

Implementation of Job Analysis and Competency Mapping to Improve Employee Performance in Wijara Nagatsupazki

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Abstract— This research discusses human resources tools utilized by coach, in order to improve employee performance in Wijara Nagatsupazki. Wijara Nagatsupazki is an SMEs (Small and Medium Enterprises) located in UPK PPUMKM PIK Pulo Gadung, East Jakarta, that provide services to produce mold, dies, and tools for business clients. In order to analyze the constraints that limit Wijara Nagatsupazki's business capabilities, coach conducts in-depth interviews with the general manager, while observing the business process. After that, collected data will be the basis of suggesting human resources solution that will be implemented thoroughly in Wijara Nagatsupazki.

Index Terms— Competency Mapping, Contextual Performance, Employee Performance, Human Resources, Job Analysis, Indonesia, MSMEs, Task Performance

1 INTRODUCTION

In Indonesia, Micro, Small and Medium Enterprises (MSMEs) are often praised as a major economic growth driver. According to Badan Perencanaan Pembangunan Nasional (Bappenas), there were about 60.7 million MSMEs operating in 2015. With that figure, MSMEs makes up 99.9% of total business unit in Indonesia. In terms of employment, MSMEs plays a significant role to employ Indonesia's workforce. In 2015, MSMEs employs more than 132.3 million em-

However, there are some shortcomings behind the successes of Indonesia's MSMEs. In this era, especially with the establishment of the ASEAN Economic Community (AEC), MSMEs are faced with an ever-tighter competition. In terms of the quality of human capital, head of Panitia Kerja Masyarakat Ekonomi ASEAN Badan Kerja Sama Antar Parlemen Republik Indonesia, Juliari P. Batubara, argues that Indonesia's has yet to have human capital that can provide competitive advantage for MSMEs.

Abdul Kadir from Ministry of Foreign Affairs, MSMEs sector, agrees with Juliari. He argues that the Indonesia's human capital productivity is below the average of ASEAN countries. According to data of GDP/employee, Indonesia rate for GDP/employee only reach USD 10.7 thousand, while other ASEAN countries such as Singapore reaches USD 92 thousand (9x of Indonesia), Malaysia reaches USD 33,3 thousand (3x of Indonesia), and Thailand reaches USD 15.4 thousand (USD 4.7 thousand difference).

In order to overcome those shortcomings, MSMEs are required to improve their competitiveness through effective human resources management. Ade Petranto, officials from Ministry of Foreign Affairs, said that MSMEs has competitiveness if they manage to build 4 characters, which are sturdiness, creativity, opportunity-seeker, and good at managing finances. These characters are important for MSMEs' human capital, in order to harness the opportunity around AEC's market and minimizing the risk of competition.

To deepen the understanding of how to deal with those shortcomings around human resources management, coach conducted a brief research regarding the relation of human resources management and organizational performance.

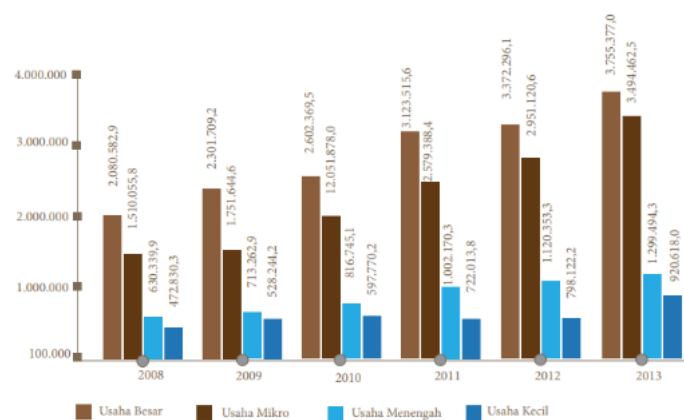


Figure 1 GDP contribution in Indonesia (Source : Bappenas, 2015)

Nonetheless, GDP contribution of MSMEs steadily rise each year. From 2008 to 2013, there was an increase of 4,328,355.2 billion Rupiah in terms of GDP. In 2015, GDP contribution of MSMEs approximately makes up 57.6% of total GDP, with export contribution around 15.7% and investment contribution around 56.2%

The literature reviews used as the basis for this research are:

- Recent study "Pengaruh Aspek Pengelolaan Sumber Daya Manusia terhadap Peningkatan Kinerja Organisasi di Industri Otomotif di Indonesia", by Susilowati (2013). Her research discusses the importance of human capital behind the success of automotive enterprise. In order to be successful, enterprise need to have human capital that can create, organize, and run the business ecosystem. Result from this research argues that the quality of human capital proved to be positively and significantly correlated towards organizational performance in automotive industry.
- According Borman & Motowidlo (1997), and Morgeson et al. (2005), a clear and communicated job analysis is proven to improve the efficiency of human capital in terms of job understanding, which influence employee's contextual performance.
- According Draganidis & Mentzas (2006), Hoge et al., (2005), and McCall (1998), competency mapping is proven to improve the effectiveness of human capital in terms of competence, which influences employee's task performance.

Thus, this research aims to contribute in filling the research gap, which is to explore the influence of implementing job analysis and competency mapping towards Indonesia's MSME's, in non-automotive industry. Furthermore, this research will be implemented and focused directly towards Wijara Nagatsupazki's human resources, as an MSMEs in tool-making industry. Research will be carried out from February to November 2019, utilizing in-depth interview and field observation to obtain real-time data. To validate this research's findings, coach will measure employee performance as a key indicator before and after implementation.

2 FRAMEWORKS

- Wijara Nagatsupazki's Internal Analysis
 - o Company Profile of Wijara Nagatsupazki
 - o Organizational Structure of Wijara Nagatsupazki
 - o Business Process of Wijara Nagatsupazki
 - o Business Canvas Model Analysis
A visual framework developed by Osterwalder and Pigneur (2010), to describe how a company create, deliver, and capture value. This canvas will be utilized to provide an overview of value creation process within Wijara Nagatsupazki.

- o Segmentation, Targeting, and Positioning (STP) Analysis
A framework used to divide market into group of similar buyer, according to characteristics and behavior of the market. Segmentation, targeting, and positioning are analyzed in chronological order, in order to map Wijara Nagatsupazki's position in the tool-making industry.
- o Marketing Mix Analysis
A crucial framework to understand how a product or service can be successfully offered to the market. Since Wijara Nagatsupazki is a service business, coach will use the 7 P's of marketing mix, which are Product, Price, Place, Promotion, Physical Evidence, Process, and People.
- Wijara Nagatsupazki's External Analysis
 - o Porter's Five Forces Analysis
A framework used to analyze the industrial competition faced by the company. It determines the intensity of competition from five forces, which are internal rivalry, buyer power, supplier power, threat of new entrants, and threat of substitute products. Coach will then analyze the attractiveness of tool-making industry, and how Wijara Nagatsupazki can deal with it.
 - o Strengths, Weaknesses, Opportunities, dan Threats (SWOT) Analysis
The process of analyzing the internal conditions of a company, while reviewing the external conditions faced by the company. In this research, coach will identify the strengths (S) and weaknesses (W) within Wijara Nagatsupazki, as well as the opportunities (O) and threats (T) surrounding Wijara Nagatsupazki. These SWOT will then be utilized to formulate business strategies with TOWS Matrix.
- Wijara Nagatsupazki's GAP Analysis
A framework to compare the actual performance of a company with desired performance. If Wijara Nagatsupazki does not utilize current resources optimally, or forgoes capital or technological investment, then Wijara Nagatsupazki will be prone to perform below its desired performance.
- Wijara Nagatsupazki's Pareto Analysis
A framework to analyze all the gaps identified within an MSMEs into an order, so coach and Wijara Nagatsupazki can prioritize the most urgent and doable problems to be solved.

3 METODHOLGY

The research subject is an MSME business unit in the form of a tool-making workshop in UPK PPUMKM PIK Pulo Gadung, East Jakarta, named Wijara Nagatsupazki. Wijara Nagatsupazki engages in the business of tools production service, which currently sells their service directly to business customers, such as automotive and electronic company. Wijara Nagatsupazki's customers are companies that need a service to produce mold, dies, or tools for their manufacturing process. Wijara Nagatsupazki currently employs 65 human resources, with 1 general manager position to supervise the business, 6 managerial position to manage the division, and 58 staffs.

There are two types of data that will be collected, which are primary and secondary data. Primary data will be collected through in-depth interview and field observation, while the secondary data will be collected through historical data and various sources of literature review.

- In-depth interview

The first meeting was held in February 2018 at UPK PPUKMP Pulogadung, East Jakarta, with Mr. Ignasius Darminto as the general manager of Wijara Nagatsupazki. Coach was introduced with Wijara Nagatsupazki's manager, as well as all staff around the workshop. Then, the second until sixth meeting was conducted through March - July 2018 with Mr. Ignasius Darminto, in order to discuss the business process, actual condition of Wijara Nagatsupazki, ideal condition that desired by the owner, as well as identifying potential problem that hinders Wijara Nagatsupazki from achieving that ideal condition.

After problems were identified and prioritized, coach conducts implementation sessions from August to December 2018. These sessions done with Mrs Yosephine as the human resources manager, in order to formulate job analysis for all positions in Wijara Nagatsupazki's organizational structure, as well as preparing competency mapping for 4 divisions in production department. After that, coach and Mrs Yosephine socialize the newly created job analysis to the person who fills specific position, and mapping the competency of human capital in production division for better human resources planning.

- Field observation

Through field observation, coach observed how the staff worked, working conditions inside the workshop, and the daily activities of each staff in Wijara Nagatsupazki. Coach did not ask any question nor communicate with the subject being observed, while noting all the information and events that occurred when the staffs were engaged in business activities.

- Wijara Nagatsupazki's Historical Data

Historical data used in this research are organizational profile, human resources database, customer database, and financial documentation. By looking at the human resources database, Wijara Nagatsupazki does not have any formal documents or process of managing human capital.

- External Data

External data used in this research are books of management, such as strategic management and human resources management; literature review from previous research; and local government regulations related to MSMEs. Books of management and literature review from previous research are used to provide the theoretical foundation for solving the problems in Wijara Nagatsupazki, while local government regulations are used to learn the legal aspects of employment within MSME's in Indonesia.

The purpose of conducting qualitative research is to describe, discuss and explain the meaning of a pattern that emerges from the collected data (Malhotra, 2010). In doing qualitative research methods, there are three stages that should be followed in order to analyze the data, which are:

- Data reduction

At this stage, data are reduced by selecting collected data to be processed for research purpose. Data that has been selected and sorted are then summarized and sharpened, while unused data will be omitted.

- Data Presentation

At this stage, data will be presented in visual interpretations such as diagram, chart, or graphs.

- Taking Conclusions and Data Analysis

At this stage, conclusions or data summary has been obtained, processed, and adjusted to match the research problems and objectives of business coaching that is being done.

4 FINDINGS

- Business Model Canvas (BMC) Analysis

Wijara Nagatsupazki has a clearly defined value proposition and customer segments to be served, in order to maintain the consistency of day-to-day business. However, in the process of value creation for the customer, due to lack of human resources management practices, Wijara Nagatsupazki currently has no comparative human capital as key resources. This inhibit the quality of value created by Wijara Nagatsupazki, as well as decreasing the competitive advantage for Wijara Nagatsupazki.

- Porter's Five Forces Analysis
Wijara Nagatsupazki employs qualified human capital to emphasize their service and product in terms of quality, in order to differentiate their value for the target market. However, due to inefficiency and ineffective human capital planning (such as when planning for training & development programs), the relative costs of acquiring qualified human capital turns out to exceed the relative value produced by the human capital.
- Strengths, Weakness, Opportunities, dan Threats (SWOT) Analysis
Wijara Nagatsupazki should focus their efforts first on solving their weaknesses. One of the most urgent weakness to be solved is the lack of formal document to manage their human capital effectively. could affect customer's perception that Wijara Nagatsupazki does not have the capability required to manage their human capital effectively for value creation process.

5 CONCLUSIONS

In determining and developing human resources management strategies to increase employee performance and thus, organizational performance, coach departs from field observation using various human capital analysis tools and interviews with the human resources. This field observation and interviews concludes that the lack of human resource management caused employee performance tends to decrease. The lack of human capital practices, decreasing employee performance, and the absence of tools to formally manages human capital in Wijara Nagatsupazki, could be identified as the major problem of decreasing organization performance.

To solve that problem, coach tried to assist Wijara Nagasupazki by doing job analysis, in order to formulate job description and job specification for better understanding of task and responsibility to be done in the job. Coach also created competency mapping for effective work allocation and training and development planning to improve the right and required competency of human capital.

Coach along with Wijara Nagasupazki's human resource manager, Mrs. Yosephine Caroline, interviewed several key employees in 21 job position (1 general manager position, 6 managerial position, and 14 staff position), in order to collect data about the structure of the job, relationship with other job position, task and responsibility to be done, and required qualification to do the job well. After the process of job analysis for each job is done, coach then verified the data collected in job analysis to each job's superior. Staffs are verified by manager, managers are verified by general manager, and general manager is verified by the owner of Wijara Nagatsupazki.

Then, coach formulated job description and job specification based on the job analysis, which consists of job title, reporting duty, partner, line of command, nature of work, task and responsibility, authority, working condition, education qualification, and skills and attitudes required to fill the job.

With job description and job specification in hand, coach then implemented the newly created tools to every employee in Wijara Nagasupazki. Implementation are done by socializing the content of job description and job specification, so everyone clearly understands the expectation of the company towards them. Within 3 months after implementation, coach then measured the influence of job analysis in improving employee contextual performance with a survey. Data collected then analyzed with SPSS 25, with the result as follows:

Table 1 Paired Sample Test Before and After Job Analysis

Paired Samples Statistics									
		Mean	N	Std. Deviation	Std. Error Mean				
Pair 1	Before	2.3061	18	.30239	.07127				
	After	2.6339	18	.30583	.07208				
Paired Samples Correlations									
		N	Correlation	Sig.					
Pair 1	Before & After	18	.742	.000					
Paired Samples Test									
		Paired Differences							
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
Before	- After	-.3277	.2185	.0515	- .4364	- .2190	-6.36	17	.000

According to the table, the mean of contextual performance experience an increase, from 2.3061 to 2.6339. The correlation value of job analysis implementation is 0.742, which indicates a strong relation between job analysis and contextual performance of Wijara Nagatsupazki's human capital. Nevertheless, in the column sig. (2-tailed), the value is .000, which means that the result is below the critical level of 0.05. Hence, the formulation and implementation of job analysis is proven to statistically improve the contextual performance of Wijara Nagatsupazki's human capital.

In terms of competency mapping, coach interviewed all 18 employees in production division in order to create job mapping. Data collected from the interview are the task and responsibilities of each production job, Key Performance Areas (KPA) required to produce value, and competency require-

ment to perform well in the job. After the process of competency mapping for each job is done, coach then verified the data collected in job analysis to Mr. Widodo as the production manager. Then, coach formulated a competency dictionary and competency mapping based on the job mapping, which consists of competencies (skills, knowledge, and attitude) identified, and then graded to each human capital.

With competency dictionary and competency mapping in hand, coach then implemented the newly created tools to human resources and production department in Wijara Nagasupazki. Implementation are done by socializing the content of competency dictionary and competency mapping, so human resources manager clearly understands which of the employee needs to be trained for a specific competency. Production manager can now clearly understand which of the production staff should be allocated for a specific project, based on the required competency needed to do the project. Within 3 months after implementation, coach then measured the influence of job analysis in improving employee task performance with a mini survey. Data collected then analyzed with SPSS 25, with the result as follows:

Table 2 Paired Sample Test Before and After Competency Mapping

Paired Samples Statistics					
		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Before	4.8417	18	1.64760	.38834
	After	6.0278	18	1.56620	.36916

Paired Samples Correlations

		N	Correlation	Sig.
Pair 1	Before & After	18	.768	.000

Paired Samples Test

Paired Differences									
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
					Lower	Upper			
Before - After		-.42667	.27425	.06464	-.56305	-.29029	-6.60	17	.000

The mean of task performance experiences an increase, from 2.3161 to 2.7428. The correlation value of competency mapping implementation is 0.542, which indicates a strong relation between competency mapping and task performance of Wijara Nagatsupazki's human capital. Nevertheless, in the column sig. (2-tailed), the value is .000, which means that the result is below the critical level of 0.05. Hence, the formulation and implementation of competency mapping is proven to statistically improve the task performance of Wijara Nagatsupazki's human capital.

ACKNOWLEDGMENT

The author wishes to give thanks to Mr. Triyono Arief, Mrs. Nikita Puspita, and Mr. Eka Hadyan Prasetya.

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