

# The Effect of Work Environment on Work Productivity on the Competitiveness of the SMEs Culinary Sector in Bandung

Yana Hendayana<sup>a</sup>, Sri Wilujeng<sup>b</sup>, Suskim Riantani<sup>c</sup>, Deden Sutisna<sup>d</sup>, Yelli Eka Sumadhinata<sup>e</sup>, <sup>a,b,c,d,e</sup>Faculty of Business Management, Widyatama University, Indonesia Email: [Yana.hendayana@widyatama.ac.id](mailto:Yana.hendayana@widyatama.ac.id)

The development of MSMEs in the culinary sector is one of the programs supported by the government, specifically in the city of Bandung. This is an attraction that can increase regional income and also increase employment. In line with this, to be able to compete, the Work Environment and productivity are the benchmarks for increasing the competitiveness of these MSMEs. This research measures and analyzes the influence of the environment on productivity and productivity on competitiveness. The population used in this study was the entire culinary sector MSMEs in the city of Bandung, being as many as 795 MSMEs. Sampling uses a formula so that the research sample amounts to 99 MSMEs. The analytical method uses path analysis to produce research to prove that the Work Environment has a positive and significant influence on competitiveness, the Work Environment has a positive and significant influence on employee productivity, and productivity has a positive and significant effect on competitiveness, while productivity variables do not mediate the relationship between Work Environment for competitiveness.

**Key words:** *Work Environment, productivity, competitiveness.*

## Introduction

In macro terms, the MSME (Micro, Small Medium Enterprises) business is an industry that needs to be developed because economic growth requires an investment support. With the condition of limited investment, investment needs to be directed at efforts to develop new entrepreneurs, many of which emerge at the level of MSMEs. The MSME business is also

able to absorb a workforce of more than 90%. With the increase in the GDP of micro and small businesses, it is expected that at the same time it can grow the income per capita of the low-income groups so that they can reduce the level of poverty. Another fact from previous research by Hendayana et al., (2017), states that MSMEs in Indonesia is one of the biggest taxpayers, playing a major role in the Indonesian economy, therefore need special attention from stakeholders.

The growth estimates of business actors reflect that every 1% growth in GDP will create 42,797 new business actors in Indonesia. In addition to its contribution to the Indonesian economy, SMEs are seen as a reliable sector in the face of the economic crisis. This was evident when there was an economic crisis a few years ago, and SMEs still existed while many large businesses were out of business (Indonesian Economic & Small Medium Enterprises Outlook 2011).

One of the cities in Indonesia that has great potential and develops in the creative industry is the city of Bandung. The development of this creative industry is independent of the role of various business sectors in Bandung, one of which is MSMEs. MSMEs in Bandung began to develop more or less around the year 2000, and the number continues to increase every year. The development of MSMEs in the city of Bandung has always increased every year, especially the industrial sector which is making rapid economic development progress.

**Table 1:** Number of MSMEs in Bandung City in 2010-2017

| No. | Description | Year  |       |       |       |       |       |      |      |  |
|-----|-------------|-------|-------|-------|-------|-------|-------|------|------|--|
|     |             | 2010  | 2011  | 2012  | 2013  | 2014  | 2015  | 2016 | 2017 |  |
| 1   | Micro       | 3,649 | 3,827 | 3,921 | 4,115 | 4,301 | 4,578 | 4689 | 5099 |  |
| 2   | Small       | 301   | 325   | 337   | 357   | 372   | 392   | 395  | 411  |  |
| 3   | Medium      | 271   | 273   | 273   | 274   | 276   | 281   | 281  | 282  |  |
|     | Total       | 4221  | 4425  | 4531  | 4746  | 4948  | 5251  | 5365 | 5792 |  |

**Source:** Bandung City Cooperative and UMKM Office 2017

According to the Creative Economy Agency and the Central Bureau of Statistics (2017), in Indonesia there are various kinds of sectors which are included in the creative industry. These are increasing each year as well as the creative industry groups developed consisting of 16 sub-sectors namely:

**Table 2:** Contribution of Creative Industries According to the Subsector

| No. | Sector   | Percentage |
|-----|----------|------------|
| 1   | Culinary | 41,69 %    |
| 2   | Fashion  | 18,15 %    |
| 3   | Craft    | 15,70 %    |

|    |                                |        |
|----|--------------------------------|--------|
| 4  | Television and Radio           | 7,78 % |
| 5  | Publishing                     | 6,29 % |
| 6  | Architecture                   | 2,30 % |
| 7  | Application and Game Developer | 1,77 % |
| 8  | Advertising                    | 0,80 % |
| 9  | Music                          | 0,47 % |
| 10 | Photography                    | 0,45 % |
| 11 | Performing Art                 | 0,26 % |
| 12 | Product Design                 | 0,24 % |
| 13 | Art                            | 0,22 % |
| 14 | Interior Design                | 0,16 % |
| 15 | Film                           | 0,16 % |
| 16 | Visual Communication Design    | 0,06 % |

**Source:** Creative Economy Agency and the Central Bureau of Statistics Republic of Indonesia 2015

The culinary sector is a sector that has the largest of MSME, with a contribution of 41.69%, so it is not surprising if the government concentrates on this sector to help increase employment and income in the regions and cities. Economic changes that occur at this time are very influential on the growth and development of an organization, which encourages organizations to remain competitive and maintain their existence in the business world. This can be achieved if reliable and quality human resources are present (Rusyana, 2011). To support the increase in MSME income and employee productivity, it is necessary to have good management of the MSME business so that the existence of these MSMEs can continue to grow and have high competitiveness both between regions and countries. Fredrick W. Taylor mentions a number of factors believed to have an influence on productivity including; (a) growth organized trade union, (b) technological progress, and (c) changes in government regulation. For example, the government is assumed have influence on productivity, although it is mostly indirect through labor laws, regulations of consumer protection and tax regulations. In addition, Work Environment, according to Opperman (2002), is a combination of three main sub-environments, namely: technical environment, human environment, and organizational environment. Providing a good Work Environment is expected to increase job satisfaction so that work productivity will also increase. This will be used to measure how much influence on work productivity and impact on competitiveness in MSMEs belonging to the culinary industry. To achieve this goal, organizational management must be able to identify these factors both in work situations and in the psychological aspects of workers who can motivate them so that these factors can increase productivity and at the same time have impact on the competitiveness of MSMEs.

Based on the explanation above, authors are interested in examining "The Effect of the Work Environment on work productivity in the culinary sector MSMEs in the city of Bandung".

Identification of problems:

1. What influence is Work Environment on work productivity in the culinary sector MSMEs of Bandung City?
2. What is the influence of productivity on the competitiveness of SMEs in Bandung in the culinary sector?
3. What is the influence of Work Environment on the competitiveness of SMEs in Bandung City in the culinary sector?
4. What is the indirect effect of Work Environment competitiveness on productivity in the MSMEs in Bandung City in the culinary sector?

### **Literature Review**

According to Armstrong (2014) Work Environment is part of work design that can increase the effectiveness and productivity of the organization, and ensure the organization becomes a good place to work and conducive with work. Company management must also pay attention to the Work Environment for employees. Research by Omotayo, Eseme, Adenike, Olumuyiwa (2015), shows that the managers and policy makers must take these factors into consideration when formulate their employment policy to have efficiency and productivity of the labor. Snell & Bohlander (2013), mentioned that providing flexibility is a good way to improve employee performance and motivation. According to Opperman (2002), Work Environment is a combination of three main sub-environments, namely: (1) Environment Technical, (2) Environment Human, and (3) Environment Organizational.

### ***Work Productivity***

The existence of some big thoughts, according to Fredrick W. Taylor, in human relations has led to the greatest increase in productivity since the mid-nineteenth century. A number of factors that are been believed to have influence on productivity, including (a) growth of organized trade union, (b) technological progress, and (c) changes in the government role. A need to provide a safe space for employee has long history in human resource management. According to Beer et al., (1994), models of human resource management, as recognized work systems, can not only affect commitment, competence, cost effectiveness, and suitability, but also have long-term consequences for worker welfare. There is some evidence to show that work system design might affect the physical health, mental health and longevity of life itself. Cecunc (2004), referred to productivity as "an index expressed as the ratio of output to input (Wehrich and Koontz, 1994; Bedejan, 1987). Lambert (2005), argues that "productivity of labor rarely measured directly but is concluded from change in employee behavior such as commitment of organizational, citizen behavior and job satisfaction".

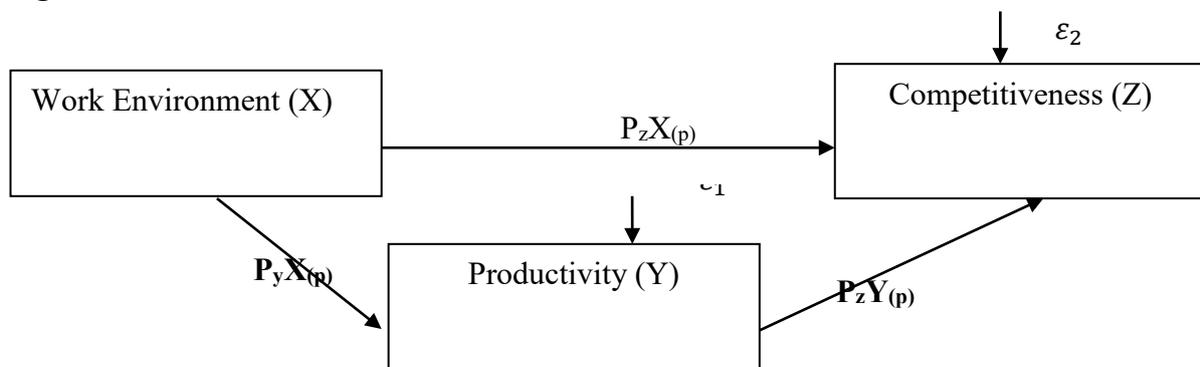
## Competitiveness

Porter (1995: 5) said: "Competition is core of success or failure of firms." Competition is core of a company's success or failure. There are two sides caused by competition, namely the success side, because it encourages company to be more dynamic and compete on producing products and provide the best service for their markets, so competition is seen like a motivating of opportunity. While the other side is failure, because companies that are static, afraid of competition, and unable to produce quality products, will be weakened with competition seen as a threat to the company. According to Muhardi (2007), competitiveness is a function of operations that is not only oriented internally but also exists externally, namely responding proactively to the target market. The dimensions of a company's competitiveness, as stated by Muhardi (2007) by quoting Ward et al., (1998), consist of cost, quality, delivery time, and flexibility.

## Theoretical Framework

Theoretical and conceptual frameworks based on the theories discussed above, can be formulated from the research as shown below:

**Figure 1.** Theoretical Framework



The research hypothesis appears as follows:

H1: Environment Work has an effect on the work productivity in MSMEs in Bandung City in the culinary sector.

H2: Productivity affects the competitiveness of SMEs in Bandung City in the culinary sector.

H3: Environment Work has an effect on competitiveness of UMKM in Bandung City in the culinary sector.

H4: Indirectly there is an influence of Environment Work on competitiveness through productivity in the MSMEs in Bandung City on the culinary sector.

## Research Method

The populations in this study were all MSMEs in the culinary sector in Bandung, with as many as 795 MSMEs, as can be seen in the table below.

**Table 3:** Population of MSMEs in the Culinary Sector in Bandung City 2016

| Category   | Total |
|------------|-------|
| Restaurant | 396   |
| Shop       | 372   |
| Café       | 14    |
| Bar        | 13    |

**Source:** Bandung City Culture and Tourism Agency 2018

The sampling method uses calculating sample size using Slovin technique with alpha 5%, so that the research sample is 99 MSMEs. The distribution of samples based on the calculation of the Slovin formulas are as follows:

**Table 4:** MSME Samples in the 2016 Culinary Sector in the City Of Bandung

| Category   | Population | Total |
|------------|------------|-------|
| Restaurant | 396        | 50    |
| Shop       | 372        | 46    |
| Café       | 14         | 2     |
| Bar        | 13         | 2     |
| Total      | 795        | 99    |

**Source:** Data processed by researchers 2018

The method of data collection in this study was questionnaire. Questionnaire was used as data collection tool in this study by using a list of statements, and the research instruments were directed according to the variables used in the research model. The analytical tool used was simple linear regression analysis and path analysis. With the equation as follows:

$$Y = a + b_1X_1 \quad (1)$$

$$Z = a + b_2X_2 \quad (2)$$

$$Y = a + b_3X_3 \quad (3)$$

## Results and Discussion

The results of data processing by using the SPSS 21.0 for Windows program, the three simple linear regression sequences were obtained:

Effect of Work Environment on Competitiveness

**Table 5:** Simple Linear Regression Analysis Test Results

| Model            | Unstandardized Coefficients |            | t     | Sig.  |
|------------------|-----------------------------|------------|-------|-------|
|                  | B                           | Std. Error |       |       |
| (Constant)       | 15,771                      | 3,025      | 5,193 | 0,000 |
| Work Environment | 0,448                       | 0,094      | 4,764 | 0,000 |

Source: Data processed by researchers 2018

From Table 5 above, it can be seen that the probability value (Sig.) for the Relationship of the Work Environment to Competitiveness = 0,000, which is smaller than the significance level of 5% (0.05). So, the null hypothesis (H0) is rejected and the alternative hypothesis (Ha) is accepted. That is, relationship between Work Environment have a positive and significant effect on Competitiveness.

### *Productivity Effect on Competitiveness*

**Table 6.** Simple Linear Regression Analysis Test Results

| Model        | Unstandardized Coefficients |            | t     | Sig.  |
|--------------|-----------------------------|------------|-------|-------|
|              | B                           | Std. Error |       |       |
| (Constant)   | 16,753                      | 3,359      | 4,988 | 0,000 |
| Productivity | 0 ,395                      | 0,104      | 3,785 | 0,000 |

Source: Data processed by researchers 2018

Table 6, above, shows that the probability value (Sig.) for the relationship between Productivity and Competitiveness = 0,000, which is smaller than the significance level of 5% (0.05). So, the null hypothesis (H0) is rejected and alternative hypothesis (Ha) is accepted. That is, relationship of productivity has a positive and significant effect on competitiveness.

### *Path Analysis*

Work Environment variable (X) has an indirect relationship to the Competitiveness variable (Y), namely through the Productivity variable (Z), or  $b_2 \times b_3$ . So the total effect of variable X on variable Y indirectly is  $b_4 (b_2 \times b_3)$ . The regression coefficient of each variable can be seen in Table 7 below:

**Table 7.** Regression Coefficient Value

| Model                                   | Unstandardized Coefficients |            | T     | Sig.  |
|---|-----------------------------|------------|-------|-------|
|   | B                           | Std. Error |       |       |
| Work Environment → Competitiveness (b1) | 0,448                       | 0,094      | 4,764 | 0,000 |
| Work Environment → Productivity (b2)    | 0,395                       | 0,104      | 3,785 | 0,000 |
| Productivity → Competitiveness (b3)     | 0,476                       | 0,079      | 6,035 | 0,000 |

Source: Data processed by researchers 2018

From table 10 above, it can be concluded:

The direct effect of  $X \rightarrow Y = b1 = 0.448$

The direct effect of  $X \rightarrow Z = b2 = 0.395$

The direct effect of  $Z \rightarrow Y = b3 = 0.476$

Indirect influence  $X \rightarrow Z \rightarrow Y = b4 = b2 \times b3$

Indirect effect of  $X \rightarrow Z \rightarrow Y (0.395 \times 0.476) = 0.18802$

## Discussion

The first hypothesis (H1) states that the probability value (Sig.) for the Relationship of the Work Environment to Competitiveness is 0,000, which is smaller than the significance level of 5% (0.05). So, zero hypothesis (H0) is rejected and the alternative hypothesis (Ha) is accepted. That is, the relationship between Work Environment has a positive and significant effect on Competitiveness with regression coefficient on 0.448. The results are in line with the research conducted by Taufik Setiawan (2013) and Sony Sonia (2013), which shows that the Work Environment has a positive and significant effect in competitiveness.

### *The Effect of Work Environment on Productivity*

The second hypothesis (H2) states that the probability value (Sig.) of the Relationship between Work Environment to Productivity is 0,000, which is smaller than the significance level of 5% (0.05). So, the zero hypothesis (H0) is rejected and alternative hypothesis (Ha) is accepted. That is, relationship between Work Environment has a positive and significant effect on Productivity with regression coefficient on 0.395. The results of this study are the same as the research conducted by I Wayan (2014), Maludin Panjaitan (2017), and Akinyele (2010), which states that Work Environment has a positive and significant influence on work productivity. The influence from the environment on operational activity and organizational performance was recognized by Johnson and Scholes (1988), Jones (1996), Akerele (1991), Okpechi (1999) and Yesufu (2000). Stoner et al., (2000) and Wehrich and Koontz (1994), further emphasized that organizational activities are influenced by what happens in the

external environment. Akerele (1991), also showed that the inability to manage human factors effectively can be influenced in several negative ways including; employee fatigue on arrival at the office due to poor transportation facilities and harsh living conditions in most urban cities. They are also encouraged use unfavorable work materials and machines to achieve the desired level of performance, so it becomes our view that the Work Environment will have an impact on employee work productivity.

### ***Productivity Effect on Competitiveness***

The third hypothesis (H3) states the probability value (Sig.) of the relationship between Productivity and Competitiveness = 0,000, which is smaller than the significance level of 5% (0.05). So, the zero hypothesis (H0) is rejected and alternative hypothesis (Ha) is accepted. This relationship of productivity has a positive and significant effect on Competitiveness with a regression coefficient of 0.476. The results of this study are in line with the research conducted by Yana Hendayana and Suryana (2018), who said that Productivity has positive and significant effect in Competitiveness.

### ***Effect of Work Environment on Competitiveness through Productivity***

The fourth hypothesis (H4) states that the indirect influence of the Work Environment on Competitiveness through Productivity must be calculated by multiplying the Work Environment (X) coefficient value to Productivity (Z) with a Productivity coefficient (Z) to Competitiveness (Y) that is  $b_4 (0.395 \times 0.476) = 0.18802$ . This result is smaller when compared to the direct effect of the Work Environment on Competitiveness which is equal to 0.448. So it can be concluded that in this study there was no mediation or in other words, the Productivity variable did not mediate the relationship between the Work Environment and Competitiveness.

### **Conclusion**

The Work Environment has a positive and significant influence on Competitiveness. The greater the influence of the Work Environment, the better Competitiveness will be. Work Environment has a positive and significant influence on employee productivity. With a greater Work Environment productivity of employees will be increase. Productivity have a positive and significant influence on competitiveness. The greater the influence of Competitiveness, the better the productivity of employees. Productivity, as an intervening variable, does not succeed in mediating the relationship of the Work Environment as an independent variable to Competitiveness as the dependent variable.

## REFERENCES

- Akinyele Samuel Taiwo (2010), The influence of Work Environment on workers productivity: A case of selected oil and gas industry in Lagos, Nigeria, *African Journal of Business Management* Vol. 4 (3), pp. 299-307, March 2010
- Akinyele, S.T., 2005. *Managing Productivity. A Lecture Delivered to Undergraduate Students of Covenant University (Unpublished).*
- Amstrong, M. (2013). *Armstrong's handbook of Human Resorce Management Practice Edisi 13.* United Kingdom : Kogan Page Limited.
- Ghozali, Imam (2009). "Aplikasi Analisis Multivariate dengan Program SPSS". Semarang: Badan Penerbit Universitas Diponegoro.
- Hendayana, Y., Suryana, S. and Machmud. 2017. A.The Role of Tax Officers Data and Information Processing in the Process of Recording the Annual Tax Reporting of Entrepreneurs in Indonesia. In *Proceedings of the 2nd Global Conference on Business, Management and Entrepreneurship (GCBME 2017) - Increasing Management Relevance and Competitiveness*, pages 114-117.
- I Wayan Senata, I Made Nuridja, Kadek Rai Suwena (2014) *Pengaruh Lingkungan Kerja Terhadap Produktivitas Kerja Karyawan Ud. Kembang Sari Kabupaten Badung Tahun 2012*, Vol:4No:1Tahun:2014
- Johnson, G. and K. Scholes, 1988. *Exploring Corporate Strategy.* 2nd Edn., Prentice-Hall International (UK) Ltd., Hartfordshire.
- Jones, 8.E., 1996. *Understanding Organisations: A Sociological Perspective*, Copp Clark Ltd., Toronto.
- Maludin Panjaitan (2017), *Pengaruh Lingkungan Kerja Terhadap Produktivitas Kerja Karyawan*, *Jurnal Manajemen* Vol 3. No. 2, p. 1-5 (2017)
- Okpechi, 8.0., 1999. The private sector and productivity improvement. *Nig. J. Industrial Relation*,5: 28-28.
- Opperman CS (2002). *Tropical Business Issues.* Partner Price Water House Coopers.
- Rusyana, G, 2011. *Pengaruh Lingkungan Kerja dan Kepuasan Kerja terhadap Produktivitas Tenaga Kerja (survei pada perusahaan Manufaktur yang tergolong Industri menengah di Kota Tasikmalaya).* Fakultas Ekonomi Siliwangi



Stoner, J.A.F., R.E. Freeman and D.R. Jr. Gilbert, 2000. Management. 6th Edn., Prentice-Hall of Indian Private Limited, New Delhi.

Weihrich, H. and H. Koontz, 1994. Management: A Global Perspective. 10th Edn., McGraw Hill International Editions, New York.

Yana Hendayana, Suryana (2018), The Effect Of Productivity And Innovation On The Competitiveness Of Batik Smes In West Java Indonesia, Proceeding Global Academy of Training & Research (GATR) Enterprise (2018)

Yesufu, T.M., 2000. The Human Factor in National Development: Nigeria, Spectrum Books Limited, Ibadan, Nigeria.