# THE INFLUENCE OF JOB DESIGN ON THE QUALITY OF WORK LIFE AND JOB SATISFACTION OF EMPLOYEE

Novie Prasetyaning Marhaeni
Polytechnic, Secretarial Study Program, Surabaya University, n.marhaeni@gmail.com
Noviaty Kresna Darmasetiawan
Management, Economic and Business Faculty, Surabaya University, noviatykds@gmail.com

## Abstract

The research conducted at a flour producer attempts to find out the Influence of Job Design on the Quality of Work Life and Job satisfaction. Primary data was taken through questionnaires method of ninety respondents of the company. The sampling technique is Non-Probability Sampling with purposive random sampling method. While the processing of data using Structural Equation Modelling (SEM) with Partial Least Square (PLS) software. The data processing and the analysis reveal that the result of the three hypotheses can be accepted. The design work gives a positive influence on the quality of work life, while the job design also shows a positive influence on the job satisfaction. The quality of working life also performs a positive effect on employee job satisfaction.

Keywords: Job design, Quality of work life, Job satisfaction, Structural equation modelling, Partial least square

#### Abstrak

Penelitian yang dilakukan terhadap karyawan sebuah perusahaan yang memroduksi tepung ini bertujuan untuk mengetahui tentang Pengaruh Desain Pekerjaan terhadap Kualitas Kehidupan Kerja dan Kepuasan Kerja Karyawan. Data primer diambil melalui kuesioner yang telah diisi oleh 90 orang responden dari perusahaan tersebut. Teknik pengambilan sampel adalah Non-Probability Sampling dengan metode Purposive Random Sampling. Sedangkan untuk pengolahan datanya menggunakan Structural Equation Modeling (SEM) dengan software Partial Least Square (PLS). Setelah melalui analisis dan pengolahan data, diperoleh hasil bahwa ketiga hipotesis dapat diterima, yaitu bahwa desain pekerjaan berpengaruh positif terhadap kualitas kehidupan kerja, desain pekerjaan berpengaruh positif terhadap kepuasan kerja, dan kualitas kehidupan kerja berpengaruh positif terhadap kepuasan kerja karyawan.

Kata Kunci: Desain pekerjaan, Kualitas kehidupan kerja, Kepuasan kerja, Structuaral equation modelling, Partial least square

JEL Classification: M31

#### 1. Research Background

Many companies apply innovation in managing the human resources; begin form the recruitment process, employee development, up to maintaining potential employee. That thing is done in order to get qualified and high competence, loyalty employee, and also give maximum contribution to company. With the human resources that have adequate knowledge and skills, good behaviour, willing to work hard, discipline, and positive character will bring big effect in terms of company succeed and progress. Hodges in Yuspratiwi (2001) stated that discipline can be described as individual or group behaviour that willing to follow prescribed rules.

In another point of view stated that the condition that is created and in accordance with hope, most part have effect on employee attitude and behaviour, as early manifestations of their job satisfaction. Research about job satisfaction becomes attention in industrial world, because high job satisfaction will encourage individual or group performance or achievement

improvement, which also will increase company effectiveness overall. Low job satisfaction causes many kinds of negative effect such as skip, slow performance, targets unmet, strike, turnover, intentional damage, and indiscipline.

One of the aspects that become the source of many kinds of employee performance problems is the effectiveness of a job design. With the effective job design will be able to harmonize one job with another, between one individual with another, and also the relationship between employee and employer or between employees (Zainal *et al.*, 2009). Therefore, operational activity within the company become on the right track to its goal.

Beside the job design problem, according to some research that has been conducted, employee quality of work life also shows positive relationship on employee job satisfaction (Cherns and Davis, 1975). According to Raja and Kumar (2013), quality of work life becomes one of the trends that are counted as determinant of business organization sustainability and survival. By adjusting to needs, job of worker's competence, and also employee's needs to be accommodated in terms of their competence, will make them feel satisfy in doing their job so there will be effort to do a better work.

Just like what we can see in the research result conducted by Ayodeji (2000) with the title of Job Design and Improved Quality of Work Life of Nigerian Secondary School Teachers, discussed how an effective job design effects on two aspects which are the job itself and also the employee's social life so that it is resulting an individual that has commitment, loyalty, harmony with fellow employee.

This research is done in a flour company. The primary aim of this research is to know the influence of job design on employee quality of work life and satisfaction.

#### 1.1 Literature Review

Conceptually, according to Robbins and Coulter (2014) job design is the way to combine a couple of works in order to complete a job. Meanwhile Jones and George (2006) stated that job design is a process whereas the manager decides how to divide the task to become specific job to provide products and services to customer.

Hackman and Oldham (1975) identified five characteristic of core work in job design, which are:

- Skills variety is whereas employee is more emphasized on their skills that needed to complete a job.
- Task identity is employee complete the job step by step based on job procedure.
- Task significance is a job that considered being important for another person's job.
- Autonomy is employee has the freedom to responsible job design until job result.
- Feedback is employee get feedback information about their performance.

According to Greenberg and Baron (1995) job is designed to help employee to do their job by pleasant and care with what they do, and also become valuable and have meaning to employee in doing their job.

Every organization or company surely want the best condition from their employee, whether it is their competence, performance, productivity, and loyalty for the company. A condition where the turnover is low, employee has pretty long years of service, employee feels comfortable, and has strong bond with the company indicate that the company has run good human resources management. Employees also feel that their need for the job and their private needs are fulfilled. This is an indicator where the employee work life quality has been fulfilled, so that they have the feeling of work satisfaction.

Robbins (1989) defined working life quality as follow "A process by which an organization responds to employee needs by developing mechanism to allow them to share fully in making the decisions that design their lives at work." Quality of working life is, according to Robbins, a process that is done by an organization in order to respond employees need by building a mechanism that allows the employee to make decision in their work.

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Meanwhile, Werther & Davis (1996) affirmed that quality of working life is the existence of good supervision, good working condition, decent salary, and challenge also award in terms of doing their jobs. As for the aims of quality of working life development are as follows:

- a. Improve employee job satisfaction
- b. Improve job safety and health
- c. Improve employee performance
- d. Create organization learning
- e. Support management of change

Wexley and Yuki (2003) mentioned that job satisfaction is attitudes generalization towards the job. Variety of individual attitude towards their job is the representative of good or bad experience in working, also hope on the experience that happened to them (Wilson, 2012:327). If the work that is done by someone can be fun, therefore, they will get satisfaction. In contrary, dissatisfaction will occur if someone does not feel comfortable and happy in doing the job.

In his research, Koesmono (2005) stated that the meaning of job satisfaction for a worker if it is reviewed for every word are: satisfaction is a feeling that experienced by someone whereas what is hoped for has been fulfilled or even more than expected, meanwhile work is effort in order to achieve a goal by earning salary or compensation from the contribution to the working place. Job satisfaction can be seen from the positive attitude of employee on their job and anything that they are faced in their working environment. Meanwhile, a company leader has the obligation to create job satisfaction for the employees, because job satisfaction is a factor that believed can encourage and affecting employee morale so that they can work well and will affect their performance. Besides that, a manager also must give a good and fun working condition, and also safety assurance so that the employees will feel satisfied. In working, someone will comfortable and has high loyalty for the company if the person gets job satisfaction that just like they want.

From couples of definitions about job satisfaction that stated by experts above, can be briefly concluded that job satisfaction is attitude that occurred by someone for their job as manifestation from perception and feeling on the job that is done. If an employee does not het job satisfaction, it will affect the interest and spirit in doing the job. Other thing that occurs is the increasing of absence of employees in working place. At the end, this thing will affect employee work productivity and also company performance in general. Furthermore, employees that feel dissatisfy will try to find another place to work until they can find the company that is able to give them job satisfaction. Job dissatisfaction does not always cause by salary or material factors, but it can be caused by other things such as facility, security, employee relationship or employer, and other things that intangible. Each individual will have different level of satisfaction based on the values within themselves. This thing is caused by the differences of willing on each individual. The more aspect in the job that is suitable with individual desire, the higher satisfaction level that felt, and vice versa.

## 2. Research Method

In this research, the writer takes job design (X1) as independent variable and exogenous (variable that is not affected), which consists of job variation, identity, job, job meaning, autonomy, and feedback. Beside that the second independent variable and also endogenous (variable that is affected), which is quality of working life (X2), which consists of career development, worthy and fair compensation, communication, involvement, employee, security assurance, and problem solving. Meanwhile variable dependent and endogenous (variable that is affected) is job satisfaction (Y), which consists of attendance level, turnover level, job discipline, responsibility, and employee involvement.

This research will be conducted in PT ISM Bogasari Flour Mills, Surabaya, whereas the population number is 150 people, which is the employee of HRD, Finance, and marketing Department in Bogasari Division Surabaya. Meanwhile research sample determined as much as 90 staff from those 3 departments. Research sample collecting is done by using Non-Probability Sampling technique and also Purposive Random Sampling sample collecting method, which is a sample determining process with certain consideration (Sugyono, 2001).

Data collection model used in this research is Structural Equation Modelling (SEM) in order to analyse data, by using the PLS (Partial Least Square) software. There are three models of track analysis in PLS that is used in this research, those are inner model that specifies the connection between latent variable, outer model makes specification connection between latent variable with manifest variable, weight relation that estimates latent variable value.

In the use of PLS, there is several evaluations on structural and measurement models. Meanwhile in measurement model evaluation convergent validity, discriminant validity, composite reliability, and Average Variance Extracted test are applied. Meanwhile in measurement model evaluation R-squared (R<sup>2)</sup> and track coefficient estimation test are applied.

#### 2.1 Framework

Below is the research model that will be done based on theoretical basis and previous research result.

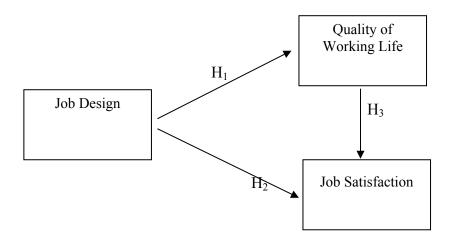


Figure 1. Framework

# 2.2 Research Hypothesis

Based on theory discussion, previous research, and previous argumentation, therefore formulated the hypothesis as follows:

- H1: The effective job design will have positive effect on employee quality of working life.
- H2: the effective job design will have positive effect on employee job satisfaction
- H3: good quality of working life will have positive effect on employee job satisfaction

## 2.3 Research Result

#### 2.3.1 Inner Model

Testing inner model or structural model is done to see the connection between significance construct value and R-square from research model. Structural model evaluated by using R-square for t test dependent construct also significance from structural path parameter coefficient.

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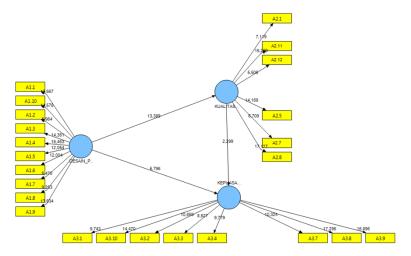


Figure 2. Inner Model

R-square for job satisfaction variable obtained for 0,599795 and for quality of working life variable obtained for 0,507562. This result shows that 59,9797% of job satisfaction (KK) can be explained by job design and quality of working life variables, meanwhile 50,762 % quality of working life can be explained by job design.

In the effort to understand the connection between construct, significance value and R-square from research model, inner model or structural model testing is done. Model assessment with PLS is done by look at the R-square for each dependent latent variable first, which is job satisfaction is affected by quality of working life and job design (job satisfaction affected by job design).

## 2.3.2 Outer Model

In this research, the way of indicator to the construct is reflective. Measurement model that is done by confirmatory factor analysis or usually called as CFA which is used for testing the dimensionality of a construct, which is testing the validity and reliability from that latent construct framer indicators. There are three criteria in performing measurement model in order to rate outer model in SEM-PLS with the help of PLS 2.0 software smart, which are Convergent Validity, Discriminant Validity, and Composite Reliability. Output Smart-PLS 2.0 producing early model which is illustrated with the picture below:

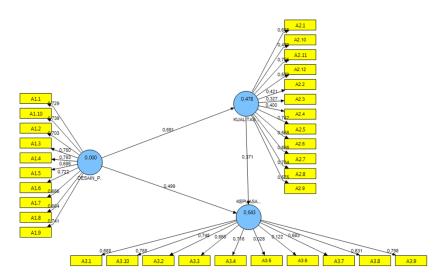


Figure 3. Early Structural Model

The beginning of early model measurement by performing convergent validity which is illustrated by loading factor value of each indicator on its variable construct, whereas variable construct in this research are job design, quality of working life, and job satisfaction. Loading factor value from the data processing shows some indicators with loading factor value < 0,5 up to 0,6 which are A3.5 and A3.6. indicators of A3. variable. And then for A2.2, A2.3, A2.4, A2.6, A2.9, A2.10, and A2.12 indicators of A2. AVE value A3 and A2 variables are less than 0,5.

Based on loading factor result and AVE value, it indicates the need of model modification in order to get AVE value more than 0,5. The indicators with loading factor value of < 0,5 up to 0,6 will be eliminated one by one form the model, start from the smallest until AVE values of each construct is > 0,5. Indicators that eliminated from the model to get AVE value of > 0.5 which are indicators A3.5 and A.36 form A3 variable, and also indicators A2.2, A2.3, A2.4, A2.6, A2.9, A2.10, and A2.12 from A2 variable. As for model that formed after some invalid questions asked until get the AVE value of > 0,5:

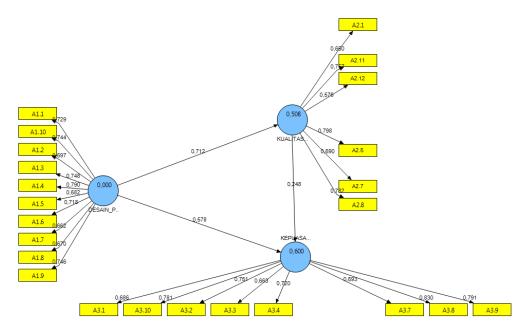


Figure 4. Modification Structural Model

Meanwhile SEMP-PLS outer model measurement with SMART-PLS 2.0 software is as follows.

#### 2.4 Convergent Validity

Validity measurement in SEM-PLS is done with 3 criteria as follows:

## 2.4.1 Loading Factor

The first outer model measurement to be seen from the loading factor from each indicator on the construct, it is said that the indicator is valid (capable to measure its construct) if loading factor is more than 0,5 up to 0,6, suitable with recommended criteria and AVE also communality value is more than 0,5.

Outer model value or correlation between constructs with variable is yet to meet the convergent validity in the first time because there is still many indicators that have loading factors below 0,5 up to 0,6, and AVE and communality values are less than 0,5. Model modification is done by issue queries that has loading factor value below 0,5 up to 0,60, issued one by one from the smallest until manage to get AVE value more than 0,5. In model modification shows that all loading factor has value above 0,5 up to 0,6 so that AVE and communality values more than 0,5 and construct for all variable is no more to be eliminated.

## 2.4.2 Average Variance Extracted (AVE) and Communality

Another measurement to measure convergent validity except to look at loading factor can be done by looking at the AVE and communality values for each indicator. If AVE and communality values are more than 0,5 which is suitable with the recommendation, then each indicator measure the construct in valid. Based on the data collected, it is concluded that all constructs are meet the valid criteria. This thing is shown by AVE and Communality values above 0,50 as well as the criteria recommended.

## 2.4.3 Discriminant Validity

Discriminant validity is done in order to make sure that every concept of each latent variable is different with another variable. Model has a good discriminant validity if every loading value and indicator from a latent variable have the biggest loading value among other loading towards another latent variable. Based on discriminant validity test result, found that each indicator from each latent variable have the biggest loading factor compare to loading factor if connected to another latent variable. This means that every latent variable has already have good discriminant validity.

# 2.4.4 Reliability Validity

Based on reliability validity test can be concluded that all construct is meeting the reliable criteria. This thing is shown by the composite reliability and Crobach Alpha values which are more than 0,70 just like criteria recommended. From the model measurement result with convergent validity, validity and reliability validity discriminant show that all measurement of each indicator on the construct is meeting the recommended criteria. This thing can be concluded that each indicator is capable to measure each construct very well.

# 2.5 Hypothesis Testing

Estimated parameter significance gives very useful information about the connection between research variables. Base used to test hypothesis is the value of output result for inner weight. Table 1 is a result for inner weights, below gives the estimation output for structural model measurement.

**Table 1. Structural Model** 

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	Standard Error (STERR)	T Statistics ( O/STERR )
Job design -> job satisfaction	0,577838	0,577376	0,099693	0,099693	5,796194
Job design -> quality of working life	0,712434	0,722413	0,053210	0,053210	13,388981
Quality of working life -> job satisfaction	0,248157	0,258022	0,107952	0,107952	2,298774

In PLS testing statistically, each connection that hypothesized is done by using simulation. In this thing, bootstrap method is done to the sample. Test with bootstrap also mean to minimalize the abnormality of research data.

#### 3. Research and Discussion

## 3.1 Job Design Variable Effect on Quality of Working Life Test Result

The first test result shows that there is competence variable (K) connection with job satisfaction (KK) shows path coefficient value of 0,712434 with t-statistic value of 13,88981. That t-statistic value is larger than T Table (1,960). This result means that job design has positive and significant connection on quality of working life which mean it matches with the first

hypothesis, whereas effective job design will have positive effect on employee quality of working life.

## 3.2 Job Design Variable Effect on Job Satisfaction Test Result

The second hypothesis test shows that job design variable connection on job satisfaction resulting path coefficient value of 0,577831 with t-statistic of 5,796194. The t-statistic value is bigger than T Table (1,960). This thing means that job design has positive and significant connection on job satisfaction which means it matches with the second hypothesis, whereas the effective job design will have positive effect on employee job satisfaction

#### 3.3 Quality of Working Life Variable Effect on Job Satisfaction Test Result

The third hypothesis test result shows that quality of working life variable connection with job satisfaction shows path coefficient value of 0,248157 with t-statistic value of 2,398774. This t-statistic value is bigger than T Table (1,960). This thing means that quality of working life is significant to job satisfaction, which means it matches with the third hypothesis, whereas good quality of working life will have positive effect on employee job satisfaction.

#### 4. Conclusion

After data analysis and the discussion, it is resulting conclusion as follows:

- 1. Job design effect on quality of working life shows positive and significant correlation, so that the first hypothesis which stated that effective job design will have effect on employee quality of working life can be accepted.
- 2. Job design effect on job satisfaction shows positive and significant correlation so that the second hypothesis which stated that effective job design will have positive effect on employee job satisfaction can be accepted.
- 3. Quality of working life effect on job satisfaction shows positive and significant correlation so that the third hypothesis which stated that good quality of working life will have positive effect on employee job satisfaction can be accepted.

Besides that, some things are also recommended for Bogasari and for future research

- 1. Bogasari management need to pay attention to employee need in planning their job activity, by considering that that thing will gives chance for them to be more creative, actualized themselves, has the feeling of owning the job, praise, and in the end, will get the job satisfaction feeling.
- 2. From the data acquired some images about respondent that have the perception that management or employer involvement are still lack in solving problems that happen to their employee during their work. Because of that Bogasari management need to pay more attention the employee, whether during individual work activity or team (teamwork). Problem that happens to employee can be solved with two ways communication and sufficient communication intensity, so that in discussion process can be found the issue or problem that is faced and the way to solve it.
- 3. From the data information is acquired that the respondent desire to work in long term period is still lacking. Because of that Bogasari management need to make the best strategy to maintain their employee, especially those with potential and have great competence for company, for instance by make a better and more open communication so that it can reduce the discrepancy between employee or departments. Beside that it will also give more chances to employee in order to have autonomy in completing their work and also another strategic act that is profitable to company or even the employee.

Besides that, the interesting thing to dig deeper in the future research is that job satisfaction cannot obtained from rewards, facilities, or certain award, but employee desire to get chance to develop themselves through the job needs to be attention also.

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