

A Study on the Impact of Business Environment Entrepreneurial Spirit and Enterprise Value of Selected Electric Appliances

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Abstract: This study investigates the intricate dynamics of entrepreneurial spirit, innovation, adaptability, excellence, and their collective impact on the economic and social value of electronic appliances within the competitive landscape. This study uses different sample respondents to collect relevant data, and uses statistical analysis such as correlation coefficients and hypothesis testing. The research results indicate that innovation, adaptability, and excellence have a significant impact on the capabilities of enterprises and their subsequent economic value.

Keywords: Business environment; Entrepreneurial spirit; Enterprise value

1. Introduction

The electric appliance industry has witnessed remarkable growth and transformation in recent decades, driven by technological advancements, changing consumer preferences, and evolving global market dynamics. Within this dynamic landscape, the ability of electric appliance companies to adapt, innovate, and thrive is influenced by a multitude of factors. This study embarks on an exploration of the intricate interplay between the business environment, entrepreneurial spirit, and enterprise value within the context of selected electric appliance companies in China. The findings of this study will provide valuable recommendations for businesses and policymakers on how to foster a conducive business environment that nurtures entrepreneurial endeavors and promotes sustainable enterprise value.

Gree was founded in 1991 and has become one of the world's largest manufacturers of air conditioning products, recognized as a leading player in the global electrical industry. It is famous for emphasizing technological innovation and research and development. It has a certain representativeness as a case company.

2. Review of Related Literature and Studies

Daniel (2023), states that untapped potential can be unlocked and new ideas can be brought to the table by embracing their entrepreneurial spirit. The organizational culture must value and encourage risk-taking and creativity in order for employees to develop an entrepreneurial spirit in the workplace^[1]. Xie Zhong, Zhang Jie (2019) believes that the improvement of the business environment plays an important role in promoting the development of physical enterprises. As the business environment gradually improves, the cultivation of entrepreneurial spirit has a significant promoting effect on the performance of physical enterprises^[2]. Liu Lei (2020) found that the higher the business environment index, the more conducive it is to the enhancement of enterprise value; The improvement of enterprise innovation capability promotes the enhancement of enterprise value^[3]. The literature reviewed suggests a strong correlation between entrepreneurship and firm performance, where companies exhibiting entrepreneurial behavior tend to achieve superior financial outcomes (Nikolaev et al., 2018)^[4]. A conducive business environment, including regulatory support, resource accessibility, and market conditions, can nurture entrepreneurial culture and enhance the impact of entrepreneurial spirit on enterprise value (Gavril, 2018)^[5].

3. Methods of Study

This study employed a descriptive-correlational research design. The participants in this study were 95 employees of Gree Electric and 60 electronic customers. The process of constructing a survey questionnaire includes systematically designing a set of questions, using Likert scales, etc. for quantitative measurement, and using Cronbach α Verify the reliability and effectiveness. The survey questionnaires are sent in a mixed format, with some being personally sent to the company and others being sent through online survey platforms such as WJX.CN.

4. Presnetation, Analysis and Interpretation of Data

4.1 Extent of Entrepreneurial Spirit Exist Within Selected Electric Appliance Companies in Zhuhai

Table 1 Extent of Entrepreneurial Spirit Exist Within Selected Electric Appliance Companies In Zhuhai

Statements	Mean	Interpretation
1.I believe that my company encourages and embraces innovation and creativity.	3.21	Agree
2. I think my company's approach to risk-taking when exploring new business opportunities is risk-tolerant.	3.20	Agree
3.My company supports my initiatives and ideas for process improvements.	3.18	Agree
4.My company often encourages me to identify and pursue new market opportunities.	3.20	Agree
5.I find that my company is responsive to changing market conditions and customer preferences.	3.11	Agree
6.I believe that my company fosters a culture of continuous learning and adaptation.	3.18	Agree
7.I feel empowered by my company to take calculated risks in pursuit of new business ventures.	3.21	Agree
8.My company is effective in capitalizing on emerging industry trends and technological advancements.	3.14	Agree
9.My company consistently rewards and recognizes employees for entrepreneurial efforts and achievements.	3.24	Agree
10.I perceive a high level of entrepreneurial spirit within my company, considering factors like innovation, adaptability, and willingness to seize opportunities.	3.27	Strongly Agree
Composite Mean	3.19	Agree

Legend: 3.25-4.00 = Strongly Agree; 2.50-3.24 = Agree; 1.75-2.49 = Disagree; 1.00-1.74 = Strongly Disagree(Legends 2-7 Similarly)

Table 1 shows, The comprehensive average of 3.19 belongs to the "agree" category, indicating an overall positive perception of entrepreneurial spirit within the company.

4.2 Impact of Business Environment Entrepreneurial Spirit to Enterprise's Ability in a Competitive Industry

4.2.1 Innovation

Table 2 Impact of Business Environment Entrepreneurial Spirit to Enterprise's Ability in a Competitive Industry in Terms of Innovation

Statements	Mean	Interpretation
1.In my company, the business environment encourages and supports innovation as a means to gain a competitive edge.	3.33	Strongly Agree
2.My company invests in research and development activities to foster innovation in response to the competitive industry landscape.	3.33	Strongly Agree
3.The business environment in our industry compels us to continuously seek innovative solutions to meet evolving customer demands.	3.31	Strongly Agree
4.My company encourages employees to proactively contribute	3.31	Strongly Agree

innovative ideas and suggestions to address competitive challenges.		
5.The competitive nature of our industry necessitates a high level of innovation in our product development processes.	3.36	Strongly Agree
6.Our company actively seeks partnerships and collaborations with innovative firms to enhance our competitive position.	3.35	Strongly Agree
7.The ability to adapt and innovate quickly is crucial for maintaining competitiveness in our company.	3.32	Strongly Agree
8.The competitive pressures in our business environment motivate us to continuously improve and innovate our processes.	3.31	Strongly Agree
9.Our company actively seeks out emerging technologies and trends to incorporate them into our innovation strategies.	3.33	Strongly Agree
10.The business environment encourages entrepreneurial thinking and actions to drive innovation and competitiveness.	3.32	Strongly Agree
Composite Mean	3.32	Strongly Agree

Table 2 shows, The study participants perceive their company as highly committed to fostering innovation and maintaining competitiveness. The findings highlight the proactive approach of the organization in responding to industry demands and its willingness to seek out emerging technologies and trends.

4.2.2 Adaptability

Table 3 Impact of Business Environment Entrepreneurial Spirit to Enterprise’s Ability in a Competitive Industry in Terms of Adaptability

Statements	Mean	Interpretation
1.The dynamic business environment in our company encourages us to adapt quickly to changing market conditions.	3.21	Agree
2.The competitive industry landscape necessitates that our company remains flexible and adaptable in our strategies.	3.19	Agree
3.Our company actively monitors industry trends and adjusts our operations accordingly to stay competitive.	3.22	Agree
4.Employees in our organization are encouraged to embrace change and adapt to new challenges.	3.20	Agree
5.The competitive nature of our industry pushes us to continuously seek ways to adapt and improve our products and services.	3.22	Agree
6.Our company is proactive in adjusting its strategies in response to emerging competitive threats.	3.19	Agree
7.Adaptability is considered a key factor for long-term success in our firm.	3.27	Strongly Agree
8.Our organization encourages employees to seek out new opportunities for growth and adapt to changing customer needs.	3.23	Agree
9. We actively embrace innovative solutions and adapt our processes to improve efficiency and competitiveness.	3.26	Strongly Agree
10. The business environment in our industry fosters entrepreneurial thinking and adaptability to thrive in a competitive landscape.	3.23	Agree
Composite Mean	3.22	Agree

Table 3 shows, The study participants perceive their company as proactive and adaptable in response to the dynamic business environment and competitive industry landscape. The results highlight the importance of adaptability, innovation, and a culture that embraces change in maintaining competitiveness.

4.2.3 Excellence

Table 4 shows, The study participants perceive their organization as strongly committed to excellence across various dimensions, including quality standards, customer service, culture, and operational processes.

Table 4 Impact of Business Environment Entrepreneurial Spirit to Enterprise's Ability in a Competitive Industry in Terms of Excellence

Statements	Mean	Interpretation
1.A commitment to excellence in my firm is embedded in our culture and is integral to our competitive strategy.	3.36	Strongly Agree
2. The business environment in our industry demands that we consistently deliver high-quality products and services to remain competitive.	3.37	Strongly Agree
3.Our organization actively seeks opportunities for process improvements and strives for operational excellence.	3.34	Strongly Agree
4. The competitive landscape encourages our company to set and maintain industry-leading standards for quality.	3.38	Strongly Agree
5. In our organization, employees are encouraged to take ownership of their work and deliver excellence in all tasks.	3.35	Strongly Agree
6. Our company values a culture of continuous improvement and excellence in customer service.	3.37	Strongly Agree
7. Excellence in our industry is synonymous with our brand, and we work diligently to maintain that reputation.	3.32	Strongly Agree
8. Our organization actively seeks to exceed customer expectations and consistently deliver exceptional value.	3.32	Strongly Agree
9. The business environment encourages entrepreneurial thinking and a relentless pursuit of excellence to thrive in a competitive industry.	3.26	Strongly Agree
10. Our company's commitment to excellence extends to all aspects of our operations, from product development to customer service.	3.31	Strongly Agree
Composite Mean	3.34	Strongly Agree

4.3 Impact of Business Environment Entrepreneurial Spirit in Enterprise's Value of Selected Electronic Appliances

4.3.1 Economic Value

Table 5 Impact of Business Environment Entrepreneurial Spirit in Enterprise's Value of Selected Electronic Appliances in Terms of Economic Value

Statements	Mean	Interpretation
1.The economic value I receive from the selected electronic appliances is influenced by the overall business environment.	3.17	Agree
2.The competitive industry landscape has a noticeable impact on the pricing and economic value of these electronic appliances.	3.17	Agree
3.The ability of the company to adapt to changes in the business environment enhances the economic value of these electronic appliances.	3.17	Agree
4.My purchasing decisions for electronic appliances are influenced by how the business environment affects the product's economic value.	3.13	Agree
5.I believe that a company's entrepreneurial spirit positively contributes to the economic value of its electronic appliances.	3.07	Agree
6. Entrepreneurial thinking and actions within the company are directly linked to the economic value I receive from these electronic appliances.	3.12	Agree
7. The company's innovation efforts and willingness to seize opportunities enhance the economic value of these electronic appliances.	3.18	Agree
8.Economic value creation is a central focus in the company's entrepreneurial endeavors and strategic decisions.	3.07	Agree
9.The company actively seeks ways to increase the economic value of its electronic appliances through cost-effective strategies.	3.18	Agree
10.The business environment's influence on the company's ability to deliver economic value is complemented by its entrepreneurial spirit and commitment to excellence.	3.20	Agree
Composite Mean	3.15	Agree

Table 5 shows, The participants perceive the business environment, innovation, and entrepreneurial spirit as factors contributing to the economic value of electronic appliances. They also recognize the company's proactive efforts in innovation and cost-effective strategies as key contributors to economic value.

4.3.2 Social Value

Table 6 Impact of Business Environment Entrepreneurial Spirit in Enterprise's Value of Selected Electronic Appliances in Terms of Social Value

Statements	Mean	Interpretation
1.I believe that the company's commitment to social responsibility positively contributes to the social value of these electronic appliances.	3.18	Agree
2.The company's efforts to support local communities and sustainability initiatives enhance the social value of these electronic appliances.	3.17	Agree
3.I consider the ethical practices of the company in its supply chain and production processes when evaluating the social value of these electronic appliances.	3.23	Agree
4.The company's contributions to charitable causes and community development positively influence the social value of these electronic appliances.	3.17	Agree
5.I believe that a company's entrepreneurial spirit and commitment to social responsibility are interconnected and contribute to the social value of its products.	3.18	Agree
6.The company's active engagement in environmental conservation and eco-friendly practices enhances the social value of these electronic appliances.	3.20	Agree
7. I consider the company's efforts to promote diversity and inclusivity in its workforce when assessing the social value of these electronic appliances.	3.22	Agree
8. The company's transparency in its business practices and commitment to ethical behavior positively impact the social value of these electronic appliances.	3.22	Agree
9.I believe that the social value of these electronic appliances is influenced by the company's engagement in philanthropic activities and community support.	3.22	Agree
10.The business environment's influence on the company's social responsibility initiatives is complemented by its entrepreneurial spirit and commitment to creating social value.	3.23	Agree
Composite Mean	3.20	Agree

Table6 shows, The survey results suggest that participants acknowledge the significant role of the company's ethical practices, diversity and inclusivity efforts, transparency, philanthropic activities, and environmental engagement in shaping the social value of electronic appliances.

4.3.3 Customer Satisfaction

Table 7 Impact of Business Environment Entrepreneurial Spirit in Enterprise's Value of Selected Electronic Appliances in Terms of Customer Satisfaction

Statements	Mean	Interpretation
1.The business environment significantly influences my satisfaction with the electronic appliances I purchase.	3.22	Agree
2.I believe that the competitive industry landscape plays a role in the quality and satisfaction I experience with these electronic appliances.	3.22	Agree
3. My satisfaction with the electronic appliances is affected by the company's ability to adapt to changing market conditions.	3.23	Agree
4. The business environment's impact on customer demand influences my satisfaction with these electronic appliances.	3.20	Agree
5. I believe that a company's entrepreneurial spirit positively contributes to my satisfaction with its electronic appliances.	3.22	Agree
6.Entrepreneurial thinking and actions within the company are directly linked to my satisfaction with these electronic appliances.	3.25	Strongly Agree
7.The company's innovative efforts and willingness to seize opportunities enhance my satisfaction with these electronic appliances.	3.22	Agree
8. My satisfaction with the electronic appliances is positively influenced by the company's commitment to excellence and continuous improvement.	3.22	Agree
9. I believe that the company's responsiveness to changing market conditions contributes to my satisfaction with these electronic appliances.	3.20	Agree
10.The company's ability to deliver high-quality products and services in a competitive industry positively impacts my satisfaction with its electronic appliances.	3.22	Agree
Composite Mean	3.22	Agree

Table 7 shows, The survey results suggest that participants acknowledge the significant role of

entrepreneurial qualities, including adaptability, innovation, and commitment to excellence, in influencing their satisfaction with electronic appliances.

4.4 Significant Difference in Impact of Business Environment Entrepreneurial Spirit to Enterprise Ability When Grouped According to The Profile

To explain the difference significant difference in impact of business environment entrepreneurial spirit to enterprise ability when grouped according to the profile, the hypothesis was tested through Two-Independent Samples t-test and Analysis of Variance (ANOVA). The null hypothesis stated that, there is no significant difference in impact of business environment entrepreneurial spirit to enterprise ability when grouped according to the profile. This study used 0.05 level of significance in making decision on null hypothesis (H₀). In subsequent studies, a significance level of 0.05 (H₀) was used.

Table 8 Significant Difference in Impact of Business Environment Entrepreneurial Spirit to Enterprise Ability When Grouped According to Their Age

Enterprise Ability	F-value	p-value	Decision on Ho	Interpretation
Innovation	0.745	0.592	Failed to Reject	Not Significant
Adaptability	1.362	0.246	Failed to Reject	Not Significant
Excellence	0.758	0.583	Failed to Reject	Not Significant

Table 8 shows, in all three cases (innovation, adaptability, and excellence), the p-value is greater than the commonly used significance level of 0.05 (5%). In addition, the f value is relatively low. Therefore, the decision on the null hypothesis (H₀) is 'unable to reject', which means that there is insufficient evidence to indicate a significant relationship between these components of a company's capabilities (innovation, adaptability, excellence) and the dependent variable.

Table 9 Significant Difference in Impact of Business Environment Entrepreneurial Spirit to Enterprise Ability When Grouped According to Their Sex

Enterprise Ability	t-value	p-value	Decision on Ho	Interpretation
Innovation	-0.035	0.972	Failed to Reject	Not Significant
Adaptability	-2.634	0.010	Reject	Significant
Excellence	0.379	0.706	Failed to Reject	Not Significant

Table 9 shows, Adaptability is a component of a company's ability that has a statistically significant impact on the dependent variable. However, the innovation and excellence measured in this study did not seem to have a significant impact on the dependent variable.

Table 10 Significant Difference in Impact of Business Environment Entrepreneurial Spirit to Enterprise Ability When Grouped According to Educational background

Enterprise Ability	F-value	p-value	Decision on Ho	Interpretation
Innovation	3.239	0.026	Reject	Significant
Adaptability	1.445	0.235	Failed to Reject	Not Significant
Excellence	0.191	0.902	Failed to Reject	Not Significant

Table 10 shows that innovation is the only component of a company's capabilities that has a statistically significant impact on the dependent variable. The adaptability and excellence measured did not seem to have a significant impact on the dependent variable.

Table 11 Significant Difference in Impact of Business Environment Entrepreneurial Spirit to Enterprise Ability When Grouped According to Their Position

Enterprise Ability	F-value	p-value	Decision on Ho	Interpretation
Innovation	0.26	0.772	Failed to Reject	Not Significant
Adaptability	1.456	0.238	Failed to Reject	Not Significant
Excellence	1.393	0.253	Failed to Reject	Not Significant

Table 11 shows any component of the enterprise's capabilities Score (innovation, adaptability, excellence) has no statistically significant impact on the dependent variable.

4.5 Significant Relationship Between Entrepreneurial Spirit Exists and the Impact of Business Environment Entrepreneurial Spirit to Enterprise's Ability in Competitive Industry

Table 12 Significant Relationship Between Entrepreneurial Spirit Exists and the Impact of Business Environment Entrepreneurial Spirit to Enterprise's Ability in Competitive Industry

Enterprise Ability	R-value	Degree of Relationship	p-value	Decision on Ho	Interpretation
Innovation	-0.020	Very Weak Negative	0.847	Failed to Reject	Not Significant
Adaptability	0.825	Very Strong Relationship	0.000	Reject	Significant
Excellence	-0.199	Very Weak Negative	0.054	Failed to Reject	Not Significant

In table 12, the results indicate that innovation does not have a significant relationship with the dependent variable. Adaptability exhibits a very strong and significant positive relationship with the dependent variable. Excellence shows a borderline, but not definitively significant, negative relationship with the dependent variable.

4.6 Significant Relationship Between Entrepreneurial Spirit Exists and Enterprise's Value in Selected Electronic Appliances Company

Table 13 Significant Relationship Between Entrepreneurial Spirit Exists and Enterprise's Value in Selected Electronic Appliances Company

Enterprise Value	R-value	Degree of Relationship	p-value	Decision on Ho	Interpretation
Innovation	0.991	Very Strong Relationship	0.000	Reject	Significant
Adaptability	0.774	Strong Relationship	0.000	Reject	Significant
Excellence	0.769	Very Strong Relationship	0.000	Reject	Significant

Table 13 shows that innovation, adaptability, and excellence all exhibit a very strong and significant positive correlation with corporate value.

5. Conclusions

Analysis shows that the selected electrical companies in Zhuhai do indeed have entrepreneurial spirit; Innovation has a very strong and significant positive impact on enterprise capabilities; In terms of economic value, entrepreneurship, innovation, and excellence play an indispensable role in positively influencing the economic value of electronic devices. In terms of social value, ethical practices, diversity, and philanthropy have been identified as factors that enhance the social value of electronic devices.

The study found that when considering the survey of respondents, the analysis did not show significant differences in the impact of business environment and entrepreneurial spirit on corporate capabilities; There is a significant relationship between entrepreneurial spirit and the impact of business environment on corporate capabilities, and companies that cultivate entrepreneurial spirit often utilize the business environment more effectively; Entrepreneurial spirit is also closely related to the value of a company, and companies with strong entrepreneurial spirit tend to create higher value products.

6. Recommendations

Electronic Appliance companies should cultivate an innovative culture, invest in research and development projects, and create innovative products to meet the constantly changing needs of consumers. Innovation is a key driver of economic value and competitiveness.

The electronics industry should maintain a commitment to product excellence or service quality, as high-quality products can positively impact economic value and customer satisfaction.

Consumers and buyers should consider products from companies renowned for innovation when making purchasing decisions. These products are more likely to offer advanced features and value for your money. High-quality electronic appliances tend to be more reliable, durable, and satisfy your needs better.

The government and industry regulatory agencies should encourage and support research and innovation in the electronic and electrical industry through policies and incentive measures. Innovation can drive economic growth and competitiveness.

Future researchers need to continue studying the relationship between entrepreneurship, innovation, adaptability, and excellence, as well as their impact on economic and social values. Deeper insights can benefit businesses and society.

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