The Impact of Human Resource Practices, Employee Quality and Innovation on Performance: An Analysis of Woven Fabric SMEs

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Abstract: This paper focusing on understanding the effect of Human Resource Management Practice to a quality of employee and further to the innovation in Small Medium Enterprise by using the SME performance as the measured variable. The effect can be analyzed by exploring both direct and indirect effect of Human Resource Management Practice to SME's performance. The sample used in this research are SME that already run for more than 6 years with growing revenue.

The result shows that in SME's context in Indonesia, the quality of employee and innovation is directly affecting the SME's performance while a good Human Resource Management Practice did not directly affect the performances. However, a good Human Resource Management Practices significantly affecting the Human Resource Quality and innovation. Thus, a good Human Resource Management Practice indirectly affecting Small Medium Enterprise performance in Indonesia.

This paper developing a model to measure the effect of Human Resource Management Practice as an independent variable to Quality of employee and innovation related to organization's performance. This paper also using path analysis to discover the direct and indirect effect of the independent variable to dependent variable. The model designed on this paper is proved to be passable since it successfully describing 61.9% of the phenomenon while only 38.1% is out of the context. The result of this research can enrich the studies relating to Human Resource Management Practice on SME, especially in Indonesia's context.

Keywords: Human Resource Management Practice, Employee Quality, Innovation, SME Performance, SME growth Drivers

I. INTRODUCTION

1.1. Research Background

Small Medium Enterprise in Indonesia held an important role in national economic, country development and in decreasing unemployment. This is the result of the outstanding number of SME in Indonesia,

where 99.99% of business in Indonesia can be categorized as SME (Bank of Indonesia, 2015). SME contribute 57.9% from total Gross Domestic Income of Indonesia on 2015, higher compared to enterprise and government sector contribution. SME also successfully decreasing the unemployment rates in Indonesia, by having 97.2% employment rates in 2015 (BPS, 2015). However, SME in Indonesia is far from perfect, there is a lot improvement needed, especially relating to the quality of human resource and its competitiveness.

This condition is worsened by Indonesian competitiveness condition which suffered a setback from rank 34 from 144 countries in 2015 to rank 37 from 140 countries in 2016, to rank 41 from 138 countries in 2017 (Asia World Economic Forum 2016; Asia World Economic Forum 2017). The Indonesian human resource quality is also not in a good position, which is ranked 113th in the world (UNDP, 2015; UNDP, 2016). Reflecting on this condition, improvement in human resource quality and competitiveness is an urgent matter and this includes the quality of human resource in SME business. Improving the competitiveness and human resource quality is increasing the survivability rates of SME in Indonesia in facing Asean Economic Community.

One of SME sector that always supported by government in Indonesia is woven fabric industries. Woven fabric SME is located in many regions in Indonesia which most of them are SME business. Each region has their own unique pattern of woven fabric produced which becomes its business competition leverage. Improvement in woven fabric SME business held a high potential in increasing the Gross Domestic Income of Indonesia and reducing unemployment.

A successful SME needs to be successfully utilizing Human Resource Management Practice, which consists of Recruitment, Training and Development, performance appraisals, compensation and benefits and engagement (Dessler, 2008). Recruitment as a part of Human Resource Management Practice is providing the employee with proper skill sets to fulfil the requirement needed by company (Malthis, 2001). A high-quality employee is highly related to innovation created by a company (Bal et al, 2013). With continuous innovation, SME performance can be improved which leads to improved competitiveness in the market. Thus, there will be increasing in revenue and company stability (Nugraha&Andadari, 2014). Human Resource Management Practice is also positively affecting to innovation creation in an organization (Al-Bahussin& El-Garaihy, 2010) and improving SME performance in general (Chandler & McEvoy, 2000).

Based on this background, this research would like to answer these research questions:

1. What is a Direct and Indirect effect of Human Resource Management Practice, high-quality employee, and innovation to SME performance in Indonesia?

2. What is the parallel and partial effect of Human Resource Management Practice, high-quality employee, and innovation to SME performance in Indonesia?

II. LITERATURE REVIEW

The employee is one of the most important factor in every organization's success (Koubek & Vatchkova, 2007). Human resource is also of the most promising factor in increasing the continuous economic development (Raguz *et al,* 2011). Thus, an effective human resource management is essential for an organization success (Cascio, 2006) and Human Resource Development is the main challenge in SME business sector (Hudson *et al,* 2001). Most of SME failure is caused by their inability to manage their Human Resource (Awa *et al,* 2015).

2.1. Role of Human Resource Management Practice to Human Resource Quality, Innovation and Organization performance

Human Resource Management Practice is including recruitment, training and development, performance management, reward and compensation, and workplace safety (Monday, 2010). Human Resource Management Practice can shape employee knowledge, skills, values and attitude to the desired traits (wright *et al,* 2001) while experience and industry knowledge determine employee quality (Santarelly& Tran, 2013). Competencies of human resource can be determined by their expertise, skill, adaptation, and completion (Dullayaphut&Untachai, 2013) and education are one of the effective ways to assess employee expertise (Hofheinz, 2009).

A High-quality employee is highly related to innovation created in an organization (Bak et al, 2013). This statement is supported by Coronado et al in 2008 and Jimenez &Sanz-Valle in 2015 which state that the key to successful innovation in an organization is Human Resource and its management practice. Human Resource Management Practice give an effective effect to innovation (Al-Bahussin&El-Garaihy, 2010). Employee quality and amount of investigation in human resource show a positive relation with organization growth (Gossling & Rutten, 2007; Santos-Rodrigues et al, 2010). Human Resource Management Practice is also proved to contribute to organization performance (Cunha & Cunha, 2004). An effective Human Resource Management Practice, especially Recruitment procedure, performance appraisals, rewards and benefits management and training and development program is directly affecting to productivity and organization performance (Collins & Druten, 2003; Uysal & Koca, 2009; Kahn, 2010). In SME context, an effective Human Resource Management Practice can improve the financial performance and employee personal productivity (Sels *et al,* 2006).

## 2.2. Effect of Innovation to performance in SME

Innovation is a new findings or adoption which create a new combination from resource provided (Hult et al, 2003). Innovation can be creating on Organization, unit, process or individual level (Smith & Lynch, 2014). In this global economy era, innovation is essentials for business continuity (Gaynor, 2002). Innovation in one and only solution to survive in a hypercompetitive market (Kim & Maubourgne, 2005). Innovation is positively related to performance (Fred & Robson, 2004). Also, innovation can improve profitability and revenue growth (Hsueh & Tu, 2004). Innovation is also showing positive relation to SME performance (Rosenbusch, Brinckmann and Bausch, 2011). Thus, innovation is not only needed by a huge enterprise, but also for SME (VrakkingdanCozijnsen, 1997).

III. CONCEPTUAL FRAMEWORK

Based on the literature review, the conceptual framework proposed for this research is :

Based on theories above, this research hypothesis are:

1. Human Resource Management Practice directly has a positive and significant effect on Quality of Human Resource

2. Human Resource Management Practice directly has a positive and significant effect on Innovation

3. Human Resource Management Practice directly has a positive and significant effect on Organization performance
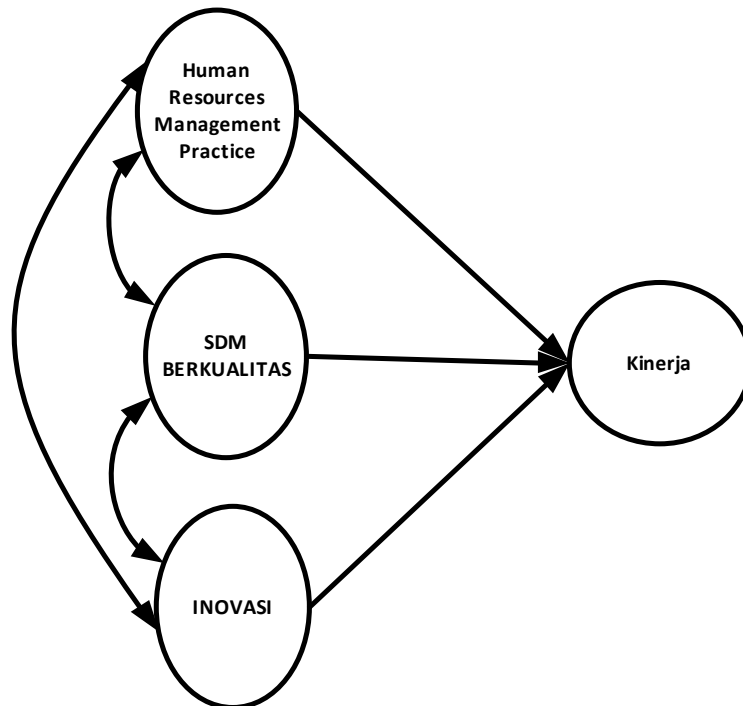
Picture 1: Conceptual Framework

4. Human Resource Management Practice indirectly (through Human Resource Quality variable) has a positive and significant effect on Organization performance

5. Quality of Human Resource directly has a positive and significant effect on Quality of Human Resource

6. Quality of Human Resource directly has a positive and significant effect on Quality of Innovation

7. Quality of Human Resource indirectly (through Innovation variable) has a positive and significant effect on Organization performance

8. Innovation directly has a positive and significant effect on Organization performance

IV. RESEARCH METHODOLOGY

This research conducted on Woven Fabric SME industries in Kediri, Klaten, and Jepara region, Indonesia. SME that become sample is only the SME that successfully grow their business with criteria including the SME business already run for more than 6 years, and the number of employees, revenue and profit is growing each year. Questionnaire and interview method are used to collecting primary data. The questionnaire is consist of 4 part. Part I is regarding the Human Resource Management Practices, consist of recruitment, training and development, performance appraisal and compensation (Dessler, 2008). Part II is regarding the quality of employee based on their education (Hofheinz, 2009) and experience (Santarelli & Tran, 2013). Part III is the questionnaire regarding innovation, consist of process innovation, product innovation, market innovation and organization innovation (Avermaete, Viaene, Morgam and Crawford, 2013). Part

IV is measuring organization performance based on the increase in sales, revenue, and a number of employees (Hsueh & Tu, 2004).

Likert scale is used in this questionnaire with a range from 1 to 4 which 4 represent strongly agree and 1 represent strongly disagree. This questionnaire is not using 1 to 5 scale in order to eliminate the not sure option since most Indonesian tends to choose a neutral position when responding to sensitive matters. By eliminating the not sure option, this questionnaire hoped can be avoiding biases. A validity test of this questionnaire is using construct validity test with product moment correlation moment equation and its reliability is tested using Alpha Cronbach method.

After conducting tests, the number of the questionnaire that valid to be further analyzed is 60 questionnaire, representing 3 target regions. The data analyzing method is using path analysis. Path analysis is a technique to analyze action-reaction relationship occurs on double regression if the independent variable is not only directly affecting dependent variable but also indirectly affecting it (Robert D. Retherford 1993). Path analysis will determine the direct and indirect (Through Human Resource Quality and Innovation variable) relation of all variables and parallel or partial relation of independent variables (Human Resource Management Practice, Quality of Human resource and innovation) to SME performance as the dependent variable. Then, all the result will be analysed descriptively.

V. RESULT AND DISCUSSION

Based on the result of data analysis by using SPSS, then the result can be concluded as:

Table 1
Model Summary, Parallel Correlation Value and Coefficient of Determination

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	,787[a]	,619	,599	,21014862	2,257

a. Predictors: (Constant), Y2, Y1a, X

b. Dependent Variable: Y3

From the table above, Correlation Coefficient knew to be R = 0.789, which means the Human Resource Management Practice variable, quality of employee and innovation in parallel has a positive relation to SME performance (-1 < R < +1). Where the determinant coefficient is R2 = 0,619 which shows that 61.9% change which happens to dependent variable is correlated with independent variable in the proposed

Table 2
F ANOVA Test

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3,363	3	1,121	22,003	,000[b]
	Residual	2,038	40	,051		
	Total	5,400	43			

a. Dependent Variable: Y3

b. Predictors: (Constant), Y2, Y1a, X

model. While the other 38.1% is correlated to other variables outside the model. This result shows that Human Resource Management Practice, Quality of employee and innovation is correlating to SME performance by 61.9%

Result of Anova analysis table shows that probability value (Sig F) = 0.000 < 0.05. This means that the model effect of Human Resource Management Practice, Human Resource Quality, and innovation in parallel significantly affecting the SME performance. Thus, this model is statistically valid. This result is corresponding with a research by Rauch, Frese and Utsch in 2005 which its findings are the value and employee quality is an important predictor of future business growth. This result is supported by research by Aruna S Gamage in 2014 which the result shows in Japan that use of effective Human Resource Management Practice increasing the operational and financial performance of an organization. Dessler in 2008 state that Human Resource Management Practice aim is to ensure that employee keeps increasing their quality in order to develop their competitiveness. These high-quality employees need to be placed in the right place, trained well and effectively managed to increase their motivation towards business goals.

Table 3
Coefficients (partial)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	,862	,317		2,714	,010
	X	-,192	,105	-,240	-1,833	,074
	Y1a	,787	,134	,765	5,854	,000
	Y2	,245	,084	,311	2,907	,006

a. Dependent Variable: Y3

X : Human Resource Management Practice Variable

Y1a : Quality of Human Resource Variable

Y2 : Innovation Variable

Coefficients table (Result of the partial test) shows that human resource quality variable score shows that Sig = 0.000 < 0.05 which means that quality of human resource partially affecting directly and indirectly to SME performance variable. This correlation is positive and statistically significant. The Innovation variable score shows Sig = 0.006 < 0.05 which means partially innovation is directly affecting SME performance variable. This result is corresponding with a statement from Bal et al in 2013 which state that high-quality employee is highly affecting to innovation, and innovation is positively affecting to performance. Also, quality of employee and number of investment in human resource is positively affecting to business growth.

However, some result is slightly different than the previous research, one of it is regarding the Human Resource Management Practice is not directly by significant affecting SME performance (Sig value 0.074 > 0.05). However, it is indirectly through human resource quality and innovation variable is affecting SME performance significantly.

One of the reasons why Human Resource Management Practice variable is not significantly affecting SME performance is because the size of the SME which becomes sample dominated by the small business with employee 9-99 people (70% of the sample) and 30% sample are a micro business. Most of the respondent (80%) state that they do the human resource management practice informally and 70% of them cannot compensate their employee above the minimum wages regulation.

Most of the small and micro business is only applying simple human resource management practice (De Kok, 2010) and imperfect Human Resource Management Practice put these small businesses on disadvantages (Dessler, 2008). Research by Tocher & Rutherford in 2009 state that only the formal Human Resource Management Practice is positively affecting performance. This fact is supported by research by Mulilli, Skenderi and Islami in 2015 which states the same result. Paying under the minimum wage and minimum number also becomes a problem in small business since the most affecting factors are compensation and benefits (Mulolli, Skender and Islami, 2015).

70% of the sample used in this research is small and micro business, most of Human Resource Management practice on this business is not perfect and only run informally. Also, most of the business only give the compensation under the minimum wage. Thus, this affecting the result of this research which shows the Human Resource Management Practice is not directly affecting the performance.

IV. CONCLUSION

In Indonesia context, especially in woven fabric industry SME in Kediri, Klaten and Jepara region, the most affecting factors to performance is the quality of employee and innovation, while Human Resource Management Practice is not directly affecting the performance of SME. Human Resource Management Practice only significantly affecting the SME performance indirectly through human resource quality and innovation variable. However, this research shows Human Resource Management Practice is directly and significantly affecting human resource quality and innovation. The model designed for this research is also proved to successfully simulate the connection between variables with 61.9% correlation with designed variables.

V. LIMITATION AND FUTURE RESEARCH

Even though the result of this research supporting the designed model, the generalization of the research result is limited. This condition happens because of: 1) Limitation on the sample taken which only covered 3 regions in Indonesia. 2) A limited number of the sample taken (60 sample). For future research, the model design in this research needs to be further tested using larger sample pool of woven fabric SME in another region. This model can also be applied to other SME industry in Indonesia. Other future research that can be done is to increase the number of variables and develop another model for Human Resource Management Practice in SME.

REFERENCE

Al-bahussin, SA., and El-garaihy, WH., (2010), The Impact of Human Resource Management Practices, Organisational Culture, Organisational Innovation and Knowledge Management on Organisational Performance in Large Saudi Organisations: Structural Equation Modeling with Conceptual Framework.

Avermaete, T., Viaene, J., Morgam, E. J., & Crawford, N. (2003), Determinants of Innovation in Small Food Firms. *European Journal of Innovation Management,* 6(1), 8–17.

Awa, H.O., Ojiabo, O.U. and Emecheta, B.C., (2015), Integrating TAM, TPB and TOE frameworks and expanding their characteristic constructs for e-commerce adoption by SMEs. Journal of Science & Technology Policy Management, 6(1), pp. 76-94.

Badanpusat Statistik (BPS). (2009), Statistik Indonesia.

Bal, Y., Bozkurt, S. and Ertemsir, E., (2013), A Study on determining the relationship between Strategic HRM Practices and Innovation in Organizations. In Active Citizenship by Management, Knowledge Management & Innovation, Management, Knowledge and Learning, International Conference.

Rosenbusch, N., Brinckmann, J. and Bausch, A., (2011), Is innovation always beneficial? A meta-analysis of the relationship between innovation and performance in SMEs. *Journal of business Venturing,* 26(4), pp.441-457.Cainelli, 2006.

Cascio, W.F., (2006), 10 Global performance management systems. Handbook of research in international human resource management, p. 176.

Chandler and Evoy, (2000), Human resource management, TQM, and firm performance in small and medium-size enterprises. Etrepreneurship: Theory & Practice, Vol. 25, 43–57, 2000.

Collins, C. J., Clark, K.D., (2003), Strategic human resource practices, top management team social networks, and firm performance: The role of human resource practices in creating organizational competitive advantage. Academy of management Journal, 46(6), 740-751.

Coronado, D., Acosta, M., Fernandez, A., (2008), Attitudes to innovation in peripheraleconomic regions. Research Policy 37, 1009–1021.

De Kok, Johannes, (2010), M P. Human Resource Management Within Small And Medium-Sized Enterprises, Valkenburga.d.Geul ISBN: 90 5170 705 3. This book is no. 313 of the Tinbergen Institute Research Series, established through cooperation between Thela Thesis and the Tinbergen Institute.

Dessler, G. (2008), Human Resource Management (11th edition), New Delhi, Prentice Hall, of India Private Ltd.

Dullayaphut, P., Untachai, S. (2013), Development the Measurement of Human Resource Competency in SMEs in Upper Northeastern Region of Thailand. Procedia – Social and Behavioral Sciences, 88, 61-72.

Gamage, Aruna S., (2014), Recruitment and Selection Practices in Manufacturing SMEs in Japan: An analysis of the link with business performance, *Ruhuna Journal of Management and Finance*, Volume 1 Number 1 - January 2014.

Gaynor, G.H., (2002), Innovation by Design: What it Takes to Keep Your Company on The Cutting Edge, AMACOM American management association, New York, NY.

Gossling, T., Rutten, R., (2007), Innovation in regions. European Planning Studies 15, 253–270.

Hofheinz, P., (2009), EU 2020: why skills are key for Europe's future. Policy Brief IV(1), 1–23.

Hsueh, L.M. and Tu, Y.Y., (2004), Innovation and the operational performance of newly established small and medium enterprises in Taiwan. Small Business Economics, 23(2), pp. 99-113.

Hudson, M., Smart, A. and Bourne, M., (2001), Theory and practice in SME performance measurement systems. *International Journal of Operations & Production Management*, 21(8), pp.1096-1115.

Hult, G.T.M., Snow, C.C. and Kandemir, D., (2003), The role of entrepreneurship in building cultural competitiveness in different organizational types. *Journal of Management*, 29(3), pp. 401-426.

Hult, G.T.M., Hurley, R.F. and Knight, G.A., (2004), Innovativeness: Its antecedents and impact on business performance. Industrial Marketing Management, 33(5), pp. 429-438.

Human Development Reports, (2015), Human Development Statistical Tables, United Nations Development Programme *http://hdr.undp.org/en/data*

Jimenez-Jimenez, D., & Sanz-Valle, R., (2005), Innovation and human resource management fit : an empirical study, *International Journal of Manpower*, 2005, 26, 4, pp 364-397.

Khan, M.A., (2010), Effects of Human Resource practices on organizational performance. An empirical study of Oil and Gas industry in Pakistani. *European Journal of Economics Finance and Administrative Sciences*, 24, 158-175.

Kim, W.C., Maubourgne, R. (2005), Blue ocean strategy. Harvard Business School Press, Boston, MA.

Koubek, J. and Vatchkova, E., (2007), Bulgaria and Czech Republic: countries in transition. HRM in Europe, p. 313.

Mulolli, E., Islami, X., Skender, N., (2015), Human Resource Management Practices and SMEs Performance: Study Based In Kosovo, *International Review of Management and Business Research*, Vol. 4, Issue 4.

Mondy, RW., (2010), Human resource management (11th ed.). Upper Saddle River, New Jersey:

Nugroho, O., Andadari, R. K. (2014), The Innovation of Micro, Small, and Medium Enterprises: A Case Study of Laweyan Batik Village, Indonesia. *Indian Journal of Commerce & Management Studies*, V (2), 37-46.

OECD, (2011), Skills for Innovation and Research. OECD Publishing (down-loaded on 20 April 2012 from *http://www.oecd-ilibrary.org/science-and-technology/skills-for-innovation-and-research 9789264097490-en*).

Olaru, M., Pirnea, I. O., Hohan, A., Maftei, M. (2014), Performance Indicator used by SMEs in Romania, related to Integrated Management Systems. Procedia – Social and Behavioral Science, 109, 949-953.

Raguž, I., Druži I., Tica, J. (2011), Human Capital in Growth Accounting: the case of Croatia. Journal of International Scientific Publications: Educational Alternatives, 9.

Rauch, A., Frese, M., (2005), Effects of human capital and long term human resources development and utilization on employment growth of small-scale businesses a causal analysis, Entrepreneurship: theory and practice 29(6), 2005.

Cunha, M.P.E. and Cunha, R.C.E., (2004), The dialectics of human resource management in Cuba. The International *Journal of Human Resource Management*, 15(7), pp. 1280-1292.

Rosenbusch, N., Brinckmann, J., Bausch, A. (2011), Is Innovation Always Beneficial? A Meta-Analysis of the Relation between Innovation and Performance in SMEs. *Journal of Business Venturing,* 26, 441-457.

Santarelli, E., Tran, H.T., (2013), The interplay of human and social capital in shapingentrepreneurial performance: the case of Vietnam. *Small Business Economics* 40 (2), 435–458.

Santos-Rodrigues, H., Dorrego, P.F., Jardon, C.F., (2010), The influence of human capitalon the innovativeness of firms. *International Business and Economics Research Journal* 9 (9), 53–63.

Smith, R. and Lynch, D., (2014) Coaching and Mentoring: A review of literature as it relates to teacher professional development. *International Journal of Innovation, Creativity and Change,* 1(4), pp. 91-103.

Sels , L., De Winne , S., Delmotte , J., Maes , J., Faems , D., Forrier , A., (2006), Linking HRM and Small Business Performance: An Examination of the Impact of HRM Intensity on the Productivity and Financial Performance of Small Businesses, Small Business Economics, 26, pag.83-101, 2006

Tocher, N. and Rutherford, M.W., (2009), Perceived acute human resource management problems in small and medium firms: an empirical examination. *Entrepreneurship Theory and Practice*, 33(2), pp. 455-479.

UNDP, (2015), List of countries by Human Development Index, *https://en.wikipedia.org/wiki/List_of_countries_by_Human_Development_Index Accessed 10 August 2017*

Uysal, G. and Koca, G., (2009), HR and firm performance at companies in Turkey: Correlative analysis. Journal of Modern Accounting and Auditing, 5(1), p. 45.

Vrakking and Cozijnnnnnnnsen, (1997), Monitoring the quality of innovation processes and innovation successes, in Hassey, D.E. (Ed.), The Innovation Challenge, JohnWiley & Sons, Chichester, pp. 25-49.

WEF, http://www.nmi.is/media/338436/the_global_competitiveness_report_2016-2017.pdf

http://reports.weforum.org/global-competitiveness-index/country-profiles/#economy=IDN

Wright, P., Dunford, B. and Snell, S., (2001), "Human resources and the resource based view of the firm", *Journal of Management,* Vol. 27, pp. 701-721.