



# THE INFLUENCE OF WAGE AND AGE ON LABOR PRODUCTIVITY IN THE *KERAWANG* INDUSTRY IN GORONTALO REGENCY (Study on Kerawang Naga Mas Industry)

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## Abstract:

The utilization of existing Human Resources (HR) in the industrial sector is the key to achieving goals in the industrial sector. The success or failure of a work organization in achieving its goals will depend on the human resources, including the labor in the Kerawang Industry in Mongolato Village, Telaga Subdistrict, Gorontalo Regency. For this reason, it is essential to conduct research that aims to determine the effect of wage and age factors on labor productivity in the Kerawang Naga Mas Industry. Moreover, this study applies multiple linear regression analysis where the population is the laborers in the Kerawang Naga Mas industry, amounting to 35 respondents. At the same time, the data collection is done through questionnaires and interviews. The research finding clarifies that wage and age factors significantly affect labor productivity in the Kerawang Naga Mas Industry. However, wage has a negative tendency on labor productivity, which means that for every 1% increase in wage, the labor production value of the Krawang Industry will decrease by 0.298. In contrast, the age variable has a positive tendency on labor productivity, meaning that for every 1% increase in age, the labor productivity value of the Kerawang Industry will increase by 0.1743.

**Keywords:** Productivity, Wage, Age

## 1. INTRODUCTION

The interaction of various groups of variables, including such human resources, natural resources, capital, technology, and others, impacts a region's or country's economic development. As both a reason, economic development is intrinsically tied to the function of individuals in its administration. Government policies on development have an impact on society. Humans, as labor and development inputs, are also consumers of development's outcomes. The future growth of Indonesia is focused toward the development of the full person, according to the notion of human resource development. As a result, determining the extent to which employee productivity can be achieved heavily relies on evaluating job productivity. As per Sidanti's research (2015), any company is required to suppress and optimize human resources in order for them to have high talents or abilities. Processing industry is an economic activity that involves turning a basic good mechanically, chemically, or by hand into a finished/semi-finished product, and/or goods of low value into goods of high value, and closer in nature. to the end user. It is expected that because this industry grows and develops, it will be able to absorb enough employees. Human resources or labor must be the center of attention because they are subjects and objects that determine their very large relevance as supporters for the continuity of a business. Naga Mas is a karawo handicraft industry, or kerawang cloth as it is known outside of Gorontalo, that was founded on October 17, 1976. Mongolato, Kec. Telaga, Gorontalo is home to the Naga Mas industry. In this case, the Naga Mas industry will pay attention to the productivity of each workforce person, particularly the karawo embroidery workers themselves, in order to ensure supply and demand equilibrium. Karawo is made in a unique way to produce high-quality products, with a manufacturing process that is classified as not-for-profit. It's simple because it's still done by hand or embroidered. Because its originality rests in the workmanship, patience and thoroughness are required during the process of manufacturing karawo. Especially when it comes to fiber separation (Fabric Yarn). To improve the company's quality and quantity, it is required to raise labor

productivity, which means that, in order to meet the company's targets and objectives, it is also necessary to consider aspects such as years of service, wages, and the age of the workforce. Based on the issues, this study was conducted in the form of a thesis titled "The Effect of Wages and Age on Labor Productivity in the Filigree Industry in Gorontalo Regency" to determine the effect of wages and age on labor productivity of employees of the Kerawang Naga Mas Industry (Study on the Naga Mas Filigree Industry). 1. Is there any effect of salary variable on worker productivity in Naga Mas kab. Gorontalo's filigree industry? 2. Is there an influence of age on labor productivity in the Naga Mas kab. Gorontalo filigree industry?

**2.MATERIALS AND METHODS**

**2.1 Theory must be studied.**

In a study undertaken to determine the impact of education, wages, work experience, gender, and age on labor productivity in the shuttlecock industry in Tegal City, Central Java Province, it was discovered that the factors of wages, experience, and gender have the greatest impact. Work, gender, and the number of dependents all have a favorable impact on the industry's labor productivity. While the education variable has no bearing on the outcome (Herawati and Sasana, 2013: 2).

**2.2 Industry Definition**

In microeconomics, industry refers to a group of similar businesses that produce similar items and have similar alternatives. Industry refers to all activities that are productive in nature and can give more added value in order to address basic human needs for goods and services. In macroeconomics, industry also refers to the economic activity that generates income, hence industry refers to economic activity that adds value. Industry, as a macroeconomic activity, attempts to produce added value in addition to increasing gross domestic product (GDP), but, more crucially, for the people's wellbeing. Furthermore, in a broader sense, industry refers to a group of businesses that generate goods and services with high cross elasticity (Prasetyo, 2010: 3).

**2.2.1 Small Business**

Small industry is defined as an economic activity that is included in the production process within small limits, as defined by Law No. 9 of 1995 (in Disperindag & PM Semarang Regency, 2008:3) regarding small businesses: "Small industry is an economic activity that is included in the production process within small limits." "A small industry is an economic activity carried out by individuals, households, or entities with a net worth of at least Rp. 200 million and a sales value of Rp. year amounting to IDR 1 billion or less, with a net worth of at most Rp. 200 million and a sales value of Rp. year amounting to IDR 1 billion or less, aiming to produce goods and services for commercial trade. Small industry is an economic activity that is marketed and generates income on a small scale and is carried out with a few workers. The dynamics of small industries in Indonesia are split into three categories based on their existence: Local industries, that is, industrial groups that rely on a small local market for survival, are geographically dispersed.

**2.3.1 Working conditions**

The terms human resources (HR) and human resources (HR) are interchangeable. First and foremost, human resources refer to the meaning of work or services that can be offered during the manufacturing process. HR in this case reflects the quality of a person's effort put in over a period of time to provide goods and services. The second definition of HR refers to people who can work to deliver services or contribute to work efforts. Being able to work entails being able to engage in activities with monetary worth. Furthermore, these activities produce items or services to suit the community's needs. Age determines one's physical ability to labor.

**2.3.2 Job Prospects**

Job opportunities, according to the Central Bureau of Statistics (2003:57), refer to the number of persons who can be accommodated to work in a company. If the available job possibilities are sufficient or matched with the quantity of existing workers, this job opportunity will accommodate all workers.

**2.4 Productivity of Labor**

Employee productivity is a key metric for gauging a company's success in running a business. Because the higher the labor productivity of firm personnel, the better the earnings and productivity of the company.

**3.RESULTS AND DISCUSSION**

**3.1 VALIDATION TEST**

The validity test is used to make sure that the information obtained is accurate to a significant degree (Fatoni, 2006).

**Tabel 4.2. Uji Validitas Produktivitas Tenaga Kerja**

Questions	Value Corrected Item	R-Hitung	Ket.
Q1	0,48	0,33	VaLid
Q2	0,76	0,33	VaLid
Q3	0,74	0,33	VaLid
Q4	0,58	0,33	VaLid
Q5	0,69	0,33	VaLid
Q6	0,7	0,33	VaLid

Q7	0,53	0,33	Valid
Q8	0,41	0,33	Valid

Sumber : Data Primer diolah.

According to Table 4.2, a significant test of 0.05 indicates that the Value Corrected Item/R-Calculate > R-Table suggests that labor productivity is above average. valid.

Tabel 4.3. Uji Validitas Upah

Questions	Value Corrected Item	R-Hitung	Ket.
Q1	0,90	0,33	Valid
Q2	0,86	0,33	Valid
Q3	0,92	0,33	Valid
Q4	0,92	0,33	Valid
Q5	0,74	0,33	Valid
Q6	0,60	0,33	Valid

Sumber : Data Primer diolah.

As according Table 4.3, the Value Corrected Item/R-Calculate > R-Table based on a significant test of 0.05 shows that salaries are above the national average. valid.

Tabel 4.4. Uji Validitas Usia

Questions	Value Corrected Item	R-Hitung	Ket.
Q1	0,79	0,33	Valid
Q2	0,82	0,33	Valid
Q3	0,75	0,33	Valid
Q4	0,81	0,33	Valid
Q5	0,66	0,33	Valid
Q6	0,68	0,33	Valid

Sumber : Data Primer diolah.

According to Table 4.4, the Value Corrected Item/R-Count > R-Table, based on a significant test of 0.05, indicates that the Age variable is greater than valid

### 3.2 Uji Reliabilitas

Tabel 4.5. Uji Reliabilitas

No	Variabel	Reabilitas	Keterangan
1	Produktivitas Tenaga Kerja	1,14	Strong Reliability
2	Upah	1,14	Strong Reliability
3	Usia	1,14	Strong Reliability

As according table 4.5, the variables of labor productivity, earnings, and age have a high level of dependability because the alpha value is more than 0.90.

### 3.3 Analisis Regresi Linier Berganda

Tabel 4.6. Output estimasi Regresi Linier Berganda

Included observations: 35

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	41.62028	5.775819	7.205953	0.0000
X1	-0.298197	0.148513	-2.007890	0.0532
X2	0.174303	0.140883	1.237217	0.2250
R-squared	0.153620	Durbin-Watson stat		2.315430
Adjusted R-squared	0.100721			
F-statistic	2.904030	Prob(F-statistic)		0.069350

Keterangan: Taraf Sig : \*\*\* = 1%; \*\* = 5%; dan \* = 10%.

Sumber : Output Eviews 9

Based on the output results in Table 4.6, the estimation of the Multiple Linear Regression model is obtained as follows.

$$Y = -0.298X_1 + 0.1743X_2$$

1. According to the model equation above, the wage variable has a negative effect on Gorontalo Regency Workforce Productivity, which indicates that for every 1% increase in Wage, the value of Gorontalo Regency Workforce Productivity decreases by 0.298.
2. The Age variable has a positive effect on Gorontalo Regency Workforce Productivity, which indicates that for every 1 percent rise in Age, the value of Gorontalo Regency Workforce Productivity increases by 0.1743

### Test of Statistical Hypothesis

Hypothesis testing is a method of checking something by making an assumption to temporarily answer a question. There are numerous requirements that must be met in order to test the hypothesis, which are often referred to as the real level ( $\alpha$ ). Each hypothesis test can be true or false. As a result, testing the hypothesis is required before the hypothesis may be accepted or denied, as explained below:

#### 4.6.1. Partial Examination (t)

The t-test is used to see how much one independent variable can explain the dependent variable on its own. On the basis of Table 4.6, it can be seen that:

1. Because the Prob value of Wage is less than the Sig level, the Wage variable has a considerable effect on Labor Productivity in Gorontalo Regency. (0.01), allowing H0 to be accepted.
2. Because the Prob value of Age is less than the Sig level, the Age variable has a substantial effect on Labor Productivity in Gorontalo Regency. (0.01), allowing H0 to be accepted.

#### 4.6.2 Simultaneous Testing (section 4.6.2) (f)

The F test is used to see if the independent factors have a combined effect on the dependent variable. The p-value is smaller than the significance level value ( $=0.01$ ), according to Table 4.7. This indicates that the independent factors have a combined effect on the dependent variable.

#### 4.6.3 Determination Test 4.6.3. R2

The coefficient of determination, or R2, is a measurement of how well the independent factors can explain the dependent variable. The R-squared value is 0.153620, according to Table 4.7. This suggests that the Wage and Age variables can explain 15% of the variation in Gorontalo Regency Labor Productivity.

## 4. CONCLUSION

The researchers present the following conclusions based on the findings of the research and discussion:

1. In the Gorontalo Regency's filigree industry, the pay variable has a negative and significant effect on labor productivity.
2. In the Kerawang Industry in Gorontalo Regency, the age variable has a favorable but non-significant effect on worker productivity.

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