Cost Effectiveness of New Product Development: The Influence of Cost Information, Environmental Innovation Practices and Designer's Gender

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Abstract. Hence this study aims to test the effect of cost information, environmental innovation practices and designer's gender on new product cost effectiveness. To test proposed hypothesis, this study adopt laboratory experiment with 117 participants. The result reveals significant joint effect of cost information and environmental innovation practices with designer's gender. Experimental result underlines the important notion from contingency perspective which states that there will be no single fit factors which may have the effect on specific structure, system or performance in organization. Interaction effect of cost information and gender, and environmental innovation practices and gender, showed a significant effect based on analysis of variance performed in this study. Additional test of factors affecting cost effectiveness of new product design is the contribution of this study. While previous research had tested the effect of cost information on NPD performance, environmental issue has not been considered. Further, role of designer's individual characteristic in terms of gender is examined as well.

Keywords: Cost information, environmental innovation practices, designer gender, new product development, cost effectiveness.

1 Introduction

In Indonesia, the impact of environmental problems has become a very hot topic of discussion, especially among the public. We should be aware of this environmental problem, because of the large amount of waste and environmental pollution which causes natural disasters. In society there are still many activities that are not good in managing natural resources and also in their use. Large projects also contribute to this, such as causing air pollution, throwing waste carelessly which causes environmental damage. This makes it possible to create new product innovations that are environmentally friendly by paying attention to all aspects.

Conditional effects of the market and institutional environment Companies do not operate in a vacuum. According to configuration theory, firm performance depends on internal agreements such as corporate strategy and its suitability for a dynamic environment [1]. In particular,

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previous research argues that the success of NPD strategies depends on a dynamic external environment. Following this perspective, in this study we focus on the market environment (i.e. market turbulence and technological turbulence) and the institutional environment (i.e. law enforcement effectiveness) to assess the effects of observations to investigate between two different types of mergers [2].

Therefore, it is important to emphasize New Product Development (NPD)has grown rapidly over the past few years due to the growth of business services and changes in manufacturing. The framework begins by capturing the external environment to build long-term relationships with stakeholders regarding creating new services. Additionally, identified stakeholders are actively involved in the process during development beyond the NPD project. The third step, sales, should focus on understanding how service can improve the overall customer experience for example through effective after-sales service and after-sales support. Lastly on delivery, companies must consider the long-term customer relationships that stem from the nature of the service to be created and the interactions with users during the delivery process itself. In this case, network service discovery (NSD) must incorporate the principles of modularity from which the product originates [3].

In addition, diversity gender is often operationalized and defined in depth, and is rooted in perceived biological traits, especially the ability to differentiate between men and women on various matters. It is a very simple assumption that men and women behave differently, without considering diversity and gender theory. Instead, it simply replicates gendered behavior. Gendered organizations, groups, and individuals influence society. These differences in gender roles help examine the division of roles that are considered to be given to women and men. This helps build a picture of gender relations that is dynamic, precise, and appropriate to today's society. Socially different gender theories have resulted in different roles for women and men in Society [4].

In the design process of new products, the gender phenomenon shows how gender differences can influence the entire process—from research and concept to product development and marketing. Like inclusivity in marketing, products must be flexible and adaptable. The gender phenomenon in product design reflects efforts to create products that are inclusive, diverse, and responsive to the needs of all people, regardless of their gender identity or gender [5]. This not only includes physical aspects, but also emotional, social and cultural dimensions in product development.

When managing Cost Effective for new products, companies gain the greatest leverage by obtaining production costs as early as possible, so that production costs reflect the direct labor, material, and general costs of producing the finished good. This is important for bringing products to market at competitive prices, securing initial market share, and minimizing opportunity costs. Likewise, purchasing generally facilitates supplier orientation, and early supplier orientation can provide benefits in new product development at several levels of price, quality, speed, innovation and efficiency. The focus on achieving desired production costs in the planning and development stages has been studied extensively in the accounting literature [6].

Emphasis on Cost Effectiveness which something deep achieving goals accurately, selecting the right goal from a variety of possibilities, or choosing a technique and choosing from a number of other options to produce efficient costs are all part of cost effectiveness. Measuring the achievement of predetermined goals is another way to determine effectiveness. The definition

of effectiveness is how well the work is done, the extent to which people produce output as expected [7]. This means that if a job can be completed according to plan, both in time, cost and quality, then it can be said to be effective. Effectiveness is the utilization of facilities, infrastructure, resources in a certain amount that has been previously determined to produce a number of goods or services, activities that will be carried out by a person or company [8].

Cost information functions to measure the sacrifice of input value to help management produce information in measuring whether its business activities generate profits. In order to plan the allocation of economic resources sacrificed to determine expenditure, cost accounting provides information about costs that can be obtained by management [9]. Cost Accounting provides cost information that enables management to manage the allocation of various economic resources to ensure the production of output that has greater economic value.Specificin need [10].

In line also by implementing cost effectiveness in creating innovations based on environmental utilization.Eco-innovation is another name for environmental innovation. According to [11], Innovation is the creation of new goods, applications, production processes, organizational structures, or business management methods for businesses that are concerned with limiting environmental risks and reducing the adverse impacts of using certain materials compared to using alternative materials. Eco-innovation is the use of wasteful resources and serves as an alternative path for the future. According to [12], innovation that aims to improve environmental performance is called environmental innovation. Initiatives aimed at reducing energy use, preventing pollution, and recycling waste must include environmental innovation.

Research conducted previously, according to [13] shows that the main method of managing information systems has an impact on the quality of accounting (financial and management) information systems. It is impossible to achieve the quality of a management accounting information system because of the causes and effects which incur large costs but do not produce anything positive. Well-integrated service support can result in the creation of an accounting information system with the highest possible management quality, along with expertly trained operational implementation that includes expertise focused on information technology resources [14].

Furthermore, previous research shows that cost effectiveness, which can explain the use of resources during the production process, is needed to obtain cost-effective production costs and provide high quality goods. If resources are used exclusively to perform value-added activities during the production process, then this is considered cost-effective [15]. Management must control the causes of expenditure in order to save costs. cost effectiveness is the result of activities. To provide value to consumers, management needs to evaluate how cost effective the company is in using its various operations [16].

Various previous studies according to Sekar, 2023 have done many things. Differences with this research include differences in sub-sectors for the samples used, information system management, and differences in the use of measurement scales for environmental management accounting variables on the cost effectiveness of new products. This research looks further intoexamine the influence of cost information and environmental innovation practices on the cost effectiveness of new products.Efficiency performance can be improved through improving activities aimed at achieving cost effectiveness and reducing production costs. Based on the explanation above, the author is interested in raising the problem by conducting research on howhow to test the influence of cost information and environmental innovation practices on the cost effectiveness of new products.

Literature review and hypothesis

The influence of cost information on cost effective new product designs

[17] defines costs as the monetary equivalent of sacrifices of economic resources that have occurred or could occur for certain purposes. The idea of costs is also related to the concept of production in management accounting because costs indicate the efficiency of the production system. [18] define costs as out-of-pocket costs incurred when purchasing products or services that will last a long time or provide benefits over several accounting periods.

According to [19] and [20], a management accounting information system is a collection of actions that include collecting, measuring, storing, analyzing, reporting and managing information.According to [21], a management accounting information system is a procedure that finds, measures, collects, checks, prepares, analyzes and disseminates related data..Management accounting information systems, according to [22], are the process of identifying, measuring, collecting, analyzing, preparing, interpreting and communicating financial information that management uses to plan, evaluate and control an organization in addition to ensuring that the use of resources guaranteed and taken into account. Force. Three measures are used by the information systems success model to measure client satisfaction [23] namely:

a. Information Quality is associated with aspects such as information produced by timeliness, correctness, relevance and format of information systems.

b. The presence or absence of "bugs" in the system, UI consistency, usability, responsiveness of the interactive system, documentation, and sometimes the quality and maintainability of the program code are all factors that contribute to system quality.

c. Practicality The extent to which someone thinks that using a particular system will improve their ability to complete their work is called usefulness. When something helps in the future, it is beneficial.

Cost information greatly influences effective NPD; damage pollutes the environment. As a result, the development of cost-effective new products by replacing environmentally friendly and efficient products becomes a comprehensive activity and increases innovation in society [24]. Firm performance depends on internal arrangements, such as the firm's strategy and its adaptation to an ever-changing environment, according to configuration theory. To find representative environmental factors in NPD, our research focuses on the market environment.

H1: Cost information influences the cost effectiveness of new product designs

The influence of environmental innovation practices on cost effective new product design

According to previous research, [25] found that environmental performance influences firm value based on previous research. The research results of [26] and [27] which found that environmental performance increases company value strengthens this conclusion. This study is consistent with the findings of [28] because environmental management has advantages that include saving resources and energy through innovation and technology. The market also reacts to information regarding companies' efforts to reduce greenhouse gas emissions. Therefore, the value of a company may be influenced by its environmental performance [29] However, research by [30] found that environmental performance cannot control the relationship between disclosure of greenhouse gas emissions and company value. Research by [31] and [32] also

found that environmental performance does not affect company value. This is due to the fact that investors sometimes ignore a company's environmental performance when making decisions [33].

Environmental performance is the company's performance used to create a good (green) environment [34]. This environmental innovation practice is used for waste prevention, environmental planning, environmental calculation of by-products [35]. With the emergence of new product designs that are cost effective and environmental costs are incurred by companies in the economy as a result of contributing to preserving the environment [36]. According to [37], environmental management systems (EMS) can be modified to enable internal company performance measurement to manage environmental issues throughout the company. The EMS framework must undergo three changes. First, a common goal is needed. Second, procedures for collecting and reporting goal-related data are needed. Finally, management reviews should be conducted at the company level. This statement still applies to the ISO14001:2004 framework.

Business initiatives to foster a healthy and environmentally friendly atmosphere as a sign of its accountability and success. The company's implementation of an environmental management system is proven by its ISO-1400. Environmental management, as a strategy used by the business world to foster positive relationships and a positive reputation with stakeholders, is closely related to environmental performance. Environmental performance can be a strategic step for the business world to carry out environmentally friendly innovations because customers are increasingly enthusiastic about using or buying environmentally friendly products [38]. Apart from helping businesses minimize their negative impact on the environment and increase shareholder value, environmental performance is another environmental management strategy Environmental disclosures can be used to provide information to stakeholders and legitimize corporate actions. As a result, greenhouse gas emissions will appear as an environmental impact .

Incorporating quality improvement principles, an environmental management system is an organizational approach to environmental management. Although many businesses take environmental protection initiatives voluntarily, there is often a tendency to address escalating problems through preventative efforts before damage occurs. Companies can create their own environmental policies with the help of an environmental management system.

Positive innovation in the market has a positive impact on company operations. Any organization must be aware of the performance processes that can transform it into a stronger organization. To illustrate, a business executive educates his staff by helping them understand the company's distinct brand values, which his staff then supports. Workers who receive company training help consumers understand the company's positive ideals, which in turn helps customers place high positive values on the company. Employees will also receive performance evaluations from the business world as part of training to assess their performance and work results. On the other hand, if there is no training for employees regarding environmental innovation practices, it will result in a lack of understanding in creating good new products and the ability to think critically and produce quality new products.

H2: Environmental Innovation Practices influence the cost effectiveness of new product designs

Gender influence on cost effectiveness of new product design

The term gender is introduced by social scientists in explaining the differences between women and men which are innate as God's creation and are cultural formations that are learned and inherent from childhood to adulthood [39] Gender (male owner) does not have a significant impact on company performance. In contrast, gender (female owners) has a positive and significant impact on their business growth and survival [40]. Although the results for firm growth differ from the results for firm performance, because female ownership does not have a significant impact on firm performance, business growth is measured over a longer period of time, indicating that women are better at managing businesses over longer periods of time than men in similar positions. The same. There is a positive, but not significant, difference between female and male consumers' purchase intentions towards new product designs [41].

Product innovation is substantial change and improvement in products, services, and processes. This includes creative solutions and responses to meet consumer and market needs and expectations, the driving forces of business circumstances, and the strategic needs of the organization [42]. Decision making is the first step in what action will be taken and according to one's calculations is the most appropriate action for the problem that occurs. Gender roles and equality are also involved in the decision making process, although a holistic understanding of the product's impact on stakeholder groups can guide design decisions. who is more informed and responsible [43].

The role of gender in environmental innovation practices is very important because equality can increase creativity, diversity and effectiveness of innovative solutions [44]. Based on the explanation above, it is found that gender roles influence decision-making policies, which is the third hypothesis of this research, that men are better at making decisions compared to women, dIth considering aspects such as understanding user needs, marketing, economic balance, product design that takes into account gender differences can influence cost effectiveness by increasing attractiveness, user satisfaction and product lifespan. Additionally, it can also create a positive reputation for the company in terms of inclusivity and sensitivity to the needs of diverse users.

H3. Gender influences the Cost Effectiveness of new product design.

2. Method

2.1 Experimental design

The research used is experimental, because this method is the most appropriate to use to test hypotheses on cause and effect relationships. This research is research used to test Cost Information and Environmental Innovation Practices on Cost Effectiveness using experimental methods. The design used is factorial to form 4 groups of 2x2 experiments between subjects by testing the interaction between two variables to determine the differences between them.

Table 1. Cost information

	Designer Gender	
	Woman	Man

Cost Information	Specific	Cell 1	Cell 3
	Realistic	Cell 2	Cell 4

Based on the experimental matrix above, participants will be given 4 different treatments, namely:

Cell 1 participants with the gender Female were given specific cost information

Cell 2 participants with the gender Female were given relative cost information

Cell 3 participants with male gender were given specific cost information

Cell 4 participants with male gender were given relative cost information

Table 2. Environmental innovation practices

		Designer Gender	
		Woman	Man
Environmental Innovation Practices	There is	Cell 1	Cell 3
	There isn't any	Cell 2	Cell 4

Based on the experimental matrix above, participants will be given 4 different treatments, namely:

Cell 1 participants with gender female received environmental innovation practices

Cell 2 participants with female gender did not receive environmental innovation practices

Cell 3 participants with male gender received environmental innovation practices

Cell 4 participants with male gender did not receive environmental innovation practices

Based on the experimental design described above, it provides evidence that the hypothesis is accepted or not accepted, which has been implemented by the researcher using hypothesis testing compared with other groups. In this case, gender has an important influence in decision making and it cannot be denied that men's decisions are more dominant than women's due to several factors. Gender is also influential because it has equality in new product design, for example in effectiveness and creativity.

2.2 Experimental tasks and procedures

Participants were assigned by researchers to design and develop new product designs and manipulation checks by asking several questions. Manipulation checks are carried out by asking participants 5 questions, the aim of which is to examine which one can save more costs based on the cost information. To prevent the effects of other systematic but undesirable variables that might influence the results of an experiment, randomization is applied to assign subjects to an experiment. There is also a procedure for conducting experiments, namely participants enter the

classroom by choosing a place that has been prepared by the researcher, where there are materials for designing and also a questionnaire worksheet that must be filled in with different codes, then students start designing according to the instructions that have been given clear.

3 Results and discussion

3.1 Descriptive statistical test

Table 3. Descriptive statistics. Dependent variable: cost effective

CostInfo	Gender	Mean	Std. Deviation	N
Relative Cost Information	Woman	3.3333	1.04198	36
	Man	3.5789	.96124	19
	Total	3.4182	1.01271	55
Specific Cost Information	Woman	3.7391	.92939	46
	Man	3,2500	.93095	16
	Total	3.6129	.94704	62
Total	Woman	3.5610	.99502	82
	Man	3.4286	.94824	35
	Total	3.5214	.97908	117

Table 4. Descriptive statistics. Dependent variable: cost effective

PracticeLing	Gender	Mean	Std. Deviation	N
No Environmental Innovation Practices	Woman	3.4103	.90954	39
	Man	3.7222	.95828	18
	Total	3.5088	.92819	57
There are Environmental Innovation Practices	Woman	3.6977	1.05864	43
	Man	3.1176	.85749	17
	Total	3.5333	1.03280	60
Total	Woman	3.5610	.99502	82
	Man	3.4286	.94824	35
	Total	3.5214	.97908	117

Descriptive statistic for variables tested in the hypothesis can be seen from table 1 and table 2 above. To observe the mean of cost effective product design, standard deviation, and the number of participants in each experimental group, the experimental results data are presented in the

Tables. The distribution of participants in each experimental group ranges from 16 to 82 participants.

Hypothesis testing

Table 5. ANOVA Result. Dependent variable: cost effective

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	4.695a	3	1,565	1,661	,180
Intercept	1173.708	1	1173.708	1245.329	,000
CostInfo	,036	1	,036	,038	,846
Gender	,360	1	,360	,382	,538
Cost Info * Gender	3,279	1	3,279	3,479	,065
Error	106,501	113	,942		
Total	1562,000	117			
Corrected Total	111,197	116			

a. R Squared = .042 (Adjusted R Squared = .017)

Table 6. ANOVA Result. Dependent variable: cost effective

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	5.315a	3	1,772	1,891	.135
Intercept	1191.487	1	1191.487	1271,592	,000
PracticeLing	,616	1	,616	,657	,419
Gender	,440	1	,440	,470	,495

PracticeLing * Gender	4,873	1	4,873	5,201	.024
Error	105,881	113	,937		
Total	1562,000	117			
Corrected Total	111,197	116			

a. R Squared = .048 (Adjusted R Squared = .023)

Analysis of Variance (ANOVA) result revealed in table 1 and table 2 above indicates that there are significant interaction effect between cost information and gender, and between environmental innovation practices and gender, on cost effective product design. With the statistically significant influence of the interaction variable of Cost Information and Environmental Innovation Practices with Gender on Cost Effective design, the interpretation of the main effects becomes less relevant. This is because there is evidence of the strength of the interaction variable, indicating interdependence between variables (Hair et al., 2010).

4. Conclusion

This study's objective is to test the effect of cost information, environmental innovation practices, and designer's gender on new product's cost effectiveness. Based on the result of laboratory experiment, it is revealed that cost effectiveness of the new product design will vary depending on contingent factors, namely cost information, environmental innovation practices, and gender. Analysis of variance performed in this study reveals a significant interaction effect between cost information and gender, and between environmental innovation practices and gender. This leads to interpretation that the effect of cost information and environmental innovation practices is not independent. There will be other factor which has joint effect, that is the designer's gender who performed the new product development process. This is in line with contingency theory which explains that there is no independent aspect which will affect performance.

Implication of the study's result lies on the consideration of joint effect between variables with gender. Since different designer gender will affect how cost information and environmental innovation practices will have the impact on new product cost effectiveness, management should be carefully set both data presentation and team composition in NPD. Additionally, further analysis will be needed in future research to broaden the scope of investigation on the effect of such factors in the product design. Different variables test using experiment, different research approach such as qualitative study and enriched quantitative methods such as from surveys may be executed in future research.

References

[1] L. Judijanto and S. Sumantri, "Analysis of the Effect of Cost Accounting Information Systems , Technological Innovation , and Organizational Culture on Cost Efficiency in Manufacturing Companies in Surabaya," vol. 2, no. 01, 2024.

[2] J. Yan *et al.*, "How to improve new product performance through customer relationship management and product development management: evidence from China," *J. Bus. Ind. Mark.*, vol. 36, no. 1, pp. 31–47, 2021, doi: 10.1108/JBIM-05-2019-0190.

[3] – Marzi, Giacomo, – Ciampi, Francesco, D. Dalli, and M. Dabic, *New Product Development During the Last Ten Years*. 2020.

[4] D. J. Maume, "Gender differences in providing urgent childcare among dual-earner parents," *Soc. Forces*, vol. 87, no. 1, pp. 273–298, 2008, doi: 10.1353/sof.0.0101.

[5] B. Osman, A. El-Adham, and A. Elrefaey, "Primigravida Women's Fear of Childbirth and Its Effect on Their Decision Regarding Mode of Delivery," *Tanta Sci. Nurs. J.*, vol. 22, no. 3, pp. 76–100, 2021, doi: 10.21608/tsnj.2021.196624.

[6] L. M. Ellram, W. L. Tate, and T. Y. Choi, "The Conflicted Role of Purchasing in New Product Development Costing," *J. Supply Chain Manag.*, vol. 56, no. 1, pp. 3–32, 2020, doi: 10.1111/jscm.12217.

[7] A. H. Tiessen, K. M. Vermeulen, J. Broer, A. J. Smit, and K. Van Der Meer, "Cost-effectiveness of cardiovascular risk management by practice nurses in primary care," *BMC Public Health*, vol. 13, no. 1, p. 1, 2013, doi: 10.1186/1471-2458-13-148.

[8] T. Rajaramanan *et al.*, "Cost effective solvothermal method to synthesize zn-doped tio2 nanomaterials for photovoltaic and photocatalytic degradation applications," *Catalysts*, vol. 11, no. 6, 2021, doi: 10.3390/catal11060690.

[9] E. Sekar, A. Pratiwi, N. Susanti, and A. Rahman, "An Analysis Of The Determination Of The Cost Of Production Based On Order At Yanto Mie Milling Business In Muara Bangkahulu Of Bengkulu City Analisis Penentuan Harga Pokok Produksi Berdasarkan Pesanan Pada Usaha Penggilingan Yanto Mie Di Muara Bangkahulu ," vol. 3, no. 1, pp. 15–30, 2023.

[10] S. Choiriah and I. D. Gunawan, "The Influence of Information Asymmetry and Intellectual Capital Disclosure to Cost of Equity Capital with Managerial Ownership and Institutional Ownership as a Moderating Variable (Banking Sector Issuers listed on Stock Exchange 2013-2016)," *Res. J. Financ. Account.* , vol. 9, no. 7, pp. 158–167,

2018.

[11] Y. Fernando, C. J. Chiappetta Jabbour, and W. X. Wah, “Pursuing green growth in technology firms through the connections between environmental innovation and sustainable business performance: Does service capability matter?,” *Resour. Conserv. Recycl.*, vol. 141, no. September 2018, pp. 8–20, 2019, doi: 10.1016/j.resconrec.2018.09.031.

[12] S. K. Singh, J. Chen, M. Del Giudice, and A. N. El-Kassar, “Environmental ethics, environmental performance, and competitive advantage: Role of environmental training,” *Technol. Forecast. Soc. Change*, vol. 146, no. May 2018, pp. 203–211, 2019, doi: 10.1016/j.techfore.2019.05.032.

[13] Y. Ramadhan, “The Effects of Process Quality Management and Information Technology to Product Quality Performance with Management Accounting System as Intervening (A Case Study of Manufacture Companies Listed on Indonesia Stock Exchange),” vol. 6, no. 6, pp. 161–173, 2015.

[14] I. Hidayat, Hamdani, D. S. Abbas, N. T. Lam, and P. A. Sari, “The Role of Environmental Management Accounting in Mediating Green Innovation to Firm Value: Moderated by Quality Management,” *Int. J. Energy Econ. Policy*, vol. 14, no. 3, pp. 281–287, 2024, doi: 10.32479/ijeep.15869.

[15] R. Fallah, “Study of the effect of institutional ownership on accounting quality and cost of capital,” *Propósitos y Represent.*, vol. 9, no. SPE2, 2021, doi: 10.20511/pyr2021.v9nspe2.1053.

[16] A. P. Marshanda, A. Sari, R. Assaff, and M. A. Ardhana, “the Effect of Information Asymmetry on Profit Management Practices in Food and Beverage Companies Listed on the Indonesia Stock Exchange,” *Equilib. J. Ilm. Ekon. Manaj. dan Akunt.*, vol. 13, no. 1, p. 227, 2024, doi: 10.35906/equili.v13i1.1957.

[17] J. Akuntansi and F. Ekonomi, “Analisis Sistem Akuntansi Penerimaan Dan Pengeluaran Kas Pada Pt. Hasjrat Abadi Manado,” *J. Berk. Ilm. Efisiensi*, vol. 16, no. 4, pp. 1087–1097, 2016.

[18] A. Abdullah, “Manajemen Kepala Sekolah dalam Pembelajaran Daring Pada Masa Pandemi Covid 19,” *J. Pendidik. Guru*, vol. 2, no. 1, pp. 1–13, 2021, doi: 10.47783/jurpendigu.v2i1.183.

[19] S. Manurung *et al.*, *Akuntansi Manajamen*. 2022.

[20] Y. P. Putra and T. A. Subroto, “Pengaruh Pengungkapan Sustainability Report Terhadap Kinerja Keuangan Perusahaan,” *EKOMBIS Rev. J. Ilm. Ekon. dan Bisnis*, vol. 10, no. 2, 2022, doi: 10.37676/ekombis.v10i2.2272.

[21] D. Hertati, “Pengembangan Model Penataan Organisasi Perangkat Daerah Pemerintah Kota Surabaya,” *Spirit Publik*, vol. 10, no. 2, pp. 1–16, 2015.

[22] I. T. A. Trisnawati, “Pengaruh economic value added, arus kas operasi, residual income, earnigns, operating leverage dan market value added terhadap return saham,” *J. Bisnis dan Akunt.*, vol. 11, no. 1, pp. 65–78, 2009.

[23] H. Susanto and N. Kholis, “Analisis Rasio Keuangan Terhadap Profitabilitas Pada Perbankan Indonesia,” *J. Ebbank*, vol. 7, no. 1, pp. 11-12 http://www.ebbank.stiebbank.ac.id/index.php/, 2016, [Online]. Available: http://www.ebbank.stiebbank.ac.id/index.php/EBBANK/article/view/83/84

[24] Q. Derekx, P. Bacchin, D. Veyret, K. Glucina, and P. Moulin, “Numerical and experimental study of fouling in microfluidic channels and microfiltration Membranes,” *Procedia Eng.*, vol. 44, pp. 54–56, 2012, doi: 10.1016/j.proeng.2012.08.304.

[25] S. M. Calderón *et al.*, “Aerosol-stratocumulus interactions: towards a better process understanding using closures between observations and large eddy simulations,” *Atmos. Chem. Phys.*, vol. 22, no. 18, pp. 12417–12441, 2022, doi: 10.5194/acp-22-12417-2022.

[26] G. L. C. Gunawan, “Bauran Pemasaran Terhadap Keputusan Pembelian,” *Performa*, vol. 5, no. 2, pp. 166–175, 2021, doi: 10.37715/jp.v5i2.1738.

[27] T. C. S. Rinsman and A. B. Prasetyo, “The Effects of Financial and Environmental Performances on Firm Value with Environmental Disclosure as an Intervening Variable,” *J. Din. Akunt.*, vol. 12, no. 2, pp. 90–99, 2020, doi: 10.15294/jda.v12i2.24003.

[28] Y. Nakao, “Metal-mediated C-CN Bond Activation in Organic Synthesis,” *Chem. Rev.*, vol. 121, no. 1, pp. 327–344, 2021, doi: 10.1021/acs.chemrev.0c00301.

[29] R. D. Anggraeni and A. H. Rizal, “Pelaksanaan Perjanjian Jual Beli Melalui Internet (E-Commerce) Ditinjau Dari Aspek Hukum Perdataan,” *SALAM J. Sos. dan Budaya Syar-i*, vol. 6, no. 3, pp. 223–238, 2019, doi: 10.15408/sjsbs.v6i3.11531.

[30] R. Anggraeni and M. Febrianti, “Faktor-Faktor Yang Mempengaruhi Tax Avoidance Pada Perusahaan Manufaktur Di Bursa Efek Indonesia,” *J. Bisnis Dan Akunt.*, vol. 21, no. 1a-2, pp. 185–192, 2019, [Online]. Available: http://jurnaltsm.id/index.php/JBA

[31] R. Ulina, R. Mulyadi, and M. E. Sri Tjahjono, “Pengaruh Kualitas Audit Dan Komite Audit Terhadap Manajemen Laba Pada Perusahaan Manufaktur Yang Tercatat Di Bursa Efek Indonesia,” *Tirtayasa Ekon.*, vol. 13, no. 1, p. 1, 2018, doi: 10.35448/jte.v13i1.4229.

[32] A. Asnita and Wahidahwati, “Pengaruh Kinerja Lingkungan Terhadap Nilai Perusahaan Dengan Pengungkapan Informasi Lingkungan Sebagai Variabel Intervening,” *J. Ilmu dan Ris. Akunt.*, vol. 8, no. 7, pp. 1–19, 2019.

[33] A. Trisyanto, “Eco-Efficiency, Green Innovation and Carbon Emission Disclosure on Company Value in High Profile Industrial Companies,” *SAR (Soedirman Account. Rev. J. Account. Bus.*, vol. 01, no. 02, pp. 47–60, 2024, doi: 10.32424/1.sar.2024.9.01.11915.

[34] Evelyn, Sudrajat, and R. Azhar, “The effect of environmental performance, environmental costs, and company size on financial performance through corporate social responsibility,” *Asian J. Econ. Bus. Manag.*, vol. 1, no. 2, pp. 131–140, 2022, doi: 10.53402/ajebm.v1i2.175.

[35] N. Renaldo, T. Sevendy, and H. Simatupang, “the Role of Environmental Accounting in Improving Environmental Performance Through Csr Disclosure,” *Bus. Manag. Account.*, vol. 1, no. 1, pp. 17–23, 2022.

[36] E. Amadea, “The Effect of Product Quality, Service Quality, Environment Quality, and Product Assortment on Customer Loyalty trough Customer Satisfaction of BCA Mobile Application,” *J. Econ. Financ. Manag. Stud.*, vol. 05, no. 03, pp. 633–654, 2022, doi: 10.47191/jefms/v5-i3-17.

[37] K. L. Howe *et al.*, “Ensembl Genomes 2020-enabling non-vertebrate genomic research,” *Nucleic Acids Res.*, vol. 48, no. D1, pp. D689–D695, 2020, doi: 10.1093/nar/gkz890.

[38] W. Husnaini and B. Tjahjadi, “Quality management, green innovation and firm value: Evidence from indonesia,” *Int. J. Energy Econ. Policy*, vol. 11, no. 1, pp. 255–262, 2021, doi: 10.32479/ijeep.10282.

[39] I. Muflikhati, H. Hartoyo, U. Sumarwan, A. Fahrudin, and H. Puspitawati, “Kondisi Sosial Ekonomi dan Tingkat Kesejahteraan Keluarga: Kasus di Wilayah Pesisir Jawa Barat,” *J. Ilmu Kel. dan Konsum.*, vol. 3, no. 1, pp. 1–10, 2010, doi: 10.24156/jikk.2010.3.1.1.

[40] P. Era, R. Di, and I. Kepolisian, “JURNAL M-PROGRESS,” pp. 49–58.

[41] R. Martinez-Jimenez, M. J. Hernández-Ortiz, and A. I. Cabrera Fernández, "Gender diversity influence on board effectiveness and business performance," *Corp. Gov.*, vol. 20, no. 2, pp. 307–323, 2020, doi: 10.1108/CG-07-2019-0206.

[42] M. Baquedano, M. Elawar, and M. Lizárraga, "Factors that affect decision making: Gender and age differences," *Int. J. Psychol. Psychol. Ther.*, vol. 7, pp. 381–391, 2007.

[43] F. Mallapiang, A. Azriful, and R. Jusriani, "Peran Gender Dalam Pengambilan Keputusan Pemilihan Metode Kontrasepsi Di Puskesmas Pattallassang Kabupaten Gowa Tahun 2016," *J. Sipakalebbi*, vol. 4, no. 1, pp. 289–305, 2020, doi: 10.24252/jsipakallebbi.v4i1.14599.

[44] D. Fitriani, "Pengaruh Gender Terhadap Keputusan Pembelian Produk Online," *Creat. Commun. Innov. Technol. J.*, vol. 12, no. 1, pp. 99–107, 2019.