


FACTORS AFFECTING BUSINESS PERFORMANCE: EXPANDING THEORETICAL MEASUREMENTS

Vu Thi Thanh Thuy^A, Pham Thi Hong Nhung^B, Le Thi Tu Oanh^C, Ngo Thi Kim Hoa^D



ARTICLE INFO	ABSTRACT
<p>Article history:</p> <p>Received 20 February 2023</p> <p>Accepted 08 May 2023</p>	<p>Purpose: The article aims to expand a scale system of factors that impacts on business performance.</p> <p>Theoretical framework: The paper based on the empirical data collected from various types of participants, including accountants (for information providing), managers (for decision-making), sales staff (for work), and lecturers (for research) in Vietnam.</p> <p>Design/methodology/approach: By descriptive and comparative statistical analysis of SPSS 20 software with 124 valid observations, the survey has proposed the scale system of influencing factors (03 groups of external factors, 05 groups of internal factors) and business performance measures (10 financial and 11 non-financial indicators).</p> <p>Findings: This study points out the different evaluations according to the demographic features of survey subjects on the group of financial indicators. Specifically, the group of accountants (representing information providers) obtains a lower score than the group of information users. Likewise, the post-graduated participants show stricter assessments of financial indicators in comparison to the rest of the group.</p> <p>Research, Practical & Social implications: These results suggest the scale system for measuring influencing factors toward business performance in enterprises for further research.</p> <p>Originality/value: The value of the study is providing an expansion of the factors affecting the efficiency of an enterprise and points out a commonly used set of financial performance measurement indicators. Research results provide useful references for research on related issues.</p> <p>Doi: https://doi.org/10.26668/businessreview/2023.v8i5.2134</p>
<p>Keywords:</p> <p>Influencing Factors; External Factors; Internal Factors; Business Performance; Financial Indicators; Non-Financial Indicators.</p> <div data-bbox="169 1025 480 1272" style="text-align: center;">  </div>	

FATORES QUE AFETAM O DESEMPENHO EMPRESARIAL: EXPANSÃO DAS MEDIDAS TEÓRICAS

RESUMO

Objetivo: O artigo visa ampliar um sistema de escala de fatores que impactam no desempenho empresarial.

^A PhD in Finance. University of Labour and Social Affairs. Vietnam.

E-mail: thuyhuong7879@gmail.com Orcid: <https://orcid.org/0000-0002-5960-8876>

^B Master in Finance. Academy of Finance. Vietnam. E-mail: nhungpth.ho@vietcombank.com.vn

Orcid: <https://orcid.org/0009-0001-4720-7215>

^C PhD in Finance. Associate Professor. University of Labour and Social Affairs. Vietnam.

E-mail: oanhletu@gmail.com Orcid: <https://orcid.org/0000-0002-2823-2204>

^D PhD in Finance. Academy of Finance. Vietnam. E-mail: ngokimhoa@hvtc.edu.vn

Orcid: <https://orcid.org/0000-0001-5311-1546>

Estrutura teórica: O artigo baseia-se nos dados empíricos coletados de vários tipos de participantes, incluindo contadores (para fornecer informações), gerentes (para tomada de decisões), equipe de vendas (para trabalho) e professores (para pesquisa) no Vietnã.

Desenho/metodologia/abordagem: Por meio de análise estatística descritiva e comparativa do software SPSS 20 com 124 observações válidas, a pesquisa propôs o sistema de escala de fatores influenciadores (03 grupos de fatores externos, 05 grupos de fatores internos) e medidas de desempenho empresarial (10 financeiros e 11 indicadores não financeiros).

Resultados: Este estudo aponta as diferentes avaliações de acordo com as características demográficas dos sujeitos da pesquisa sobre o grupo de indicadores financeiros. Especificamente, o grupo de contadores (representando os provedores de informação) obtém uma pontuação menor do que o grupo de usuários da informação. Da mesma forma, os pós-graduados apresentam avaliações mais rigorosas dos indicadores financeiros em comparação com o restante do grupo.

Implicações de pesquisa, práticas e sociais: Esses resultados sugerem o sistema de escala para medir fatores que influenciam o desempenho dos negócios nas empresas para pesquisas futuras.

Originalidade/valor: O valor do estudo é fornecer uma expansão dos fatores que afetam a eficiência de uma empresa e apontar um conjunto de indicadores de medição de desempenho financeiro comumente usados. Os resultados da pesquisa fornecem referências úteis para pesquisas sobre questões relacionadas.

Palavras-chave: Fatores Influenciadores, Fatores Externos, Fatores Internos, Desempenho Empresarial, Indicadores Financeiros, Indicadores Não Financeiros.

FACTORES QUE AFECTAN EL DESEMPEÑO EMPRESARIAL: AMPLIACIÓN DE MEDIDAS TEÓRICAS

RESUMEN

Objetivo: El artículo tiene como objetivo ampliar un sistema de escala de factores que impactan el desempeño empresarial.

Marco teórico: el artículo se basa en datos empíricos recopilados de varios tipos de participantes, incluidos contadores (para brindar información), gerentes (para la toma de decisiones), personal de ventas (para el trabajo) y maestros (para la investigación) en Vietnam.

Diseño/metodología/enfoque: A través del análisis estadístico descriptivo y comparativo del software SPSS 20 con 124 observaciones válidas, la investigación propuso el sistema de escala de factores influyentes (03 grupos de factores externos, 05 grupos de factores internos) y medidas de desempeño empresarial (10 indicadores financieros y 11 no financieros).

Resultados: Este estudio señala las diferentes valoraciones según las características demográficas de los sujetos de investigación sobre el grupo de indicadores financieros. Específicamente, el grupo de contadores (que representan a los proveedores de información) obtiene puntajes más bajos que el grupo de usuarios de información. Asimismo, los posgraduados tienen evaluaciones más rigurosas de los indicadores financieros en comparación con el resto del grupo.

Implicaciones de investigación, prácticas y sociales: estos resultados sugieren el sistema de escala para medir los factores que influyen en el desempeño comercial en las empresas para futuras investigaciones.

Originalidad/Valor: El valor del estudio es proporcionar una ampliación de los factores que afectan la eficiencia de una empresa y señalar un conjunto de indicadores de medición del desempeño financiero de uso común. Los resultados de la búsqueda proporcionan referencias útiles para la investigación sobre temas relacionados.

Palabras clave: Factores Influyentes, Factores Externos, Factores Internos, Desempenho Empresarial, Indicadores Financieros, Indicadores No Financieros.

INTRODUCTION

Background

Business performance and the method of evaluating its level still receive controversial assessments in terms of academic fields, due to the lack of consistent agreement on some aspects, especially the unit of evaluation and a valid definition (Comb et al., 2005). More

specifically, Nguyen et al. (2015) examined the firm performance by financial indicators, including Return on Assets (ROA), Return on Equity (ROE), and Return on Sales (ROS). Besides, other scholars obtain the scale measurement of firm performance based on non-financial indicators, such as customer/employee satisfaction, competitive advantages, ... (Orozco, 2016). However, the majority of studies adopt financial indicators which can be measured, like business revenue, profit, and growth rate (Covin et al., 2006; Hill & Jones, 2011).

Justification

There are various opinions among researchers about studying the effects of some significant factors on organizational performance. In Vietnam, Phuoc and Vo (2019) conducted a large survey on 313 Vietnamese small and medium-sized enterprises, which results in 6 groups of factors affecting business efficiency, namely business characteristics, business owners' characteristics, business capital, social relationships, support policies, and renewal operations. Nevertheless, Nguyen and Mai (2011) findings show that there are 05 groups of factors impacting firm performance, including business characteristics, business owners' characteristics, support policies, social relationships, and revenue growth rate. Truong and Nguyen (2010), carried out a study on 60 small and medium-sized enterprises located in 6 provinces in Cuu Long Delta, Vietnam, collecting random samples by geographic features; applying the multivariate linear regression model to evaluate the performance based on the influence of internal factors of enterprises, such as level of education, experiences, firm size, firm sector, the average quantity of employees and capital. Meanwhile, Nguyen et al. (2015) did research on 113 small and medium-sized enterprises in Bac Lieu province, Vietnam with independent variables: Gender, level of education, revenue growth rate, social relationships, business sector, structure, scale, age, revenue growth rate, and support policies.

Objective of the Work or Research Problem

The results of both theoretical reviews and practical research confirm the inconsistency between the scale measurement of factors affecting business performance and the measurement of business performance. Thus, this article aims to develop a scales system, based on the theoretical framework and assessments of survey subjects to provide fundamental knowledge-based resources for similar research.

THEORETICAL BACKGROUND

Those factors that impact business efficiency are examined in two dimensions, namely External and Internal factors.

External Factors

Those factors can be viewed as external factors, which have direct or indirect effects on business operations. According to prior research, external factors mainly refer to the legal environment, economic environment, economical characteristics, technical features of business sectors, the dynamic development of sciences and technologies; business uncertainties arising from activities of enterprises as well as the degree of international integration.

Legal Environment

The initial factor that impacts firm operation is the legal system, for the fact that individuals and organizations are put under the control of regulations of the legal system. Nguyen T. Q (2014) indicates that recent policies of Vietnam have encouraged companies to take part in various economic areas, contributing to stabilizing monetary policy and adjusting the interest rate which provides tax incentives for priority export products while imposing a high tax on restricted import products. Rodríguez-Gutiérrez et al. (2015) also conducted a study examining the impact of macro-environment factors, including the legal environment, on small and medium-sized enterprises' performance in Spain. Results from the empirical analysis have shown that the competitive success of Spanish small and medium-sized enterprises in the service sector is promoted by macroeconomic factors.

Economic Environment

There are several factors from the economic environment that have massive effects on the efficiency of capital use of enterprises, thus influencing the effectiveness of business activities, such as interest rate, inflation, exchange rate, and market price, ...Rodríguez-Gutiérrez et al. (2015) believe that these factors are common for enterprises operating at the same environment. Likewise, Nguyen (2014) also stated that companies that operate in a certain environment have to adapt to it, while internal environment elements have to alter in alignment with external environmental factors. Rodríguez-Gutiérrez et al. (2015) strongly confirm the important role of the constant development of science and technology in accelerating the performance of enterprises.

The Characteristics of the Business Sector

Since enterprises operate in a certain business sector, their performance is also influenced by the characteristics of the sector, in terms of economic and technical dimensions. In detail, those characteristics have a huge impact on the asset structure, degree of risk, seasonality, and capital structure of companies (Psomas & Jaca, 2014), thus affecting capital size, sale revenue, payment method, cost of capital, ... and most importantly, the efficiency of capital use (in particular) and business efficiency (in general) of enterprises. Moreover, the more complicated the economic and technical features are, the worse effect they pose on the performance of the firm. Quiulin Ke et al. (2018) researched factors affecting the business operations of real estate companies in England and Wales. The main findings have shown that the scale of the housing market presents impacts on the operations of enterprises. Accordingly, housing prices vary widely by space and can rapidly change in response to an exogenous demand shock from the market.

Internal Factors

There are also several subjective factors coming from the enterprise itself that affect the business efficiency such as strategies; education, knowledge of managers and the education, knowledge of employees; the rationality of asset structure and the sources of the business capital of enterprises; the need of business capital using; the level of manufacturing utilization...

Business Strategies

Business strategy is viewed as a course of action that can help the firm in attaining its objectives (Moloi & Marwala, 2021). The success of any business is determined by the effectiveness of its strategy. An effective business strategy builds directly on the company's offering and value proposition. According to Rodríguez-Gutiérrez et al. (2015), good business strategies contribute to positive asset management, plus accelerate the efficiency of business activities. Similarly, Santos and Marinho (2018), and Kumar et al. (2020), also agree that business strategies impact the performance of enterprises.

Education, Knowledge of Enterprises Managers

The education, and knowledge of managers perform a huge effect on the enterprise's performance. If they make the right decisions, the results will be positive and vice versa

(Rodríguez-Gutiérrez et al., 2015). Psomas and Jaca (2014) performed a study examining the key factors of total quality management in 151 service organizations, which strongly confirmed that the managerial quality of leadership is a critical factor that has a positive effect on business efficiency. Bahari et al. (2022) pointed out that entrepreneur's personality traits helped them to solve problems excellently, thereby affecting the performance of enterprises.

Education, Knowledge, Enterprise Employees

Employees play an important in the enterprise as the direct or indirect labor force. Therefore, if they have low managerial abilities and knowledge may lead to a negative impact on business efficiency. Research by Pham and Hoang (2019); Migdadi et al. (2016) have shown the same outcome. The study of Psomas and Jaca (2014) also indicates the positive effects on the business efficiency of service enterprises made by employees with a high level of education, knowledge, and ability.

The Suitable Asset and Capital Structure of the Business

The rationality of the structure of assets and business capital in the enterprise helps enterprises to exploit reasonable internal and external capital sources, increasing business efficiency. The use of short-term capital for long-term investment is also a factor that causes liquidity risk to enterprises, and more severely, pushes them to the verge of bankruptcy. Rodríguez-Gutiérrez et al. (2015), and Atmadja et al. (2016) express approval of the significant role of firm size, and financial capital raised through business capital use on organizational performance.

The Level of Modern Technology Application

Researches conducted by Parnell (2011) and Kumar et al. (2020) consider the ability of modern technology utilization as a key factor to foster the effectiveness of business activities. Accordingly, investing in the implementation of new technology will provide favorable conditions for enterprises to improve their labor productivity as well as achieve better firm performance. Vijayakumar and Chandrasekar (2022) showed that the innovative capability of manufacturing had a significant positive relationship with the firm's performance. The result encouraged manufacturing firms to invest in innovation to improve their performance.

The impact of external and internal factors (or objective and subjective factors) can be both positive and negative. Therefore, enterprises need to identify the main factors as well as

their direction to proactively and effectively implement the source of business capital. Table 1 shows the literature review of factors affecting business efficiency.

Table 1. Summary of factors affecting business efficiency

No.	Factor	Summary	Resource
A. External factors			
1.	Legal environment	Legal corridor for business operations: financial policies, tax policies, credit policies... A transparent and favorable environment contributes to the better performance of enterprises	Rodríguez-Gutiérrez et al (2015); Nguyen T. Q. (2014)
2.	Business industry characteristics	Characteristics of products and procedure of manufacturing business: Complex, normal, simple. These characteristics affect the business organization, and the cost of application; thus influencing the business efficiency.	Wood (2006); Huarng et al (2002); Psomas & Jaca (2014); Qiulin Ke et al (2008)
3.	Economic environment	Macro policies; inflation, interest rate; exchange rate; price, risks; the level of openness, and international integration. The stable macroeconomic environment will expand the opportunities for business operations and provide favorable conditions to enhance business efficiency.	Parnell (2011); Rodríguez-Gutiérrez et al (2015); Kumar et al. (2020); Qiulin Ke et al. (2008)
B. Internal factors			
1.	Business strategies	Ability to make business strategies; appropriate marketing strategies, implement the strategies, and support managers in setting the vision for business strategies. The right strategies will contribute to the achievement of financial and non-financial targets.	Parnell (2011); Blackburn et al. (2013); Rodríguez-Gutiérrez et al. (2015); Santos and Marinho (2018); Kumar et al. (2020)
2.	Education, knowledge of enterprises managers	Level of education, the capability of managers; managers' ethics; suitable learning orientation, and the ability of decision-making in business. As the leader of an enterprise, the success of business activities depends on the managers' competency.	Rodríguez-Gutiérrez et al (2015); Psomas & Jaca (2014); Migdadi et al. (2016); Parnell (2011); Santos and Marinho (2018); Bahari et al. (2022)
3.	Education, knowledge, employees	Level of education, professional ability, ethics. Employees contribute directly and indirectly to business goals. Therefore, the level of education, and the capability of accountants, businessmen, and workers,.. help them work better, thus accomplishing the organizational targets.	Hsu et al (2014); Atmadja et al (2016); Rodríguez-Gutiérrez et al. (2015); Huarng et al. (2002); Psomas & Jaca (2014); Pham & Hoang (2019); Migdadi et al. (2016)
4.	The rationality of asset and capital structure	The scale of business capital; the ratio of certain assets to the total asset, the ratio of equity; borrowed capital, and debts. The huge resource of capital and rationality in capital structure will assist enterprises in regulating more business operations.	Wood (2006); Qiulin Ke et al (2008); Rodríguez-Gutiérrez et al (2015); Hsu et al. (2014); Atmadja et al. (2016); Phuoc & Vo (2019)

5	The level of modern technology application.	Efficiently exploiting resources, utilizing the power of the organization, and applying modern technology to enterprises is a good solutions to enhance the performance of business activities.	Parnell (2011); Kumar et al. (2020); Kafetzopoulos et al. (2019); Rodríguez-Gutiérrez et al (2015); Vijayakumar and Chandrasekar (2022)
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Source: Prepared by the authors (2023)

Business Performance

Business performance is the term that manifests the level of utilizing resources of enterprises to achieve business targets. However, both business efficiency and its evaluative criteria are still controversial in academic studies due to the lack of approval in some aspects concerning the unit of analysis as well as an official definition (Comb et al., 2005).

There are a few authors who have selected the scale of business performance as the financial indicator (such as the capability of renovation, the customer, employee satisfaction, and the achievement of a competitive position). However, the majority of researchers have obtained the financial indicators that can be measured, including revenue, profit, and growth rate (Covin et al., 2006; Hill and Jones, 2011). Table 2 shows the scale measurement of business efficiency from previous research.

Table 2. Summary of business performance measures

No.	Scales of measurement	Resource
A. Financial indicators		
1	Revenue	Rodríguez-Gutiérrez et al (2015); Migdadi et al. (2016); Huarng et al. (2002); Psomas & Jaca (2014); Hsu et al. (2014)
2	Profit	Kafetzopoulos et al (2019); Migdadi et al. (2016); Huang et al. (2002); Psomas & Jaca (2014); Hsu et al. (2014)
3	Profit Margin (Profit/Revenue)	Gonzalez-Benito and Lannelongue (2013)
4	Profit margin compared to competitors	Kafetzopoulos et al. (2019)
5	Contribution growth (revenue - variable costs)	Kafetzopoulos et al. (2019); Gonzalez-Benito and Lannelongue (2013)
6	Return on Investment (ROI)	Kafetzopoulos et al (2019); Rodríguez-Gutiérrez et al (2015); Huang et al. (2002); Gonzalez-Benito and Lannelongue (2013)
7	The market value of enterprises	Santos and Marinho (2018)
8	Lower cost	Huang et al. (2002); Hsu et al. (2014); Parnell (2011)
9	Operating cash flow	Psomas & Jaca (2014)
10	Productivity	Kafetzopoulos et al (2019); Psomas & Jaca (2014); Gonzalez-Benito and Lannelongue (2013)
B. Non-financial indicators		
1	Customer satisfaction	Kafetzopoulos et al (2019); Migdadi et al. (2016); Psomas & Jaca (2014); Gonzalez-Benito and Lannelongue (2013)
2	Employee satisfaction	Orozco (2016)
3	Product Quality	Kafetzopoulos et al (2019); Psomas & Jaca (2014)
4	Improve operational efficiency	Kafetzopoulos et al (2019)
5	Business relationship	Kafetzopoulos et al (2019); Migdadi et al. (2016)
6	Market reaction	Santos and Marinho (2018)

7	Increase competitive	Hsu et al. (2014)
8	Ability to improve	Hsu et al. (2014)
9	Ability to improve technology	Hsu et al. (2014)
10	Reputation and image	Gonzalez-Benito and Lannelongue (2013)
11	Market share	Psomas & Jaca (2014); Gonzalez-Benito and Lannelongue (2013)

Source: Prepared by the authors (2023)

RESEARCH METHODS

From the theory, the author builds a questionnaire to assess the consensus on the measurement scales of factors affecting business performance, including internal and external factors, and measure business performance (financial, and non-financial). The number of scales (Table 3) is summarized as presented in the theory (Table 1 and Table 2), following that the factors affecting business performance include 3 external factors and 5 internal factors. The business performance scale includes 10 financial indicators and 11 non-financial indicators.

Table 3. Summary of the scale

Number	Scale	Quantity	Encode
1	External factors	03	E (E01 -> E03)
2	Internal factors	05	I (I01 -> I05)
3	Financial indicators	10	F (F01 -> F10)
4	Non-financial indicators	11	N (N01 -> N11)

Source: Prepared by the authors (2023)

After determining the scale according to the theoretical synthesis, the research steps are as follows:

Step 1: Build a questionnaire on Google form following the factors mentioned above, and send emails to respondents who are lecturers teaching accounting and finance; accountants, managers, and sales staff in Vietnamese enterprises. The questions are rated on a 5-point Likert scale (1- Strongly disagree; 5 - Strongly agree) to assess the agreement on the use of scales in each factor group.

Step 2: Collected data 128 responses, after coding, filtering, and cleaning data, obtained 124 valid votes to perform analysis.

Step 3: Data has been analyzed on SPSS 20 software with descriptive statistics tools, comparison, and graphical presentation.

Table 4. Demographic characteristics

Characteristics		No = 124	Percentage (%)
Gender	Female	76	61.3
	Male	48	38.7
Job position	Lecturers	18	14.5
	Accountants	17	13.7
	Management	25	20.2
	Businessman	64	51.6
	After university	42	33.9
Academic level	University	74	59.7
	Another	8	6.4
Total		124	100

Source: Prepared by the authors (2023)

Table 4 shows the demographics of the individuals who answered the survey. The results showed that the majority of subjects were female (76; 61.3%). In terms of job position, businessmen accounted for the highest percentage (64; 51.6%), followed by managers in enterprises (25; 20.2%), the number of lecturers and accountants participating in the survey is equivalent. In terms of academic level, the majority have university degrees (74; 59.7%), followed by graduate degrees. The above objects are suitable for surveying information about factors affecting the business performance of enterprises from the perspective of experts in the field of finance and accounting and those who perform accounting work and supply analysis and use information.

RESEARCH RESULTS

The Results of the Evaluation of the Scale

Evaluating the scale of external and internal factors

External factors affecting business performance: Legal environment (E01); Economic and Technical characteristics of business fields (E02); Economic environment (E03). The evaluation opinions agree and strongly agree with these scales (mean from 4.02 to 4.21), in which, the technical and economic characteristics of the business line reach the strongly agreed level (mean is 4.21), The remaining 2 scales have a high agreement (Table 5).

Table 5. Evaluation of the external and internal factors

	Mean	N	Minimum	Maximum	Std. Deviation
The scale of external factors					
E01	4.15	124	1	5	0.908
E02	4.21	124	1	5	0.839
E03	4.02	124	1	5	0.850
The scale of internal factors					
I01	4.37	124	1	5	0.841
I02	4.29	124	1	5	0.730
I03	4.23	124	1	5	0.787
I04	4.03	124	1	5	0.919
I05	4.25	124	1	5	0.772

Source: Prepared by the authors (2023)

Internal factors include enterprise resources with 05 scales: Business strategy (I01); Qualification and capacity of the administrator (I02); Qualification and capacity of staff (I03); Reasonable use of assets and capital sources (I04); Exploit existing resources and technological capabilities (I05). The results in Table 2 show that these scales are all rated as strongly agree (means from 4.23 to 4.37), except for the I04 scale which reaches an agreement (mean 4.03). Evaluation of the enterprise strategic scale (I01) reached the highest level, followed by the level and capacity of managers (I02). The scales I03 and I05 are equivalent (Table 5).

Evaluating the performance scale

Table 6. Evaluation of performance scale

	Mean	N	Minimum	Maximum	Std. Deviation
Financial measures					
F01	4.06	124	1	5	0.810
F02	4.17	124	1	5	0.824
F03	4.13	124	1	5	0.954
F04	3.94	124	1	5	0.931
F05	4.02	124	1	5	0.879
F06	4.11	124	1	5	0.867
F07	3.98	124	1	5	0.855
F08	3.82	124	1	5	0.955
F09	3.97	124	1	5	0.883
F10	4.10	124	1	5	0.909
None-Financial measures					
N01	4.37	124	1	5	0.791
N02	4.13	124	1	5	0.806
N03	4.40	124	1	5	0.815
N04	4.24	124	1	5	0.726
N05	4.20	124	1	5	0.765
N06	4.15	124	1	5	0.817
N07	4.27	124	1	5	0.800
N08	4.11	124	1	5	0.809
N09	4.27	124	1	5	0.866
N10	4.30	124	1	5	0.836

N11	4.24	124	1	5	0.849
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Source:Prepared by the authors (2023)

Financial measures to evaluate business performance surveyed include 10 categories, from F01 to F10. Table 3 shows the evaluation results of the survey subjects, with the opinions having many fluctuations among the criteria but still reaching the agreement level (mean from 3.82 to 4.17). The highest agreed metrics are profit (F02), profit margin (F03), ROI (F06), and productivity (F10). The group of indicators at a lower level are revenue (F01), interest growth (F05), the market value of enterprises (F07), and cash flow (F09). The indicator of cost reduction (F08) was rated the lowest, but still reached the level of “agree”.

Non-financial measurements include 11 indicators (Table 6). Most of the evaluation results on these measures reached the level of “Strongly agree” (mean from 4.2 to 4.4), especially the indicator of employee satisfaction (N02), the level of response to the market (N06), and ability to improve (N08) were rated lower, but still reached “Agree”. The criteria of customer satisfaction (N01) and product quality (N03) were the highest. The indicators in the second-highest group include the reputation and image of enterprises (N10), increasing competitiveness (N07) and ability to improve technology (N09), improving operational efficiency (N04), and market share (N11), business relationship (N05).

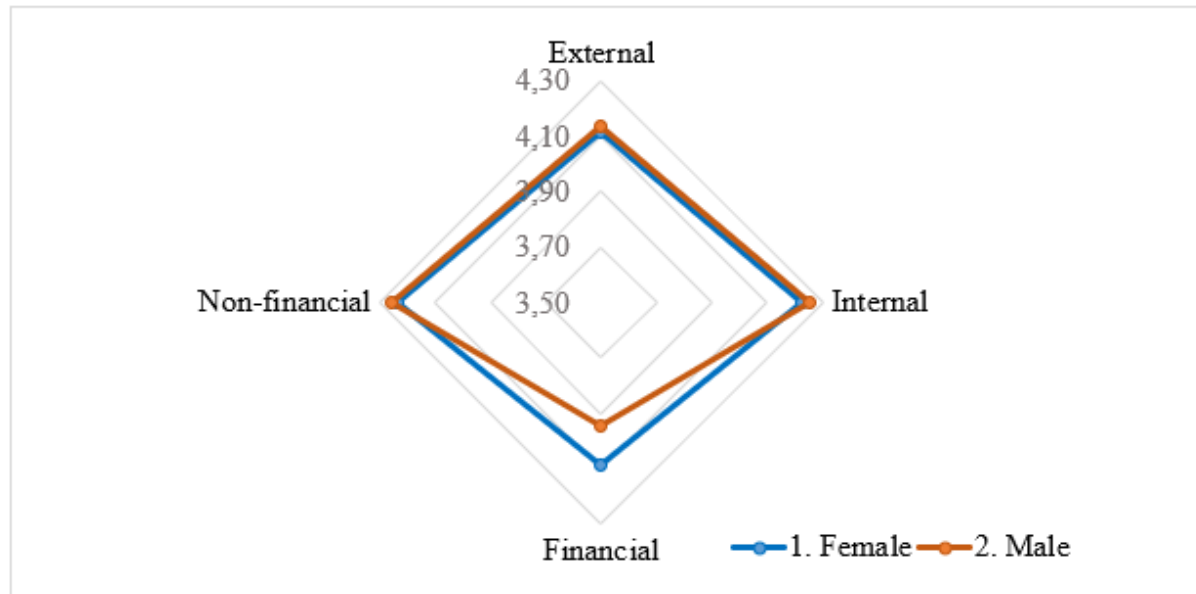
Comparison of rating scales according to demographic characteristics

To consider from the viewpoint of the survey respondents on the scales of factors affecting business performance (internal and external), performance measures (financial, financial indicators), and research using a comparison of outcomes by gender, job position, and academic level.

By gender

Consider 04 groups of factors affecting business performance to find out the difference between the 2 groups (male and female) (Figure 1). The results show that these two groups of subjects have relatively similar views on internal factors, external factors, and non-financial measurement. As for the financial indicators, females agreed higher than males. According to demographic statistics, the majority of the female are businessmen (information users). Specifically, the difference by job position will be analyzed in Figure 2.

Figure 1. Comparison of rating scales by gender

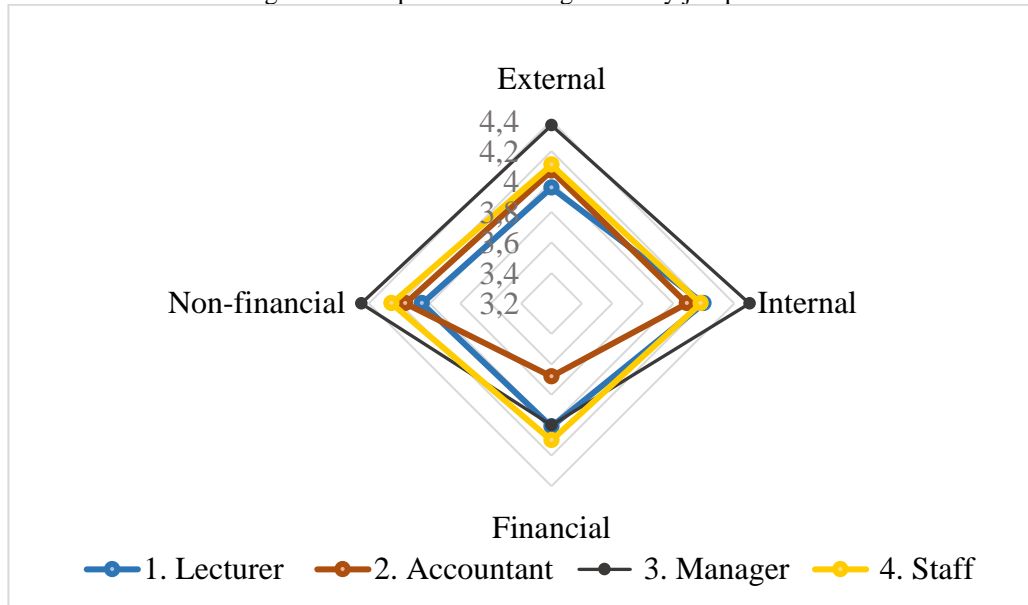


Source: Prepared by the authors (2023)

By job position

The results of Figure 2 show that, when assessing the views on the efficiency scale and influencing factors of the job position, the groups made different choices about each criterion. The management group, which is typical for using information for decision-making, has the highest level of agreement on the proposed scales, followed by the sales team, using the evaluation information in performing assigned work. Groups of businessmen, lecturers, and accountants have the same choice of internal and external factor scales and non-financial measurements. Particularly for financial indicators, the accounting group, representing the object providing financial information, had the lowest rating compared to the remaining groups, which are management (using information for decision-making), businessmen (for job evaluation), or lecturers (for research).

Figure 2. Comparison of rating scales by job position

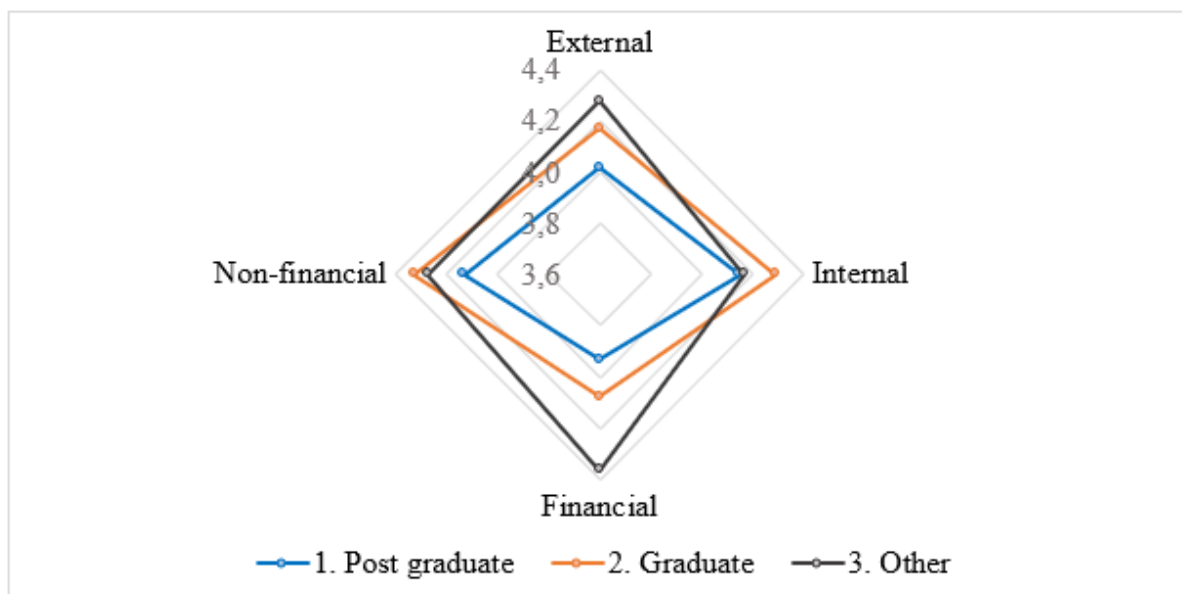


Source: Prepared by the authors (2023)

By academic level

In terms of academic level, the groups had relatively different assessments. The other group of qualified subjects had the highest agreement, especially on financial measurements and external factors. The group with a university degree evaluated 4 groups of scales relatively evenly, in which, internal factors were rated the highest by this group. The graduate-level group has the lowest rating on all measures.

Figure 3. Comparison of rating scales by academic level



Source: Prepared by the authors (2023)

CONCLUSION

By summarizing literature reviews about factors affecting business performance, the author has systematized the scale measurement of influencing factors (external and internal) and measurement of business indicators (financial and non-financial) from previous studies. Based on these results, the author has collected evaluations from participants (including lecturers in financial accounting (representing researchers), managers (representing the user of information to make decisions), salesmen (representing the people directly involved in the evaluation of business targets), and accountants (representing for information providers). The results have shown that the majority of survey subjects agree with the scale measurement of external and internal factors that affect business efficiency (mean from 4.02 to 4.37). However, in the scale measurement of evaluating business efficiency (including financial and non-financial indicators), the mean of the group of non-financial indicators is relatively higher (from 4.11 to 4.4); meanwhile the group of financial indicators, despite the high level of “agree”, has the wider range of mean (from 3.83 to 4.37). In general, the indicators of profit, profit margin, ROI, and productivity still perform the highest outcomes, while the indicator of cost reduction receives the lowest score.

Analyzing the demographic characteristics of survey subjects (gender, job position, level of education), it can be seen that the evaluations are diverse according to these characteristics. In detail, regarding gender, both males and females agree on the financial cost as well as external/internal factors; however, the group of female subjects has a higher quality of scale measurement evaluation. In terms of job position, the group of managers assesses those measurements by "agree" more than other groups. On the contrary, the group of lecturers and accountants has the same evaluation on the scale measurement of internal/external and non-financial but poses a different assessment of financial indicators. The financial indicators receive the lowest score from the group of accountants, in comparison to other indicators. Concerning the level of education, all of the survey subjects impose the similar score in internal factors and non-financial measurement, but for the external factors and financial measurement, the outcomes vary, whereby the under- graduated subjects have the highest rate of “agree”, followed by the university-level group, while the post-graduated rate the lowest. This result manifests the careful evaluation of the group with a high level of education, which usually researches external factors, compared to the rest of the survey subjects. The findings also suggest applying the scale measurement of factors affecting the business efficiency of enterprises in future quantitative research.

REFERENCES

- Atmadja, A. S., Su, J.-J., & Sharma, P. (2016). Examining the impact of microfinance on microenterprise performance (implications for women-owned microenterprises in Indonesia). *International Journal of Social Economics*, 43(10), 962-981.
- Bahari, N., Saufi, R. A., Zainol, N. R., Samad, N. S. A., & Yaziz, M. F. A. (2023). Entrepreneur's Personality Traits and Firm Performance of Malaysian Smes: Mediated by Market Orientation. *International Journal of Professional Business Review*, 8(1), e01260. <https://doi.org/10.26668/businessreview/2023.v8i1.1260>
- Barclay, L.J. (2005). "Following in the footsteps of Mary Parker Follett: Exploring how insights from the past can advance organizational justice theory and research", *Management Decision*, Vol. 43 No. 5, pp. 740-760. <https://doi.org/10.1108/00251740510597752>
- Blackburn, R., Hart, M., & Wainwright, T. (2013). Small business performance: business, strategy and owner-manager characteristics. *Journal of Small Business and Enterprise Development*, 20(1), 8-27. doi:DOI 10.1108/14626001311298394
- Combs, J.G., Russell Crook, T. and Shook, C.L. (2005). "The Dimensionality of Organizational Performance and its Implications for Strategic Management Research", Ketchen, D.J. and Bergh, D.D. (Ed.) *Research Methodology in Strategy and Management (Research Methodology in Strategy and Management, Vol. 2)*, Emerald Group Publishing Limited, Bingley, pp. 259-286. [https://doi.org/10.1016/S1479-8387\(05\)02011-4](https://doi.org/10.1016/S1479-8387(05)02011-4)
- Covin, J., Green, K., & Slevin, D. (2006). Strategic Process Effects on the Entrepreneurial Orientation–Sales Growth Rate Relationship. *Entrepreneurship Theory and Practice*, 30(1), 57-81. doi:<https://doi.org/10.1111/j.1540-6520.2006.00110.x>
- Emma H. Wood. (2006). The internal predictors of business performance in small firms: A logistic regression analysis. *Journal of Small Business and Enterprise Development*, 13(3), 441-453. doi:DOI 10.1108/14626000610680299
- Freeman, R. E. 1984. Strategic management: A stakeholder approach. Boston: Pitman
- Goldratt, E.M. and Cox, J. (1984). *The Goal: Excellence in Manufacturing*. North River Press, Great Barrington, MA.
- Gonzalez-Benito, J., & Lannelongue, G. (2014). An integrated approach to explain the manufacturing function's contribution to business performance. *International Journal of Operations & Production Management*, 34(9), 1126-1152. doi:DOI 10.1108/IJOPM-08-2011-0297
- Hill, C. W., & Jones, G. (2011). *Essentials of Strategic Management*. (3rd, Ed.) SouthWestern College Pub.
- Hopwood, A. (1972). Empirical Study Of Role Of Accounting Data In Performance Evaluation. *Journal of Accounting Research*, 10, 156-182.
- Hsu, M.-S., Lai, Y.-L., & Lin, F.-J. (2014). The impact of industrial clusters on human resource and firms performance. *Journal of Modelling in Management*, 9(2), 141-159. doi:DOI 10.1108/JM2-11-2012-0038

- Huang, F., & Chen, Y.-T. (2002). Relationship of TQM philosophy, methods and performance: a survey in Taiwan. *Industrial Management & Data Systems*, 102(4), 226-234.
- Jensen, M.C. and Meckling, W.H. (1976). Theory of the firm: Managerial behavior, agency costs and Capital structure. *Journal of Financial Economics*, 3, 305–60
- Kafetzopoulos, D., Gotzamani, K., & Skalkos, D. (2019). The relationship between EFQM enablers and business performance: The mediating role of innovation. *Journal of Manufacturing Technology Management*, 30(4), 684-706. doi:10.1108/JMTM-06-2018-0166
- Ke, Q., Isaac, D., & Dalton, P. (2008). The determinants of business performance of estate agency in England and Wales. *Property Management*, 26(4), 255-272. doi:10.1108/02637470810894894
- Kumar, R., Singh, K., & Jain, S. (2020). An empirical exploration of Agile manufacturing for enhanced business performance in Indian manufacturing industry. *World Journal of Science, Technology and Sustainable, Development*, 17(1), 90-111. doi:DOI 10.1108/WJSTSD-07-2019-0040
- Marshall, A. (2009). *Principles of Economics, Eight Edition*. New York: Cosimo, Inc.
- Migdadi, M. M., Abu Zaid, M. K., Al-Hujran, O. S., & Aloudat, A. M. (2016). An empirical assessment of the antecedents of electronic-business implementation and the resulting organizational performance. *Internet Research*, 26(3), 661-688. doi:10.1108/IntR-08-2014-0203
- Moloi, T., Marwala, T. (2021). A Brief Overview of the Firm's Strategy. In: Artificial Intelligence and the Changing Nature of Corporations. *Future of Business and Finance*. Springer, Cham. https://doi.org/10.1007/978-3-030-76313-8_3
- Nguyen, N. Q., & Mai, N. V. (2011). Factors affecting the business performance of small and medium enterprises in Can Tho City, Vietnam. *Journal of Science*, 19(b), 122-129.
- Nguyen, Q. T. (2014). Factors affecting the business environment of Vietnamese enterprises in the post-WTO period. *Urban Economics Magazine*, 70. Retrieved from <https://thegioiuiat.vn/bai-viet-hoc-thuat/cac-nhan-to-tac-dong-den-moi-truong-kinh-doanh-cua-cac-doanh-nghiep-viet-nam-giai-doan-hau-wto-5800/>
- Nguyen, T. M., Tang, N. T., & Lam, B. H. (2015). Factors affecting the business performance of construction enterprises in Bac Lieu province, Vietnam. *Vietnam Industry and Trade Magazine*, 38, 34-40. Retrieved from <https://tapchicongthuong.vn/bai-viet/cac-yeu-to-anh-huong-den-hieu-qua-hoat-dong-kinh-doanh-cua-doanh-nghiep-xay-dung-tai-tinh-bac-lieu-69683.htm>
- Orozco, D. B. (2016). Understanding The Impact Of Management Control Systems Over Capabilities And Organizational Performance, Under The Influence Of Perceived Environmental Uncertainty. *Doctoral Thesis*. Barcelona, Spain.
- Parnell, J. (2011). Strategic capabilities, competitive strategy, and performance among retailers in Argentina, Peru and the United States. *Management Decision*, 49(1), 130-155.

Pham, L., & Hoang, H. (2019). The relationship between organizational learning capability and business performance: The case of Vietnam firms. *Journal of Economics and Development*, 21(2), 259-269. doi:10.1108/JED-10-2019-0041

Phuoc, H. M., & Vo, H. T. (2019). Factors affecting the business performance of small and medium enterprises in Ben Tre city. *Communist magazine*, 8(2).

Psomas, E., & Jaca, C. (2016). The impact of total quality management on service company performance: evidence from Spain. *International Journal of Quality & Reliability Management*, 33(3), 380-398. doi:DOI 10.1108/IJQRM-07-2014-0090

Rodríguez-Gutiérrez, M. J., Moreno, P., & Tejada, P. (2015). Entrepreneurial orientation and performance of SMEs in the services industry. *Journal of Organizational Change*, 28(2), 194-212. doi:10.1108/JOCM-01-2015-0020

Santos, I. L., & Marinho, S. V. (2018). Relationship between entrepreneurial orientation, marketing capability and business performance in retail supermarkets in Santa Catarina (Brazil). *Innovation & Management Review*, 15(2), 118-136. doi:10.1108/INMR-04-2018-008

Truong, L. D., & Nguyen, T. D. (2010). Business efficiency of small and medium enterprises in the Mekong Delta, Vietnam. *Banking Technology Magazine*, 50, 11-16.

Vijayakumar, V. ., & Chandrasekar, K. . (2022). Moderating Role of Commercial Capabilities on Firm Performance Through Innovative Capability in Manufacturing Msmes. *International Journal of Professional Business Review*, 7(3), e0620. <https://doi.org/10.26668/businessreview/2022.v7i3.0620>.