

ANALYSIS OF MILLENIALS’ PRODUCTIVITY IN THE MANUFACTURING INDUSTRY

Grace Amin^{1*)} Bayu Setiawan²⁾

¹⁾*President University, Cikarang, Bekasi*

²⁾*President University, Cikarang, Bekasi*

^{*)}email : grace_amin@president.ac.id

ABSTRACT

This study aims to determine the influence of the working environment, stress, opportunities for innovation, and motivation toward employee productivity of the millennial generation in the workplace. A quantitative approach and multiple linear regression were used to analyze data from 107 respondents. The result of this research shows that the working environment, stress, and opportunities for innovation have a significant influence on millennials’ productivity while motivation has no significant influence. All of the independent variables simultaneously influence the millennials’ productivity with the coefficient of determination (adjusted R²) around 80.1%. Manufacturing companies need to provide a comfortable environment that encourages millennial employees to show innovation and increase productivity.

Keywords: Work Environment, Stress, Opportunities for Innovation, Motivation, Productivity, Millennial

1. BACKGROUND

In this era, which has implemented globalization and established the 4.0 industrial revolution, the high-skilled employees are in high demand because the progress of the company is mostly dependent on the highly skilled human resources. The better quality of the human resources of the company, the higher competition will stand against the companies (Kalangi, 2015). This means the challenge will always exist, as well as the innovation and the improvement of the companies, internally and externally. Employees as the valuable assets that need to be controlled internally since the development of the high performance and skillful human resources in the companies are really necessary (Hamali (2014); Trihastuti, (2019)).

The economic contribution of the Cikarang – Bekasi region is already at the national level, which absorbs a lot of labor, and then it is called the biggest industrial city in Indonesia. The productivity problem at the company is very serious. Therefore in 2019, the Department of Trade and Industry has implemented Training Model activities in the Bekasi district. The purpose of the activity was to increase labor productivity by building workers’ awareness of the importance of productivity, providing an understanding of the application of techniques or methods of increasing productivity to be implemented in the workplace as well as methods to maintain the level of productivity that has been achieved. In this case, it can be said that the level of productivity of workers in the Bekasi-Cikarang region must be more improved than before.

The millennial generation is now transforming into the superior human resources that are needed by high numbers of companies now and further. This generation will be an important factor in the

process of the survival mission of the company. The support through the morals, dynamism, and punctuality of the employee that leads to the unity of the employee layers is more important rather than the facility’s service and infrastructure within the company (Muda, Rafiki, & Harahap, 2014).

Due to handling millennials, companies must know their characteristics. Two characteristics that are quite prominent in millennials are interconnected and seemingly unlimited. One of the main characteristics of the millennial generation is marked by increased use and familiarity with communication, media, and digital technology. millennials have creative, informative, passionate, and productive traits. The existence of the internet, wi-fi, laptops, and smartphones allows them to be connected and have a global perspective. From these devices, they are able to do everything from sending short messages, accessing educational sites, transacting online businesses, to ordering online transportation services. Therefore, they are able to create new opportunities along with the development of increasingly sophisticated technology. In addition, they also have different approaches to communication. For example, they want to be free from workplace rules and management performance standards. They also expect leaders to adjust to them, including how to communicate at work. Employees who feel they can discuss with their superiors about things that are not related to work, tend to last longer at the company than superiors who only discuss work. So they look very reactive to the environmental changes that occur around them. Flexibility is the key to dealing with the millennial workforce. (Budiati, 2018; Deloitte, 2019).

Waldmeir (2018) stated that manufacturers in the US struggling to compete for workers in a tight labor market, they are battling an extra disadvantage when recruiting millennial and younger workers to replace the previous generation. Many young people do not want to work in factories. According to Page (2018) found between 2.5 million and 3.5 million manufacturing jobs will go unfilled in the coming years. Manufacturing environments are often associated with being dirty, loud, or dangerous. However, the current climate of the industry is one with cutting-edge technology and ingenuity. Millennials prefer to work in environments that are innovative, high-tech, and have flexible roles. In order to recruit top talent, the industry needs to promote high-tech opportunities and set a standard of work-life balance.

According to Novi, Director of Human Resources at PT. Deloitte Consultant Indonesia, the average level of industry turnover is above 10% at present, it is due to the incompatibility of the workplace with the behavior of millennials. Millennials really want a flexible work atmosphere, do not have to enter the office at 9 – 5 pm but can be replaced with work outside the office, and more outcome-based rather than routine but not productive (Deloitte, 2019).

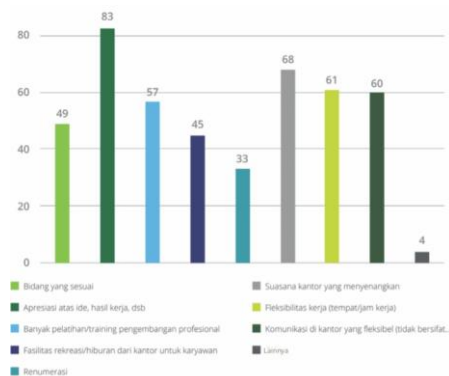


Figure 1.1. Employee Expectations from the Workplace (Deloitte, 2019)

Based on millennial characteristics data, and work characteristics in the manufacturing sector in general, it can be said that the work environment is one of the important factors that must be handled by the company to know the productivity of their employee. Based on a study from the Center for Human Capital Development (CHCD-PPM Management) in 2017 (Warta Ekonomi, 2018), explained the reasons for the survival of Indonesian millennials in a company. Salary compensation, work-life balance, leadership, and management, as well as work characteristics that are felt to be in accordance with their wishes. However, the work environment is the first position. In addition, millennials view working in the manufacturing industry as a standard salary, low benefits, and a poor work environment (Amalia, (2018); Talenta, (2020)). In this case, the company must be extra in handling work environment issues. The work environment is not only in the physical condition, but the working climate as a whole must be fulfilled. Organizational climate is defined as the perception and similarity of attitudes towards the organization. A positive organizational climate is closely related to the level of employee satisfaction and productivity. (Duru, C. E., & Shimawua, D. (2017)

The impact of work stress is also big on employee productivity. According to Siagian (2000), stress that is not handled properly usually results in a person's ability to interact positively with their environment, meaning that the employee concerned will face a variety of negative symptoms which in turn affect work performance. According to Robbins & Judge (2008), stated that work stress at a certain level will stimulate the body to be able to increase its ability to react. Employees then often do their jobs better, more intensively, or faster. Work stress, in other words, can to some extent increase employee productivity but if left unchecked can reduce the level of work productivity. One reason why stress needs to be understood is that stress is closely related to performance. Employees who experience work stress cannot work optimally. (Ekianabor (2016); Ehsan & Ali (2019))

The role of motivation is also important for the productivity of employees. Basically, if the company wants to achieve optimal performance and productivity to achieve the targets, the company must give the best motivation to employees. The problem of motivating employees is not easy because in employees there are different wants, needs, and expectations between one employee and another employee (Amalia & Fakhri, 2016). The inner condition can be seen from the passion or enthusiasm of work that produces work activities as a contribution to the achievement of the goals of the company where they work. (Maduka (2014); Nurdin (2018); Sanjaya (2018); Theodora, et.al (2019)). Salary is also a factor in motivating employees, but creating a culture and a fun work atmosphere and facilitating intimate communication between employees and managers is another thing that is more important. The stronger work motivation, the employee's performance, and productivity will be higher, this means that any increase in employee motivation will give a very significant increase in employee performance and productivity. How companies value and treat human resources will influence their attitudes and behavior in carrying out their work so that in the end it will also be very influential in determining the success and goals of the company. (Rivai & Sagala, 2013; Yustina, 2016; Talenta, 2017)

Based on the data above, researchers were trying to analyze the influence of the working environment, stress, opportunities for innovation, and work motivation on Millennial employee productivity in the Manufacturing industry.

2. LITERATURE REVIEW

2.1. Employee Productivity

Employee productivity is how to produce or improve the results of goods and services as high as possible by utilizing resources efficiently (Hasibuan, 2014). There are some indicators of employees' productivity namely ability, willingness to improve the results, work spirit, self-development, quality of work, and efficiency.

2.2 Working Environment

A working environment is an environment where people work together to achieve organizational goals. (Awan, 2015; Al-Shammary, 2015). There are several indicators in the work environment, the following indicators work environment include:

a. Relationships with co-workers (Non-Physical)

Relationships with co-workers are harmonious and without mutual intrigue between fellow workers. One factor that can influence employees to remain in an organization is a harmonious relationship between colleagues. A harmonious relationship and kinship are one of the factors that can affect employee performance.

b. Availability of work facilities (Physical)

This means that the equipment used to support the smooth working of complete / up to date. The availability of complete work facilities, although not new is one of the supporting processes in working. In addition, facilities in the workplace are included such as lighting, security, cleanliness, air conditioner/fan, workbench, etc.

2.3 Stress

Work stress is a condition that arises from the interaction between humans and their job. It is characterized by the human change that forces them to deviate from their normal functioning (Nikmah, 2018). Indicators for occupational stress there are four which are as follows:

a. Concerns

It is afraid of a thing that is not yet known for sure in the work. The worry is experienced by workers who are due to many factors from the work.

b. Anxiety

Feelings of disharmony were felt by the worker while carrying out the job duties he was working on. Usually due to overly risky tasks.

c. Pressure

A depressed feeling in a worker is perceived as he performs the duties and the work done. It can be caused by the work itself.

d. Frustration

Disappointment due to failure in doing something or the consequences of not succeeding in achieving a goal. This is usually due to a lack of satisfaction with the work

2.4 Opportunities for innovation

Innovative opportunities refer to a set of different elements within the processes whereby actors identify, act upon, and realize new combinations of resources and market needs—in order to try to benefit from their future economic potential (Sondari, Maarif, & Arkeman, (2013); Holme´n, Magnusson & Mckelvey, (2017); Sultika (2017)). The indicator of innovation, such as:

a. Leadership Style

The role of leadership to create innovation is very important, the creativity of employees should be supported by the leaders of the company.

b. Personal Characteristic

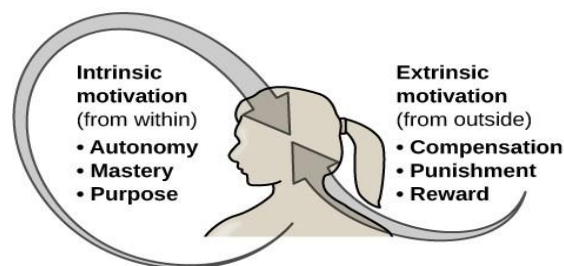
Employees’ characteristics that always give support and are full dedication to the company to make a progress for the sake of company success are very needed in the organizations.

c. Environmental Dynamics

Everything in the environment can be used by employees to meet company or customer needs because the environment has the carrying capacity to support humans and other living things.

2.5 Motivation

Work Motivation refers to the human drive to work in order to gain rewards from that work, whether those rewards be physical, emotional, social or monetary (Legault, 2016).



Based on the theoretical basis above, researchers prepared the following research hypothesis:

H1: The work environment has a significant impact on millennials’ productivity at a manufacturing company

H2: Work stress has a significant impact on millennials’ productivity at a manufacturing company

H3: Opportunities for innovation have a significant impact on millennials’ productivity at a manufacturing company

H4: Work motivation has a significant impact on millennials’ productivity at a manufacturing company

H5: Work environment, Work stress, Leadership, Opportunities for innovation, and Work motivation have a significant simultaneously impact on millennials’ productivity at a manufacturing company

3. METHOD

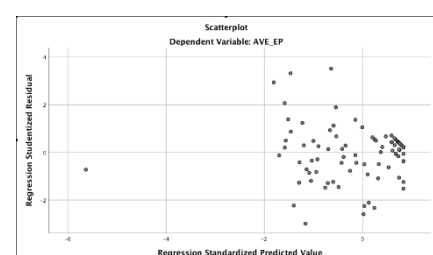
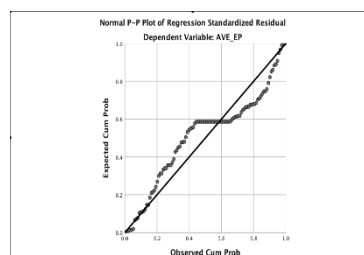
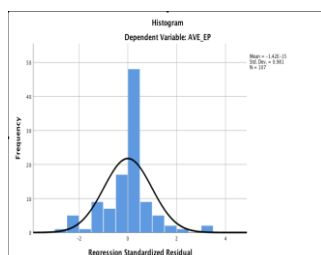
In this study, researchers used quantitative methods as an approach to answer research questions. Researchers used questionnaires as a strategy for collecting data. The population of this research is an unknown population as the researcher cannot know the specific number of the millennials employee in the manufacturing industry Cikarang – Bekasi. Researchers used purposive sampling as a method to collect the response and the multiple linear regression method to analyze 107 responses.

4. RESULT AND ANALYSIS

Respondents profile

No	Profile	Respondents	Percentage
1	Gender		
	Male	65	61%
	Female	42	39%
2	Age		
	20 – 26 years old	54	51%
	27 – 31 years old	41	38%
	32 – 39 years old	12	11%
3	Education		
	Junior high	1	1%
	Senior high	14	13%
	Diploma	11	10%
	Bachelor	66	62%
	Master	13	12%
	Doctoral	2	2%
4	Length of work		
	< 1 year	36	34%
	1 – 5 years	62	58%
	>5 years	9	8%

Most of the respondents were males of the productive age. They have a bachelor’s degree and have been working for more than 1 year.



Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	AVE_WE	.288	3.470
	AVE_WS	.403	2.482
	AVE_OPFI	.372	2.687
	AVE_WM	.191	5.241

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	11.605	24.926		.466	.643
	AVE_WE	.182	.087	.168	2.079	.040
	AVE_WS	.162	.043	.258	3.785	.000
	AVE_OPFI	.428	.075	.408	5.739	.000
	AVE_WM	.192	.108	.177	1.783	.078

a. Dependent Variable: AVE_EP

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	363296.304	4	90824.076	107.705	.000 ^b
	Residual	86013.359	102	843.268		
	Total	449309.664	106			

a. Dependent Variable: AVE_EP
 b. Predictors: (Constant), AVE_WM, AVE_WS, AVE_OPFI, AVE_WE

Model Summary ^b					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.899 ^a	.809	.801	29.039	1.670

a. Predictors: (Constant), AVE_WM, AVE_WS, AVE_OPFI, AVE_WE
 b. Dependent Variable: AVE_EP

This research has an objective to determine the influence of work environment, work stress, opportunities for innovation, and work motivation on millennials’ productivity in the manufacturing industry Cikarang-Bekasi area. Based on the analyzed results, it is shown that all of the independent variables simultaneously have a significant influence on millennials’ productivity. From the t-test result, work environment, work stress, and opportunities for innovation have a significant influence on millennials’ productivity. However, work motivation has no significant influence on employee productivity.

Based on the results of the first hypothesis it is shown that there is a significant impact of the work environment on productivity. Every increase of one unit in the work environment could give an additional around 18.2% in employee productivity. In this research, the physical environment, such as cleanliness, security, lighting, the color of the wall, and other facilities, has a higher influence on millennials’ productivity rather than the non-physical environment. These comfortable physical environment factors can make employees enjoy and focus to do their job. However, the non-physical environment such as relationships with co-workers also giving a big impact. Open communication, leaders’ support, and good relationships among the employees are going to be the key factor to encourage their performance.

This research also found there is a significant influence of work stress on millennials’ productivity in the manufacturing company. Every increase of one unit among the work stress could give an additional around 16.2% to employee productivity. Many respondents feel stress (anxiety and frustration) when they got a lot of pressure. Those stressors will be interpreted as challenges and used to increase their productivity. They are going to prove their capabilities by solving those defiances.

Opportunities for innovation also has a significant influence on the productivity of millennial in the manufacturing company. Every increase of one unit in the work environment could give an

additional around 42.8% in employee productivity. Leadership style, personal characteristics, and environmental dynamics give a high influence on productivity. Millennials are the creative generation who take advantage of the changes and opportunities that are in front of their eyes or bring up new ideas that are not uncommon. The leaders of the company should concern about the insight of their employees, especially the millennials. Millennials' characteristic such as impatient, and tech-savvy behavior helps improve efficiency at work. The learner-centered characteristic also makes them easily open to new ideas (Karugo,2017). For both long-established companies and new businesses, innovation is a vital tool in improving a company's employee performance and productivity.

Based on the results of the last hypothesis is shown that there is no significant influence of motivation on the productivity of millennial employees in manufacturing companies. Work motivation still has an impact but is not as significant as other independent variables. Companies still have to pay attention to external and internal motivation factors of their employees in order to encourage performance.

5. CONCLUSION AND IMPLICATION

Based on this research, work environment, work stress, opportunities for innovation, and work motivation significantly influence millennials' productivity in manufacturing industries Cikarang – Bekasi. Manufacturing industries must be concerned about how to develop a good relationship between the employer and worker, especially the millennials. Millennials have been known as having several characteristics that differ from the previous generations. Therefore, it is recommended for the organization to do some approaches such as creating open communication, and respectful and a fair atmosphere that can minimize the gap and create harmony. Providing good facilities and the chance for millennials to do innovation and improve their capabilities will also drive their productivity. Lastly, companies also need to set up and adapt to the current technologies to help the process of production in the manufactured. The organizations could use this chance to set up a new learning course related to the internet of things or even how to operate a new technology to support daily working operations.

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