The Factors Impact To The Growth Of Small And Medium Enterprises (SME) In Sri Lanka

HIGHER NATIONAL DIPLOMA IN SOFTWARE ENGINEERING
STATISTICS FOR COMPUTING GAHDSE23.3F

Submitted to :
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Abstract

The growth and sustainability of Small and Medium Enterprises (SMEs) play a crucial role in driving economic development and fostering inclusive growth in Sri Lanka. However, SMEs face numerous challenges that hinder their growth potential. This research project aims to identify and analyze the factors impacting the growth of SMEs in Sri Lanka. Through a mixed-methods approach combining quantitative surveys, qualitative interviews, and a comprehensive review of literature, key factors influencing SME growth were identified and analyzed. The findings of this study provide valuable insights into the challenges and opportunities facing SMEs in Sri Lanka and offer recommendations for policymakers, business owners, and other stakeholders to support SME development and enhance their competitiveness and sustainability in the Sri Lankan market.

1 Executive Summary

Small and Medium Enterprises (SMEs) are vital contributors to the economic landscape of Sri Lanka, playing a pivotal role in job creation, innovation, and wealth generation. This report delves into the factors influencing the growth of SMEs in Sri Lanka, aiming to provide insights that can inform policies and strategies to support their development.

The research utilized a mixed-methods approach, combining quantitative surveys, qualitative interviews, and a comprehensive review of existing literature. Through this methodology, key factors impacting SME growth were identified and analyzed.

The findings reveal several critical challenges faced by SMEs in Sri Lanka, including limited access to finance, inadequate infrastructure, inconsistent government policies, and the need for greater market responsiveness and technological adoption. While these challenges pose significant barriers to SME growth, they also present opportunities for intervention and improvement.

Addressing these challenges requires a multifaceted approach involving collaboration between government agencies, financial institutions, industry stakeholders, and SME owners themselves. Policymakers need to create an enabling environment by implementing supportive policies, streamlining regulatory processes, and enhancing access to finance and infrastructure. Moreover, fostering a culture of innovation and entrepreneurship and providing targeted support for skill development and technology adoption are essential for enhancing SME competitiveness and sustainability.

In conclusion, this report underscores the importance of understanding and addressing the factors impacting SME growth in Sri Lanka. By implementing targeted interventions and creating a conducive ecosystem for SME development, Sri Lanka can unlock the full potential of its SME sector, driving economic growth, job creation, and prosperity for all.

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1. Introduction:

Small and Medium Enterprises (SMEs) are the backbone of Sri Lanka's economy, contributing significantly to employment generation, poverty alleviation, and economic growth. With their agility, innovation, and ability to adapt to changing market conditions, SMEs play a crucial role in driving economic development and fostering inclusive growth. Understanding the factors that influence the growth and sustainability of SMEs is essential for policymakers, business owners, and other stakeholders to formulate effective strategies for their support and development.

1.1 Background and Context:

Small and Medium Enterprises (SMEs) are the backbone of Sri Lanka's economy, representing a diverse array of businesses that contribute significantly to economic growth, job creation, and poverty reduction. SMEs play a crucial role in driving innovation, fostering entrepreneurship, and promoting inclusive development across various sectors of the economy.

1.2 Importance of SMEs in Sri Lanka:

SMEs are integral to Sri Lanka's economic development strategy, accounting for a significant share of the country's GDP and employment. According to data from the Central Bank of Sri Lanka, SMEs contribute over 45% of total employment and approximately 52% of GDP, highlighting their importance as engines of growth and drivers of economic diversification. Moreover, SMEs play a vital role in promoting regional development and reducing income disparities by creating job opportunities in rural and underserved areas.

1.3 Challenges Facing SMEs in Sri Lanka:

Despite their critical role in the economy, SMEs in Sri Lanka face numerous challenges that hinder their growth and competitiveness. These challenges include:

- ✓ Limited Access to Finance: SMEs often struggle to access affordable financing from formal financial institutions due to stringent collateral requirements, high interest rates, and a lack of credit history. This limits their ability to invest in technology, expand operations, and innovate.

- ✓ Inadequate Infrastructure: Infrastructure deficiencies, including unreliable electricity supply, poor transportation networks, and limited access to water and sanitation facilities, pose significant challenges for SMEs, particularly those operating in rural areas.

- ✓ Regulatory Burdens: Complex regulatory frameworks, bureaucratic procedures, and cumbersome administrative processes create barriers to entry and inhibit business growth. SMEs often face challenges in complying with tax regulations, obtaining licenses and permits, and navigating the legal landscape.

- ✓ Skills Shortages: A shortage of skilled labor and a mismatch between the skills demanded by SMEs and those available in the labor market hinder productivity and innovation. SMEs often struggle to recruit and retain qualified employees, limiting their ability to compete effectively in the global market.

1.4 Government Initiatives and Policy Support:

Recognizing the importance of SMEs in driving economic growth and job creation, the Sri Lankan government has implemented various initiatives and policy measures to support SME development. These include:

- ✓ Financial Assistance Programs: The government provides financial assistance, including credit facilities, grants, and subsidies, to support SMEs' access to finance and investment in technology and innovation.

- ✓ Capacity Building Programs: Capacity building programs, training workshops, and skills development initiatives aim to enhance the managerial and technical skills of SME owners and employees, improving productivity and competitiveness.

- ✓ Policy Reforms: The government has undertaken policy reforms to streamline regulatory processes, reduce bureaucratic red tape, and create a more conducive business environment for SMEs to thrive.

2 Research Problem Statement:

SMEs in Sri Lanka face numerous challenges hindering their growth and sustainability, yet there's a lack of comprehensive research on the multifaceted factors influencing their growth. This study aims to address this gap by identifying the key factors impacting SME growth in Sri Lanka and analyzing how these factors interact to shape SME performance, productivity, and competitiveness. By doing so, the study seeks to provide insights that can inform policy formulation and interventions to support SME development in Sri Lanka.

2.1 Significance of the Study:

The significance of this study lies in its potential to inform policy formulation, business strategies, and stakeholder interventions aimed at fostering the growth and sustainability of SMEs in Sri Lanka. Specifically, the study contributes to the following areas:

1. **Policy Formulation**: By identifying the key factors influencing SME growth in Sri Lanka, the study provides policymakers with empirical evidence to design targeted policies and interventions that address the specific challenges faced by SMEs. These policies can include initiatives to improve access to finance, streamline regulatory processes, enhance infrastructure, and promote skill development, thereby creating an enabling environment for SMEs to thrive.

2. **Business Strategies**: For SME owners and entrepreneurs, the findings of this study offer valuable insights into the factors driving SME growth and competitiveness. Armed with this knowledge, SMEs can develop informed business strategies that capitalize on their strengths and address their weaknesses. This may involve diversifying product offerings, adopting innovative technologies, exploring new markets, or enhancing operational efficiency to enhance their competitive advantage and sustainability.

3. **Stakeholder Interventions**: The study's findings can also guide the efforts of various stakeholders, including industry associations, development agencies, financial institutions, and non-governmental organizations, in supporting SME development. These stakeholders can leverage the insights gained from the study to design targeted interventions, such as capacity-building programs, access to finance initiatives, mentoring and networking opportunities, and advocacy campaigns, that meet the specific needs of SMEs in Sri Lanka.

4. **Academic Research**: In addition to its practical implications, this study contributes to the academic literature on SME development by providing empirical evidence on the factors influencing SME growth in the Sri Lankan context. The study adds to the body of knowledge on SMEs, filling a gap in existing literature and serving as a foundation for further research and scholarly inquiry into this important area of study.

5. **Economic Development**: Ultimately, this study's significance lies in its potential to drive economic development in Sri Lanka. SMEs are vital for economic growth, job creation, and poverty reduction, especially in developing nations like Sri Lanka. By supporting SME growth, this study contributes to broader goals of inclusive and sustainable development, promoting economic resilience, social stability, and prosperity for all.

2.2 Objectives of the Research:

1. **Identify Key Factors**: To identify and categorize the key factors that influence the growth of SMEs in Sri Lanka, including financial, infrastructural, regulatory, and human capital factors.
2. **Assess Interactions**: To examine how these factors interact with each other and contribute to SME performance, productivity, and competitiveness in the Sri Lankan context.
3. **Evaluate Impact**: To assess the relative importance and impact of each factor on SME growth, considering both quantitative metrics (e.g., revenue growth, employment generation) and qualitative indicators (e.g., innovation, market responsiveness).
4. **Develop Analytical Framework**: To develop an analytical framework or model that integrates the identified factors and their interrelationships, providing a comprehensive understanding of SME growth dynamics in Sri Lanka.
5. **Validate Framework**: To validate the proposed framework through empirical analysis, using data collected from SMEs in Sri Lanka through surveys, interviews, or secondary sources.
6. **Provide Policy Recommendations**: To provide evidence-based policy recommendations for policymakers, government agencies, and other stakeholders to support SME growth in Sri Lanka, informed by the findings of the framework analysis.
7. **Offer Strategic Insights**: To offer strategic insights and practical recommendations for SME owners, entrepreneurs, and industry associations to enhance their competitiveness and sustainability in the Sri Lankan market.
8. **Contribute to Knowledge**: To contribute to the body of knowledge on SME development by advancing theoretical understanding and empirical evidence on the factors influencing SME growth in Sri Lanka, filling gaps in existing literature.

These objectives provide a structured approach to developing a framework for understanding the factors impacting SME growth in Sri Lanka, analyzing their interactions, and providing actionable recommendations for stakeholders. Adjustments can be made based on the specific focus and scope of our research project.

2.3 Conceptual Framework:

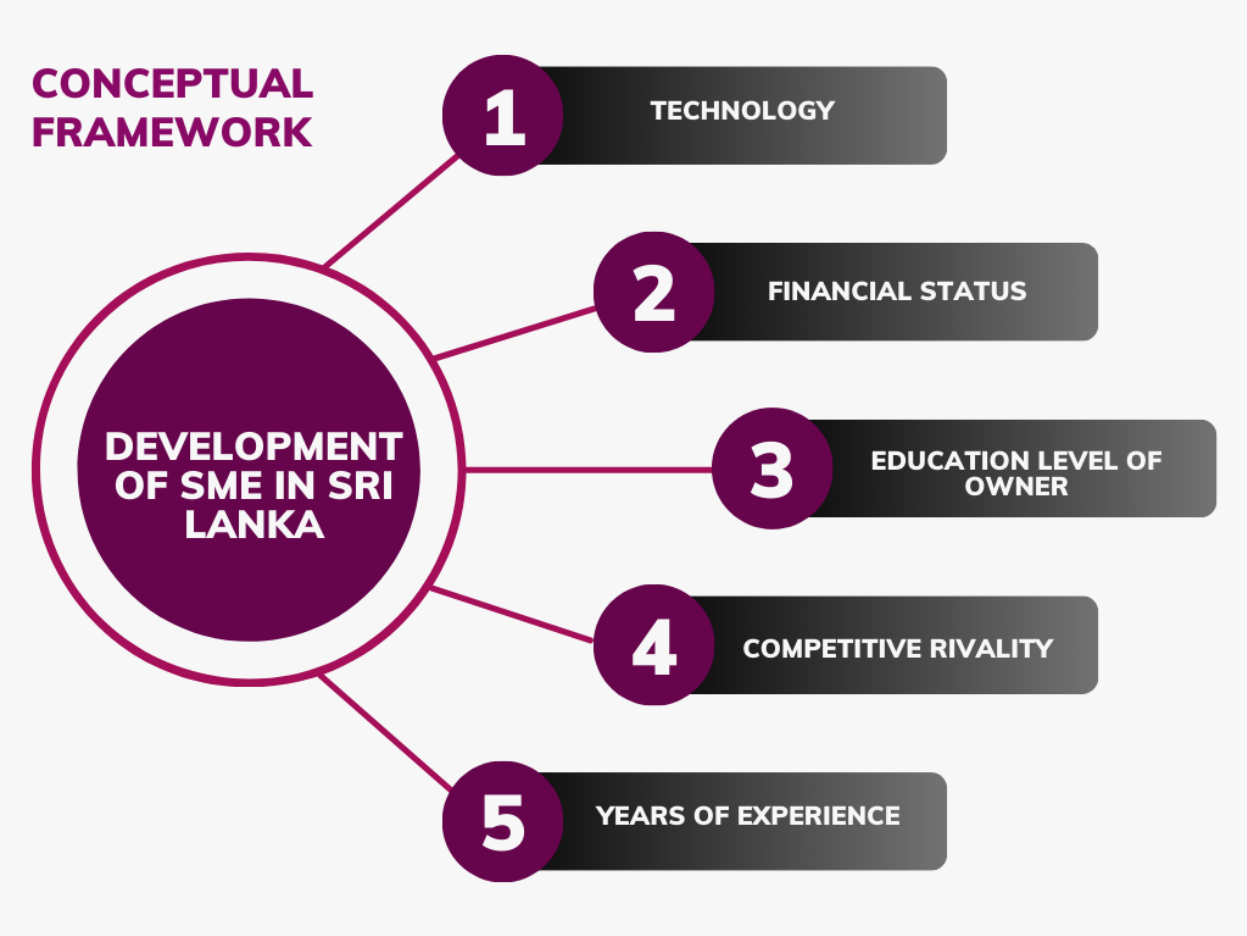

Figure 2-1 Conceptual Framework

3 Methodology:

2.1 Research Design:

This study adopts a mixed-methods research design to comprehensively investigate the factors impacting the growth of SMEs in Sri Lanka. The mixed-methods approach combines quantitative surveys and qualitative interviews to gather both numerical data and in-depth insights from SME owners and key stakeholders.

2.2 Sampling:

2.2.1 Population:

The population of interest comprises SMEs operating across various sectors in Sri Lanka.

2.2.2 Sampling Technique:

A stratified random sampling technique will be employed to ensure representation from different industries and regions within Sri Lanka. The population will be stratified based on industry sector, business size, and geographical location.

2.2.3 Sample Size:

A total of 76 responses were obtained from SMEs selected through the sampling process. The response rate was calculated as the percentage of completed surveys returned out of the total number of surveys distributed.

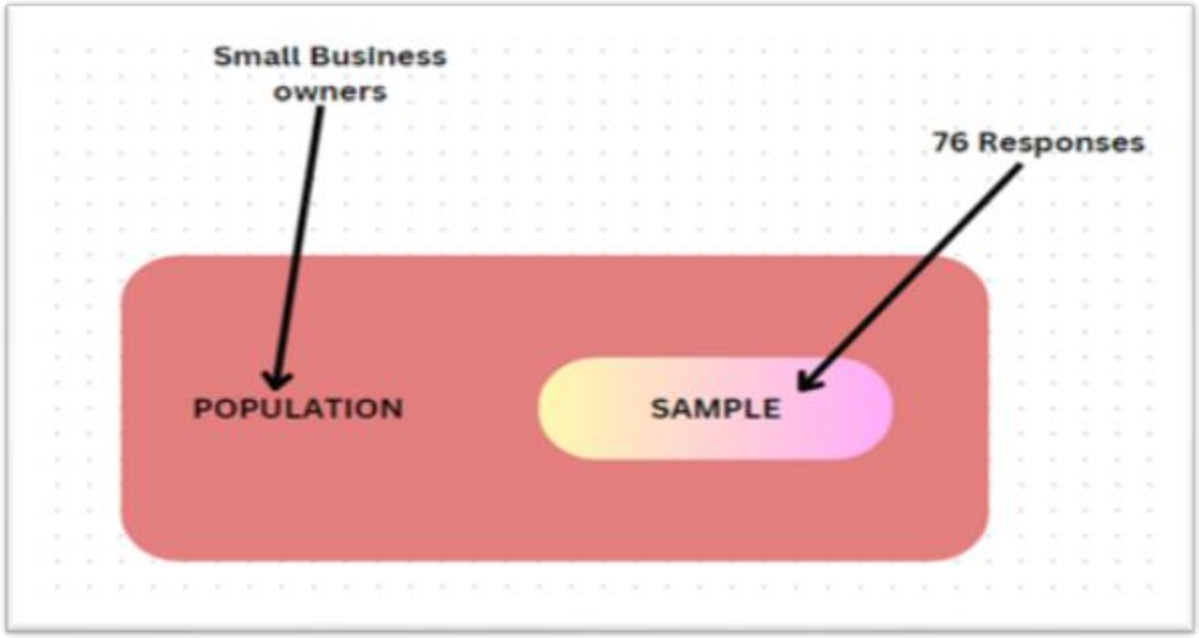

Figure 3-1 Sampling

2.3 Data Collection:

2.3.1 Quantitative Data:

Quantitative data will be collected through structured surveys administered to a sample of SMEs selected from the population. The survey questionnaire will include close-ended questions designed to gather information on various factors influencing SME growth, such as access to finance, infrastructure, government policies, market demand, and technological adoption. The survey will be distributed electronically or in person, depending on the preferences of the participants.

2.3.2 Qualitative Data:

Qualitative data will be collected through semi-structured interviews with SME owners, industry experts, policymakers, and other key stakeholders. The interviews will be conducted to explore participants' perspectives, experiences, and insights regarding the factors impacting SME growth in Sri Lanka. Interviews will be audio-recorded and transcribed for analysis.

2.3.3 Data Collection Method:

In this research, the data were mainly collected from the online questionnaire that was distributed over Small and Medium Enterprises holders in Sri Lanka. This questioner is mainly focused on The Factors Impact To The Growth Of Small And Medium Enterprises (SME) In Sri Lanka. In this research analysis process, we used 76 submissions from the questioner.

- This link shows our questionnaire that we created for data collection.

Survey Link

2.4 Questionnaire:

The Following questionnaire is used to collect data.

Technology:

This section evaluates your engagement with technology in your SME. Share your practices, investments, and the impact of technology on efficiency.

1. I actively incorporate technology into my daily business operations.
2. I regularly use digital tools and platforms to enhance my business activities.
3. I have invested in technology upgrades or innovations in the past year.
4. The use of technology has positively impacted the efficiency of my business.

Financial Status:

Assess your SME's financial health, challenges faced, use of financial tools, and the influence of financial considerations on investments.

1. I consider the current financial health of my SME to be strong.
2. I have faced financial challenges in the last fiscal year.
3. I actively use financial management tools for decision-making in my business.
4. Financial considerations significantly influence my investment decisions for the SME.

Education Level of Owner :

Explore how your education contributes to SME success, its relevance to the industry, ongoing education efforts, and its impact on decision-making.

1. I believe my educational background has positively contributed to the success of my SME.
2. I think my education is relevant to the industry in which my SME operates.
3. I actively pursue ongoing training or education related to my industry.
4. My educational background significantly influences my business decision-making.

Competitive Rivality:

Consider the competitiveness of your industry, strategies to stay ahead, and adaptability to changes in the competitive landscape.

1. I believe my industry is highly competitive.
2. I actively monitor the strategies and activities of my competitors.
3. I have implemented strategies to gain a competitive advantage in the market.
4. I adjust my business strategies based on changes in the competitive landscape.

Years of Experience:

Reflect on your substantial experience in SME management, its positive influence on growth, adaptability to industry changes, and challenges faced over the years.

1. I have been managing or owning my SME for a substantial number of years.
2. I believe my years of experience have positively influenced the growth of my business.
3. My business has successfully adapted to industry changes over the years.
4. I have encountered challenges related to industry changes during my years in business.

Development of SME in Sri Lanka:(Dependent variable)

Evaluate the overall development and growth perception, observed changes in size and reach, key contributors to development, and active strategies for SME growth in the past three years.

1. I perceive a significant overall development and growth of my SME in the last three years.
2. I have observed significant changes in the size and reach of my business over the past few years.
3. I believe certain factors have contributed the most to the development of my SME.
4. I actively implement strategies and actions to drive the development of my SME.

3 Data Analysis:

3.1 Quantitative Analysis:

Quantitative data collected through surveys will be analyzed using statistical software such as SPSS. Descriptive statistics, including frequencies, percentages, means, and standard deviations, will be calculated to summarize the data. Inferential statistics, such as correlation analysis and regression modeling, will be employed to examine the relationships between different factors and SME growth.

3.2 Qualitative Analysis:

Qualitative data from interviews will be analyzed thematically using a systematic approach. Transcripts will be coded and categorized into themes and patterns related to the factors influencing SME growth. Interpretation of the qualitative findings will provide deeper insights into participants' perspectives and experiences.

3.3 Variables

3.3.1 Independent Variables:

1. Technology Adoption:

This is about how much small businesses in Sri Lanka use new technology in their work, like computers, online marketing, or selling things online.

2. Financial Status:

This tells us how well small businesses in Sri Lanka are doing financially. It includes things like how much money they're making, how easily they can pay their bills, and if they can get loans.

3. Educational Level of Owner:

This shows how much education the people who own or run small businesses in Sri Lanka have. It tells us if they finished high school, went to college, or have advanced degrees.

4. Competitive Rivalry:

This is about how much competition there is between small businesses in Sri Lanka. It includes things like how many other businesses are similar to theirs, how much they fight over customers, and if it's easy for new businesses to join the market.

5. Years of Experience:

This tells us how long the people who own or run small businesses in Sri Lanka have been doing it. It shows if they've been working in the same field for a short time or a long time.

3.3.2 Dependent Variable:

1. Development of SMEs in Sri Lanka:

This shows how well small businesses in Sri Lanka are growing and succeeding. It includes things like how much money they're making, if they're coming up with new ideas, if they're getting bigger, and if they're hiring more people.

3.4 Research Questions and Hypotheses

3.4.1 Research Questions:

- ✓ How do various factors, including technology adoption, financial status, educational level of the owner, competitive rivalry, and years of experience, collectively influence the development of SMEs in Sri Lanka?

3.4.2 Hypotheses:

- ✓ H0: Null Hypothesis
- ✓ H1: Alternative Hypothesis

1. **Technology Adoption**:

   - H0:Technology adoption has no significant impact to the development of SMEs in Sri Lanka
   - H1:Technology adoption has a significant impact to the development of SMEs in Sri Lanka

2. **Financial Status**:

   - H0:Financial Status has no significant impact to the development of SMEs in Sri Lanka
   - H1:Financial Status has a significant impact to the development of SMEs in Sri Lanka

3. **Educational Level of Owner**:

   - H0:Educational level of owner has no significant impact to the development of SMEs in Sri Lanka
   - H1: Educational level of owner has a significant impact to the development of SMEs in Sri Lanka

4. **Competitive Rivalry**:

   - H0: Competitive rivalry has no significant impact to the development of SMEs in Sri Lanka
   - H1: Competitive rivalry has a significant impact to the development of SMEs in Sri Lanka

5. **Years of Experience**:

   - H0: Years of Experience has no significant impact to the development of SMEs in Sri Lanka
   - H1: Years of Experience has a significant impact to the development of SMEs in Sri Lanka

3.5 Data Analysis

3.5.1 Technology Adoption

3.5.1.1 Normal Probability Plot

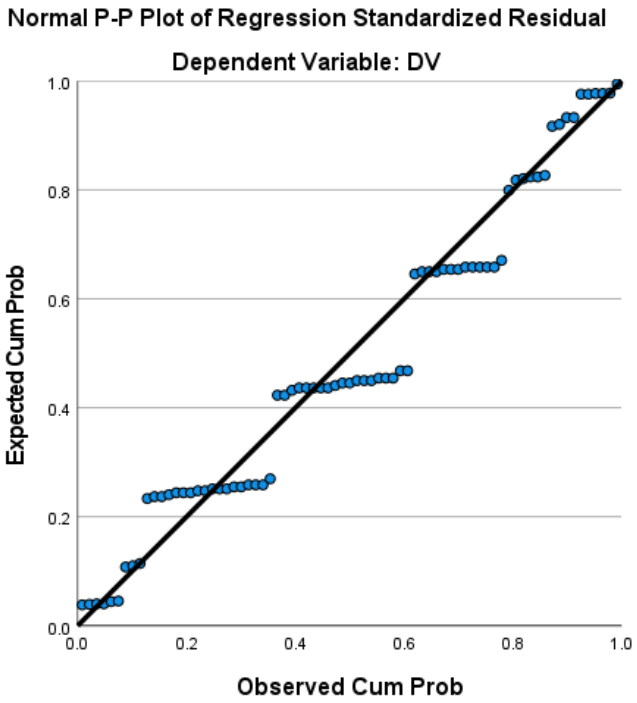

Figure 3-1 Normal P-P Plot for Technology Adoption

The Normal P-P Plot shows how two things are related: how much SMEs in Sri Lanka have adopted technology, and how developed they are. When SMEs use more technology, they tend to be more developed. So, the more technology a SME uses, the more developed it is likely to be. The scatter plot might show most SMEs with higher levels of technology adoption are also more developed, suggesting a positive relationship between technology adoption and SME development

3.5.1.2 Model Summary Table

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.030[a]	.001	-.013	.46857

a. Predictors: (Constant), TECHNOLOGY

b. Dependent Variable: DV

Figure 3-2Model Summary Table for Technology Adoption

R (Correlation Coefficient)-0.030:

The correlation coefficient (R) measures the strength and direction of the linear relationship between the predictor and the dependent variable. In this case, the correlation coefficient is 0.030, indicating a very weak positive correlation between technology adoption and the dependent variable. This means that as technology adoption increases, there is a slight tendency for SME growth to increase as well, although the relationship is very weak.

R Square(Coefficient of Correlation)-0.001:

The coefficient of determination (R Square) represents the proportion of the variance in the dependent variable that is explained by the predictor variable. In this model, the R Square value is 0.001, suggesting that only a very small percentage (less than 1%) of the variability in the dependent variable is explained by technology adoption.

Interpretation:

Overall, based on this model summary table, the relationship between technology adoption and the dependent variable (DV) appears to be very weak, with technology adoption explaining only a small amount of the variability in the dependent variable. The model may not be a good fit for explaining the relationship between these variables, as indicated by the negative adjusted R Square value.

3.5.1.3 ANOVA Table & Hypothesis

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.014	1	.014	.065	.800[b]
	Residual	16.027	73	.220		
	Total	16.042	74			

a. Dependent Variable: DV

b. Predictors: (Constant), TECHNOLOGY

Figure 3-3ANOVA Table for Technology Adoption

Significant F value in Anova table,

Sig value <= 0.05,

H0- Not accept

H1-Accept

Significant F value in Anova table,

Sig value >= 0.05,

H0- Accept

H1-Not accept

- H0:Technology adoption has no significant impact to the development of SMEs in Sri Lanka
- H1:Technology adoption has a significant impact to the development of SMEs in Sri Lanka

✓ Anova table indicates 0.800 sig value which is greater than 0.05.It explains the rejection of H1(Alternative hypothesis) and acceptance of H0(Null hypothesis). This suggests that technology adoption is not statistically significant in predicting SME development in Sri Lanka. So there is no significant relationship between technology adoption and the development of SMEs in Sri Lanka.

3.5.2 Financial Status

3.5.2.1 Normal Probability Plot

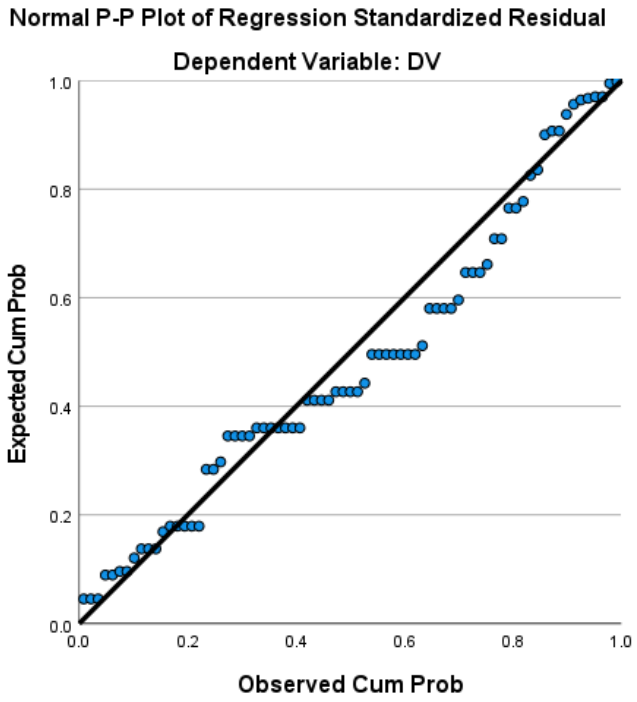

Figure 3-4 Normal P-P Plot for Financial Status

The Normal P-P Plot illustrates the relationship between two factors: the financial status of SMEs in Sri Lanka and their level of development. When SMEs have higher financial status, they tend to be more developed. In other words, as the financial resources of SMEs increase, their level of development is likely to rise as well. The scatter plot may reveal a pattern where SMEs with higher financial status are positioned higher on the y-axis, indicating greater development. This trend suggests a positive relationship between the financial status of SMEs and their development in Sri Lanka.

3.5.2.2 Model Summary Table

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.307[a]	.094	.082	.44618

a. Predictors: (Constant), FINANCIAL STATUS

b. Dependent Variable: DV

Figure 3-5 Model Summary Table for Financial Status

1. **R(Correlation Coefficient)-0.307:**

   The correlation coefficient (R) measures the strength and direction of the linear relationship between the predictor and the dependent variable. In this case, the correlation coefficient is 0.307, indicating a moderate positive correlation between financial status and the dependent variable. The increment of Financial Status will moderately impact on the SME development in Sri Lanka.

2. **R Square (Coefficient of Correlation)-0.094:**

   The coefficient of determination (R Square) represents the proportion of the variance in the dependent variable that is explained by the predictor variable. In this model, the R Square value is 0.094, suggesting that approximately 9.4% of the variability in the dependent variable is explained by financial status.

3. **Interpretation:**

   Overall, based on this model summary table, the relationship between financial status and the dependent variable (DV) appears to be moderate, with financial status explaining approximately 9.4% of the variability in the dependent variable. The model seems to provide a reasonable fit to the data, as indicated by the adjusted R Square value. Further analysis or consideration of additional variables may be needed to better understand the factors influencing the dependent variable.

3.5.2.3 ANOVA Table & Hypothesis

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.509	1	1.509	7.580	.007[b]
	Residual	14.533	73	.199		
	Total	16.042	74			

a. Dependent Variable: DV

b. Predictors: (Constant), FINANCIAL STATUS

Figure 3-6 ANOVA Table for Financial Status

Significant F value in Anova table,

Sig value <= 0.05,

H0- Not accept

H1-Accept

Significant F value in Anova table,

Sig value >= 0.05,

H0- Accept

H1-Not accept

- H0:Financial Status has no significant impact to the development of SMEs in Sri Lanka
- H1:Financial Status has a significant impact to the development of SMEs in Sri Lanka

✓ Anova table indicates 0.007 sig value which is less than 0.05.It explains the rejection of H0(Null hypothesis) and acceptance of H1(Alternative hypothesis). So Financial Status has a significant impact to the development of SMEs in Sri Lanka.

3.5.3 Educational Level of Owner

3.5.3.1 Normal Probability Plot

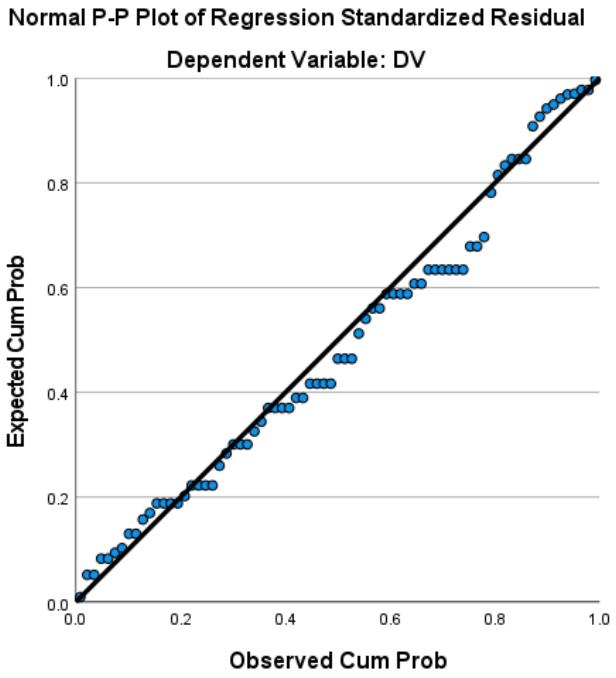

Figure 3-7 Normal P-P Plot for Educational Level of Owner

The Normal P-P Plot illustrates the relationship between two factors: the education level of SME owners in Sri Lanka and the development of their SMEs. When SME owners have higher levels of education, their SMEs tend to be more developed. In other words, as the education level of SME owners increases, the development of their SMEs is likely to increase as well. The scatter plot may demonstrate a pattern where SMEs owned by individuals with higher education levels are positioned higher on the y-axis, indicating greater development. This trend suggests a positive relationship between the education level of SME owners and the development of SMEs in Sri Lanka

3.5.3.2 Model Summary Table

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.268[a]	.072	.059	.45164

a. Predictors: (Constant), EDUCATIONAL LEVEL OF OWNER

b. Dependent Variable: DV

Figure 3-8 Model Summary Table for Educational Level of Owner

R(Correlation Coefficient)-0.268:

The correlation coefficient (R) measures the strength and direction of the linear relationship between the predictor and the dependent variable. In this case, the correlation coefficient is 0.268, indicating a weak positive correlation between the education level of SME owners and the dependent variable. Therefore ,while increasing the educational level of the owner may have some positive impact on SME growth.

R Square(Coefficient of Correlation)-0.072:

The coefficient of determination (R Square) represents the proportion of the variance in the dependent variable that is explained by the predictor variable. In this model, the R Square value is 0.072, suggesting that approximately 7.2% of the variability in the dependent variable is explained by the education level of SME owners.

Interpretation:

Based on this model summary table, the relationship between the education level of SME owners and the dependent variable (DV) appears to be weak, with the education level explaining approximately 7.2% of the variability in the dependent variable. The model seems to provide a reasonable fit to the data, as indicated by the adjusted R Square value. Further analysis or consideration of additional variables may be needed to better understand the factors influencing the dependent variable.

3.5.3.3 ANOVA Table & Hypothesis

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.151	1	1.151	5.644	.020[b]
	Residual	14.890	73	.204		
	Total	16.042	74			

a. Dependent Variable: DV

b. Predictors: (Constant), EDUCATIONAL LEVEL OF OWNER

Figure 3-9 ANOVA Table for Educational Level of Owner

Significant F value in Anova table,

Sig value <= 0.05,

H0- Not accept

H1-Accept

Significant F value in Anova table,

Sig value >= 0.05,

H0- Accept

H1-Not accept

- H0:Educational level of owner has no significant impact to the development of SMEs in Sri Lanka
- H1: Educational level of owner has a significant impact to the development of SMEs in Sri Lanka

✓ Anova table indicates 0.020 sig value which is less than 0.05.It explains the rejection of H0 (Null hypothesis) and acceptance of H1(Alternative hypothesis). So Educational level of owner has a significant impact to the development of SMEs in Sri Lanka

3.5.4 Competitive Rivalry

3.5.4.1 Normal Probability Plot

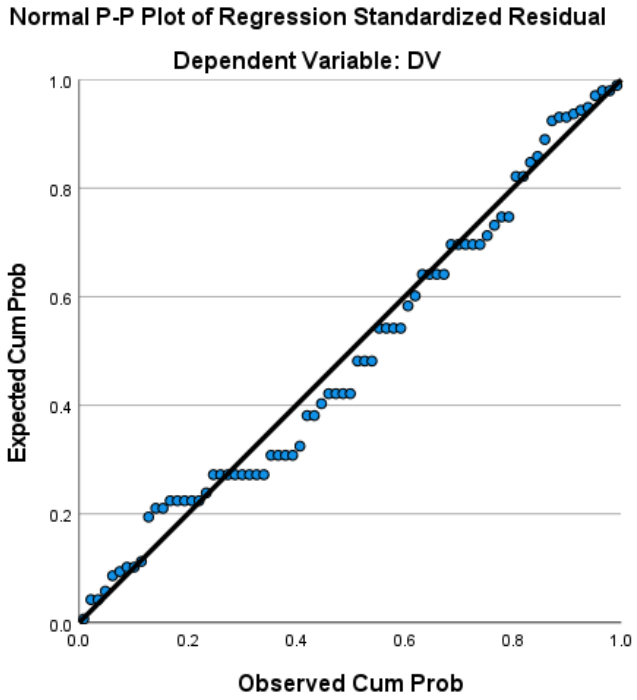

Figure 3-10 Normal P-P Plot for Competitive Rivalry

The Normal P-P Plot illustrates the relationship between two factors: the level of competitive rivalry among SMEs in Sri Lanka and their level of development. When SMEs face higher levels of competitive rivalry, they tend to be more developed. In other words, as the level of competitive rivalry increases, the development of SMEs is likely to increase as well. The scatter plot may reveal a pattern where SMEs operating in industries with higher levels of competitive rivalry are positioned higher on the y-axis, indicating greater development. This trend suggests a positive relationship between competitive rivalry and the development of SMEs in Sri Lanka.

3.5.4.2 Model Summary Table

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.304[a]	.092	.080	.44661

a. Predictors: (Constant), COMPETITIVE RIVALITY

b. Dependent Variable: DV

Figure 3-11 Model Summary Table for Competitive Rivalry

R(Correlation Coefficient)-0.304:

The correlation coefficient (R) measures the strength and direction of the linear relationship between the predictor and the dependent variable. In this case, the correlation coefficient is 0.304, indicating a moderate positive correlation between competitive rivalry and the dependent variable. The increment of Competitive rivalry will moderately impact for the increment of SME development in Sri Lanka.

R Square (Coefficient of Correlation-0.092:

The coefficient of determination (R Square) represents the proportion of the variance in the dependent variable that is explained by the predictor variable. In this model, the R Square value is 0.092, suggesting that approximately 9.2% of the variability in the dependent variable is explained by competitive rivalry.

Interpretation:

Based on this model summary table, the relationship between competitive rivalry and the dependent variable (DV) appears to be moderate, with competitive rivalry explaining approximately 9.2% of the variability in the dependent variable. The model seems to provide a reasonable fit to the data, as indicated by the adjusted R Square value. Further analysis or consideration of additional variables may be needed to better understand the factors influencing the dependent variable.

3.5.4.3 ANOVA Table & Hypothesis

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.481	1	1.481	7.426	.008[b]
	Residual	14.560	73	.199		
	Total	16.042	74			

a. Dependent Variable: DV

b. Predictors: (Constant), COMPETITIVE RIVALITY

Figure 3-12 ANOVA Table for Competitive Rivalry

Significant F value in Anova table,

Sig value <= 0.05,

H0- Not accept

H1-Accept

Significant F value in Anova table,

Sig value >= 0.05,

H0- Accept

H1-Not accept

- H0: Competitive rivalry has no significant impact to the development of SMEs in Sri Lanka
- H1: Competitive rivalry has a significant impact to the development of SMEs in Sri Lanka

✓ Anova table indicates 0.008 sig value which is less than 0.05.It explains the rejection of H0 (Null hypothesis) and acceptance of H1(Alternative hypothesis). So Competitive rivalry has a significant impact to the development of SMEs in Sri Lanka

3.5.5 Years of Experience

3.5.5.1 Normal Probability Plot

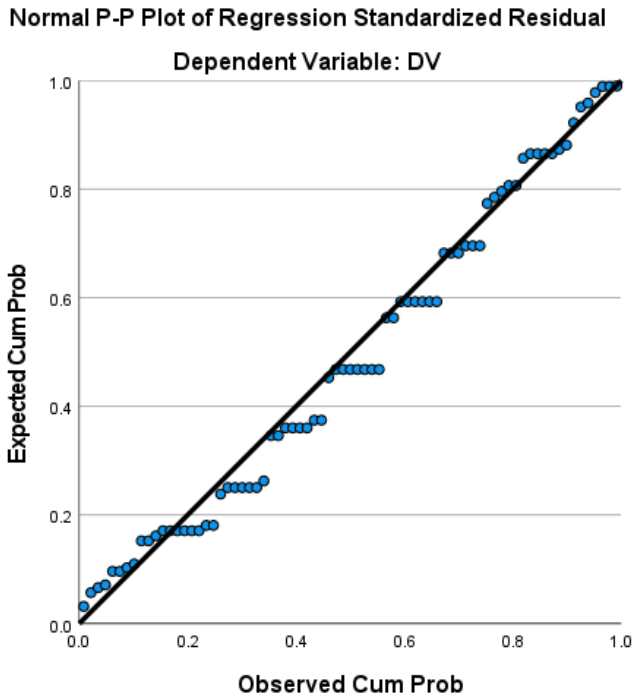

Figure 3-13 Normal P-P Plot for Years of Experience

The Normal P-P Plot illustrates the relationship between two factors: the years of experience of SME owners in Sri Lanka and the development of their SMEs. When SME owners have more years of experience, their SMEs tend to be more developed. In other words, as the years of experience of SME owners increase, the development of their SMEs is likely to increase as well. The scatter plot may reveal a pattern where SMEs owned by individuals with more years of experience are positioned higher on the y-axis, indicating greater development. This trend suggests a positive relationship between the years of experience of SME owners and the development of SMEs in Sri Lanka.

3.5.5.2 Model Summary Table

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.436[a]	.190	.179	.42181

a. Predictors: (Constant), YEARS OF EXPERIENCE

b. Dependent Variable: DV

Figure 3-14 Model Summary Table for Years of Experience

R (Correlation Coefficient)-0.436:

The correlation coefficient (R) measures the strength and direction of the linear relationship between the predictor and the dependent variable. In this case, the correlation coefficient is 0.436, indicating a moderate positive correlation between years of experience and the dependent variable. The increment of Years of experience will moderately impact for the increment of SME development in Sri Lanka.

R Square (Coefficient of Correlation)-0.190:

The coefficient of determination (R Square) represents the proportion of the variance in the dependent variable that is explained by the predictor variable. In this model, the R Square value is 0.190, suggesting that approximately 19% of the variability in the dependent variable is explained by years of experience.

Interpretation:

Based on this model summary table, the relationship between years of experience and the dependent variable (DV) appears to be moderate, with years of experience explaining approximately 19% of the variability in the dependent variable. The model seems to provide a reasonable fit to the data, as indicated by the adjusted R Square value. Further analysis or consideration of additional variables may be needed to better understand the factors influencing the dependent variable.

3.5.5.3 ANOVA Table & Hypothesis

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.053	1	3.053	17.159	<.001[b]
	Residual	12.989	73	.178		
	Total	16.042	74			

a. Dependent Variable: DV

b. Predictors: (Constant), YEARS OF EXPERIENCE

Figure 3-15 ANOVA Table for Years of Experience

Significant F value in Anova table,

Sig value <= 0.05,

H0- Not accept

H1-Accept

Significant F value in Anova table,

Sig value >= 0.05,

H0- Accept

H1-Not accept

- H0: Years of Experience has no significant impact to the development of SMEs in Sri Lanka
- H1: Years of Experience has a significant impact to the development of SMEs in Sri Lanka

✓ Anova table indicates 0.001 sig value which is less than 0.05.It explains the rejection of H0(Null hypothesis) and acceptance of H1(Alternative hypothesis). So Years of Experience has a significant impact to the development of SMEs in Sri Lanka

3.5.6 Multiple Variables Analysis

3.5.6.1 Normal Probability Plot

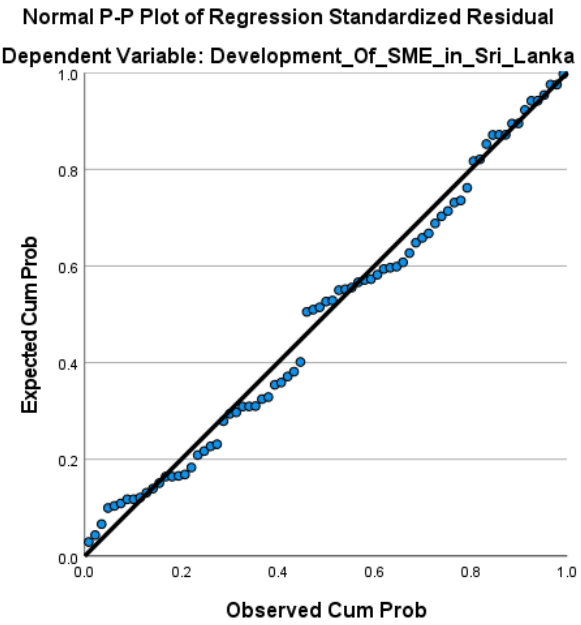

Figure 3-16 Normal P-P Plot for Multiple Variable

The Normal P-P Plot illustrates a positive relationship between various factors and the development of SMEs in Sri Lanka. As SMEs adopt more technology, possess stronger financial statuses, have owners with higher education levels, face higher levels of competitive rivalry, and accumulate more years of experience, they tend to be more developed. This suggests that these factors positively influence SME development.

3.5.6.2 Model Summary Table

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.529[a]	.280	.228	.40915

a. Predictors: (Constant), Years_Of_Experience, Technology, Education_Level_Of_Owner, Financial_Status, Competitive_Rivalry

b. Dependent Variable: Development_Of_SME_in_Sri_Lanka

Figure 3-17 Model Summary Table for Multiple Variable

R (Correlation Coefficient)-0.529:

The correlation coefficient (R) measures the strength and direction of the linear relationship between the predictor and the dependent variable. In this case, the correlation coefficient is 0.436, indicating a moderate positive correlation between years of experience and the dependent variable. The increment of more technology, possess stronger financial statuses, have owners with higher education levels, face higher levels of competitive rivalry, and accumulate more years of experience will moderately impact for the increment of SME development in Sri Lanka.

R Square(Coefficient of Correlation-0.280:

The coefficient of determination (R Square) represents the proportion of the variance in the dependent variable that is explained by the predictor variable. In this model, the R Square value is 0.190, suggesting that approximately 19% of the variability in the dependent variable is explained by years of experience.

Interpretation:

Overall, based on this model summary table, the relationship between years of experience and the dependent variable (DV) appears to be moderate, with years of experience explaining approximately 19% of the variability in the dependent variable. The model seems to provide a reasonable fit to the data, as indicated by the adjusted R Square value. Further analysis or consideration of additional variables may be needed to better understand the factors influencing the dependent variable

3.5.6.3 ANOVA Table & Hypothesis

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4.491	5	.898	5.365	<.001[b]
	Residual	11.551	69	.167		
	Total	16.042	74			

a. Dependent Variable: Development_Of_SME_in_Sri_Lanka

b. Predictors: (Constant), Years_Of_Experience, Technology, Education_Level_Of_Owner, Financial_Status, Competitive_Rivalry

Figure 3-18 ANOVA Table for Multiple Variable

Significant F value in Anova table,

Sig value <= 0.05,

H0- Not accept

H1-Accept

Significant F value in Anova table,

Sig value >= 0.05,

H0- Accept

H1-Not accept

- H0: Technology, Financial Status, Education level of owner, competitive rivalry & years of experience have no significant impact on development of SMEs in Sri Lanka.
- H1: Technology, Financial Status, Education level of owner, competitive rivalry & years of experience have significant impact on development of SMEs in Sri Lanka

✓ Anova table indicates 0.001 sig value which is less than 0.05.It explains the rejection of H0(Null hypothesis) and acceptance of H1(Alternative hypothesis). So Technology, Financial Status, Education level of owner, competitive rivalry & years of experience have significant impact on development of SMEs in Sri Lanka .

✓ This means that, based on the current analysis, there is enough evidence to conclude that the predictor variables collectively have a significant impact on development of SMEs in Sri Lanka.

3.5.7 Coefficient Table

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	1.571	.525		2.992	.004	.523	2.619
	Technology	-.175	.082	-.244	-2.134	.036	-.338	-.011
	Financial_Status	.233	.116	.231	2.005	.049	.001	.466
	Education_Level_Of_Owner	.047	.105	.058	.453	.652	-.162	.257
	Competitive_Rivalry	.118	.123	.133	.966	.337	-.126	.363
	Years_Of_Experience	.358	.126	.334	2.853	.006	.108	.609

a. Dependent Variable: Development_Of_SME_in_Sri_Lanka

Figure 3-19 Coefficient Table for Multiple Variable

Interpretation:

The regression equation provides insights into how various factors contribute to the development of SMEs in Sri Lanka. Here's the interpretation of the coefficients:

- **Constant (1.571)**:

  When all predictor variables (Technology, Financial Status, Education Level Of Owner, Competitive Rivalry, Years Of Experience) are zero, the estimated value of SME development in Sri Lanka is 1.571.

- **Technology (-0.175)**:

  For every one-unit increase in technology adoption, the estimated development of SMEs decreases by 0.175 units, holding all other variables constant. This suggests that excessive reliance on technology without proper integration or adaptation may hinder SME development.

- **Financial Status (0.233)**:

  For every one-unit increase in financial status, the estimated development of SMEs increases by 0.233 units, holding all other variables constant. This indicates that stronger financial positions enable SMEs to invest in growth opportunities, leading to greater development.

- **Education Level Of Owner (0.047)**:

  For every one-unit increase in the education level of the owner, the estimated development of SMEs increases by 0.047 units, holding all other variables constant. This suggests that owners with higher education levels may possess additional skills or knowledge beneficial for SME growth.

- **Competitive Rivalry (0.118)**:

  For every one-unit increase in competitive rivalry, the estimated development of SMEs increases by 0.118 units, holding all other variables constant. This implies that healthy competition may drive SMEs to innovate and improve, contributing to their development.

- **Years Of Experience (0.358)**:

  For every one-unit increase in years of experience, the estimated development of SMEs increases by 0.358 units, holding all other variables constant. This highlights the importance of accumulated experience in navigating challenges and seizing opportunities for SME growth.

Regression Equation:

Y=C+ (b1x1) + (b2x2) + (b3x3) + (b4x4) + (b5x5)

Development Of SME in Sri Lanka = 1.571+(- 0.175 * Technology) +(0.233 * Financial Status) + (0.047 * Education Level Of Owner)+(0.118 * Competitive Rivalry)+ (0.358 * Years Of Experience)

4 Conclusion

In conclusion, our research highlights some important factors that affect the growth of Small and Medium Enterprises (SMEs) in Sri Lanka:

Technology Use: While technology is essential for SMEs, relying too much on it without adapting properly can slow down growth. SMEs should use technology wisely to boost their development.

Financial Strength: SMEs with stronger finances can invest more in growth opportunities, leading to better development. Improving access to funds and managing finances well are crucial for SMEs to grow.

Owner's Education: Owners with higher education levels bring more skills and knowledge to their businesses, which can help SMEs grow. Encouraging continuous learning among owners is important for SME growth.

Competition: Healthy competition pushes SMEs to improve and innovate, which fosters growth. Creating an environment where competition is fair can help SMEs thrive.

Experience: The more experience SMEs have, the better they can navigate challenges and take advantage of opportunities. Sharing knowledge and mentorship programs can help SMEs make the most of their experience.

In short, addressing these factors together and creating a supportive environment for SMEs can drive their growth, contributing to a stronger economy in Sri Lanka.

5 References

- Research on SME in Sri Lanka
- Research on factors affecting SME in Sri Lanka
- Research
- SME Development research

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