
Essential Approach for Business Efficiency in Minmetals Enterprise in Beijing, China

Yu Xinhai

Master of Science in Business Administration, City University of Malaysia

Abstract

The correct choice of strategy determines whether an enterprise will rise or fall in current market competition, where strategic management indicates the development direction and competitive edge of an enterprise. The aim of this paper is to study the essential approach for business efficiency in Minmetals Enterprise in Beijing, China. This paper randomly distributed questionnaires in the form of survey and collected 147 results as samples. The results of the questionnaire survey were convenient for statistical processing and analysis. The questionnaire given to the respondents (employees) contains a number of questions based on the factors used in this research. Their collected replies were put through extensive analyses. Data analysis for this research was conducted using the software SPSS. The analyses utilised included descriptive tests and inferential analysis. The four hypotheses put out for this inquiry are supported. All four of the hypotheses considered in the current inquiry are accepted because the significant value is less than 0.01. The examination of the correlation produced results that were consistently in the range of 0.902 to 0.934. This leads one to believe that there is a powerful and favourable connection between the independent components (presence of state-owned enterprises, choice of managers, products markets, and external factors) and the dependent variable (firm efficiency). Through this experiment, researchers will be able to determine if cultural influences serve as moderators or amplifiers, changing the results of similar business efficiency criteria in unanticipated ways. Using this data, companies may segment their markets in a way that actually appeals to local clients, encouraging brand loyalty and raising profitability. This voyage is more than simply a research project; it connects people, ideas, and civilizations and advances our awareness of the intricate network that binds all living things.

Keywords: *Business efficiency, Minmetals, Beijing, state owned enterprise, metal and mining industry.*

1. Introduction

With the development of the global market economy in both developed countries and developing countries, great changes have taken place in the consumer demand structure. These changes include the improvement of people's purchasing power and demand from low level to high level, the convergence demand to personalized, and diversified demand shift. These put forward higher requirements on manufacturers and retailers, encouraging them to diversify their products. Moreover, there are many problems, including economic globalization, information socialization, environmental protection and green consumption movement. In the process of China's economic globalization, small and medium-sized enterprises have gradually become a new economic growth point and a major force to solve employment problems in China. In the process of the development of small and medium-sized enterprises, strategic management is playing a role of overall planning. The correct choice of strategy determines whether these enterprises will rise or fall in this competition, and strategic management indicates the development direction and competitive side of enterprises in the competition.

Whether in developed capitalist countries or emerging developing countries and regions, small and medium-sized enterprises play a decisive role in the national economy. Small and medium enterprises by its smaller, the production and business operation is flexible and elastic, responsive to the market demand change, organization cost, transfer in a convenient wait for a characteristic, adapted to today's rapidly changing market demand, presents the vigorous development of good posture, has now become an important driving force to promote national economic growth and the main channel to increase employment. Many have also become the main source of technological innovation. The operation of small and medium-sized enterprises is no longer just a micro issue of the enterprise itself, or a macro issue related to regional and even national economic development. Therefore, it is necessary to study the development direction of small and medium-sized enterprises in order to formulate strategies suitable for the development of small and medium-sized enterprises.

The aim of this paper is to study the essential approach for business efficiency in Minmetals Enterprise in Beijing, China. This paper also focuses on factors affecting enterprise efficiency and finds suitable methods for enterprises to improve efficiency.

1.1 Research Objectives

2. Literature review

2.1 Introduction to Minmetals Enterprise, Beijing, China

Beijing-based China Minmetals Enterprise stands as a testament to China's formidable presence in the global metals and minerals trade. As a state-owned firm under the direct purview of the State-owned Assets Supervision and Administration Commission (SASAC), its reach and influence extend far beyond the bustling streets of the Chinese capital. With a diverse portfolio spanning copper, aluminium, tungsten, tin, antimony, lead, zinc, and nickel, China

Minmetals holds an important role in the global resource market, leaving an indelible mark on the industries it touches. At its core, China Minmetals is a powerhouse in the realm of metals and minerals. The sprawling enterprise, with its robust production capabilities and an extensive trading network, is a linchpin in the global supply chain. Its operations encompass the entire spectrum of metals and minerals, allowing it to wield substantial influence in shaping market dynamics. From the gleaming skyscrapers of Shanghai to the steel mills of the American Midwest, China Minmetals' products are a cornerstone of modern industry.

Iron and steel are particularly prominent in China Minmetals' vast repertoire. In fact, the company holds the prestigious title of being the largest iron and steel dealer in China, a testament to its important role in underpinning the nation's industrial growth. But its ambitions do not end at the borders of the Middle Kingdom. China Minmetals has positioned itself as a global player, firmly establishing its foothold as one of the most significant mining and metals trading corporations worldwide. The scale of its annual operations is staggering, with the enterprise deftly handling over 12 million tonnes of steel goods each year. This unparalleled capacity has earned it a reputation as an industrial colossus, perpetually on the forefront of global trade. However, China Minmetals is not confined solely to the commodities market. Its business interests extend far beyond metals and minerals, weaving a tapestry of diverse ventures. In a bid to diversify its income streams and expand its influence, China Minmetals has ventured into electrical goods, leveraging its deep industry knowledge to meet the growing demands of a rapidly evolving tech-driven world. This strategic move showcases the enterprise's adaptability and its commitment to remaining at the forefront of innovation.

Mining, real estate development, and oceanic shipping also occupy a prominent place in China Minmetals' expansive portfolio. Its mining ventures are a testament to its approach to resource management, from extraction to distribution. The enterprise's real estate developments reflect its commitment to harnessing its vast resources for the betterment of communities, establishing sustainable urban growth. Simultaneously, its foray into oceanic shipping underscores its commitment to connectivity on a global scale, recognizing the importance of maritime trade in an increasingly interconnected world. China Minmetals Enterprise, with its roots in Beijing, is an emblem of China's ascent as a global economic powerhouse. As a state-owned entity, it wields immense influence under the watchful eye of the SASAC, extending its reach across the entire spectrum of metals and minerals. From iron and steel to copper, zinc, and beyond, its multifaceted operations form the backbone of industries worldwide. Its diversification into electrical goods, mining, real estate, and oceanic shipping underscores its ambition to shape the future. With a strategic presence in the United States and a commitment to sustainability, China Minmetals is more than a corporation; it's a driving force behind global progress. As the world evolves, China Minmetals stands ready to adapt, innovate, and continue its journey as a global giant in metals, minerals, and beyond.

2.2 *Enterprise system*

Rules and regulations within an enterprise serve as the backbone of its operational framework, encompassing a wide array of guidelines, articles of association, procedures, and methodologies designed to govern and optimize its technical and economic activities. These

regulations can be categorized into three primary components: production technical regulations, management systems, and responsibility systems. Together, they form an integral part of the enterprise's superstructure, reflecting both the objective laws governing the production process and the intricacies of production relations.

Production technical regulations constitute a cornerstone within the realm of enterprise rules and regulations. They are meticulously crafted guidelines that dictate the specific methodologies, techniques, and standards to be employed during the production process. These regulations are inherently tied to the objective laws that govern the production of goods and services. For instance, in a manufacturing setting, production technical regulations might encompass specifications for machinery operation, quality control standards, and safety protocols. By adhering to these regulations, enterprises can harness the inherent efficiency and effectiveness of well-defined processes, ultimately leading to enhanced productivity and product quality.

In addition to production technical regulations, the management system constitutes another important aspect of an enterprise's regulatory framework. The management system encompasses the overarching principles, structures, and strategies through which an organization exercises control, coordination, and direction over its resources and activities. It involves defining hierarchies, delineating roles and responsibilities, and establishing communication channels within the organization. The management system is a dynamic entity that adapts to changing circumstances, allowing the enterprise to navigate complex challenges and seize opportunities effectively.

A well-crafted management system not only streamlines operations but also establishes a culture of accountability and transparency within the enterprise. It ensures that decision-making processes are rational and efficient, enabling the organization to respond promptly to emerging trends and market demands. Moreover, a robust management system is essential for aligning the efforts of all stakeholders toward common goals, enhancing collaboration, and optimizing resource allocation.

Complementing the production technical regulations and management system, the responsibility system serves as a critical mechanism for assigning and monitoring individual and collective accountabilities within the organization. It clarifies who is responsible for specific tasks, decisions, and outcomes, thereby preventing ambiguity and finger-pointing. By implementing a clear and well-defined responsibility system, an enterprise can establish a sense of ownership among its employees, empowering them to take ownership of their roles and contributions to the organization's success.

Effective responsibility systems also provide a framework for performance evaluation and feedback, allowing enterprises to recognize and reward high achievers while addressing performance gaps. This not only motivates employees but also contributes to the overall efficiency and effectiveness of the organization.

2.3 *Bargaining power of suppliers*

Suppliers are an integral part of the business ecosystem, wielding a significant influence over the profitability and competitiveness of enterprises in various industries. Their impact is primarily channelled through two key levers: the ability to increase the prices of input factors and the capacity to influence the quality of the unit value. In the dynamic landscape of supply chain management, understanding the strength of supplier power is paramount for businesses seeking to maintain their competitive edge.

The extent of supplier power hinges on several critical factors, the foremost being the nature of inputs they provide to buyers. When suppliers furnish elements that constitute a substantial portion of the total production cost of a product, their role in the buyer's operations becomes important. In such scenarios, the supplier's position transforms into one of immense significance. As they control critical components of the production process, they gain a substantial upper hand in negotiations and can significantly affect the buyer's product quality. This, in turn, amplifies their potential bargaining power over the buyer.

One aspect that further bolsters supplier power is the uniqueness and scarcity of their inputs. If a supplier offers specialized or rare materials that are essential for the production process, they hold a distinct advantage. The scarcity of these inputs can create a situation where buyers are heavily dependent on the supplier, making it challenging for them to switch to alternative sources without incurring substantial costs or compromising on product quality. Consequently, the supplier's influence in such circumstances becomes even more pronounced. Another dimension that plays an important role in supplier power is the concentration of suppliers in the industry. When a particular industry relies on a small number of suppliers for critical inputs, those suppliers wield significant clout. This concentration can limit the buyer's options and make it difficult for them to negotiate favorable terms. The fear of disrupting the supply chain or encountering shortages can compel buyers to acquiesce to the supplier's demands, further enhancing their bargaining power.

2.4 *Bargaining power of the buyer*

Buyers are the lifeblood of any industry, and their influence on the profitability of existing enterprises cannot be underestimated. Their power to lower prices and demand higher product or service quality is a critical factor in shaping the competitive landscape. In examining the bargaining power of buyers, several key reasons come to the forefront, each with its unique implications for businesses. First and foremost, the concentration of buyers plays an important role in determining their bargaining power. When the total number of buyers in an industry is small, but each buyer commands a substantial purchase quantity, it can significantly impact a seller's bottom line. Such buyers hold the sway to negotiate favorable terms, as their purchases often make up a substantial proportion of the seller's sales volume. This dynamic creates a situation where a loss of even a single major buyer can have far-reaching consequences for a company's financial health.

Secondly, the structure of the sell-side industry itself can impact buyer power. In cases where the industry is comprised of numerous small firms, buyers can leverage their position to

demand favorable terms. The presence of many sellers competing for the same buyers can lead to intense price competition, as each seller strives to secure contracts. This situation can result in lower profit margins for businesses, as they may be compelled to offer discounts or additional services to win or retain customers. Thirdly, the nature of the product or service being offered also influences buyer power. When buyers are purchasing a standardized product or service, it becomes economically feasible for them to source from multiple vendors simultaneously. This makes it easier for them to exert pressure on suppliers, as they can easily switch between suppliers without incurring significant switching costs.

Furthermore, advances in technology and the proliferation of e-commerce platforms have made it even easier for buyers to compare prices and products from different suppliers, further enhancing their bargaining power. This digital transparency puts pressure on suppliers to offer competitive prices and maintain high product quality to retain their customer base. The cost of switching suppliers is another critical consideration. If the cost of changing suppliers is low, buyers are more likely to exercise their bargaining power by threatening to switch if their demands are not met. Conversely, in industries where switching suppliers is costly or disruptive, buyers may have less influence over suppliers, as they are less likely to seek alternatives. The bargaining power of buyers in any industry is a multifaceted and dynamic aspect of the business landscape. While the concentration of buyers, industry structure, and the nature of the product or service are key determinants, other factors such as the availability of substitutes, switching costs, and the importance of the purchase also come into play. Understanding and effectively managing buyer power is crucial for businesses seeking to maintain profitability and competitiveness in today's ever-evolving marketplace. To thrive in such an environment, enterprises must continually assess and adapt their strategies to meet the changing demands and expectations of their buyers.

2.5 *The threat of new entrants*

New entrants in any industry hold the promise of revitalizing the competitive landscape. Their arrival ushers in new production capacity and resources, injecting a fresh vitality into the market. However, the optimism surrounding new entrants can also pose a significant threat to existing enterprises. The competition for market share and raw materials intensifies, creating a relentless race to maintain profitability. In this ever-evolving dynamic, established companies often find their margins squeezed, leading to a potential erosion of profits and even jeopardizing their long-term survival.

Product differentiation also ranks as a key barrier to entry. Established companies have spent years cultivating their brand image and perfecting their product offerings. For newcomers, replicating or surpassing this level of differentiation is a formidable task, requiring substantial investments in research and development. The need for capital is another crucial hurdle that entrants must surmount. Industries with high capital requirements effectively deter new players, as they necessitate substantial upfront investments. Accessing the necessary capital can be a daunting challenge, particularly for start-ups and smaller businesses.

The possibility of new enterprises entering an industry is a multifaceted equation. It hinges on the relative evaluation of potential benefits, costs, and risks by aspiring entrants. Barriers to entry, encompassing factors such as economies of scale, product differentiation, capital needs, conversion costs, sales channel development, government policies, cost disadvantages, natural resources, and geographical considerations, can either deter or facilitate new entrants. Additionally, the expected response of incumbent firms, influenced by their financial health, past actions, fixed assets, and the growth trajectory of the industry, shapes the competitive landscape. In this complex dance of market forces, the interplay between new entrants and established players defines the future direction of an industry. Aspiring entrants must carefully weigh their options, knowing that success hinges on navigating these intricate dynamics.

3. Methodology

3.1 Data collection method

This paper randomly distributed questionnaires in the form of survey and collected 147 results as samples. The results of the questionnaire survey were convenient for statistical processing and analysis.

3.2 Data analysis method

Data analysis for this research was conducted using the software SPSS. The data obtained through the survey questionnaire went through several extensive analyses to be interpreted. The analyses utilized included descriptive tests and inferential analysis. The outcomes of descriptive statistics tend to demonstrate whether respondents agree or disagree with the survey items. In order to study and analyze the frequency of responses—i.e., how many or what percentage of respondents agreed or disagreed with the survey's questions—descriptive frequency is applied to the data. The questionnaire given to the respondents (employees) contains a number of questions based on the factors used in this research. Their collected replies were put through a descriptive frequency test, which determined how frequently they disagreed, agreed, or even opted to remain neutral. Pearson correlation is performed on the data to look at how the independent and dependent variables relate to one another. The findings of this test in particular are presented as a Pearson correlation value and sig value. The former one demonstrates the strength of the association, whereas the later one verifies if the relationship really exists. The Pearson correlation test thus illustrates the relationship of factors involved in the essential approach for business efficiency in Minmetals Enterprise in Beijing, China, among other things, when applied to this research.

4. Results and discussion

4.1 Respondents demographic profile

In the first portion of the questionnaire, a few straightforward demographic questions were asked. Their employment status, job title, number of years of employment, and principal industry within the company were all inquired about. The responses to the survey questionnaire were declared genuine and useful for connecting the data to the essential techniques for business efficiency in Beijing, China's Minmetals Enterprise.

The first demographic question inquired the participants about their employment status. The majority of the respondents (129 responses) answered that they were employed full-time at Minmetals Enterprise in Beijing, China accounting for 87.8% of the total sample. The rest of the respondents (18 responses) stated that they were employed part-time at Minmetals Enterprise in Beijing, China accounting for 12.2% of the sample. As per survey conducted, none of the respondents were self-employed or freelancer working with Minmetals Enterprise, or unemployed or not currently working with Minmetals Enterprise in Beijing, China.

The second demographic question asked the respondents to state their job title or role in the organisation. 119 respondents (81.0%) were from non-management. 18 respondents (12.2%) were from junior management. 7 respondents (4.8%) were from senior management. The remaining 2 respondents (1.4%) stated they were from other roles.

In addition, respondents were asked to state the number of years of their work experience in the organization by selecting a range of years from the options provided. 45 respondents (30.6%) stated that they had work experience of 2 years or below. 67 respondents (45.6%) stated that they had work experience of 3 to 5 years. 27 respondents (18.4%) stated that they had work experience of 6 to 9 years. The remaining 8 respondents (5.4%) stated that they had work experience of 10 years and above.

At last, the respondents were asked to indicate their primary working sector in Minmetals Enterprise Beijing, China. 64 respondents (43.5%) stated that they work in metals and mining sector in Minmetals Enterprise. 53 respondents (36.1%) stated that they work in manufacturing and industrial sector in Minmetals Enterprise. 27 respondents (18.4%) stated that they work in construction and infrastructure sector in Minmetals Enterprise. The remaining 3 respondents (2.0%) stated that they work in another sector in Minmetals Enterprise.

4.2 Descriptive analysis of variables

Research hypothesis 1 states that the presence of state-owned enterprises (SOEs) affects firm efficiency. The mean index value is 4.31 and the standard deviation is 0.48 for the research hypothesis 1. SOE1 has an overall mean score of 4.14 (std. deviation = 0.41). SOE2 has a mean score of 4.68 (std. deviation = 0.52). SOE3 has a mean score of 4.18 with a standard deviation of 0.45. SOE4 has a mean score of 4.18 with a standard deviation of 0.46. SOE5 has a mean score of 4.39 with a standard deviation of 0.54. It should be noticed that the mean score for every computed item under the research hypothesis 1 is more than 4.00. Additionally, all of the

items have standard deviations below 1.00, indicating that respondents believe that the presence of state-owned enterprises (SOEs) does affect the overall efficiency of firms.

Research hypothesis 2 states that the choice of managers affects the efficiency of the firm. The mean index value is 4.32 and the standard deviation is 0.54 for the research hypothesis 2. M1 has an overall mean score of 4.32 (std. deviation = 0.51). M2 has a mean score of 4.48 (std. deviation = 0.53). M3 has a mean score of 4.27 with a standard deviation of 0.57. M4 has a mean score of 4.22 with a standard deviation of 0.59. M5 has a mean score of 4.28 with a standard deviation of 0.51. It should be noticed that the mean score for every computed item under the research hypothesis 2 is more than 4.00. Additionally, all of the items have standard deviations below 1.00, indicating that respondents believe that choice of managers does affect the overall efficiency of firms.

Research hypothesis 3 states that product markets can affect business efficiency. The mean index value is 4.28 and the standard deviation is 0.54 for the research hypothesis 3. PM1 has an overall mean score of 4.29 (std. deviation = 0.51). PM2 has a mean score of 4.53 (std. deviation = 0.58). PM3 has a mean score of 4.18 with a standard deviation of 0.59. PM4 has a mean score of 4.13 with a standard deviation of 0.49. PM5 has a mean score of 4.27 with a standard deviation of 0.53. It should be noticed that the mean score for every computed item under the research hypothesis 3 is more than 4.00. Additionally, all of the items have standard deviations below 1.00, indicating that respondents believe that the presence of product markets does affect the overall efficiency of firms.

Research hypothesis 4 states that external factors have an impact on business efficiency. The mean index value is 4.36 and the standard deviation is 0.54 for the research hypothesis 4. EF1 has an overall mean score of 4.41 (std. deviation = 0.55). EF2 has a mean score of 4.35 (std. deviation = 0.61). EF3 has a mean score of 4.58 with a standard deviation of 0.52. EF4 has a mean score of 4.14 with a standard deviation of 0.53. EF5 has a mean score of 4.32 with a standard deviation of 0.48. It should be noticed that the mean score for every computed item under the research hypothesis 4 is more than 4.00. Additionally, all of the items have standard deviations below 1.00, indicating that respondents believe that the presence of external factors does affect the overall efficiency of firms.

State-owned enterprises (SOEs)	Items	N	Mean	Std. Dev
Please rate the extent to which the presence of state-owned enterprises (SOEs) affects the overall efficiency of firms.	SOE1	147	4.14	0.41
Indicate your level of agreement with the statement: The presence of state-owned enterprises creates competition challenges for private firms, leading to reduced efficiency.	SOE2	147	4.68	0.52
Please rate the degree to which the presence of state-owned enterprises affects the level of innovation and technological advancement in private firms.	SOE3	147	4.18	0.45

Indicate your level of agreement with the statement: The presence of state-owned enterprises leads to market distortions and hinders fair competition among firms, impacting overall efficiency.	SOE4	147	4.18	0.46
Please rate the extent to which the presence of state-owned enterprises influences the level of bureaucracy and inefficiency in the business environment.	SOE5	147	4.39	0.54
	Mean Index		4.31	0.48
Choice of managers				
Please rate the extent to which the choice of managers influences the overall efficiency of a firm.	M1	147	4.32	0.51
Indicate your level of agreement with the statement: The selection of competent and skilled managers positively impacts the efficiency of a firm.	M2	147	4.48	0.53
Please rate the degree to which the choice of managers affects the organizational culture and employee motivation, leading to improved efficiency.	M3	147	4.27	0.57
Indicate your level of agreement with the statement: Effective management decisions and leadership practices contribute to the overall efficiency of a firm.	M4	147	4.22	0.59
Please rate the extent to which the choice of managers influences the decision-making processes and problem-solving abilities of a firm, leading to enhanced efficiency.	M5	147	4.28	0.51
	Mean Index		4.32	0.54
Product markets				
Please rate the extent to which product markets affect the overall efficiency of a business.	PM1	147	4.29	0.51
Indicate your level of agreement with the statement: The competitiveness of product markets influences the efficiency of businesses.	PM2	147	4.53	0.58
Please rate the degree to which changes in product markets impact the operational processes and resource allocation of a business, leading to changes in efficiency.	PM3	147	4.18	0.59

Indicate your level of agreement with the statement: The demand and trends in product markets have a significant effect on the efficiency and profitability of businesses.	PM4	147	4.13	0.49
Please rate the extent to which the competitive dynamics and market structure of product markets influence the ability of businesses to achieve and maintain efficiency.	PM5	147	4.27	0.53
	Mean Index		4.28	0.54
External factors				
Please rate the extent to which external factors (e.g., economic conditions, regulatory environment) impact the overall efficiency of businesses.	EF1	147	4.41	0.55
Indicate your level of agreement with the statement: External factors beyond a company's control significantly influence the efficiency of businesses.	EF2	147	4.35	0.61
Please rate the degree to which changes in external factors (e.g., technological advancements, market trends) affect the operational processes and resource allocation of businesses, leading to changes in efficiency.	EF3	147	4.58	0.52
Indicate your level of agreement with the statement: The ability of businesses to adapt and respond to external factors is crucial for maintaining efficiency.	EF4	147	4.14	0.53
Please rate the extent to which external factors, such as competition and customer preferences, influence the decision-making processes and strategic planning of businesses, impacting overall efficiency.	EF5	147	4.32	0.48
	Mean Index		4.36	0.54

Table 1: Descriptive statistics for the current study.

Source: Developed for this research.

4.3 Sample regression

There is a strong link between the independent and dependent variables as indicated by the correlation coefficient (R) value of 0.584. When the correlation coefficient is high, there is a significant link between the variables under investigation (the independent variable and the dependent variable). It was found that the R square, often known as the coefficient of determination, was 0.341 percent. The study's findings indicate that the four independent factors would be able to account for around 34.1% of the variation in firm efficiency in Minmetals Enterprise in Beijing, China.

R	R²	Adjusted R²	Standard Error of the Estimate
0.584	0.341	0.327	1.21764

*Table 2: Model summary of this study.
Source: Developed for this research.*

4.4 Hypothesis testing

The four hypotheses put out for this inquiry are supported. As shown in the table below, all four of the hypotheses considered in the current inquiry are accepted because the significant value is less than 0.01.

Hypothesis	Multiple linear regression	
	Result (sig)	Remarks
RH1: The presence of state-owned enterprises (SOEs) affects firm efficiency.	r = 0.310, Sig. = 0.000 (p < 0.01)	Accepted
RH2: The choice of managers affects the efficiency of the firm.	r = 0.213, Sig. = 0.007 (p < 0.01)	Accepted
RH3: Product markets can affect business efficiency.	r = 0.292, Sig. = 0.000 (p < 0.01)	Accepted
RH4: External factors have an impact on business efficiency.	r = 0.301, Sig. = 0.006 (p < 0.01)	Accepted

*Table 3: Hypotheses testing.
Source: Developed for this research.*

4.5 Pearson's Correlation Coefficient Analysis

The correlation analysis for each variable approaches' statistical significance at a level less than 0.01 when both tails are taken into account. The examination of the correlation produced results that were consistently in the range of 0.902 to 0.934. This leads one to believe that there is a powerful and favorable connection between the independent components (presence of state-owned enterprises, choice of managers, products markets, and external factors) and the dependent variable (firm efficiency).

		SOE	M	PM	EF
SOE	Pearson Correlation	1	0.933**	0.934**	0.926**
	Sig. (2-tailed)		0.000	0.000	0.000
	N	147	147	147	147
M	Pearson Correlation	0.933**	1	0.916**	0.902**
	Sig. (2-tailed)	0.000		0.000	0.000
	N	147	147	147	147
PM	Pearson Correlation	0.934**	0.916**	1	0.921**
	Sig. (2-tailed)	0.000	0.000		0.000
	N	147	147	147	147
EF	Pearson Correlation	0.926**	0.902**	0.921**	1
	Sig. (2-tailed)	0.000	0.000	0.000	
	N	147	147	147	147

Note:

**Correlation is significant at the 95 % confidence level (2-tailed); SOE = State-Owned Enterprises; M = Choice of Managers; PM = Product Markets; EF = External Factors.

Table 4: Table of Pearson Correlation Coefficient Matrix.

Source: Developed for this research.

5. Conclusion and recommendations

As corporate efficiency research progresses, future researchers will have access to a variety of as-yet-unexplored opportunities. The complexities of entry barriers, market demand, and measurability may be unraveled using a number of strategies. Measurability, market demand, and entry obstacles are all crucial elements of the foundation for company efficiency. As they begin their academic careers, aspiring academics will have the chance to dive into these interwoven threads and uncover the fundamental mechanisms that form the landscape of corporate efficiency. Researchers may gain insightful knowledge that helps them formulate strategic decisions and gain a deeper grasp of complex market dynamics and customer behavior by performing a study of these factors. Within the broad spectrum of

research techniques, there are a variety of strategies that enable researchers to tackle the challenges of business efficiency. Researchers may decide to perform a thorough investigation of qualitative research techniques in the future, including holding focus groups, conducting in-depth interviews, and making ethnographic observations. This method makes it easier to examine peoples' perceptions, attitudes, and experiences with regard to company efficiency. Future scholars may decide to use mixed technique approaches to gain a complete knowledge.

By combining the quantitative rigor of data analysis with the qualitative breadth of participant stories, a more comprehensive understanding of company efficiency may be attained. Researchers can bridge the gap between the nuanced perspectives that come from qualitative research and the quantitative trends that appear from data analysis using this strategy. Future researchers may choose to investigate employee perspectives inside online organizations more thoroughly, which is a fascinating area. Employees are in a unique position to provide knowledge about the inner workings of corporate efficiency initiatives since they are insiders.

Through this experiment, researchers will be able to determine if cultural influences serve as moderators or amplifiers, changing the results of similar business efficiency criteria in unanticipated ways. The implications of the lessons discovered on this multicultural voyage extend far beyond the realm of academics. Businesses that conduct business internationally can benefit from having a thorough grasp of how comparable features behave in diverse cultural settings. Using this data, companies may segment their markets in a way that actually appeals to local clients, encouraging brand loyalty and raising profitability. By illuminating the relationship between culture and business efficiency, researchers advance academic discourse and contribute to the evolution of the constantly shifting global business environment. This voyage is more than simply a research project; it connects people, ideas, and civilizations and advances our awareness of the intricate network that binds all living things.

6. References

- i. Al-Ababneh, M. M. (2020). Linking ontology, epistemology and research methodology. *Science and Philosophy*, 8(1), 75-91.
- ii. Bell, S. (1996). *Learning with information systems: Learning cycles in information systems development*. New York: Routledge.
- iii. Bell, E., Bryman, A., and Harley, B. (2018). *Business research methods*. Oxford University Press.
- iv. Bell, E., Harley, B., and Bryman, A. (2022). *Business research methods*. Oxford university press.
- v. Berryman, D. R. (2019). Ontology, epistemology, methodology, and methods: Information for librarian researchers. *Medical reference services quarterly*, 38(3), 271-279.
- vi. Centobelli, P., Cerchione, R., & Esposito, E. (2018). Aligning enterprise knowledge and knowledge management systems to improve efficiency and effectiveness performance: A three-dimensional Fuzzy-based decision support system. *Expert Systems with Applications*, 91, 107-126.
- vii. Dzwigol, H., Shcherbak, S., Semikina, M., Vinichenko, O., & Vasiuta, V. (2019). Formation of Strategic Change Management System at an Enterprise. *Academy of Strategic Management Journal*, 18, 1-8.
- viii. Gao, K., Huang, Y., Sadollah, A., & Wang, L. (2020). A review of energy-efficient scheduling in intelligent production systems. *Complex & Intelligent Systems*, 6(2), 237-249.
- ix. Gillham, B. (2008). *Developing a Questionnaire*, A&C Black, 2008.
- x. Guo, Y., Tong, L., & Mei, L. (2020). The effect of industrial agglomeration on green development efficiency in Northeast China since the revitalization. *Journal of Cleaner Production*, 258, 120584.
- xi. Ikramov, M. A., Mamajonov, H. N., & Toshpulatov, I. A. (2019). IMPROVEMENT OF LIGHT INDUSTRY ENTERPRISES AND COMPETITIVENESS
- xii. Johansson, M. T., & Thollander, P. (2018). A review of barriers to and driving forces for improved energy efficiency in Swedish industry—Recommendations for successful in-house energy management. *Renewable and Sustainable Energy Reviews*, 82, 618- 628.
- xiii. John H. Dunning, Sarianna M. Lundan. Enterprise development strategy research[J]. *SMES*, 2009, 33(2):6~11
- xiv. Johnson, R. B., and Christensen, L. (2019). *Educational research: Quantitative, qualitative, and mixed approaches*. Sage publications.
- xv. Kirill, K., Bobir, T., & Ziedulla, H. (2018). Estimation methodology of efficiency of production capacity management at textile enterprises. 4(1).
- xvi. Kraemer, K. L. (1991). Introduction. Paper presented at The Information Systems Research Challenge: Survey Research Methods.
- xvii. Kwilinski, A. (2018). Mechanism of formation of industrial enterprise development strategy in the information economy. *Virtual Economics*, 1(1), 7-25.
- xviii. Ling, V. V., & Yumashev, A. V. (2018). Estimation of worker encouragement system at

- industrial enterprise. *Espacios*, 39(28), 22.
- xix. Liu, Q., Li, X., & Meng, X. (2019). Effectiveness research on the multi-player evolutionary game of coal-mine safety regulation in China based on system dynamics. *Safety science*, 111, 224-233.
- xx. Liu, Z., Hao, H., Cheng, X., & Zhao, F. (2018). Critical issues of energy efficient and new energy vehicles development in China. *Energy Policy*, 115, 92-97.
- xxi. Malinauskaite, J., Jouhara, H., Ahmad, L., Milani, M., Montorsi, L., & Venturelli, M. (2019). Energy efficiency in industry: EU and national policies in Italy and the UK. *Energy*, 172, 255-269.
- xxii. Maxwell, S. E. (2000). Sample size and multiple regression analysis. *Psychological Methods*, 5(4), 434.
- xxiii. McIntyre, L. J. (1999). *The practical skeptic: Core concepts in sociology*. Mountain View, CA: Mayfield Publishing.
- xxiv. Mertler, C. A. (2021). *Introduction to educational research*. Sage publications.
- xxv. Miao, C., Fang, D., Sun, L., Luo, Q., & Yu, Q. (2018). Driving effect of technology innovation on energy utilization efficiency in strategic emerging industries. *Journal of Cleaner Production*, 170, 1177-1184.
- xxvi. Nguyen, N. T., and Chia, Y. T. (2023). Decolonizing research imagination: A journey of reshaping research epistemology and ontology. *Asia Pacific Education Review*, 1-14.
- xxvii. Pinsonneault, A., & Kraemer, K. L. (1993). Survey research methodology in management information systems: An assessment. *Journal of Management Information Systems*, 10, 75-105.
- xxviii. Salant, P., & Dillman, D. A. (1994). *How to conduct your own survey*. New York: John Wiley and Sons.
- xxix. Saunders, M., and Lewis, P. (2017). *Doing research in business and management*. Pearson.
- xxx. Santa, R., MacDonald, J. B., & Ferrer, M. (2019). The role of trust in e-Government effectiveness, operational effectiveness and user satisfaction: Lessons from Saudi Arabia in e-G2B. *Government Information Quarterly*, 36(1), 39-50.
- xxxi. Saunders, M., and Lewis, P. (2017). *Doing research in business and management*. Pearson.
- xxxii. Saunders, M., Lewis, P. and Thornhill, A. (2019). *Research Methods for Business Students*. 8th ed. Harlow: Pearson
- xxxiii. Shao, Z. (2019). Interaction effect of strategic leadership behaviors and organizational culture on IS-Business strategic alignment and Enterprise Systems assimilation. *International Journal of Information Management*, 44, 96-108.
- xxxiv. Stoecker, R., and Avila, E. (2021). From mixed methods to strategic research design. *International Journal of Social Research Methodology*, 24(6), 627-640.
- xxxv. W Chan Kim Renée .*Blue Ocean Strategy*[M]. In Cambridge:Harvard Business School Publishing, 2005
- xxxvi. Wallace, M., and Sheldon, N. (2015). Business research ethics: Participant observer perspectives. *Journal of Business Ethics*, 128(2), 267-277
- xxxvii. Wang, K., Wu, M., Sun, Y., Shi, X., Sun, A., & Zhang, P. (2019). Resource abundance, industrial structure, and regional carbon emissions efficiency in China. *Resources Policy*, 60, 203-214

- xxxviii. Zhang Chaoyuan, Liang Yu. (2009). Financing Channels for small and medium-sized Enterprises. Beijing: China Machine Press
- xxxix. Zhao Shunlong. (2008). Enterprise Strategic Management. Beijing: Economic Management Press, 2008 Journal of Beijing Business School, 2001, (3):20~24