

# The Impact of Innovation Policy and Development Strategy on Satisfaction and Productivity of Seaweed Industry Employees in Sumenep

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**Abstract.** This study examines The Impact of Innovation Policy and Development Strategy on Satisfaction and Productivity of Seaweed Industry Employees in Sumenep Regency. This research is quantitative research. The source of data in this study is primary data using a questionnaire. The population in this study was 41 people with a sampling technique using a saturated sample or census. The results of this study indicate that innovation policy has a significant effect on productivity and Development Strategy has a significant effect on productivity. Satisfaction mediates the effect of innovation policy on productivity significantly and Satisfaction mediates the effect of development strategy on productivity significantly.

**Keywords:** Innovation Policy, Development Strategy, Satisfaction, Productivity.

## 1 Introduction

The development of technology globally is increasingly being evaluated at this time considering the development of advanced technology in the world market. Each country has an important role in making innovation policies in socio-economic development. In addition, the effectiveness of implementing innovation also needs to be considered for the development of international strategies. Each strategy development policy needs to be analysed carefully so that each organizational goal can be achieved [1].

The implementation of any innovation policy is the main means in promoting economic development strategies. This can be achieved through development strategies and business policy tools. One of the impacts in developing this strategy can result in Satisfaction and good economic productivity. A simple example of the resulting economic impact is an increase in production, sales, income, wealth [2].

Innovation policies and development strategies can be realized if there is Satisfaction. Satisfaction is a force that moves individuals to achieve organizational targets. Satisfaction is important because an organization cannot be separated from employees and also employee motives in achieving organizational goals. Satisfaction refers to the bond between employees and the organization they work for [3].

The goal of each business unit is of course to increase productivity. The result of implementing each

policy and strategy apart from Productivity is productivity. Productivity is often used interchangeably with Productivity as an indicator of the success of a business. It is very difficult to determine worker productivity because of the variety of work activities [4]. This issue reinforces the need for this research.

The importance of productivity in a business unit makes this research important to do. Innovation policies and development strategies are factors that can be used in analysing the need for increased productivity. Everything that is done also requires commitment from all parts of the organization.

This study examines innovation policies and development strategies for Satisfaction and productivity in the seaweed industry in Sumenep Regency. Sumenep Regency is a coastal district on the island of Madura which is rich in marine products. The maritime industry in Sumenep Regency is very promising. Good management is the key for this industry to grow.

The formulation of the problem in this research are: (1) Does innovation policy have a significant effect on productivity? (2) Does the development strategy have a significant effect on productivity? (3) Does Satisfaction mediate the effect of innovation policy on productivity significantly? (4) Does Satisfaction mediate the effect of development strategy on productivity significantly?

The objectives of this study are: (1) Analysing the effect of innovation policy on productivity, (2) Analysing the effect of development strategy on productivity, (3) Analysing the mediating effect of

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Satisfaction on the influence of innovation policy on productivity significantly, (4) Analysing the mediating effect of Satisfaction to the effect of development strategy on productivity significantly.

## 2 Research Methods

This research is quantitative research that looks for the influence between variables, either directly or indirectly. The variables studied were  $X_1$  (Innovation Policy),  $X_2$  (Development Strategy),  $Y_1$  (Satisfaction), and  $Y_2$  (Productivity). The data obtained are primary data using a questionnaire. The population in this study were 57 salt farmers who are members of the micro business community in Sumenep Regency. The sample of this study is a saturated sample or a sample population that is taking the entire population as a sample. The analytical tool used is Partial Least Square (PLS) with Smart PLS.

### a. Innovation Policy

Innovation policy is meant to be the existence of new policy initiatives and directions. The policy issued has the principle of containing something new [5]. innovation indicators include [6]:

1. Human capital
2. Creation of new knowledge
3. Application of new knowledge
4. Financing of innovations

### b. Development Strategy

Development strategy is an action that requires top management to realize business development. The development strategy affects the life of the organization in the long term for at least five years. The function of the development strategy is to formulate and consider internal and external factors in the company [7]. indicators of the development strategy consist of [6]:

1. Quality of life and social inequality
2. Sustainable development as a policy objective
3. Sustainable responsibility of managers

### c. Satisfaction

Satisfaction describes the conditions that indicate the likes and dislikes of employees towards the work undertaken. Satisfaction is influenced by factors from the employee's self and factors from his work [8]. Indicators of job satisfaction include [9]:

1. Satisfaction with the nature of work
2. Satisfaction with current salary
3. Satisfaction with supervision
4. Satisfaction with promotion opportunities
5. Satisfaction with relationships with colleagues

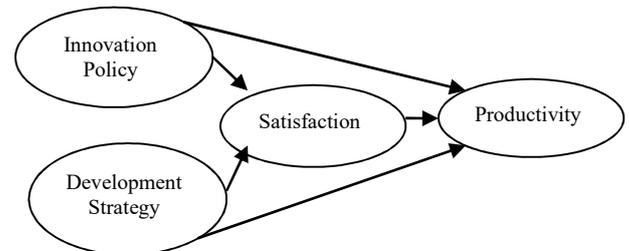
### d. Productivity

Productivity is the ratio between output and input. The results are in the form of the number of goods and services produced while the resources include the amount of labor, capital, energy, and others [8].

Some of the indicators needed to measure productivity are [10]:

1. Ability
2. The results you want to achieve
3. Work spirit
4. Self development
5. Quality
6. Efficiency

The framework of thought in this research is as follows:

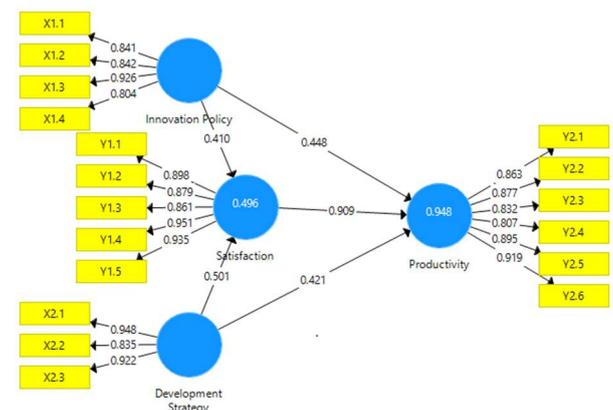


**Fig. 1** Research framework.

The research hypothesis is as follows: (1) Hypothesis 1: Innovation Policy has a significant direct effect on Productivity, Hypothesis 2: Development Strategy has a significant effect on Productivity, Hypothesis 3: Satisfaction mediates the influence of empowerment on Productivity significantly, Hypothesis 4: Satisfaction mediates the influence of Development Strategy on Productivity significantly.

## 3 Result

The following is the output of the data analysis used in this study:



**Fig. 2** Output Analysis.

The following are the results of the validation test for each indicator of the following variables:

**Table 1.** Construct Validity

Variables	Indicators	Outer Loading
X <sub>1</sub>	X <sub>1,1</sub>	0.841
	X <sub>1,2</sub>	0.842
	X <sub>1,3</sub>	0.926
	X <sub>1,4</sub>	0.804
X <sub>2</sub>	X <sub>2,1</sub>	0.948
	X <sub>2,2</sub>	0.835
	X <sub>2,3</sub>	0.922

Variables	Indicators	Outer Loading
Y <sub>1</sub>	Y <sub>1.1</sub>	0.898
	Y <sub>1.2</sub>	0.879
	Y <sub>1.3</sub>	0.861
	Y <sub>1.4</sub>	0.951
	Y <sub>1.5</sub>	0.935
Y <sub>2</sub>	Y <sub>2.1</sub>	0.863
	Y <sub>2.2</sub>	0.877
	Y <sub>2.3</sub>	0.832
	Y <sub>2.4</sub>	0.807
	Y <sub>2.5</sub>	0.895
	Y <sub>2.6</sub>	0.919

The results of the validity test, it can be seen that all indicators in the study are valid. Furthermore, the reliability was tested for all research variables. The results of the reliability test are as follows:

**Table 2.** Construct Reliability

Variables	Cronbach's Alpha	Composite Reliability	AVE
X <sub>1</sub>	0.885	0.930	0.815
X <sub>2</sub>	0.877	0.915	0.730
Y <sub>1</sub>	0.933	0.947	0.751
Y <sub>2</sub>	0.945	0.958	0.820

The test results, it shows that all variables are reliable and can be used in this study.

The results of the analysis will be significant if the T-Statistics is greater than T-Table (1.96) and the P-Value is less than 0.05. The following is a test of the influence between variables both direct and indirect, as follows:

**Table 3.** Direct Effect

Variables	Original Sample	T-Statistics	P-Value
X <sub>1</sub> – Y <sub>1</sub>	0.448	3.423	0.000
X <sub>2</sub> – Y <sub>1</sub>	0.421	3.562	0.000
X <sub>1</sub> – Y <sub>2</sub>	0.410	3.428	0.001
X <sub>2</sub> – Y <sub>2</sub>	0.501	3.739	0.000

From the results of the analysis of the direct influence between variables, it shows that all variables have a significant direct effect.

**Table 4.** Indirect Effect

Variables	Original Sample	T-Statistics	P-Value
X <sub>1</sub> – Y <sub>2</sub>	0.372	3.688	0.000
X <sub>2</sub> – Y <sub>2</sub>	0.456	3.532	0.000

From the results of the analysis of the indirect influence between variables, it shows that satisfaction mediates the indirect effect of Innovation Policy on Productivity and Development Strategy on Productivity.

## 4 Conclusion

The conclusions of this study are: (1) Innovation Policy has a significant direct effect on Productivity, (2) Development Strategy has a significant effect on Productivity, (3) Satisfaction mediates the influence of empowerment on Productivity significantly, Hypothesis (4) Satisfaction mediates the influence of Development Strategy on Productivity significantly.

## References

- [1] V. Omelyanenko, O. Kudrina, O. Semenikhina, V. Zihunov, O. Danilova, and T. Liskovetska, "Conceptual Aspects of Modern Innovation Policy," *Eur. J. Sustain. Dev.*, vol. **9**, no. 2, pp. 238–249, 2020, doi: 10.14207/ejsd. (2020).v9n2p238.
- [2] K. Guo, S. Li, Z. Wang, J. Shi, J. Bai, and J. Cheng, "Impact of regional green development strategy on environmental total factor productivity: Evidence from the yangtze river economic belt, china," *Int. J. Environ. Res. Public Health*, vol. **18**, no. 5, pp. 1–22, (2021), doi: 10.3390/ijerph18052496.
- [3] S. Z. Imamoglu, H. Ince, H. Turkcan, and B. Atakay, "The Effect of Organizational Justice and Organizational Commitment on Knowledge Sharing and Firm Performance," *Procedia Comput. Sci.*, vol. **158**, pp. 899–906, (2019), doi: 10.1016/j.procs.2019.09.129.
- [4] S. O. Ojo, D. P. Bailey, A. M. Chater, and D. J. Hewson, "The Impact of Active Workstations on Workplace Productivity and Performance: A Systematic Review," *Int. J. Environ. Res. Public Health*, vol. **15**, no. 3, (2018), doi: 10.3390/ijerph15030417.
- [5] A. Sururi, "Inovasi Kebijakan dalam Perspektif Administrasi Publik Menuju Terwujudnya Good Public Policy Governance," *Spirit Publik J. Adm. Publik*, vol. **12**, no. 2, p. 14, (2017), doi: 10.20961/sp.v12i2.16236.
- [6] A. Kovačić, "European Union and Sustainable Development Indicators," *Manag. Sustain. Dev.*, vol. **9**, no. 2, pp. 19–29, (2018), doi: 10.1515/msd-2017-0018.
- [7] M. Afridhal, "Muhammad Afridhal," *J. Chem. Inf. Model.*, vol. **53**, no. 9, pp. 223–233, (2017).
- [8] H. Yanita, "Uji Produktivitas Kerja Karyawan Bagian Produksi Terkait Dengan Work Ability, Work Environment, Dan Job Satisfaction Di Pt. Ratio Karunia Mulya Garment Karanganyar," *Pap. Knowl. Towar. a Media Hist. Doc.*, vol. **3**, no. April, pp. 49–58, (2015).
- [9] W. D. Sunanda, "Pengaruh Kepemimpinan Islam dan Religiusitas Terhadap Kinerja Karyawan Melalui Kepuasan Kerja Karyawan Sebagai Variabel Intervening (Studi Kasus Pada Waroeng Spesial Sambal)," *J. Ilmu Manaj.*, vol. **17**, no. 1, pp. 20–36, (2020).
- [10] K. N. Baiti, D. Djumali, and E. Kustiyah, "Produktivitas Kerja Karyawan Ditinjau dari Motivasi, Disiplin Kerja dan Lingkungan pada PT. Iskandar Indah Printing Textile Surakarta," *J. Ilm.*

*Edunomika*, vol. **4**, no. 01, pp. 69–87, (2020), doi:  
10.29040/jie.v4i01.812