

Volume 1 Number 1, February 2025

Riset Akuntansi dan Bisnis Indonesia (RABI)

STIE KRAKATAU, Indonesia

Embrace the Sea, Saving the Community's Economy Akar Island, Setokok Village, Batam

Nur Effendi Anwar¹, Mursal Mursal², Andi Mulyadi³, Diana Titik Windayati⁴

Batam University, Indonesia^{1,2,3,4}

andyanwa32@gmail.com¹, mursal@univbatam.ac.id², mr.andilutfi@gmail.com³,

dianatitikwindayati@univbatam.ac.id⁴

ARTICLE INFO

Received: 1 February 2025;

Accepted: 14 February 2025;

Publish: 28 February 2025;



Volume 1, Number 1
February 2025, pp 1-11
<http://>

Corresponding author:

Nur Effendi Anwar
Batam University, Batam, Indonesia
E-mail: andyanwa32@gmail.com

ABSTRACT

Purpose: The community's efforts to develop the family economy began when they realized that rengkam seaweed could be utilized to increase household income, which became the author's motivation to conduct this research.

Methodology/approach: This study used a quantitative method with questionnaires and statistical analysis to test hypotheses and explore cause-and-effect relationships between variables in social contexts.

Results/findings: The analysis confirms all indicators are valid and significant, with each variable showing a meaningful influence. The model meets most Goodness of Fit criteria, indicating it's good but still improvable..

Conclusions: Empowering communities through knowledge and skills related to local resources like rengkam seaweed can significantly boost family economic growth. The proposed model shows strong structural validity and offers practical implications for economic development programs

Limitations: This study focuses on one community and rengkam seaweed, limiting its applicability to other regions or seaweed types. The quantitative method may miss socio-cultural aspects, so future research should use mixed methods for deeper insights.

Contribution: This study highlights the potential of rengkam seaweed in boosting household income and shows that motivation, education, and skills play key roles in family economic growth. The findings can guide targeted empowerment programs using local resources.

Keywords: *Economic Growth, Education, Motivation, Skills*

How to Cite: Anwar, N. E., Mursal., Mulyadi, A., & Windayati, D. T. (2025). Embrace the Sea, Saving the Community's Economy Akar Island, Setokok Village, Batam. *Riset Akuntansi dan Bisnis Indonesia*, 1(1), 1-11.

1. Introduction

Sea rengkam is a type of seaweed that is also included in the Sargassum family, which is also a type or species of seaweed. This type of plant grows significantly and is found in the waters of the Riau Islands, especially on Akar Island, Setokok sub-district. This seaweed, which usually lives on coral rocks, was

collected by local fishermen from the middle of the sea. To reach Rengkam, fishermen struggle to find it almost in the middle of the sea. To bring in sea rengkam harvests, fishermen use spices or special containers that they make.

Sargassum seaweed is generally brown in color, relatively large in size, and an aquatic plant that grows and develops on strong substrates. The top of the plant resembles a bilateral or radially symmetrical bush with the growing sides. Sargassum is generally found in the wild and has not been properly utilized by local communities who live on the coast." This brown seaweed has pigments (coloring substances) that give it a brown color and can produce algin or alginate, laminarin, cellulose, phycoidin, and mannitol, the composition of which depends on the type (species), developmental period, and place of growth (Jeevanandam, Hii, & San Chan, 2021).

Although this plant initially had no value at all, it was just a marine plant that divers considered very annoying when they were looking for fish and shellfish outside. In fact, they are often caught by fishing boat fans. However, currently, rengkam is able to provide benefits and income for fishermen, especially on Akar Island and Setokok Village. This rengkam seaweed does not know the season, and rengkam grows and lives every season. If this seaweed is not taken up, it will be released from its host on the coral itself during the north wind season. However, rengkam grew quickly and returned to life. This rengkam does not need to be planted, let alone cultivated, and lives on coral with green water (Anwar, Mursal, Mulyadi, & Windayati, 2024)

2. Literature review and hypothesis development

According to research conducted by (Ramadhan, Siregar, & Zamora, 2024) which states that the sale of Sargassum seaweed has a significant influence on the economic growth of the Teluk Village community Sasah, Bintan, from the survey results, approximately 64% of the community, especially Tanjung Talok Village, experienced economic improvement. The sales of Sargassum have a significant effect on the economic growth of the community. $T_{count} = 3.687 > 2.052$. The sales of Sargassum have a significant effect on the economic growth of the community. $F_{count} \text{ value} > F_{table} = 10.279 > 3.34$ ".

(Ningsih & Zaidi) with the title "Use of Sargassum SP Seaweed as a Biosorbent in the Absorption of Laundry Waste" which states that the results obtained from measuring pH, TDS, EC, TSS, and phosphate, showed that there was a decrease in TDS, EC, and TSS after adding Sargassum sp. Both active and inactive were compared to before the addition of Sargassum sp., except that in the phosphate measurement, the opposite occurred. For EC, the decrease ranged from 34-59%, for TDS measurements, there was a decrease in the range of 14-46%. For the TSS and phosphate measurements, the reductions ranged from 7-99% and 4-68% respectively. Based on LHRI Regulation no. 5 of 2014 concerning wastewater quality standards, the highest phosphate content is 2 mg/L, TSS 60 mg/L, and pH ranges from 6-9, meaning that phosphate and pH still meet quality standards, while TSS before adding biosorbent exceeds standard quality standards, but after adding sargassum sp. enabled to meet standards except those that are inactive' (Bora, Fanggidae, & Fanggidae, 2023).

3. Methodology

The research method used in this research is a quantitative research method, according to P Sugiyono (2019), a quantitative research method is a research method based on the philosophy of positivism, used to research certain populations or samples, collecting data using research instruments other than The researcher aims to understand the social situation in depth. This research was conducted on Akar Island in Setokok Village.

This location was chosen as the research location because Akar Island is a coastal area where the majority of the population makes their living as fishermen based on the population according to the livelihood of 992 people, including fishermen, farmers, 69 people, and others. People who work as fishermen still use knowledge about the sea, such as water seasons, currents, wind, moon conditions, rain, and natural signs, which serve as references and guidelines for fishermen when conducting fishing activities. In this research, researchers used primary data, namely data related to research obtained

directly, namely by interviewing the people of Akar Island and Setokok Village, especially people who work as fishermen (Anwar et al., 2024)

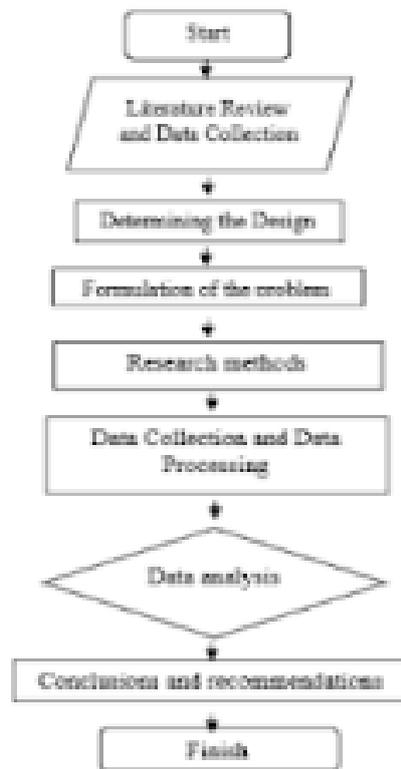


Figure 1. Research Flowcart

The method used in this study was quantitative. In quantitative research, examining a sample by collecting questionnaire data, the data results are in the form of statistical data, which are then used in hypothesis testing (P Sugiyono, 2019). Quantitative research establishes a cause-and-effect relationship between independent and dependent variables (P Sugiyono, 2019). Additionally, researchers intend to understand social situations in depth. The location of this study is Akar Island, Sitokok Village, Batam City. This location was chosen as the research location because Akar Island is one of the coastal areas where the majority of the population makes their living as fishermen based on the population according to the livelihood of 992 people, including fishermen, farmers, 69 people, and others. People who work as fishermen understand and still use the knowledge passed down from generation to generation about the sea, such as high tide and low tide seasons, currents, wind, moon conditions, rain, and natural signs, which serve as guidelines or references for fishermen. when performing sea activity. In this research, researchers used primary data, namely data related to research obtained directly, namely by administering questionnaires to the people of Akar Island, especially those who work as fishermen. Other supporting data were obtained from various sources closely related to marine products, especially rengkam seaweed produced by coastal communities.

3.1 Research Location

The research location is where the researcher conducts research or collects data. Determining this location is intended to further narrow the scope of discussing the problem, and determining the location of this research also takes into account several aspects such as the researcher's outreach capabilities, funding sources, and limited time. By focusing on the above, the researchers chose a location on Akar Island, Sitokok Village, Batam.

3.2 Research Time

The research time for this journal was carried out from April 2023 to July 2023 and the time to conduct this research was carried out when the fishermen had time and were ready to be interviewed and complete the questionnaire.

3.3 Research population

According to Ghozali (2018) and Sugiyono (2017), the population is a generalized area consisting of objects/subjects that have certain qualities and characteristics determined by researchers to be studied and conclusions drawn. The population in this study was a community of fishing farmers who worked as fishing fishermen and rengkam harvesting farmers, totaling 152 people.

3.4 Economic Conditions of the Akar Island Community

Economic fulfillment is a very important aspect of human life, and the economy is an activity that humans carry out to obtain a better life, starting from producing, distributing, and consuming. Things like this will always be done every day to meet certain needs such as food, drink, entertainment, and so on. Improving the community's economy, especially in rural areas, is the main focus of the government, both from the central government and regional governments, because the poverty rate in rural areas is still very high compared to urban areas.

The economic conditions of the people of Akar Island, apart from the marine sector, especially fishermen who catch fish, and the fishing community also carries out activities of collecting rengkam seaweed as additional income. The majority of the people on Akar Island are Muslim, marked by a Muslim place of worship. Through the BUMdes program, the Akar Island Village Government is also collaborating with companies to optimize local potential in the form of cultivating rengkam seaweed so that it becomes an export commodity that can hopefully raise the economic level of the Akar Island village community. At first, the people only worked as fishermen looking for fish, but because the results of the fish catch were getting smaller, the people looked for extra by looking for Sargassum seaweed or what they better known as rengkam to sell to companies not too far from Akar Island. Rengkam is abundant around Akar Island, making it difficult for fishing communities to find seaweed or rengkam.

"Research conducted by Diponegoro University and published on the page www.undip.ac.id, rengkam has many uses. If extracted and processed, rengkam can become a source of alginate, salt, or ester. This material is used by the pharmaceutical industry as a material for making capsule shells, emulsifiers and stabilizers." A research team from IPB University developed a herbal drink from sargassum or brown seaweed. Sargassum is a mixture of green and red seaweeds because it has higher antioxidant activity than green and red seaweeds. Several studies have shown that sargassum contains many compounds that can be used for various purposes. The main chemical compounds in sargassum include alginate, fucoïdan, protein, vitamin C, tannin, and iodine. The high content of Sargassum means that this type of seaweed is used as an ingredient or mixture in the pharmaceutical, textile, food and beverage, paper, and other industries.

In addition, sargassum contains active compounds, such as steroids, alkaloids, phenols, and triterpenoids, which function as antibacterial, antiviral, and antifungal agents. Sargassum extract, containing phenolic compounds, also has the potential to act as an antioxidant to protect cell death from dimerization and damage. The large sargassum content is also the reason why the research team from the Center for Coastal and Marine Resources Studies, Department of Aquatic Products Technology, and Science Techno Park IPB University developed a natural mixed marine herbal drink. Sargassum can also be used as a mixture in an herbal drink called alginate.

According to the Head of the Algatea Innovation Research Team, "Wahyu Ramadhan explained that sargassum is used as an ingredient in making herbal drinks because it is a type of seaweed that has many ingredients and benefits." The results of the study conducted by the research team also show that sargassum has high antioxidant levels with an IC50 value (Inhibition Concentration reaching 50-60

million per part (ppm)." Meanwhile, according to Wahyu, "so far, Indonesia has been known to have a lot of seaweed potential which has been explored or whose function is not yet widely known."

Examples of products from red seaweed that have been widely explored include gelatin and carrageenan. Another type of seaweed in Indonesia that has rarely been explored and its potential has not been widely developed is Sargassum. "Even though there is quite a lot of sargassum in Indonesia and it is abundant," he said, Sunday (4/6/2023). The high potential of seaweed sargassum in Indonesia makes the Ministry of Maritime Affairs and Fisheries strive to increase production through the cultivation sector in communities that live off sea farmers. KKP also encourages business actors or investors to take part in working on and developing the potential of the seaweed processing industry, especially sargassum, in Indonesia to increase the competitiveness and export value of these products in the world market.

"This marine plant is also multi-functional, not only acting as a guardian of the marine environment but also as a savior of the economy of coastal communities because it has high economic value.



Figure 2. Traditional drying of Rengkam

Motivation receives primary attention in every organization, while morale is a secondary phenomenon because high motivation leads to higher productivity, whereas high morale may not necessarily always lead to higher productivity.

Motivation is one of the factors that influences human behavior. Motivation is also called a driver, desire, supporter, or need - a need that can make someone enthusiastic and motivated to reduce and fulfill their own impulses so that they can act in certain ways that will bring it to the optimal direction stated by (Prayogi, Lesmana, & Siregar, 2019).

According to (Fatimah, 2023), work motivation is the provision of motivation that creates enthusiasm for someone's work, so that they want to work together, work effectively, and integrate with all efforts to achieve satisfaction.(Anwar et al., 2024) that the factors that influence employee morale are interest or attention to work, wages/salary, social status based on position, noble goals and devotion, work environment, and human relations."Work skills are the ability to use reason, thoughts and ideas, and creativity in doing, changing, or making something more meaningful so as to produce value from the results of the work. Several other definitions also define skill or expertise as the ability to translate or describe knowledge into practice so that desired work results are achieved (Lamri & Lubart, 2023).

The following are various opinions about skills according to the experts:

1. According to Gordon, skill is the ability to perform work easily and carefully.

2. According to Nadler, skills or activity skills require practice or can be interpreted as the implications of activities.
3. According to Higgins, skill is the ability to perform and fulfill a task.
4. According to Iverson, skill is defined as the ability to work easily and precisely. Summarizing, skill refers to the ability to operate a job easily and carefully.

Improving the Community Economy is a method or effort carried out by the community in managing the household economy to become better with the aim of meeting life needs. So this research aims to analyze

1. Empowering Community Potential in Improving the Economy,
2. Empowering community potential to improve the economy from a Sharia economic perspective.

The results of this research can be stated as follows: Community Potential Empowerment is population growth, which is increasing, and an increasing number of people are looking for sources of livelihood from the same sources, for example, becoming farmers and the service sector outside agriculture. Fisherman farming communities who make their living from the sea live in coastal areas or coasts; fishing communities are marine farmer groups who earn their livelihood from the sea and live in villages or coastal areas (Lamri & Lubart, 2023).

Therefore, the broad definition of a fishing community is a group of people whose main livelihood is fishing in the sea and living in coastal areas, not those who live inland, although this does not rule out the possibility that they also fish in the sea because they are not part of the community of people who have cultural ties to coastal communities.

According to (Akafo & Boateng, 2015), the factors that can influence employee morale are as follows:

1. Mentally challenging work
2. Appropriate rewards
3. Supportive working conditions
4. Supportive coworkers
5. Suitability of personality to job

Work Skills are the advantages possessed by an employee in carrying out a series of tasks and being able to complete these tasks properly, correctly, and on time as scheduled by the company. According to (Aurelya, Mulyati, & Maduwinarti, 2025) there are four indicators of work skills.

1. Technical Skills (Technical Skills)
2. Management Skills (Management Skills)
3. Entrepreneurship (Entrepreneurship)
4. Personal Maturity Skills)

In economics, it is explained that there are elements that influence the family economy, namely income, expenses and how to manage the family economy." Family income is the main source for meeting the needs of family members and can be obtained from various sources, among others.

According to (Shavers, 2007)Based on the above description, it can be concluded that family economics is a study of human efforts to meet needs through activities carried out by a person. With indicator:

1. Income
2. Fulfillment of Educational Needs
3. Fulfillment of needs for food, clothing and shelter
4. Fulfillment of Health Needs

3.5 Research Model

The following hypothesis was generated based on the research model:

1. Work motivation influences work productivity
2. Work enthusiasm influences work productivity
3. Skills influence work productivity

4. Work productivity has an effect on economic improvement
5. Motivation influences economic improvement through work productivity
6. Work enthusiasm influences economic improvement through work productivity
7. HR competency has an effect on improving the economy through work productivity

According to (Sinaga, 2020), there are five motivation indicators: physical, safety, social, resection, and self-embodiment needs. The company's efforts to improve the quality of work life are as follows:

1. Physical needs. For example, by providing adequate salaries to employees, achievement bonuses, food allowances, transport allowances, and so on.
2. The need for security and safety. For example, by providing work security and safety facilities, workers do not worry when working, such as social security for workers, pension funds, and other safety equipment.
3. Social needs. For example, by creating small teams in each subdivision, the aim was to establish harmonious working relationships and solve problems as a group. the need to be accepted in a group and the need to love and be loved.
4. The need for appreciation. For example, the company provides performance bonuses, education, and training, and the employee will direct his/her abilities, skills, and potential. Thus, employees feel appreciated for their abilities.
5. The need for self-realization.

The word education comes from the word pedagogy (education), which comes from Greek. Pedagogy consists of two words: paedos (children) and agoges (guiding). Education can be defined as a person's activity in guiding and leading children towards perfect growth and development so that they can stand independently and take responsibility (Shah & Campus, 2021). The Republic of Indonesia Law CHAPTER II Article 4 no. 2 of 1989 states that the aim of education is to educate the life of the nation and develop the whole person, namely, a person who has faith and devotion to God Almighty and has a noble character, knowledge and skills, physical and spiritual health, a stable and independent personality, and a sense of social responsibility. and nationality.

Non-formal education is any organized and systematic activity outside the school system that is carried out independently or is an important part of a wider activity that is deliberately carried out to serve certain students to achieve their learning goals. Economic growth is an increase in per capita output in the long term. In this understanding, theory must include theories regarding Gross Domestic Product (GDP) and population growth. Economic growth in several countries is influenced by several factors, including the wealth of natural resources and land, the number and quality of labor, available capital goods, the level of technology used, and the social system and attitudes of society.

(Arwani, Safi, Zawawi, Tamara, & Masrur, 2023) states that economic growth is defined as a quantitative measure that describes the development of an economy in a particular year when compared with the previous year. Economic development is expressed as a percentage change in national income in a particular year compared to the previous year. The Regional Economic Growth Indicators put forward by Prof. Rahardjo Adisasmita, in his book, state that there are several indicators that can be used as benchmarks to see the economic growth of a region, namely, as follows:

1. Income Imbalance

In ideal circumstances, where income is fairly fairly distributed, the bottom 80% of the population will receive 80% of the total income, while the top 20% will receive 20% of the total income. According to the United Nations (UN), the population is divided into three groups: the lowest 40% of the population, the middle 40% of the population, and the top 20% of the population. The income inequality indicator can be used to assess the success of regional economic development.

2. Changes in Economic Structure

Changes in Economic Structure in an advanced society and the economic development carried out will result in changes in the economic structure, where there is a tendency for the contribution (role) of the agricultural sector to the value of the Gross Regional Domestic Product (GRDP) to decrease, while the

contribution of the industrial sector will increase. The industrial sector plays an important role in national and regional development, the industrial sector providing extensive employment opportunities, providing increased income to the community, and generating foreign exchange from exports. Therefore, the economy of a region must be oriented apart from the agricultural sector but must also be oriented towards the industrial sector (Marina, Andayani, Sumantri, & Wiranti, 2023)

3. Growth in Job Opportunities

Employment and employment opportunities are strategic and urgent developmental problems in Indonesia. Indonesia's population is more than 240 people, the unemployment rate is quite high and tends to increase due to the financial crisis in countries around the world. The role of the government is necessary to overcome this broad economic crisis. One of the strategic steps is the construction of infrastructure (e.g., roads). The construction of roads that reach all production areas will encourage increased production of various agricultural commodities in a broad sense (including food crops, plantations, fisheries, animal husbandry, and forestry) as well as industrial goods. The development of transportation infrastructure and facilities will support the development of various activities in other sectors (agriculture, trade, industry, tourism, etc.).

4. Level and Distribution of Facilities

Level and Distribution of Convenience, in this case "convenience" is defined as the convenience for people to fulfill their needs, both fulfilling daily living needs (such as clothing, food, shelter, obtaining education and health services, opportunities for worship, recreation and so on), as well as fulfilling needs to be able to carry out business activities, for example obtaining raw materials, auxiliary materials, spare parts, electricity, clean water, and services such as transportation, marketing, banking and others).

5. Gross Regional Domestic Product

Gross Regional Domestic Product (GDP), one of the most important concepts in regional economic development, is the Gross Regional Domestic Product (GRDP). The GRDP is a measure of the economic achievement (success) of all economic activities (Kurnia, Rustiadi, & Pravitasari, 2019).

The indicator that shows economic growth in a region is Gross Regional Domestic Product (GRDP) data. According to this definition, the Gross Regional Domestic Product (GRDP) is the total value of final goods and services produced by all economic units in a certain area (region) at a certain time without looking at ownership factors. Economic growth in a region is obtained from an increase in the GRDP at constant prices, which reflects the increase in the production of goods and services from year to year.

Work Skills are the excess work skills possessed by an employee or worker in carrying out a task and can complete the task properly and correctly on time as scheduled by the company. (Anwar et al., 2024) explain that there are four indicators of work skills.

1. Technical Skill
2. Management Skill
3. Entrepreneurship
4. Personal Maturity Skill

4. Results and discussion

Model testing was carried out using regression coefficients for motivation (X1), education (X2), skills (X3), and Economic Growth (Y). Based on the results of calculating the regression coefficients (weight regression), an output table was created, as shown in the following table:

Standardized Direct Effects (Group number 1 - Default model)

Motivation (X1), Education (X2), Skills (X3), and Economic growth (Y)

	Skills	Education	Motivation	Growth
Growth	.191	.607	.225	.000

Regression Weights: (Group number 1 - Default model)

Motivation (X1), Education (X2), Skills (X3), and Economic growth (Y)

			Estimate	S.E.	C.R.	P	Label
Growth	<---	Motivation	.328	.161	2.037	.042	par_17
Growth	<---	Education	.475	.122	3.893	***	par_18
Growth	<---	Skills	.115	.055	2.089	.037	par_19

Standardized Regression Weights: (Group number 1 - Default model)

Motivation (X1), Education (X2), Skills (X3), and Economic growth (Y)

			Estimate
Growth	<---	Motivation	.225
Growth	<---	Education	.607
Growth	<---	Skills	.191

In the table above, the influence of the latent variable Motivation (Motiv) on the latent variable Growth (Pertu) has a standardized estimate (regression weight) of .225, with a CR (critical ratio = identical to the calculated t value) of 2.037 at probability = 0.042 CR value = 2.037 > 2,000 and Probability 0.042 < 0.05 shows that the influence of the latent variable Motivation (Motiv) on the latent variable Growth (Pertu) is significantly positive.

In the table above, the influence of the latent variable Education (Pendi) on the latent variable Growth (Pertu) has a standardized estimate (regression weight) of .607, with a CR (critical ratio = identical to the calculated t value) of 3.893 at probability = ***. The value of CR = 2,037 > 2,000 and probability *** < 0.05 shows that the influence of the latent variable Education (Pendi) on the latent variable Growth (Pertu) is significantly positive.

In the table above, the influence of the latent variable Skills (Kete) on the latent variable Growth (Pertu) has a standardized estimate (regression weight) of .191, with a CR (critical ratio = identical to the calculated t value) of 3.893 at probability = .037. The value of CR = 2,089 > 2,000 and Probability .037 < 0.05 shows that the influence of the latent variable Skills (Kete) on the latent variable Growth (Pertu) is significantly positive.

From the description above, it can be stated that the three latent variables have a significant positive influence

4.1 Goodness of Fit Analysis

Based on the analysis and test criteria, the Goodness of Fit results obtained from Amos version 23.0, processing can be created, and a table can be created as follows:

Goodness Of Fit	Cut-Of Value	Model Results	Information
Chi-Square (χ^2)	Expected to be small	202,229	Good
Relative Chi-Square (χ^2/df)	$\leq 3,00$	1,313	Good
Probability	$>0,05$	0,006	Not Good
RMSEA	$\leq 0,08$	0.041	Good
GFI	$\geq 0,90$	0,908	Good
AGFI	$\geq 0,90$	0,875	Marginal
TLI	$\geq 0,95$	0,935	Marginal
CFI	>095	0,947	Marginal

Based on the table above, the cut-off value and goodness of fit model show that four (criteria) are met and one is not good, as well as three marginal criteria, and the model above can be said to be a good model.

4.2 Analysis of Measurement Models with Determination

Below is an analysis of the measurement model with the coefficients of determination of Motivation, Education, Skills on Economic Influence. Measurement model analysis was used to determine the magnitude of the contribution of the exogenous variables to the endogenous variables. For this analysis, a Square Multiple Correlation was used. The size of the Square Multiple Correlation is shown in the following table.

Squared Multiple Correlations: (Group number 1 - Default model)

	Estimate
Growth	.738

The Square Multiple Correlation value is 0.738, according to Ferdinand 2002:114 with R², the magnitude of the determination is the Square Multiple Correlation value for the Economic Growth variable multiplied by 100% = $0.738 \times 100\% = 73.8\%$. Thus, it can be stated that 73.8% of changes in economic growth are influenced by Motivation, Education and Skills.

5. Conclusion

From the overall analysis, it can be concluded that all indicators for Motivation, Education, Skills and Economic Growth are valid and significant. And if you look at the structural model above, it shows that the Weight Regression shows that all variables have a significant influence. The Goodness of Fit results show four good criteria: one that is not good and three that are marginal; thus, the model above can be declared as a good model, and to obtain even better results, it can be modified as necessary.

References

- Akafo, V., & Boateng, P. A. (2015). Impact of reward and recognition on job satisfaction and motivation. *European Journal of Business and Management*, 7(24), 112-124.
- Anwar, N. E., Mursal, M., Mulyadi, A., & Windayati, D. T. (2024). Embrace the sea, saving the community's economy Akar Island, Setokok Village, Batam. *Journal of Multidisciplinary Academic Business Studies*, 1(4), 683-693. doi:<https://doi.org/10.35912/jomabs.v1i4.2263>
- Arwani, A., Safi, M. A., Zawawi, Z., Tamara, K., & Masrur, M. (2023). Development of the economic growth model reducing poverty in Central Java Indonesia. *International Journal of Professional Business Review: Int. J. Prof. Bus. Rev.*, 8(3), 14. doi:<https://doi.org/10.26668/businessreview/2023.v8i3.1134>
- Aurelya, S. L., Mulyati, A., & Maduwinarti, A. (2025). Pengaruh Keterampilan Wirausaha, Orientasi Kewirausahaan Dan Kemandirian Pribadi Terhadap Keberhasilan Usaha Umk Pada Bidang Kerajinan Tangan Buket Bunga Di Kabupaten Mojokerto. *Gemah Ripah: Jurnal Bisnis*, 5(02), 165-179. doi:<https://doi.org/10.69957/grjb.v5i02.2123>
- Fatimah, R. R. S. (2023). *Pengaruh iklim kerja dan kepuasan kerja terhadap kinerja pegawai Pascasarjana Universitas Terbuka*. Universitas Islam Negeri Maulana Malik Ibrahim.
- Ghozali, I. (2018). Aplikasi analisis multivariete dengan program IBM SPSS 23.
- Jeevanandam, J., Hii, Y. S., & San Chan, Y. (2021). Biosynthesized metal nanoparticles in bioremediation *Rhizomicrobiome dynamics in bioremediation* (pp. 126-161): CRC Press.
- Kurnia, A. A., Rustiadi, E., & Pravitasari, A. E. (2019). *Cluster analysis and spatial pattern approaches in identifying development pattern of Bodebek region, West Java*. Paper presented at the Sixth International Symposium on LAPAN-IPB Satellite.
- Lamri, J., & Lubart, T. (2023). Reconciling hard skills and soft skills in a common framework: The generic skills component approach. *Journal of Intelligence*, 11(6), 107. doi:<https://doi.org/10.3390/jintelligence11060107>
- Marina, I., Andayani, S. A., Sumantri, K., & Wiranti, S. E. (2023). Tinjauan Komoditas Unggulan Tanaman Pangan: Analisis Lokasi dan Pertumbuhan Ekonomi di Kabupaten Majalengka. *Journal of Innovation and Research in Agriculture*, 2(2), 7-14.
- Ningsih, R. N., & Zaidi, N. A. B. Analysis of Village Fund Management in Improving the Community Economy in Indonesia. doi:<https://doi.org/10.58968/ria.v4i1.539>

- Prayogi, M. A., Lesmana, M. T., & Siregar, L. H. (2019). *The influence of communication and work discipline to employee performance*. Paper presented at the First International Conference on Administration Science (ICAS 2019).
- Ramadhan, D. A., Siregar, H., & Zamora, R. (2024). Economic Potential Analysis Renggam On Batam Island. *Ecobisma (Jurnal Ekonomi, Bisnis Dan Manajemen)*, 11(1), 164-173. doi:<https://doi.org/10.36987/ecobi.v11i1.5481>
- Shah, R. K., & Campus, S. (2021). Conceptualizing and defining pedagogy. *IOSR journal of research & method in education*, 11(1), 6-29.
- Shavers, V. L. (2007). Measurement of socioeconomic status in health disparities research. *Journal of the national medical association*, 99(9), 1013.
- Sinaga, O. S., Hasibuan, A., Efendi, E., Priyojadmiko, E., Butarbutar, M., Purba, S., ...& Muliana, M. . (2020). *Manajemen kinerja dalam organisasi: Kami Menulis Yayasan*.
- Sugiyono. (2017). *Metode Penelitian Kualitatif, Kuantitatif dan R&D*. .