The Influence of Human Resource Management Practiceto Organizational Performance by Mediating Effect of Knowledge Management and Talent Management at Coal Mining Industry in Indonesia

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ABSTRACT: The purpose of this research is to offer a model that measures the influence of human resource management to organizational performance by mediating effect of knowledge management and talent management at coal mining industry in East Kalimantan Province of Indonesia. The design used in this research is testing hypothesis by using structural equation modeling (SEM) with 127 samples. The data’s were collected from convenience samples of 10 biggest companies of coal mining industry in East Kalimantan Province being represented by assistant manager and above. This research shows a positive and significant relationship between human resource management and knowledge management to organizational performance and also relationship between knowledge management and talent management. This research also proved the mediating effect of knowledge management and talent management to improve the organizational performance but there was no direct affect of talent management to improve organizational performance. The managerial implication of this research is as a guidance for decision maker in the company or manager how to improve organizational performance by implementing knowledge management and talent management. The novelty of this research is the research model refines overall understanding of the direct and indirect impact of human resource management to organizational performance on coal mining industry and moderating effect of knowledge management and talent management to improve it.

KEYWORDS: human resource management practice, knowledge management, talent management, organizational performance, structural equation modeling, coal mining industry

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I. INTRODUCTION

Based on data of the several coal mining areas in Indonesia, East Kalimantan Province is one of the provinces where the contribution of the coal mining industry is excellent, contributing 45.93% of the total Gross Regional Domestic Revenue (GRDP) of East Kalimantan Province (BPS Kaltim, 2018), where production capacity is almost 250 million tons per year which exceeds 50% of the total national production of coal mines in Indonesia amounting to 461 million tons in 2017 (BPS, 2018). The coal mining industry is one of industries that is able to absorb a lot of manpower so that the human resource management strategy becomes very important in improving company performance because it is closely related to business strategy (Gautam, 2015).

Dickie & Dwyer (2011) in their research stated that there are several factors that can affect performance in the coal mining industry, such as limited resources, remote locations, the need for special skills, the need for large capital, compliance with political, social and environmental issues. In the coal mining industry, employee productivity (Santra & Bagaria, 2014) as well as efficiency and effectiveness of resources (Nyamubarwa, Mupani, & Chiduuro, 2013) also play a role in improving performance (Santra & Bagaria, 2014) as well as training and technical skills development (Sinha & Jha, 2017). In addition, Zheng, Milia, Rolfe, & Bretherton (2007) explained that the strategy of human resource management plays an important role in business performance in the mining industry. Some literatures have also conducted research on mediating variables that affect the application of human resource management to organizational performance, such as affective commitment (Al-Hawary & Alajmi, 2017), human capital (Wright, Moynihan, & Gardner, 2013) or a combination of both such as Jiang, Lepak, Hu, & Baer (2012) and Raineri (2016). Human capital is an individual representation of someone in terms of knowledge, skills and abilities (Becker, 1964); (Schultz, 1961), so in organizations new knowledge is needed to gain and maintain competitive advantage through knowledge...
management (Shenbagavalli, 2013; Abdi et al., 2018) and talent management (Collings, Mellahi, & Cascio, 2018).

There have been many studies that discuss knowledge management and talent management in relation to human resource management strategies, such as Budiarti (2017) and Singh & Rao (2017) who examine the effect of applying human resource management to knowledge management and its impact on employee performance, Glaister, Karacay, Demirbag, & Tatoglu (2018) who examined the effect of the application of human resource management on talent management and company performance, Ahmed (2016) and Anbumathi & Sivasubramanian (2016) who examined the role of knowledge management on talent management, Ahmed & Elhag (2017) and Claver-Cortes, Zaragoza-Saez, Ubeda-Garcia, Marco-Lajara, & Gacia-Lillo (2018) who examined the effect of knowledge management on organizational performance, as well as Son, Park, Bae, & Ok (2018) and (Mwanzi, Wamitua, & Kiama (2017) which examines the effect of talent management on organizational performance and research that deals with influence about the application of human resource management to organizational performance but there has been no research that addresses the mediating effect of knowledge management and talent management as a human resource management strategy in implementing resource management to improve organizational performance especially in the coal mining industry within a conceptual framework. This research discusses the above topic as research material in this article.

II. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Human Resource Management

The application of human resource management is defined as a practical set that has an important influence on the effectiveness of organizational activities (Daspit, Madison, Barnett, & Long, 2018), where human resource management focuses on three related aspects including the abilities, motivations, and opportunities of employees (Kooij & Boon, 2018). From the theory of human resource management strategies, high performance from the application of human resource management will have an effect on improving performance (Al-Abbadi, 2018). In other words, high-performance work systems increase the value, individuality, and ability of employees' knowledge and skills, which in turn results in competitive advantages and better performance (Zhang & Morris, 2014), namely financial performance (Huselid, 1995), employee performance (Xiaomei, Kong, & Zhou, 2013) and operational performance (Kintana, Alonso, & Olaverri, 2006). Furthermore, (Hassan, Nawaz, Abbas, & Sajid, 2013) revealed that high-performance work systems, including training, valuation and empowerment, play an important role in increasing employee loyalty and financial performance. The use of AMO (Ability, Motivation, Opportunity) models in high-performance work systems can improve employee performance (Boxall & Purcell, 2003) by implementing an incentive system (Huang, Mauerofer, & Geng, 2016). This reduces employee turnover and increases productivity, which in turn has a positive effect on the company's financial performance (Zhang & Morris, 2014). For example, high-performance work systems increase employee knowledge and skill levels through ability-based initiatives. All of these will motivate them through regular performance feedback, incentives and rewards. Furthermore, participation in the decision making process gives them the opportunity to expand innovative ideas that facilitate to enhance the competitive position of the organization, achieve higher profits, increase sales volume, market share, and enhance the organization's reputation. Likewise, (Kintana et al., 2006) recognize that high-performance work systems enhance employee knowledge, skills and empower a committed workforce, which improves organizational operational performance. Various researchers have revealed the positive impact of skills, motivation and increasing opportunities for human resource practices on organizational performance(Obeidat, Mitchell, & Bray, 2016; Gong, Law, Chang, & Xin, 2009; Akhtar, Ding, & Ge, 2008; Guerrero & Barraud-Didier, 2004). Furthermore, similar results have been found in the business and manufacturing sector (Katou & Budhwar, 2006; Liao, 2005) as well as in the service sector (Muduli, 2015). For example, improving the skills of human resource management practices, such as extensive training, helps in improving employee performance (Birdi et al., 2008) which improves organizational performance. Likewise, the practice of developing competencies increases efficiency

Knowledge Management

Knowledge management is the process used in organizations to create, share, codify, disseminate and institutionalize visible (tacit) and invisible (explicit) knowledge (Darroch, 2005; Nonaka & Von Krogh, 2009). In addition, McCampbell, Clare, & Gitter (1999) concluded that knowledge management is the art of dealing with the transformation of intellectual assets and information to create value for many stakeholders by implementing appropriate strategies and processes for the identification, acquisition, creation, and sharing of knowledge in the organization. According to Davenport & Prusak (1997), knowledge management is related to implicit and explicit knowledge from organizations and employees. Knowledge management is also a mediating variable in the relationship between the application of human resource management and organizational performance because knowledge management can help organizations become more effective, efficient and
innovative in the face of competition (Theriou & Chatzoglou, 2009) which can result in more value creation in the area of customer capital, innovation, and human resources compared to companies that have not yet introduced knowledge management (Edvardsson & Oskarsson, 2011). Knowledge management has received epistemological and theoretical influences from various scientific disciplines, such as philosophy, computer science and economics which according to Gao, Jin, Xue, & Yao (2008) can be divided into two general categories, namely hardware and software. Hardware deals with explicit forms of knowledge and software related to implicit or invisible forms. Hardware works with the assumption that knowledge comes from information that is the result of data processing and data obtained from events. According to the hardware, knowledge management infrastructure in the form of databases, management information systems, knowledge repositories, servers, and so on. And software such as expert systems, decision support systems, data mining and warehousing are essential for effective knowledge management (Boisot, 1995; Boisot & Canals, 2004; Davenport & Prusak, 1997). On the other hand, software supports the importance of invisible knowledge and focuses on practical people and communities, developing a culture of sharing knowledge in organizations (Nonaka & Peltokorpi, 2006). It can be concluded that knowledge is different from information and resides in the human mind which supports the importance of human interaction and believes that it can be shared and learned among employees, and it also states that the role of information technology is limited to being a facilitator in the process of creating and sharing knowledge (Sveiby, 2001; Zack, Mckeen, & Singh, 2009).

Talent Management

Talent management is a dynamic capability in which companies feel, seize, and change their skills, resources, and competencies (Linden & Teece, 2014), where talented employees are organizational assets that contribute effectively to organizational success (Maurya & Agarwal, 2018). In the mining industry that requires special expertise, it is necessary to transfer and manage the expertise or talents of each employee both local and expatriate to enhance the development of expertise that has a direct impact on the company’s operations (Oppong & Gold, 2016). According to (Amrosini & Bowman, 2009), dynamic capabilities are focused on the future and develop the most adequate resource base, their value comes from company output. The foundation of the application of human resource management, applied to the entire employee consists mainly of ordinary or basic abilities (Fainshmidt, Pezeshkan, Frazier, Nair, & Markowski, 2016; Winter, 2003). This basic ability only allows organizations to function daily (Helfat & Winter, 2011). However, they provide a stable platform for developing dynamic capabilities, which then acts as a transmission mechanism for enhancing ordinary capabilities and building a new sustainable resource base ((Amrosini & Bowman, 2009); (Schilke, 2014); (Teece, 2014)). As such, talent management can be seen as a transmission mechanism that allows organizations to continue to change (Rindova & Kotha, 2001). Fainshmidt et al. (2016) and Weerawardena, Mort, Liesch, & Knight (2007) show that dynamic capabilities in emerging markets produce superior benefits because they tend to be scarce and can provide more value in economic turbulence.

Organizational Performance

Organizational performance depends on the skills, knowledge and experience of employees to achieve efficiency, effectiveness, innovation, employee and customer satisfaction, product or service quality and ability to retain unique talented people (Absar, Nimalathasan, & Jilani, 2010). Based on previous literature, the organizational performance was measured by financial or non-financial aspects. The financial perspective has been used by most researchers, such as Liao & Wu, (2009), Lopez, Rodriguez, & Garcia (2007) and Venkatraman & Ramanujam (1986), which includes competitive positions, profitability, sales growth, market share and organizational reputation. Likewise, non-financial perspectives, such as employee performance (Fuentes, Disante, Valdecantos, Cortina, & Vallejo, 2007), include matters relating to employee satisfaction, employee turnover, employee absence and participation. Finally, operational performance (Wright, Gardner, Moynihan, & Allen, 2005; Delaney & Huselid, 1996; Venkatraman & Ramanujam, 1986) included the number of customer complaints, service quality and customer satisfaction. The financial perspective covers financial performance, while the non-financial perspective covers employee and operational performance. Venkatraman & Ramanujam (1986) has been used to measure financial performance and operational performance. Furthermore, the scale of Fuentes et al. (2007) has been used to measure employee performance (Jyoti & Sharma, 2012).
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III. METHODOLOGY

This research type is a correlative study that uses hypotheses to test the relationship between variables based on previous studies (Sekaran & Bougie, 2016). This study was intended to determine the effect of exogenous latent variables on their endogenous latent variables and how the relationship occurred. In the context of this study, as an exogenous latent variable is the application of human resource management practices with the dimensions of ability, motivation and opportunity for employees to participate, while the endogenous latent variable is knowledge management with the dimensions of the creation process, transfer process, the integration process and the implementation process, talent management with the dimensions of identifying important positions, talent recruitment, managing talent, and retention management, and organizational performance with the dimensions of financial performance, employee performance, and operational performance.

Population & Sample

The respondent population of this study are assistant manager upwards in various divisions of mining company in East Kalimantan Province. The size of the sample is very sensitive to the results of statistical testing, where (Sekaran & Bougie, 2016)say that the size of the sample that is considered sufficient (appropriate) in most studies ranges from 30 to 500 respondents, in addition to multivariate studies (including multiple regression research), the sample size should be 10 times larger than the number of variables in the study. To anticipate a sample that cannot be used, the number of respondents determined are 190 respondents. This study uses two data sources, namely primary data and secondary data. Primary data according to Sekaran & Bougie (2016) is data that refers to information obtained directly from the first hand, while secondary data is data that refers to information collected from sources that already exist. Primary data is needed as the main material in this study while secondary data as a complement. Primary data source in the form of giving questionnaires to the level of manager or leader of the same level (assistant manager, manager, senior manager, general manager, director) at coal mining companies in East Kalimantan Province which is given directly or via mail or google form proportionally based on annual production capacity obtained from various sources such as duniatambang.co.id in 2019, while secondary data sources are from Bank Indonesia Report data, the Central Statistics Agency, and the Ministry of Energy and Mineral Resources (ESDM). This study uses a sample of respondents by selecting samples using a purposive sampling method, which is a sampling method that is based

H1: HRM practice influences Organizational Performance directly
H2: HRM practice influences Knowledge Management
H3: HRM practice influences Talent Management
H4: Knowledge Management influences Talent Management
H5: Knowledge Management influences Organizational Performance
H6: Talent Management influences Organizational Performance

Conceptual Framework

Figure 1. Conceptual Framework

H1: HRM practice influences Organizational Performance directly
H2: HRM practice influences Knowledge Management
H3: HRM practice influences Talent Management
H4: Knowledge Management influences Talent Management
H5: Knowledge Management influences Organizational Performance
H6: Talent Management influences Organizational Performance
on certain criteria or considerations, where the researcher determines sampling by determining specific characteristics that fit the purpose of the study so that it is expected to answer the research problem (Sekaran & Bougie, 2016). Of the 135 questionnaires that were filled out, 8 questionnaires could not be used because the filling of the questionnaire was incomplete and inconsistent so that only 127 questionnaires were processed in data processing.

The data analysis result of perceptions from respondents for all variables where human resource management variable was adopted from Tian, Cordery, & Gamble (2016) through 16 questions, knowledge management variable was adopted from Wu & Chen (2014) through 12 questions, talent management variable was adopted from Mensah (2015) through 15 questions, and organizational performance was adopted from Tseng (2016) to measure financial performance through 4 questions, Jyoti & Rani (2017) to measure employee performance through 4 questions, and Wang, Wang, Cao, & Ye (2016) to measure operational performance through 4 questions.

The Structural Equation Model is used to determine the relationship for each hypothesis by referring to t-value and the effect of each latent variable to another latent variable based on β and γ factor. It uses Lisrel 8.8 for software analysis.

IV. RESULTS AND DISCUSSION

1. Effect of human resource management on organizational performance

Based on the results of the study, it is known that the standard coefficient between human resource management and organizational performance is 0.61 with t-value of 5.38, then H1 is accepted which is a positive influence on human resource management against organizational performance. The results of this study support previous research which states that the application of human resource management directly influences organizational performance but the effect is stronger with the mediation of knowledge management and talent management, such as several studies that state the effect of human resource management on organizational performance through mediating various forms of management strategies human resources such as affective commitment (Al-Hawary & Alajmi, 2017), human capital (Wright et al., 2011) and a combination of both such as Jiang et al. (2012) and Raineri (2016). This study also supports the research of Kooij et al. (2013) and Al-Abbadi (2018) state that the application of human resource management has a direct effect on company performance and its impact on employee performance, as well as research by Vermeeren et al. (2016) which shows the effect of implementing human resource management on operational performance and financial performance directly or indirectly, and Pauwe et al. (2013) which also concluded a positive relationship between the application of human resource management with various measures of performance.

2. Effect of human resource management on knowledge management

Based on the results of the study, it is known that the standard coefficient between human resource management and knowledge management is 0.68 with t-value of 19.35, then H2 is accepted which is a positive influence on human resource management against knowledge management. The results of this study support previous research which states the positive influence of the application of human resource management to knowledge management such as research conducted by Fong et al. (2011), Ipe (2003), Singh & Rao (2017) and Budiarti (2017). From the responses of respondents obtained the results that to improve knowledge management in coal mining companies in the province of East Kalimantan, then the opportunity for employees is the biggest dimension of influence in the application of human resource management with the highest indicator of implementation is the company places a lot of important things in team work. The second dimension that has a big influence is the ability of employees with the highest application indicators is the company has an employee performance appraisal (every six months and at the end of the year) and provides feedback to improve performance, followed by the employee motivation dimension with the highest indicator of implementation is the company provides additional benefits to employees other than the normative rights prescribed by the government.

3. Effect of human resource management on talent management

Based on the results of the study, it is known that the standard coefficient between human resource management and talent management is 0.82 with t-value of 20.56, then H3 is accepted which is a positive influence on human resource management against talent management. In relation to the application of human resource management to talent management, the results of this study support previous research which states the positive influence of the application of human resource management to talent management as research conducted by Glaister et al. (2016) and Al-Lozi et al. (2018). The results of this study indicate that in improving talent management in coal mining companies in the province of East Kalimantan, in the application of human resource management explains that employee opportunities are the greatest dimension of influence with the highest indicator of application is the company places a lot of important things at work team. The second
dimension that has a big influence is the ability of employees with the highest application indicators is the company has an employee performance appraisal (every six months and at the end of the year) and provides feedback to improve performance, followed by the employee motivation dimension with the highest indicator of implementation is the company provides additional benefits to employees other than the normative rights prescribed by the government.

4. Effect of knowledge management on talent management

Based on the results of the study, it is known that the standard coefficient between knowledge management and talent management is 0.56 with t-value of 8.06, then H4 is accepted which is a positive influence on knowledge management against talent management. The results of this study support previous research which states the positive influence of knowledge management on talent management such as research conducted by Whelan and Carcary (2011), Ahmed (2016) and Anbumathi & Sivasubramanian (2016). To improve talent management in coal mining companies in East Kalimantan Province, in relation to knowledge management, the transfer process is the biggest dimension of influence with the highest application indicator being that the company has the ability to transfer relevant knowledge to employees. The second dimension with a big influence is the integration process with the highest application indicators is the company has the ability to interpret new knowledge based on knowledge, followed by the dimension of the creation process with the highest indicator of application is the company has been effective in utilizing the knowledge portal and learning management system for develop knowledge from internal employees, and the dimension of the application process with the highest application indicators is the company has the ability to apply the knowledge gained to add to more competitive organizational conditions.

5. Effect of knowledge management on organizational performance

Based on the results of the study, it is known that the standard coefficient between knowledge management and organizational performance is 0.36 with t-value of 2.14, then H5 is accepted which is a positive influence on knowledge management against organizational performance. In the relationship of knowledge management to organizational performance, the results of this study support the study of Rehman, Asghar, & Ahmad (2015) which states that a mediation of knowledge management strategies is needed in the success of the influence of knowledge management on organizational performance. In contrast to this study, Tseng (2016), Wahda (2017), Heisig et al. (2016) and Gupta and Chopra (2018) in their research show the direct influence of knowledge management on organizational performance.

6. Effect of talent management on organizational performance

Based on the results of the study, it is known that the standard coefficient between talent management and organizational performance is 0.31 with t-value of 1.49, then H6 is accepted which is a positive influence on talent management against organizational performance. The results of this study support previous research which states the positive influence of talent management on organizational performance such as research conducted by Liu and Pearson (2014), Mensah (2015), Singh and Sharma (2015) and King (2017). To improve organizational performance at coal mining companies in East Kalimantan Province, in relation to talent management, the results show that talent management is the biggest dimension of influence with the highest indicator of application is that our company manages compensation and reward management well (in accordance with the achievement of company profit). The second dimension that has a big influence is the recruitment of talents with the highest implementation indicator is that the company identifies internal and external recruitment in obtaining high-talented candidates, followed by the retention management dimension with the highest indicator of implementation is the company applies clear working hours and work arrangements (clear following the normative regulations of the government), and the dimension of identification of important positions with the highest application indicators is that the company focuses on identifying key positions that have the potential impact of economic differentials on sustainable competitive advantage.

7. Mediating Effect of knowledge management and talent management

Based on the results of the study of mediating effect of knowledge management and talent management on relationship between human resource management and organizational performance are significant with standard coefficient and t-value for knowledge management are 0.38 and 8.85, then standard coefficient and t-value for knowledge management are 0.50 and 3.70.

V. CONCLUSION:

Human resource management affect knowledge management, talent management and organizational performance. The influence of human resource management on knowledge management, talent management and organizational performance is positive, with the opportunity for employees is the biggest dimension of
influence in the application of human resource management with the highest indicator of implementation is the company places a lot of important things in team work. The second dimension that has a big influence is the ability of employees with the highest application indicators is the company has an employee performance appraisal (every six months and at the end of the year) and provides feedback to improve performance, followed by the employee motivation dimension with the highest indicator of implementation is the company provides additional benefits to employees other than the normative rights prescribed by the government. Knowledge management affect talent management and organizational performance. The influence of knowledge management ontalent management and organizational performance is positive with the transfer process is the biggest dimension of influence with the highest application indicator being that the company has the ability to transfer relevant knowledge to employees. The second dimension with a big influence is the integration process with the highest application indicators is the company has the ability to interpret new knowledge based on knowledge, followed by the dimension of the creation process with the highest indicator of application is the company has been effective in utilizing the knowledge portal and learning management system for develop knowledge from internal employees, and the dimension of the application process with the highest application indicators is the company has the ability to apply the knowledge gained to add more competitive organizational conditions. This research also show that talent management affects organizational performance positively but not significant and mediating effect of knowledge management and talent management on relationship between human resource management and organizational performance is significant.

Research Implications
1. The practical implementation of this research as a guidance for all decision makers at mining coal industry to manage knowledge and talent in their organization by implementing human resource management as well to improve organizational performance.
2. Theoretical implications of this research will be useful for mining coal industry that are able to describe all factors affect the performance of mining coal industries, so that clarity of ways to compete such as adaptation to the business environment turbulence and selection of characteristics of selected organizations can be obtained.
3. Based on the empirical findings obtained, the researcher presents some suggestions for future research as follows:
   a. Conduct research in relation to social, environmental and political issues in the mining coal industry.
   b. Conducting research with similar topic at coal mining industries under government in Indonesia or other countries.

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