RELATIONSHIP BETWEEN COMPETITOR-BASED MARKETING MIX STRATEGIES AND PRODUCTION ACTIVITIES IN MANUFACTURING AND RENEWABLE ENERGY COMPANIES

Nguyen Thi Phi Nga,

PhD, VNU, University of Economics and Business Administration

ngantp@vu.edu.vn

Pham Van Tuan,

Asso.Prof, PhD, National Economics University (NEU), Hanoi Vietnam phamvantuan@neu.edu.vn

Dinh Tran Ngoc Huy,

MBA (corresponding), Banking University HCMC, Ho Chi Minh city Vietnam - International University of Japan, Niigata, Japan

dtnhuy2010@gmail.com

Le Thu Ha,

PhD, Faculty of Basic Science, Thai Nguyen University of Economics and Business Administration, Vietnam. Lethuha.cva@gmail.com

Dao Thi Huong,

PhD, Thai Nguyen University of Economics and Business Administration (TUEBA), Vietnam <u>dthuong2020@tueba.edu.vn</u>

Article history:Received 07 October 2021 Revised 05 November 2021 Accepted 08 November 2021

Abstract

During industry 4.0, manufacturing and renewable energies companies in Vietnam has many opportunities and challenges in their operation and business, as well as solutions for competitor-based marketing mix strategies, as theory of M.Porter has mentioned competitor and competition in 5 -forces model in their business environment. Using statistics and qualitative analysis, this paper results show that manufacturing industry generally and specifically, The renewable energy firm will build a reasonable purchasing network in the country and expand market more, hence, authors propose marketing mix solution sat the end of the paper. We also recognize the importance of SWOT analysis applied in manufacturing and renewable energy sector. Last but not least authors aim to make proper recommendations for development of manufacturing and renewable energies companies in Vietnam case.

Keywords: production activities, competitor-based marketing strategies, renewable energy, manufacturing firms

1. Introduction

Manufacturing is the process of transforming inputs into outputs. The purpose of this transformation is to create added value to provide to customers. Inputs to the transformation process include human resources, capital, technology, raw materials, land, energy, and information. The outputs of the transformation are products, services, wages, and environmental impacts.

Product creation management is the synthesis of activities to build a system to create products and control the process of using input factors to create output products according to customer requirements in order to fulfill the following objectives and defined target.

Next, Green marketing can be seen as one of the types of marketing with explosive growth in the current context. That remarkable development comes not only from the interest of the business sector, but also from the efforts of scientists in developing and reinforcing theoretical values, as well as operational strategies. practices of green marketing.

Last but not least, we also need to address risk in manufacturing activities and marketing mix strategies to help them to expand markets and overcome difficulties.

Research questions

Question 1: What are renewable energy process and manufacturing management issues currently? Question 2: What are risks in manufacturing industry - a case in Vietnam?

Question 3: What are recommendations for competitors-base marketing in manufacturing company activities?

2. Literature review

The production function is a basic business function, it affects the success and development of the business because it directly affects the products and services provided, affects the cost and quality. quantity. More than ever to succeed and develop sustainably an enterprise needs to properly appreciate the importance of production management.

Beside, Pham Van Tuan, Dinh Tran Ngoc Huy, Pham Khanh Duy (2021) stated competitor based marketing strategies are necessary in various industries.

Hence ,we summarize previous studies as follows:

Authors	Year	Content, results
Whybark	1994	If there is to be meaningful
		coordination between the
		sales/marketing function and
		manufacturing, there should
		be means by which marketing
		can have an impact on
		manufacturing practices. This
		research seeks evidence that
		marketing does influence the
		manufacturing practices of
		companies in four regions of
		the world. Evidence of such
		influence is found when
		marketing participates in the
		planning of manufacturing
		activities, sales sets priorities
		for production of products or
		changes in production reflect
		changes in the market place.
Omurgonulsen & Surucu	2008	The most important strategic
		priority is found to be quality

Table 1 - Summary of related studies

		for both demonstrate
		for both departments.
		Interpersonal communication
		as the most frequently applied
		technique for conflict
		resolution is emphasized by
		both departments, whereas the
		desired conflict handling
		styles differ. The employees
		of manufacturing department
		propose common goal setting,
		empathy and feedback as the
		keys to conflict resolution,
		whereas the employees of
		marketing department mostly
		believe that systematic rules
		and good planning are the
		most appropriate and desired
		methods
Kalitko	2012	Kalitko (2012) has shown the
		process of pyrolysis of waste
		tires by thermal recycling by
		heating at high temperatures
		(500 degree C) which will
		generate FO-R oil (liquid) and
		carbon black with yields of
		50% and 35%
Bright et al	2017	that there are production,
		technology and marketing
		challenges hindering the
		operations of ASCo.
		Management of the company
		has over the years taken
		stringent measures to reduce
		the impact of some of these
		problems to the barest
		minimum.
Phuong, N.T.T., Huy, D.T.N,	2020	Banks have vital roles in
Tuan, P.V		financing industries

3. Methodology

Authors mainly use qualitative analysis based on descriptive statistics and quantitative results of risks of manufacturing industry in Vietnam.

Authors also use experience and observations to describe pyrolysis technology in renewable energy companies.

Authors also make SWOT analysis and recommendations for marketing mix strategies.

4. Main findings

4.1 Description of renewable energy firms - A typical example in Vietnam

Renewable energy activity can be considered in a typical wast tire pyrolysis case, in which we convert waste tire into FO-R oil and carbon and scrap steel under pyrolysis technology, as we see in below picture:



Figure 1- Input material as waste tires

(source: internet)

Based on Principle of pyrolysis technology: Pyrolysis is the result of heating a long chain of a macromolecular compound in the absence of oxygen. Heat is what causes molecules to move, the higher the temperature, the faster the molecules will move. At temperatures above 237°C, the movement causes weaker bonds in the molecules to separate, creating new shorter molecules.

Next, we see pyrolysis system to heaten waste tires and convert into pyrolysis FO-R oil renewable under very high temperature as below figure:

Figure 2 - Pyrolysis lines



(source: internet)

We also make SWOT analysis in renewable energy firms a below: Table 2 - SWOT analysis

STRENGTHS

Human resource:

- Engineers: a lot of experience, capability, creativity. Experienced engineers in petrochemical industry, mechanical design, gas pipeline. Our engineers have been involved in large projects in the chemical and petroleum groups in Vietnam and abroad.

- A team of skilled, young, enthusiastic workers, who are willing to learn and trained to participate in production operations.

- Specialists: have in-depth knowledge in the field, passionate in researching new ideas in order to optimize



WEAKNESSES

-Firm products such as Firm FO-R oil mainly focus on the domestic market - Input prices are not stable when buying input materials in the country

- The selling price of oil depends on the market price in the world.

- In Viet Nam, the field of waste treatment into renewable energy is a new industry, so it is necessary to have more improvements and intensive research in

 efficiency, increase value, as well as passion in researching technology and solutions to increase efficiency and pyrolysis yield, minimize wastes and their negative impact on the environment. Executive management: experienced, dedicated, responsive and effective management, held high positions in the large Viet Nam and foreign corporations such as Unilever Vietnam, Vingroup. Shareholders-Board Of Director: Strong financial capability, strong and extensive relations, experienced in trading, management, operation, investment as well as in production Technology: Firm is specialized in the field of renewable energy, we apply advanced science and technology to transform raw materials (waste tires) into useful products such as Firm FO-R Oil and Carbon Black. With a closed pyrolysis system, and an advanced carbon black refining system, we have marketed products with quality assurance -Product: Firm FO-R oil has good quality to meet Vietnam standard TCVN 6239: 2002. It is higher than conventional FO and has lower sulfur content. Firm's products are accepted by the companies who have stringent quality control procedures over the past five years. Price: competitive and always lower than traditional FO price (5-20%. 	order to have higher value added products on the market. Firm requires more intensive and long-term research to improve the technology and product quality. - Marketing activity has not been much, so some customers are not aware of Firm FO-R oil although Firm FO-R oil has higher quality and lower price than traditional FO.
 OPPORTUNITIES Input material Waste tires in Vietnam and the world are constantly increasing as an abundant source of materials for DVA. Vietnam is preparing to step into the boom of cars, in 2017 sales reached 272,750 vehicles, by 2025 expected demand for cars can reach 600,000 vehicles per year. The number of cars and trucks in Vietnam is constantly growing, leading to the increasing volume of tires in the environment estimated at 400,000 tons / year. This creates a huge supply of materials for Firm's manufacturing operation. Output Products Vietnam's energy demand is always in shortage and must be imported from abroad. This ensures that the output of DVA is always in demand and consumed completely. Vietnam always imports energy from overseas with large 	THREATS -Macroeconomic environment Vietnam economy is unstable: inflation, economic crisis. Vietnam oil price depends on world oil price - Purchase points, tire yards are not focused but dispersed - There are no professional companies to collect, purchase, process. Press raw tires for transportation easily. Input materials (waste tires) are still scattered not concentrated, unstable and mainly bought from contractors and

Vietnam always imports energy from overseas with large import volume, so Firm's outputs with guaranteed quality and competitive price are always consumed by the long implementation time lead to unstable

market. In the near future, Firm FO-R oil will replace	input material price while output price
about 8% of Vietnam's imported FO oil, in order to	follows the world market and must ensure
reduce partially the burden of trade deficit for Vietnam as	continuous supply to customers after
well as to lower production cost to increase competitive	signing the contract.
capability for customers' products.	
-Development trends:	
The company is one of the leading companies in Vietnam	
transforming waste tires into renewable energy	
The development of waste treatment into renewable	
energy and beneficial products for society, reducing the	
amount of waste to the environment to protect the	
environment is a global trend of the era which creates the	
development of the firm. This is an industry that is being	
researched and developed by the world and a special	
sector receiving incentives of the government of	
Vietnam.	
-Incentives for the field of renewable energy:	
Land tax: land allocated, low land rent	
Import tax for expanded investment project: Free import	
tax for imported goods to create fixed assets, materials,	
supplies for the execution of investment project.	
CIT: 2 years exemption, 4-year reduction (50%) and	
corporate income tax rate of 10% for the whole life of the	
project.	
- Price: According to forecast of organizations around the	
world, oil prices in the world will continue to increase in	
the future. World oil price is the lowest in Q1 / 2016 (26	
dollars / barrel) and then tends to increase from 2017 to	
now. It is currently at 70 USD / barrel and is expected to	
increase in the future as an opportunity for renewable	
energy firms to grow its business.	

(source: authors analysis)

- Hence, in the future, The renewable energy firm will build a reasonable purchasing network in the country, together with the investment in machinery and equipment, vehicles for collection and processing of raw materials at the collection place to utilize the volume of transportation, reduce transportation cost and be more active in the purchase price and volume of input materials
- In addition, the firm is also seeking and advising the government and authorities on the planned disposal of waste tires from automotive repairers, the organized storage, as well as pressing, packaging and transporting waste tires to waste treatment zone in a reasonable, scientific way. This will contribute to reducing the impact of waste tires to the environment, minimizing the area of waste tires and quickly transforming waste tires into renewable energy, which increases value added for Vietnam and addressing environmental pollution for the society.

4.2 Manufacturing management issues in Vietnam We present several manufacturing management issues as follows:

First, this is document management in production firms. Many production enterprises still manage production batch records (manufacturing process, product formula, production stages ...) on paper.

It's easy to get stuck with a pile of files. If you need to look up, it will take a long time, not only that, but also waste paper and storage. In the current stage of technology development, this management method is gradually outdated, easy to lose information, and poorly updated.

Second, this is management of inventory. Manage inventory and product expiration dates, and calculate minimum reserves of inventory.

Materials, equipment and supplies need separate storage conditions, in a safe environment, even a small mistake can cause great consequences. Inventory storage costs will be very high if the inventory is large and the business has to face product destruction when it expires. Management therefore needs to ensure that inventory is used before the expiration date.

Third, Quality Management of Finished products:

Products and production needs to follow the standards of Vietnam or Global. Each stage in the technological chain, from input source, production, packaging to output, needs to be strictly controlled to ensure that there are no errors, otherwise it will become damaged products that cannot be consumed. Production includes many different production stages, respectively, the requirements for monitoring and quality control are implemented with many different criteria. All stages must be counted in order to serve the control of production progress and traceability.

Fourth, Enterprises in the fields of manufacturing, real estate and retail (supermarkets), are also negatively affected by supply chain uncertainties, demand and revenue decline.

4.3 Risk in manufacturing industry - A case in Vietnam

We estimate market risk in manufacturing industry in Vietnam in 3 scenarios as below:

- Scenario 1: Keep competitor size as current
- Scenario 2: Competitor size smaller slightly

- Scenario 3: Competitor size double

	-	etitor size as surrent			oetitor size tly smaller			etitor size ouble	
Statistic results	Equity beta	Asset beta (assume debt beta = 0)	Difference	Equity beta	Asset beta (assume debt beta = 0)	Difference	Equity beta	Asset beta (assume debt beta = 0)	Differ ence
MAX	2,056	1,151	0,905	2,056	1,151	0,905	2,056	1,151	0,905
MIN	-0,648	-0,085	-0,562	-0,648	-0,434	-0,214	-0,413	-0,085	-0,327
MEAN	0,694	0,336	0,358	0,652	0,311	0,341	0,716	0,349	0,366
VAR	0,2142	0,0659	0,148	0,2556	0,0772	0,178	0,1931	0,0643	0,129
			Note	Sample :	size : 121 firms				

Table 3 - Statistical results (FL	in case 1) (source:	VN stock exchange 2012)
-----------------------------------	---------------------	-------------------------

Table 4 – Statistical results (FL in case 2) (source: VN stock exchange 2012)

•		Competitor size as current		Competitor size slightly smaller				etitor size ouble		
Statistic results	Equity beta	Asset beta (assume debt beta = 0)	Difference	Equity beta	Asset beta (assume debt beta = 0)	Difference	Equity beta	Asset beta (assume debt beta = 0)	Differe nce	

MAX	2,056	1,327	0,729	2,056	1,327	0,729	2,056	1,038	1,018
MIN	-1,559	-0,445	-1,114	-1,559	-0,906	-0,652	-0,839	-0,445	-0,394
MEAN	0,630	0,222	0,408	0,595	0,203	0,392	0,655	0,230	0,424
VAR	0,2886	0,0722	0,216	0,3398	0,0854	0,254	0,2543	0,0649	0,189
Note: Sample size : 121 firms									

Table 5- Statistical results (FL in case 3) (source: VN stock exchange 2012)

	-	titor size as urrent		Competitor size slightly smaller			Competitor size double		
Statistic results	Equity beta	Asset beta (assume debt beta = 0)	Difference	Equity beta	Asset beta (assume debt beta = 0)	Difference	Equity beta	Asset beta (assume debt beta = 0)	Difference
MAX	2,056	1,239	0,817	2,056	1,239	0,817	2,056	1,239	0,817
MIN	-0,191	-0,098	-0,093	-0,191	-0,140	-0,051	-0,150	-0,098	-0,052
MEAN	0,737	0,428	0,309	0,690	0,397	0,294	0,757	0,442	0,315
VAR	0,1795	0,0719	0,108	0,2172	0,0850	0,132	0,1601	0,0676	0,092
			No	ote: Samp	le size : 121 fir	ms			

Based on the calculated results, we find out:

First of all, Equity beta mean values in all 3 scenarios are acceptable (< 0,8) and asset beta mean values are also small (< 0,5). In the case of reported leverage in 2011, equity beta min value is the same when the competitor size changed from current to slightly smaller and increases in case doubling size competitors (-0,413). If leverage increases to 30%, equity and asset beta min values are the highest when competitor size doubles (-0,839 and -0,445). Finally, when leverage decreases down to 20%, equity and asset beta min values reach maximum values in case competitor size doubles (-0,15 and -0,098).

Results shows us : when leverage degree decreases down to 20%, average equity beta values increase slightly (0,737) compared to that at the initial reported leverage (0,694). Then, when leverage degree increases up to 30%, average equity beta decreases little more (to 0,630). However, in case the competitor size doubles, the risk level of the selected firms is higher (0,757) if leverage down 20%. Next, the fluctuation of equity beta value (0,289) in the case of 30% leverage up is higher than (>) the results in the rest 2 leverage cases. And we could note that in the case competitor size doubles and leverage up 30%, the risk is more dispersed. Last but not least, from chart 2, under financial leverage, in case competitor size doubles, asset beta mean (0,230) is lower than the rest 2 cases whereas the risk dispersion is lower than that in case competitors slightly smaller (0,065 < 0,068).

5. Discussion and conclusion

First, we recognize there are risks in operation of manufacturing industries. They need to be managed well.

Next, We recognize issues of manufacturing management and they need to improve marketing activities to expand market in the covid 19 context.

Then, We see that green financing need to go with green marketing in manufacturing companies to ensure sustainable green environment.

Competitor-based Marketing mix strategies

We look at below table:

Table 6 - Competitor-based Marketing mix	
Price	Product

- Differentiate pricing or competitor-based pricing strategy	- Adapt to Vietnam or Global standards of quality
Promotion	Place
- Sales staff and Advertising communication	- Build network of suppliers, distribution
activities have to know how to analyze and	intermediaries, and consumers/customers. Set
transfer competitive advantages or	up channels(directly sold or delivered to
characteristics/characteristics of the	agents, intermediate distributors)
positioning that the business is pursuing,	We can sell directly at stores, supermarkets or
helping them to stick deeply in the minds of the	through online sales channels, e-commerce
target audience.	platforms

(source: made by authors)

Next, we take advantage of SWOT analysis as presented below:

Table 7 - Advantages of SWOT

SWOT ANALYSIS	POSITIVE	NEGATIVE
Internal factors	Strength: must be maintained, used as leverage	Weakness: need to be repaired, replaced or terminated
External factors	Opportunity: Firms need to take advantage of, catch up, build and develop on these opportunities	Threat: included in the plan to set options for prevention, resolution and management.

Beside, we suggest proposals for banks

- Banks need to offer more financing for SMEs in manufacturing industries

- Banks need to cooperate with funds in financing and sponsoring good projects

- Huy, D.T.N, Loan, B.T.T., Anh, P.T. (2020) also stated vital roles of banking sector in

financing economic activities for national development and also by (Thach, N.N, Huy, D.T.N et al , 2020).

Limitation of research

We can expand our research model for other industries and other markets.

Acknowledgement

Thank you editors, friends and brothers to assist this publishing.

Conflicts of Interest

Authors declare there is no conflict of interest.

References

[1] Duong Thi Tinh, Nguyen Thu Thuy, Dinh Tran Ngoc Huy. (2021). Doing Business Research and Teaching Methodology for Undergraduate, Postgraduate and Doctoral Students-Case in Various Markets Including Vietnam, Elementary education online, 20(1).

[2] Ahlijah Bright, A., Akomea, S.Y., & Owusu-Ansah, W. (2017). Assessment of the Production, Technology and Marketing Challenges Facing Starch Producing Companies in Ghana, Open Journal of Business and Management, 5(3)

[3] Dinh Tran Ngoc Huy, Nguyen Thi Hang. (2021). Factors that affect stock price and Beta CAPM of Vietnam Banks and Enhancing Management infomation system - Case of Asia Commercial Bank, Revista geintec Inovacao E Tecnologias, 11(2).

[4] Dinh Tran Ngoc Huy, Tran Thi Ngoc Linh, Nguyen Tien Dung, Phan Thi Thuy, Ta Van Thanh, Nguyen Thanh Hoang. (2021). Investment attraction for digital economy, digital technology sector in digital transformation era from ODA investment-and comparison to FDI investment in Vietnam, Laplage em Revista, 7(3A)

[5] Das, N.M., & Rout, B.S. (2020). Impact of COVID-19 on Market Risk: Appraisal with Valueat-risk Models, The Indian economic journal, 1. https://doi.org/10.1177/0019466220981824

[6] Dinh Tran Ngoc Huy, Pham Ngoc Van, Nguyen Thi Thu Ha. (2021). Education and computer skill enhancing for Vietnam laborers under industry 4.0 and evfta agreement, Elementary education online, 20(4).

[7] Dinh Thi Hien, Dinh Tran Ngoc Huy, Nguyen Thi Hoa. (2021). Ho Chi Minh Viewpoints about Marxism Moral Human Resource for State Management Level in Vietnam, Psychology and education, 58(5).

[8] Dinh Tran Ngoc Huy. (2021). Banking sustainability for economic growth and socioeconomic development-case in Vietnam, Turkish Journal of computer and mathematics education, 12(2).

[9] Dimitrov V, Jain PC. (2006). The Value Relevance of Changes in Financial Leverage, SSRN Working Paper

[10] Fan Yong-Yan, Jalil Manafian, Syed Maqsood Zia, Dinh Tran Ngoc Huy, Trung-Hieu Le.
 (2021). Analytical Treatment of the Generalized Hirota-Satsuma-Ito Equation Arising in Shallow
 Water Wave , Advances in Mathematical Physics, Vol.2021.
 https://doi.org/10.1155/2021/1164838

[11] Flifel, Kaouther. Financial Markets between Efficiency and Persistence : Empirical Evidence on Daily Data . Asian Journal of Finance and Accounting . 2012.

[12] Grullon, Gustavo., Lyandres, Evgeny., and Zhdanov, Alexei. Real Options, Volatility and Stock Returns. Journal of Finance. 2012.

[13] Hai, Nguyen Minh., Hien, Phan Tat., and Linh, Dang Huyen. Phân tích tác động của phá giá tiền tệ đến tăng trưởng kinh tế VN thời kỳ 2000-2012. Journal of Economic Development. 2013.
[14] Gizycky, M (2001). THE EFFECT OF MACROECONOMIC CONDITIONS ON BANKSí RISK AND PROFITABILITY, Research Discussion Paper 2001-06, Reserve Bank of Australia.
[15] Hac, L.D., Huy, D.T.N., Thach, N.N., Chuyen, B.M., Nhung, P.T.H., Thang, T.D., Anh, T.T. (2021). Enhancing risk management culture for sustainable growth of Asia commercial bank - ACB in Vietnam under mixed effects of macro factors, Entrepreneurship and Sustainability Issues, 8(3).

[16] Hang, T.T.B., Nhung, D.T.H., Hung, N.M., Huy, D.T.N., Dat, P.M. (2020). Where Beta is going–case of Viet Nam hotel, airlines and tourism company groups after the low inflation period , Entrepreneurship and Sustainability Issues, 7(3).

[17] Huy, D.T.N. (2015). The Critical Analysis of Limited South Asian Corporate Governance Standards After Financial Crisis, International Journal for Quality Research, 9(4): 741-764.

[18] Huy, D.T.N. (2012). Estimating Beta of Viet Nam listed construction companies groups during the crisis , Journal of Integration and Development, 15 (1), 57-71

[19] Huy, D. T.N., Loan, B. T., and Anh, P. T. (2020). Impact of selected factors on stock price: a case study of Vietcombank in Vietnam, Entrepreneurship and Sustainability Issues, vol.7, no.4, pp. 2715-2730. <u>https://doi.org/10.9770/jesi.2020.7.4(10)</u>

[20] Huy, D. T.N., Dat, P. M., và Anh, P. T. (2020). Building and econometric model of selected factors' impact on stock price: a case study, Journal of Security and Sustainability Issues, vol.9(M), pp. 77-93. <u>https://doi.org/10.9770/jssi.2020.9.M(7)</u>

[21] Huy D.T.N., Nhan V.K., Bich N.T.N., Hong N.T.P., Chung N.T., Huy P.Q. (2021). Impacts of Internal and External Macroeconomic Factors on Firm Stock Pr ice in an Expansion Econometric model—A Case in Vietnam Real Estate Industry, Data Science for Financial Econometrics-Studies in Computational Intelligence, vol.898, Springer. <u>http://doi-org-443.webvpn.fjmu.edu.cn/10.1007/978-3-030-48853-6_14</u>

[22] Huy, D.T.N., An, T.T.B., Anh, T.T.K., Nhung, P.T.H. (2021). Banking sustainability for economic growth and socio-economic development – case in Vietnam, Turkish Journal of Computer and Mathematics Education, 12(2), pp.2544–2553

[23] Huy, D.T.N., An, T.T.B., Anh, T.T.K., Nhung, P.T.H. (2021). Banking sustainability for economic growth and socio-economic development –case in Vietnam, Turkish Journal of Computer and Mathematics Education, 12(2), pp. 2544–2553

[24] Krishna, R.C. (2015). Macroeconomic Variables impact on Stock Prices in a BRIC Stock Markets: An Empirical Analysis, Journal of Stock & Forex Trading, 4(2).

[25] Kulathunga, K. (2015). Macroeconomic Factors and Stock Market Development: With Special Reference to Colombo Stock Exchange, International Journal of Scientific and Research Publications, 5(8), 1-7.

[26] Nguyen Thi Hang, Dinh Tran Ngoc Huy. (2021). Better Risk Management of Banks and Sustainability-A Case Study in Vietnam, Revista geintec Inovacao E Tecnologias, 11(2).

[27] Nguyen Ngoc Thach, Hoang Thanh Hanh, Dinh Tran Ngoc Huy, Quynh Nam Vu. (2021). TECHNOLOGY QUALITY MANAGEMENT OF THE INDUSTRY 4.0 AND CYBERSECURITY RISK MANAGEMENT ON CURRENT BANKING ACTIVITIES IN EMERGING MARKETS-THE CASE IN VIETNAM, International Journal for Quality Research, 15(3).

[28] Nguyen Ngoc Thach, Nguyen Van Bao, Dinh Tran Ngoc Huy, Bui Dan Thanh, Le Thi Viet Nga, Truong Thu Ha, & Nguyen The Binh. (2020).Measuring the Volatility of Market Risk of Vietnam Banking Industry After the Low Inflation Period 2015–2017, Review of Pacific Basin Financial Markets and Policies (RPBFMP), 23(4), 1-13

[29] Nguyen Dinh Trung, Dinh Tran Ngoc Huy, Trung-Hieu Le, Dao Thi Huong, Nguyen Thi Hoa. (2021). ICT, AI, IOTs and technology applications in education-A case with accelerometer and internet learner gender prediction, Advances in Mechanics, 9(3)

[30] Nguyen Thi Hoa, Nguyen Thi Hang, Nguyen Thanh Giang, Dinh Tran Ngoc Huy. (2021). Human resource for schools of politics and for international relation during globalization and EVFTA, Elementary education online, 20(4).

[31] Nguyen Thi Thanh Phuong, Dinh Tran Ngoc Huy, Pham Van Tuan. (2020.) THE EVALUATION OF IMPACTS OF A SEVEN FACTOR MODEL ON NVB STOCK PRICE IN COMMERCIAL BANKING INDUSTRY IN VIETNAM-AND ROLES OF DISCOLOSURE OF ACCOUNTING POLICY IN RISK MANAGEMENT, International Journal of Entrepreneurship, 24

[32] Nguyen Dinh Trung, Dinh Tran Ngoc Huy, Pham Van Tuan, Dao Thi Huong.(2021). Ict And Digital Tech Effects On Marketing Strategies And Choosing Competitor Affecting On Business Operation-A Case In Hotel And Entertainment Sector, Design engineering, Issue 7

[33] Nguyen Dinh Trung, Nguyen Thanh Hai, Dinh Tran Ngoc Huy, Pham Van Tuan, Nguyen Thi Hoa, Nguyen Tien Dung. (2021). Recommendations for TQM in Manufacturing Companies with Pyrolysis Technology in Emerging markets and Meanings of Capital Financing–Case in Viet Nam, Advances in Mechanics, 9(3)

[34] Omurgonulsen, M., & Surucu, P.(2008). Manufacturing/marketing interface and conflict: an investigation in the Turkish manufacturing industry, Problems and Perspectives in Management, 6(1)

[35] Pham Minh Dat, Nguyen Duy Mau, Bui Thi Thu Loan, Dinh Tran Ngoc Huy.(2020). Comparative China corporate governance standards after financial crisis, corporate scandals and manipulation, Journal of security & amp; sustainability issues,9(3).

[36] Pham Van Tuan, Dinh Tran Ngoc Huy, MBA Nguyen Thi Hoa, Dao Thi Huong.(2021). Technology Applications, IT Effects on Marketing and Role of Digital Marketing In Stock Investment Industry-And Industrial Competitors Impacts On Business Risk Level, Design engineering, Issue 6

[37] Pham Van Tuan, Dinh Tran Ngoc Huy, Nguyen Dinh Trung, Nguyen Thi Hoa.(2021). MARKETING STRATEGIES FOR TOURISM AND DIGITAL TECH APPLICATIONS IN TOURISM INDUSTRY-A CASE OF OCH TOURISM CORPORATION IN VIETNAM, Design engineering, Issue 7

[38] Pham Minh Dat, Nguyen Duy Mau, Bui Thi Thu Loan, Dinh Tran Ngoc Huy. (2020). Comparative China corporate governance standards after financial crisis, corporate scandals and manipulation, Journal of security & sustainability issues, 9(3).

[39] Pham Van Hong, Huynh Xuan Nguyen, Dinh Tran Ngoc Huy, Le Thi Viet Nga, Nguyen Thi Ngoc Lan, Nguyen Ngoc Thach, Hoang Thanh Hanh.(2021). Sustainable bank management via evaluating impacts of internal and external macro factors on lending interest rates in Vietnam, Linguistica Antverpiensia, Issue 1, 76-87.

[40] Park, J.C, Ali, F.D., Mbanga, C. (2019). Investor sentiment and aggregate stock returns: the role of investor attention, Review of Quantitative Finance and Accounting, 53(2), 397 - 428.

[41] Phung Tran My Hanh, Nguyen Thi Hang, Dinh Tran Ngoc Huy, Le Ngoc Nuong. (2021). Enhancing Roles of Banks and the Comparison of Market Risk and Risk Policy Implications in Group of Listed Vietnam Banks During 2 Stages: Pre and Post-Low Inflation Period, Revista geintec-gestao Inovacao e Tecnologias, Vol.11(2).

[42] Whybark, D.C. (1994). Marketing's influence on manufacturing practices, International Journal of Production Economics, 37(1), 41-50. https://doi.org/10.1016/0925-5273(94)90006-X