions on the outcome.
  - Additionally, there is a significant influence of Access to Financial Support, Government Policies and Regulations, Research and Development Transfer, Market Openness/Barriers to Entry for Entrepreneurship, and Intermediary Services on Entrepreneurial Intentions. This implies that Entrepreneurial Intentions can serve as a mediating factor in the relationship between these dimensions and Startup Organizational Success.
  - It’s worth noting that Entrepreneurial Intentions partially mediate the relationship between Access to Financial Support, Government Policies and Regulations, Research and Development Transfer, Market Openness/Barriers to Entry for Entrepreneurship, Intermediary Services, and Startup Organizational Success. This partial mediation suggests that these factors still exert a significant impact on Startup Organizational Success even when Entrepreneurial Intentions are considered.

The model fit indices, including CMIN/DF (1.155), GFI (0.855), CFI (0.991), AGFI (0.842), and RMSEA (0.019), all fall within allowable limits ranges. Figure (3) visually represents the SEM model that was employed to analyze the impact of the research model.

**Table 10: SEM Analysis for the Research Variables**

			Estimate	P	R <sup>2</sup>
Self-Efficacy	←	Access to Financial Support	.074	.111	.616
Self-Efficacy	←	Government Policies and Regulations	.208	***	
Self-Efficacy	←	Education and Training for Entrepreneurship	.146	.004	
Self-Efficacy	←	Research and Development Transfer	.123	.008	
Self-Efficacy	←	Market Openness/Barriers to Entry for Entrepreneurship	.062	.203	
Self-Efficacy	←	Cultural and Social Norms	.081	.124	
Self-Efficacy	←	Competence Development	.073	.120	
Self-Efficacy	←	Intermediary Services	.120	.011	.769
Entrepreneurial Attitude	←	Access to Financial Support	.127	***	
Entrepreneurial Attitude	←	Government Policies and Regulations	.168	***	
Entrepreneurial Attitude	←	Education and Training for Entrepreneurship	.110	.004	
Entrepreneurial Attitude	←	Research and Development Transfer	.157	***	
Entrepreneurial Attitude	←	Market Openness/Barriers to Entry for Entrepreneurship	.118	.002	
Entrepreneurial Attitude	←	Cultural and Social Norms	.078	.052	
Entrepreneurial Attitude	←	Competence Development	.104	.004	
Entrepreneurial Attitude	←	Intermediary Services	.086	.018	.653
Entrepreneurial Intentions	←	Access to Financial Support	.092	.036	
Entrepreneurial Intentions	←	Government Policies and Regulations	.191	***	
Entrepreneurial Intentions	←	Education and Training for Entrepreneurship	.058	.210	
Entrepreneurial Intentions	←	Research and Development Transfer	.180	***	
Entrepreneurial Intentions	←	Market Openness/Barriers to Entry for Entrepreneurship	.162	***	
Entrepreneurial Intentions	←	Cultural and Social Norms	.059	.229	
Entrepreneurial Intentions	←	Competence Development	.040	.357	
Entrepreneurial Intentions	←	Intermediary Services	.127	.004	.875
Start-up Organizational Success	←	Access to Financial Support	-.009	.745	
Start-up Organizational Success	←	Government Policies and Regulations	.092	.007	
Start-up Organizational Success	←	Education and Training for Entrepreneurship	.121	***	
Start-up Organizational Success	←	Research and Development Transfer	.085	.004	
Start-up Organizational Success	←	Market Openness/Barriers to Entry for Entrepreneurship	.078	.008	
Start-up Organizational Success	←	Cultural and Social Norms	.052	.093	
Start-up Organizational Success	←	Competence Development	.062	.027	
Start-up Organizational Success	←	Intermediary Services	.104	***	
Start-up Organizational Success	←	Self-Efficacy	.172	***	
Start-up Organizational Success	←	Entrepreneurial Attitude	.241	***	
Start-up Organizational Success	←	Entrepreneurial Intentions	.078	.020	

**Figure 3: SEM for the Research Variables**

## Results

The current study aims to identify and analyze the key challenges faced by startups in Egypt, such as Entrepreneurial Ecosystem, Self-Efficacy, Entrepreneurial Attitude, and Entrepreneurial Intention. In this research, 20 interviews were conducted with Egyptian managers of startups, to identify the basic elements of the ecosystem that enable entrepreneurs to increase the efficiency and performance of their emerging companies. These interviews were analyzed using NVivo software, and thematic and content analysis were conducted. Based on the data analysis, 4 themes were found. First, the theme of entrepreneurial ecosystem elements, this theme explains the elements of the entrepreneur ecosystem, seven codes are developed under this theme; competence development, education and training, enterprising culture and leadership, financial support, government policies and regulations, market openness, and intermediary services.

Second, the theme of entrepreneurial characteristics, this theme explains the characteristics that entrepreneurs must have to achieve the success of their startups, four codes are developed under this theme; self-efficacy, entrepreneurial attitude, entrepreneurial intention, and entrepreneurial innovation. Third, entrepreneurial challenges, this theme explains the challenges that entrepreneurs face in achieving the success of their startups, four codes are developed under this theme; fierce competition, failure to plan and unrealistic expectations, knowledge and skills gaps, and ineffective marketing. Fourth, the theme of startup success, this theme shows the basic elements by which the success of startup companies is measured, three codes are developed under this theme; productivity, financial performance, and competitive advantage.

Based on the results of the qualitative analysis, a new conceptual framework was reached that shows the elements of the ecosystem.

The study identified elements that were not included in the entrepreneurial ecosystem, such as competence development and intermediate services. It removed unimportant elements like government programs, commercial infrastructure, and physical infrastructure. The remaining elements were education, training, enterprising culture, financial support, government policies, and market openness. The framework will show dimensions and mediate the relationship between entrepreneurial ecosystem dimensions and startup success.

The hypothesis testing results revealed the following:

- There is a significant relationship between entrepreneurial ecosystem and self-efficacy" is partially supported. Based on the results, the results are consistent with (Khayal, 2021; Ali et al., 2021).
- There is a significant relationship between entrepreneurial ecosystem and entrepreneurial attitude" is partially supported. Based on this results, the results are consistent with (Kirby and Ibrahim, 2017; Ismail, 2016; Silinevicha et al., 2017; Khayal, 2021; Ali et al., 2021).
- There is a significant relationship between entrepreneurial ecosystem and entrepreneurial intention" is partially supported. this results is , consistent with (Ismail, 2016; Silinevicha et al., 2017; Khayal, 2021; Ali et al., 2021).
- There is a significant relationship between self-efficacy on startup organizational success and performance" is supported. In light of the results, the results are consistent with (Khayal, 2021; Ali et al., 2021).
- There is a significant relationship between entrepreneurial attitude on startup organizational success and performance" is supported. This results is in line with (Silinevicha et al., 2017; Khayal, 2021; Ali et al., 2021).
- There is a significant relationship between entrepreneurial intention on startup organizational success and performance" is supported. In light of the results, the results are consistent with (Silinevicha et al., 2017; Khayal, 2021; Ali et al., 2021).

- The seventh hypothesis "There is a significant relationship between entrepreneurial ecosystem and startup organizational success and performance" is partially supported. In light of this result, the results are consistent with (Subrahmanya, 2017; Sperber and Linder, 2019; Breznitz and Zhang, 2019; Hillemane, 2020; Hekkert et al., 2021; Lechner et al., 2021; Garg and Gupta, 2021; Ghezzi et al., 2021; Rijnsoever, 2022; Subrahmanya and Hillemane, 2022).

The current study agreed with these previous studies in the nature and main aim of the research. Despite that, there are differences between the current research and previous studies in terms of the country in which the study is applied and the sector in which the research is applied. The researcher examined the relationship between the dimensions of entrepreneurial eco-system (access to financial support, government policies and regulations, education and training for entrepreneurship, research and development transfer, market openness/barriers to entry for entrepreneurship, cultural and social norms, competence development, and intermediary services) and startup organizational success and performance through the mediating role of self-efficacy, entrepreneurial attitude, and entrepreneurial intention in Egypt by collecting primary data from Egyptian entrepreneurs in different areas of the ecosystem.

From previous results, it was observed that there is a direct influence of Entrepreneurial Intentions on the outcome. Moreover, the results found that there is a significant influence of Access to Financial Support, Government Policies and Regulations, Research and Development Transfer, Market Openness/Barriers to Entry for Entrepreneurship, and Intermediary Services on Entrepreneurial Intentions. This implies that Entrepreneurial Intentions can serve as a mediating factor in the relationship between these dimensions and Startup Organizational Success. Finally, it can be observed that Entrepreneurial Intentions partially mediate the relationship between Access to Financial Support, Government Policies and Regulations, Research and Development Transfer, Market Openness/Barriers to Entry for Entrepreneurship, Intermediary Services, and Startup Organizational Success. This partial mediation suggests that these factors still exert a significant impact on Startup Organizational Success even when Entrepreneurial Intentions are considered.

### ***Research Implication:***

- **The academic implications** The study explores the relationship between the entrepreneurial ecosystem, including financial support, government policies, education, research, market openness, cultural norms, competence development, and intermediary services, and the success of Egyptian startup organizations. It suggests further research on factors impacting startup success to improve performance.
- **The practical implications** provided decision-makers with some methods that help develop startup organizational success, which will lead to an increase in the performance of the startup organizations.

### ***Limitations of Study***

It is well recognized that the majority of empirical research comprise some limitations. It might have an effect on the study's conclusions and prevent the results from being generalized. The sample size studied in this research might constitute a limitation since the data was collected, and analysis was conducted for only some Egyptian entrepreneurs in different areas of the ecosystem. Accordingly, it is recommended to increase the sample size in future research for more reliable results. The study also limited its research on Egypt only as a developing country. Therefore, the researcher suggested that future researchers have to measure the study's variables in other nations and compare developed and developing countries.

### ***Conclusion and Further Research Recommendations***

The study investigates the impact of entrepreneurial ecosystem dimensions on startup success, focusing on self-efficacy, entrepreneurial attitude, and intention. Interviews with 20 Egyptian startup managers

reveal a framework highlighting entrepreneurial ecosystem dimensions and factors influencing startup success. Recommendations for decision-makers are provided.; these recommendations are as follows:

- The success of the entrepreneurship ecosystem relies on improved funding, innovation, mentorship programs, simplified regulatory frameworks, entrepreneurship education, access to resources, a global perspective, and support for sustainable business practices.
- Governments can provide tax incentives, venture capital funds, and loans, while fostering an environment that encourages innovation.
- Simplifying regulatory processes and promoting entrepreneurship education are also crucial.
- Additionally, providing access to resources and infrastructure, fostering a global perspective, and encouraging sustainable business practices are essential for a robust ecosystem.
- It is necessary to create programs and initiatives that help entrepreneurs to develop a global perspective and to connect with international partners and customers. The study's limitations include a small sample size and limited analysis for Egyptian entrepreneurs in different ecosystem areas. Future research should increase the sample size and compare variables in other countries. Additionally, the study's qualitative analysis should be made quantitative for more generalized results.

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