
ORGANIZATIONAL INNOVATION CAPABILITY: INTEGRATING HUMAN RESOURCE MANAGEMENT PRACTICE, KNOWLEDGE MANAGEMENT, AND INDIVIDUAL CREATIVITY

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Abstract: *Despite the work of several researchers in revealing organizational innovation capability, research that integrates human resource management practice (HRMP) and the knowledge management (KM) model in building creativity is still underdeveloped. Therefore, this study examines the nexus between HRMP, KM, and creativity, and its in-*

fluence on organizational innovation capability in small and medium enterprises (SMEs). This study analyzes data collected from 405 respondents from the managerial level of 135 woodcraft SMEs in Indonesia by employing the partial least square SmartPLS 3.2.7 method. The results show that HRMP, KM, and creativity significantly influence organizational innovation capability. Meanwhile, KM has no significant influence on organizational innovation capability. Another important finding is that creativity is a double mediator in the mediation mechanism tested in this research. Furthermore, this research helps managers to: optimize HRMP when seeking creative employees to boost innovation capability; develop analytical skills to improve KM practices; and realize that KM not only signifies knowledge acquisition, but also greatly establishes metacognitive strategies for adopting, disseminating, and creating new ideas. This research also discusses the associated limitations.

Keywords: *human resource management practice, knowledge management, organizational creativity, organizational innovation capability*

JEL Codes: *D23, D83, M12, O31, O34*

1. Introduction

Since time immemorial, innovation has been recognized as an important predictor of organizational success (Yi et al., 2021; Shafique et al., 2019; Loewenberger, 2013). Therefore, several preliminary studies have been carried out to determine the factors that facilitate or hinder organizations' innovation activities. In the Industry 4.0 and Society 5.0 eras, marked by technological changes, the dynamics of the business environment and brief, productive life cycles pressurize companies into creating innovations consistently (Arsawan, Koval, et al., 2020). Furthermore, several studies have also explored predictors of innovation such as creativity (Lam et al., 2021; J. Jiang et al., 2012), knowledge management (hereinafter – KM) (Ode & Ayavoo, 2020; Nowacki & Bachnik, 2016; Grimsdottir & Edvardsson, 2018), and human resource management practices (hereinafter – HRMP) (Rondi et al., in press; Haneda & Ito, 2018). In addition, these are implemented in several businesses, including in the service sectors (Ode & Ayavoo, 2020; Abbas & Sağsan, 2019), small-medium enterprises (hereinafter – SMEs) (Colclough et al., 2019; Arsawan, Rajiani, et al., 2020), manufacturing (Haneda & Ito, 2018), and the hospitality industry (Chang et al., 2011).

The issue regarding the role of innovation in business entities has been investigated globally using various variables; however, it needs to be comprehensively explained. Therefore, this research tries to bridge the existent gap as follows. First, although innovation has been investigated using various antecedent formations, it has never been tested with a comprehensive model involving the links between HRMP, KM, creativity, and innovation. This model is expected to provide a holistic description of HRMP and its contributions to creativity and organizational innovation capability. Conversely, KM is one of the important predictors of knowledge that potentially enhances creativity

(Saulais & Ermine, 2012) and innovation capability (Grimsdottir & Edvardsson, 2018; Mardani et al., 2018).

Second, the role played by the HRMP in building organizational innovation capability is still unexplored. Therefore, this research attempts to explain the relationship between these 2 variables (Barba-Aragón & Jiménez-Jiménez, 2020). Organizational innovation capability is examined because it is a fundamental part of development (Zhao et al., 2020; Chaubey et al., 2021), and great effort is needed to understand it due to its implications for employees. In addition, it is rarely analyzed, despite playing a critical role in boosting a company's success and competitiveness in the current dynamic business environment.

Third, analyses on HRMP in respect to organizational innovation capability are identified as a black box by several studies (Messersmith & Guthrie, 2010; Beugelsdijk, 2008). Accordingly, this research investigates the interrelations between HRMP and organizational innovation capability. These variables are also tested using mediation or moderation mechanisms to understand the relationship between them as well as to provide a structured, systematic, and comprehensive description (Easa & Orra, 2021).

Fourth, there is a dearth of research linking KM and organizational innovation capability, especially from the perspective of developing countries (Ode & Ayavoo, 2020) and SMEs with limited resources and reactive mentalities. Therefore, they are demanded to be more innovative in formulating strategies (Du, 2021) by adopting sustainable creativity (Saulais & Ermine, 2012; Areed et al., 2021; Yankovyi et al., 2021) and building an innovation culture (Arsawan, Koval, et al., 2020) in order to succeed in a competitive business environment and during high market turbulence (Grimsdottir & Edvardsson, 2018). According to the World Economic Forum (WEF, 2019), Indonesia was ranked 74th among developing countries. This simply means that it needs to further strengthen organizational innovation capability in various activities, especially in building SMEs and boosting its contributions to economic development and growth (Arsawan, Rajiani, et al., 2020).

Motivated by the various research gaps discussed above, this study aims to explore the role of HRMP and KM to enhance individual creativity and organizational innovation ability. The present study focuses on both direct and indirect relationships between HRMP, KM, creativity, and organizational innovation capability in the context of Indonesian SMEs for two reasons. Firstly, organizational innovation capability has not been considered crucial in the SME sector (Abdul-Halim et al., 2018), whereas the results of previous studies state that to build organizational performance in a sustainable manner it is necessary to increase innovation at all levels (Kwarteng et al., 2016) so as to increase competitiveness in the global market (Chang et al., 2017). Secondly, increasing innovation capability will strengthen the management process model in SMEs (Trachenko et al., 2021), thereby strengthening Indonesia's economic development (Arsawan, Koval, et al., 2020). Therefore, this will be the first study to examine the antecedents of individual creativity related to organizational innovation capability. Based on dynamic capabilities theory (Teece et al., 2009) and the perspective of the important role of innovation (Chaubey et al., 2021; Areed et al., 2021; Colclough et al., 2019), this study is important to garner insight in understanding dynamic scenarios, and provides an appropriate analysis

in explaining organizational innovation capabilities in Indonesian SMEs in order to increase growth, profits, and to contribute to gross domestic product (Anwar et al., 2018).

This study is organized as follows. First, it considers the research gaps and explores organizational innovation capability. In addition, it formulates hypotheses based on the impact of HRMP and KM on creativity and organizational innovation capability. Subsequently, it examines the role of individual creativity as a mediating variable between HRMP, KM, and organizational innovation capability. The results of these investigations are then further reported and analyzed. Finally, the research limitations and support are discussed.

2. Literature review and hypothesis development

2.1 Human resource management practice

HRMP is extremely important, especially in the fields of economics, human resources, and strategic management (Easa & Orra, 2021). HRMP describes the managerial processes that enable organizations to acquire valuable and extraordinary knowledge as well as influence innovative activities, thereby leading to high performance (Singh et al., 2021). HRMP influences employees' work-related attitudes, abilities, and behaviors with respect to achieving organizational goals (Minbaeva, 2013). It also plays an important role in supporting an organizational environment and promoting creativity and innovation in KM.

2.2 Knowledge management

Presently, organizations have to accept the challenges of the new knowledge-based economy, as well as integrate and protect knowledge (Teece, 2000). Subsequently, they need to maintain specific and dynamic capabilities to remain competitive (Mardani et al., 2018). KM plays a relevant role in compiling an organization's unique capital, both tangible and intangible (Saulais & Ermine, 2012). Ali et al. (2020) stated that knowledge works efficiently when members of an organization are aware of those that are proficient in a particular domain. KM consists of 3 interrelated processes, namely knowledge acquisition, conversion, and application (Mardani et al., 2018).

2.3 Creativity

It is clear from several previous studies that creativity plays an important role in developing sustainable excellence and adding value to an organization. In a challenging dynamic environment, there is a need for mechanisms that aid in the development of innovative solutions (Loewenberger, 2013), irrespective of the conflict between ability and commitment to organizational practices. Creativity is described as a divergent thinking approach that tends to combine previously unrelated knowledge, products, or processes to formulate something new (Fong et al., 2018) – both in the individual and teamwork

contexts (Somech & Drach-Zahavy, 2013). Creativity is related to work motivation in terms of building innovation (Lin & Liu, 2012), even though it is described as something new and useful (Amabile, 1986). This definition does not imply that there is a universal norm for judging novelty and usefulness (Kwan et al., 2018).

2.4 Organizational innovation capability

Innovation is a newly formulated business model that inspires diverse knowledge to be turned into creative results. According to Lam et al. (2021), it provides a mechanism for organizations to exploit the inflow and outflow of knowledge in order to become more creative. This extensive and diverse research focuses on organization-level innovation. This term contains conceptual ambiguity and varied interpretations; therefore, it has no generally accepted definition (Chaubey et al., 2021).

2.5 Hypothesis development

Studies linking and testing HRMP with creativity are sparse. Nevertheless, the research carried out by J. Jiang et al. (2012) reported that HRMP motivates employees to develop a sense of autonomy, thereby causing them to effectively solve problems – including creating new ideas to cope with job demands. Referring to the social exchange theory (Blau, 1964), the HRMP system, in accordance with high commitment, has a positive influence on employee creativity. In this circumstance, the role played by the manager provides a better understanding of organizational creativity patterns (Loewenberger, 2013). HRMP is crucial in order to facilitate the creativity of employees, and better HRMP of the organization will contribute to increased employee and team creativity and enhanced innovation capabilities. These innovations will be hard to imitate by other competitors (Binyamin & Carmeli, 2010; Bratnicki, 2005), thereby increasing the innovation orientation of the organization (Colclough et al., 2019), producing high productivity (Stojcic et al., 2018), and improving performance at the organizational level (Dabić et al., 2019; Byukusenge & Munene, 2017) as an important trigger in realizing sustainable competitive advantage (Chatzoglou & Chatzoudes, 2018; Sigalas & Papadakis, 2018). In the context of the type of organization, the findings of Liu et al. (2017) revealed that the role of HRMP in private organizations, family businesses, and entrepreneurial enterprises tends to be stronger in building creativity because characters of this type rely on their innovation strategies (Colclough et al., 2019). Based on the above, the following hypothesis was formulated:

H1: HRMP has a positive and significant influence on creativity.

Several studies, including the research carried out by Özbağ et al. (2013), have stated that HRMP fosters innovation. However, Barba-Aragón & Jiménez-Jiménez (2020) reported that it had an insignificant influence on innovation. This is because HRMP does not have a direct influence on organizational innovation capability, and requires the de-

velopment of certain behaviors that ultimately result in sustainability. This shows that it is present and plays an important role in promoting innovation at the organizational (Easa & Orra, 2021) and individual levels (I. Wayan Edi Arsawan, Rajiani, et al., 2020). Based on this, the following hypothesis was formulated:

H2: HRMP has a positive and significant influence on organizational innovation capability.

Various studies have reported the positive impact of KM on organizational existence and competitiveness. Considering that knowledge is needed to generate new innovations (Baldé et al., 2018), its practice influences creativity (Nonaka & Von Krogh, 2009). However, research on the way and manner in which knowledge influences creativity is limited (Schulze & Hoegl, 2008). Consequently, this research identifies the effect of KM on creativity (Joo et al., 2014). Based on this, the following hypothesis was formulated:

H3: KM has a positive and significant influence on creativity.

KM is an important predictor of organizational success (Areed et al., 2021); it effectively facilitates the knowledge exchange required for the improvement of organizational innovation capability, realized by developing new insight and abilities (Yi et al., 2021). Hock-Doepgen et al. (2021) stated that, via KM, organizations are enabled to identify and process knowledge into innovative business opportunities. This is carried out in order to manage, implement, develop, leverage (Mardani et al., 2018), and strengthen capability, knowledge creation, and innovative performance (Lai et al., 2014). Based on this, the following hypothesis was formulated:

H4: KM has a positive and significant influence on organizational innovation capability.

Furthermore, several empirical studies reported a similar notion regarding creativity and innovation, even though these two are entirely different (Gurteen, 1998). Creativity is described as a divergent thinking process that leads to the generation of new ideas (Saulais & Ermine, 2012; Gurteen, 1998). Conversely, innovation is the successful implementation of creative ideas in an organization (Chaubey & Sahoo, 2019). Creativity is related to innovation, which is the process of adopting and converting new ideas into market offerings (Scarborough, 2016; Luchaninova et al., 2020). This means that it is the main foundation or basis of innovative behavior (Chaubey & Sahoo, 2019) – both in the context of individual employees (Arsawan, Rajiani, et al., 2020) and the organization (Shafique et al., 2019). This led to the following hypothesis:

H5: Creativity has a significant and positive influence on organizational innovation capability.

HRMP plays a strategic role in developing organizational performance and competitive advantage through stimulating creativity and employee autonomy (Jiang et al., 2012; Loewenberger, 2013), which attract ideas (Shafique et al., 2019) that improve innovative work behavior (Arsawan, Rajiani, et al., 2020). Furthermore, creativity has a unidirectional relationship with innovation because it is considered the main foundation for its development (Chaubey & Sahoo, 2019). Based on this, the following hypothesis was formulated:

H6: Creativity mediates the relationship between HRMP and organizational innovation capability.

This research further states that the relationship between KM and organizational innovation capability is mediated by creativity. In other words, the KM dimension serves as the basis of creativity (Ode & Ayavoo, 2020; Bettiol et al., 2012), which further facilitates the development of innovative ideas (Kwan et al., 2018). This is because KM lays the foundation for building creativity, which, in turn, is a source of organizational innovation. This led to the following hypothesis:

H7: Creativity mediates the relationship between KM and organizational innovation capability.

Therefore, this research examines and explains the direct relationship between HRMP, KM, creativity, and innovation capability. Furthermore, creativity was tested as a variable in mediating the relationship between HRMP and innovation capability, as well as between KM and innovation capability. The research framework is shown in Figure 1.

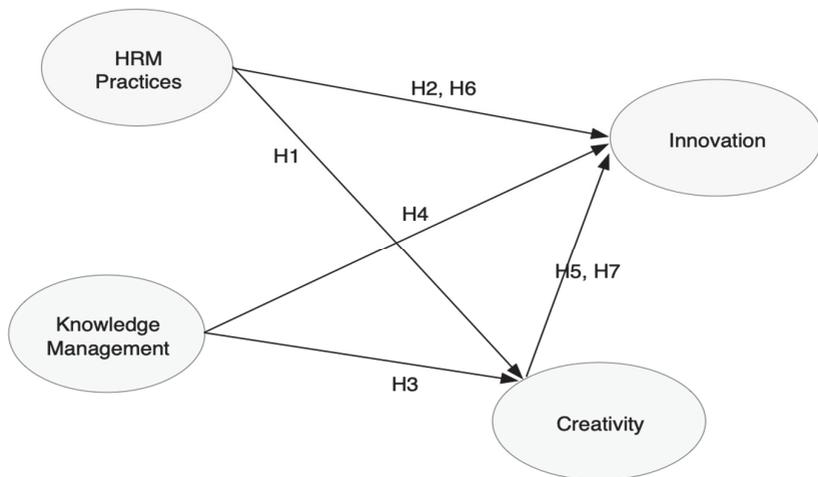


Figure 1. Research framework

3. Methodology

3.1 Sampling method

The research population was comprised of 204 woodworking SMEs spread across 7 regencies in Bali, Indonesia. Furthermore, the sample frames were selected using the simple random sampling method – namely the lottery methods without recovery. Moreover, every member of the population was sampled only once. The number of sample frames was determined using the formula created by Krejcie & Morgan (1970), and a total of 135 SMEs were involved. At each SME, 3 respondents were asked to fill out the research questionnaire – hence, the total number of respondents was 405, as shown in Table 1. Respondents were categorized based on 3 managerial levels: lesser, represented by supervisors; middle, represented by assistant managers; and top, represented by woodworking SME owners. They were considered to have knowledge of research variables and strategic policies related to organizational innovation capability.

Table 1: Study population and sample

| No | Regencies (1) | Population (2) | Percentage of Population (3) | (x) Sample (4) | Sample (5) | Respondents (6) |
|----|---------------|----------------|------------------------------|----------------|------------|-----------------|
| 1 | Denpasar | 5 | 0.024509804 | 3.30882353 | 3 | 9 |
| 2 | Badung | 18 | 0.088235294 | 11.9117647 | 12 | 36 |
| 3 | Karangasem | 1 | 0.004901961 | 0.66176471 | 1 | 3 |
| 4 | Klungkung | 53 | 0.259803922 | 35.0735294 | 35 | 105 |
| 5 | Tabanan | 14 | 0.068627451 | 9.26470588 | 9 | 27 |
| 6 | Bangli | 34 | 0.166666667 | 22.5 | 23 | 69 |
| 7 | Gianyar | 79 | 0.387254902 | 52.2794118 | 52 | 156 |
| | Total | 204 | 1.00 | 135 | 135 | 405 |

3.2 Measurements

All measurement tools were adopted from previous studies and modified for further analysis. All constructs were designed with a self-assessment report – namely a Likert scale approach of 1 to 5 (1 – *strongly disagree*, to 5 – *strongly agree*). The questionnaire was prepared in simple, easy-to-understand language, thereby achieving the research objectives. Furthermore, a total of 14 dimensions and 39 indicators were used to measure the research construct.

HRMP was measured with 3 dimensions, including training, job appraisal, and rewards, with 3, 5, and 4 indicators, respectively (Jiang et al., 2012). Variable KM was measured with 4 dimensions – namely KM transfer, storage, application, and creation, with 3 indicators each (Donate & Sánchez de Pablo, 2015) with structural equation modeling (SEM). The creativity variable was measured with 4 dimensions – namely people, process, pressure, and product, with 2 indicators each (Hansen et al., 2012). The innovation

capability variable was measured with 3 dimensions, namely market, product and process innovations with 2, 3, and 2 indicators respectively (Byukusenge & Munene, 2017).

4. Result and analysis

4.1 Profile of respondents

This research involved a total of 405 respondents employed in 135 woodworking SMEs that manufacture highly artistic, good quality, high-value products. The research objectives were realized by distributing questionnaires to supervisors, assistant managers, managers, and owners. This research also sought information on strategic policies related to these variables. Table 1 shows the demographic information of the respondents.

Table 2. Profile of respondents

| | Classification | Frequency | Percentage |
|-----------------|--------------------------------|-----------|-------------|
| Business entity | PT (Limited liability company) | 27 | 20 |
| | CV (Limited partnership) | 23 | 17.03 |
| | Family business | 85 | 62.97 |
| Company age | 1990–1999 | 27 | 0.2 |
| | 2000–2009 | 23 | 0.17037037 |
| | 2010–2016 | 85 | 0.62962963 |
| Gender | Male | 267 | 0.659259259 |
| | Female | 138 | 0.340740741 |
| Age | 21–30 | 27 | 0.066666667 |
| | 31–40 | 89 | 0.219753086 |
| | 41–50 | 194 | 0.479012346 |
| | 51–60 | 78 | 0.192592593 |
| | >60 | 17 | 0.041975309 |
| Marital status | Married | 378 | 88.9 |
| | Single | 27 | 11.1 |
| Education | Bachelor | 354 | 0.874074074 |
| | Master | 43 | 0.10617284 |
| | Doctor | 8 | 0.019753086 |
| Total workers | 1–15 | 178 | 0.439506173 |
| | 16–30 | 166 | 0.409876543 |
| | 31–45 | 49 | 0.120987654 |
| | 46–60 | 12 | 0.02962963 |
| Working status | Owner/manager | 135 | 0.333333333 |
| | Assistant manager | 135 | 0.333333333 |
| | Supervisor | 135 | 0.333333333 |

4.2 Outer model measurement

Research data were analyzed using SmartPLS-3.2.7 software with a second-order approach. The measurement model was evaluated to determine the indicators' validity and reliability. It also included the dimensions used to test the inner model through the resampling bootstrapping process.

Based on the reliability measurement concept, this research used 3 instruments for each indicator – convergent validity, discriminant validity, and composite reliability (Hair, Hult et al., 2016). The first method used was convergent validity, which is a measure of the indicators' construct validity, as shown by the outer loading factor value. In the early stages of development of a measurement scale, also called exploratory research, a loading factor value between 0.50 and 0.60 is considered sufficient (Chin, 1998). In this study, the outer loading factor value of each indicator was between 0.539 and 0.993, thereby meeting the convergent validity requirements. The next step was to test discriminant validity, which was used to measure the indicators' reliability. This method compares the square root average variance extracted (\sqrt{AVE}) coefficient of each latent variable. In addition, the correlation coefficient between other latent variables in the model was considered. The recommended AVE value is greater than 0.50.

Table 3: *The values of AVE, AVE root, and coefficients between latent variables*

| Variable | AVE | \sqrt{AVE} | Correlation coefficient | | | |
|----------------------------|-------|--------------|-------------------------|-------|-------|-------|
| | | | HRMP | KM | Cr | IC |
| HRMP | 0.501 | 0.708 | 1.000 | | | |
| KM | 0.518 | 0.719 | 0.771 | 1.000 | | |
| Creativity | 0.576 | 0.759 | 0.660 | 0.757 | 1.000 | |
| Org. Innovation Capability | 0.598 | 0.773 | 0.747 | 0.747 | 0.659 | 1.000 |

The AVE root value of HRMP was 0.719, which was greater than the correlation coefficient between other variables – namely 0.771, 0.660, and 0.747. The AVE root value of KM was 0.759, which was greater than the correlation coefficient between other variables – namely 0.757 and 0.747. The AVE root value of the innovation capability was 0.773, which was greater than the correlation coefficient between other variables – namely 0.659. This indicates that the indicators reflecting the dimensions of the variables in this research had good discriminant validity.

The third step was to use composite reliability to measure the reliability value between the variable indicators. The indicator test is reliable when composite reliability and Cronbach alpha have a value of >0.70 (Hair, Sarstedt et al., 2016)its prevalence and challenges for social science researchers. Part II – in the next issue (European Business Review, Vol. 28 No. 2; Hair, Hult et al., 2016).

Table 4. Construct reliability and validity

| | Cronbach's alpha | rho_A | Composite reliability | Average variance extracted (AVE) |
|------|------------------|-------|-----------------------|----------------------------------|
| X1 | 0.906 | 0.914 | 0.922 | 0.501 |
| X1.1 | 0.798 | 0.817 | 0.881 | 0.711 |
| X1.2 | 0.887 | 0.910 | 0.920 | 0.700 |
| X1.3 | 0.810 | 0.823 | 0.876 | 0.639 |
| X2 | 0.913 | 0.918 | 0.927 | 0.518 |
| X2.1 | 0.744 | 0.752 | 0.762 | 0.517 |
| X2.2 | 0.734 | 0.736 | 0.850 | 0.653 |
| X2.3 | 0.795 | 0.806 | 0.879 | 0.709 |
| X2.4 | 0.823 | 0.824 | 0.895 | 0.741 |
| Y1 | 0.893 | 0.897 | 0.915 | 0.576 |
| Y1.1 | 0.750 | 0.750 | 0.851 | 0.741 |
| Y1.2 | 0.814 | 0.820 | 0.915 | 0.843 |
| Y1.3 | 0.752 | 0.753 | 0.852 | 0.742 |
| Y1.4 | 0.778 | 0.779 | 0.900 | 0.818 |
| Y2 | 0.888 | 0.890 | 0.912 | 0.598 |
| Y2.1 | 0.818 | 0.819 | 0.917 | 0.846 |
| Y2.2 | 0.805 | 0.806 | 0.885 | 0.720 |
| Y2.3 | 0.778 | 0.782 | 0.900 | 0.818 |

Model reliability is measured with Cronbach's alpha (Hair et al., 2013; Hair, Sarstedt et al., 2016) its prevalence and challenges for social science researchers. Part II – in the next issue (European Business Review, Vol. 28 No. 2. However, a Cronbach's alpha value of 0.7 is considered appropriate (Hair et al., 2014). As described in Table 4, all Cronbach's alpha values were >0.7. The convergent validity of the research model was assessed through the composite reliability (CR), average variance extract (AVE), and item reliability of each variable (factor loadings) (Hair, Sarstedt et al., 2016) its prevalence and challenges for social science researchers. Part II – in the next issue (European Business Review, Vol. 28 No. 2. According to the preliminary studies, the CR and AVE values need to be >0.7 and >0.5, respectively. Table 4 shows that all CR and AVE values maintained these criteria. The loading factors of all items at the individual level were also greater than 0.7.

4.3 Inner model measurement

After examining the outer model, the inner model was tested using 3 approaches – first, the initial evaluation of the model's feasibility through a review of the R^{2y} analysis. This shows the strengths and weaknesses of the relationships between the exogenous and endogenous variables. Therefore, R^2 shows the strengths and weaknesses of the research model. According to Chin, (1998) R^2 values of 0.67, 0.33, and 0.19 are classified as strong, moderate, and weak models, respectively.

Table 5: Distribution of R^2 and adjusted R^2 values

| Variable | R^2 | Adjusted R^2 | Description |
|---------------------------------|-------|----------------|-------------|
| Creativity (Y_1) | 0.469 | 0.458 | Moderate |
| Innovation capability (Y_2) | 0.690 | 0.681 | Moderate |
| Average | 0.579 | 0.569 | |

Table 5 shows that the R^2 values of creativity and innovation were 0.469 and 0.690, respectively. The R^2 values were used to obtain an average of 0.579. This means that the HRMP, KM, creativity, and innovation constructs explained only 57.9% of the relationships within the model, while the remaining 42.1% was explained by other external variables. The adjusted R^2 value was smaller than the distributed one. This means that there is a possibility of changing or expanding the research model to include other latent variables.

After an ideal value was realized from the R^2 analysis, it was tested using the Q Square Predictive Relevance (Q^2) method. This aims to measure the accuracy of the observed model. Q^2 ranges from 0 to 1 (Hair et al., 2013), and when the value is closer to 1, this means that the model has a better predictive ability. The Q^2 value is calculated using the formula:

$$Q^2 = 1 - [(1-R_2y_1) (1-R_2y_2)] = 1 - [(1-0.469) (1-0.690)] = 1 - [(0.531) (0.310)] = 0.836$$

A value of 0.836 was realized, which meant that the model was properly observed. This implies that the model was explained by 83.60% of the relationship between the variables. Conversely, the remaining 16.40% was illustrated by the factor error or other variables not included in the research model. The third step involved testing the goodness of fit (GoF) criteria, as this is a single measure which is realized by validating the overall structural model (Hair, Hult et al., 2016; Hair et al., 2013). This was conducted as follows:

$$GoF = \sqrt{com \times R^2} = \sqrt{0.400 \times 0.579} = 0.481$$

A value of 0.4812, was realized from the GoF calculation. This implies that the predictive model is fit and accurate. However, this is based on the GoF value, including 0.10 (small), 0.25 (moderate), and 0.36 (large). Therefore, this research model is categorized as possessing a large GoF (Hair, Hult et al., 2016).

Furthermore, the effect size (f^2) was tested to provide detailed information about a group of independent and dependent variables realized through a system of structural equations (Hair, Hult et al., 2016). The criteria for effect size (f^2) range from 0.02 to 0.15 (weak influence), 0.15 to 0.35 (moderate influence), and >0.35 (strong influence) (Hair, Hult et al., 2016; Hair et al., 2014). Subsequently, supposing the f^2 value is within the 0.02 to 0.15 range, then the research model is assumed to be weak, whereas the 0.15 to 0.35 and >0.35 ranges are declared to have moderate and strong influences, respectively.

Table 6. Cohen effect size analysis

| Construct* | Original sample (O) | Sample mean (M) | Standard deviation (STDEV) | T statistics (O/STDEV) | P values |
|-------------|---------------------|-----------------|----------------------------|--------------------------|----------|
| HRMP -> OIC | 0.213 | 0.211 | 0.054 | 3.948 | 0.000 |
| KM -> OIC | 0.088 | 0.090 | 0.049 | 1.809 | 0.071 |
| Average | 0.151 | | | | |

*HRMP: human resource management practices, KM: knowledge management, OIC: organizational innovation capability

The results shown in Table 6 prove that the original sample for the HRMP and OIC constructs was 0.213. Conversely, the original sample for the KM and OIC constructs was 0.088. Therefore, the average original sample was calculated at 0.151, indicating that the relationship pattern was predictable (Hair, Hult et al., 2016).

4.4 Hypothesis test

Hypothesis testing was carried out through 2 stages, namely evaluating the direct and indirect influences of exogenous and endogenous variables. Table 7 shows that a direct relationship existed between the variables, which was determined by analyzing the path coefficient values through the original sample.

Table 7. Path coefficients

| | Original sample (O) | Sample mean (M) | Standard deviation (STDEV) | T statistics (O/STDEV) | p values | Remarks |
|-------------|---------------------|-----------------|----------------------------|--------------------------|----------|----------|
| HRMP -> Cr | 0.513 | 0.516 | 0.094 | 5.481 | 0.000 | Accepted |
| HRMP -> OIC | 0.444 | 0.444 | 0.100 | 4.444 | 0.000 | Accepted |
| KM-> Cr | 0.213 | 0.215 | 0.106 | 2.016 | 0.044 | Accepted |
| KM-> OIC | 0.062 | 0.060 | 0.089 | 0.694 | 0.488 | Rejected |
| Cr -> IOC | 0.415 | 0.415 | 0.078 | 5.321 | 0.000 | Accepted |

*HRMP: human resource management practice, KM: knowledge management, Cr: creativity, OIC: organizational innovation capability

The path coefficient used to determine the existence of a direct relationship between HRMP and creativity was 0.513, with T statistics of 5.481 > 1.96 (STDEV 0.094; O/STDEV 5.481 PV 0.000). This was significant; therefore, hypothesis 1 was accepted. These results are consistent with the research carried out by Jiang et al., (2012) which stated that HRMP is positively correlated to creativity. Increasing the implementation of HRMP dimensions such as training carried out in accordance with need analysis tends to trigger creativity through a divergent thinking process (Chaubey et al., 2021). This helps employees to proactively acquire knowledge (Jiang & Gu, 2015) in terms of creatively solving work-related problems (Jiang et al., 2012). Furthermore, the organization needs

to explore the appraisal system designed to meet the unique motivational requirements of creative employees (He et al., 2012; Mullin & Sherman, 1993). It is also relevant to create a proportionate reward system, although there is ongoing debate about this issue (Friedman, 2009).

Moreover, the path coefficient that determines the direct relationship between HRMP and IC was 0.444, with T Statistics of $4.444 > 1.96$ (STDEV 0.100; O/STDEV 4.444; PV 0.000). This was significant; therefore, hypothesis 2 was accepted. These results are consistent with the research carried out by Easa & Orra (2021), which stated that innovation capability is influenced by the effectiveness of the implementation of HRMP in an organization. HRMP plays a strategic role in creating a conducive work environment, thereby stimulating the potential for organizational innovation to develop (Barba-Aragón & Jiménez-Jiménez, 2020). It is proven that HRMP is the starting point in building organizational innovation capability (Rondi et al., in press; Kianto et al., 2017) producing higher innovation performance. We have empirically tested this idea in a survey dataset of 180 Spanish companies using structural equation modelling (SEM; Chang et al., 2011).

The path coefficient that determines the direct relationship between KM and creativity was 0.213, with T Statistics of $2.016 > 1.96$ (STDEV 0.106; O/STDEV 2.016; PV 0.044). This was significant; therefore, hypothesis 3 was accepted. These results are consistent with the study carried out by Baldé et al. (2018), which stated that KM plays an important role in developing creativity (Joo et al., 2014; Nonaka & Von Krogh, 2009). This is also in line with the study carried out by Schulze & Hoegl (2008), which stated that research on the way and manner in which knowledge acquisition influences creativity is extremely limited.

The path coefficient that determines the direct relationship between KM and OIC was 0.062, with T Statistics of $0.694 > 1.96$ (STDEV 0.089; O/STDEV 0.694; PV 0.488). This was insignificant; therefore, hypothesis 4 was rejected. In woodworking SMEs, KM had an insignificant influence on organizational innovation capability because the knowledge possessed was not fully shared. In addition, KM was not optimally implemented due to differences in the characteristics of SMEs (Mota Veiga et al., 2021). Therefore, these results contradict the research carried out by Ode & Ayavoo (2020) and Mardani et al. (2018), which stated that organizational innovation capability is closely related to creating and exploring available knowledge resources in organizations (Lam et al., 2021).

The direct correlation coefficient of creativity with OIC was 0.415, with T Statistics of $5.321 > 1.96$ (STDEV 0.078; O/STDEV 5.321; PV 0.000). This was significant; therefore, hypothesis 5 was accepted. These results are in line with the research carried out by Lin & Liu (2012), which stated that creativity and the ability to produce new work is considered the starting point and root of innovation; it also increases the chances of successful innovation (Botega & da Silva, 2020).

After this, the position of the mediating variable in an indirect relationship was determined. This model was comprised of 2 mediation pathways, which were tested according to the research framework. Based on the studies carried out by Hair, Hult et al. (2016) and Hair et al. (2014), the VAF method was adopted with respect to the following criteria: VAF < 0.20 represents no mediation, 0.20 to 0.80 represents partial mediation, and > 0.80 represents full mediation.

Table 8. *Mediation effect test*

| Link* | Media-tor* | Independent variable-mediator | Dependent Variable-mediator | Direct | Indirect | Total effect | VAF (%) | Decision |
|---------|------------|-------------------------------|-----------------------------|--------|----------|--------------|---------|-------------------|
| HRMP-IC | Cr | 0.513 | 0.415 | 0.444 | 0.213 | 0.659 | 0.323 | Partial mediation |
| KM-IC | Cr | 0.213 | 0.415 | 0.062 | 0.088 | 0.150 | 0.587 | Partial mediation |

*HRMP: human resource management practice, KM: knowledge management, Cr: creativity, IC: innovation capability, VAF: Variance Accounted For

Table 8 provides and justifies the information concerning the mediation role. From this perspective, the mediating influence on the research model was determined by using a non-parametric bootstrapping approach (Hair, Sarstedt, et al., 2016) its prevalence and challenges for social science researchers. Part II – in the next issue (European Business Review, Vol. 28 No. 2. The mediating factor was assessed by absorbing some of the direct influences on the independent and dependent variables, respectively. Finally, calculations using variance accounted for (VAF) were performed to evaluate the size of the indirect and total link (Hair et al., 2014). In this context, a VAF greater than 80% is categorized as full mediation; a VAF between 20 and 80% is categorized as partial mediation; and a VAF less than 20% is categorized as exerting no mediating influence (Hair et al., 2014).

However, because 2 mediation pathways were tested in this research, it was concluded that creativity partially mediates the relationship between HRMP and IC. The VAF value was equal to 24.4%; therefore, hypothesis 6 was accepted. These results are consistent with the studies carried out by J. Jiang et al. (2012), which stated that creativity serves as a mediating variable between HRM and innovation. Overall, these results suggest that HRMP enhances creativity by hiring employees with creative potential and further using the reward systems and job design to boost motivation (Jiang et al., 2012). In Indonesia, the HRM function of woodworking SMEs plays an important role in facilitating organizational innovation capability by hiring and rewarding creative employees, (Arsawan, Rajiani, et al., 2020) thereby enabling them to design jobs that increase intrinsic motivation and social facilitation.

Creativity also partially mediated the relationship between KM and IC, with a VAF value of 37.50%. Therefore, this means that hypothesis 7 was accepted. In the second mediation pattern, creativity acted as a mediator between KM and organizational innovation capability. According to Ode & Ayavoo (2020) and Bettiol et al. (2012), KM facilitates the development of creative ideas towards increasing innovation capability (Kwan et al., 2018). Thereafter, optimally absorbed knowledge increases capability (Arsawan et al., 2018). This is because KM lays the foundation for building creativity, which is perceived as a source of organizational innovation, as shown in Figure 2.

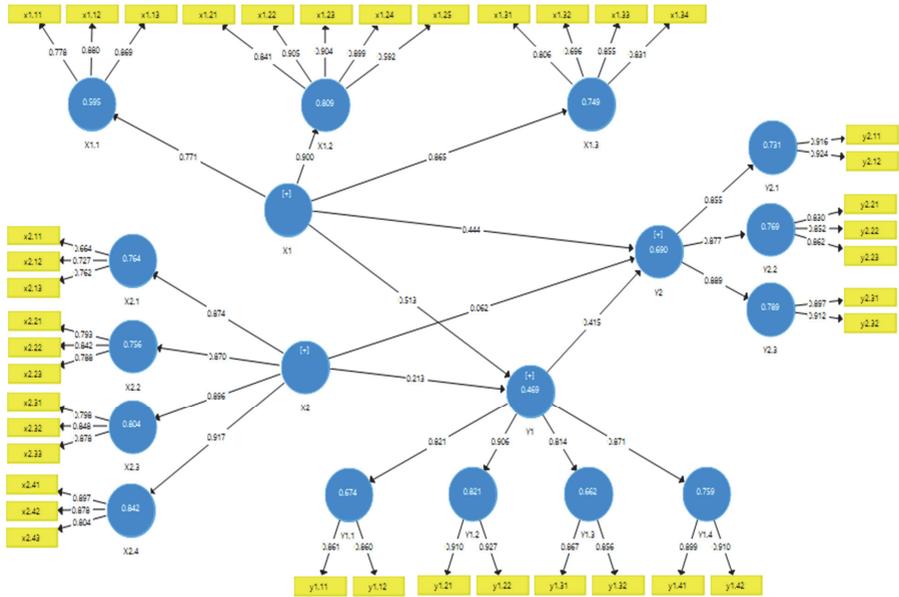


Figure 2. Output analysis

5. Conclusion

5.1 Theoretical implications

Several preliminary studies have reported that KM is an important antecedent of a company’s innovation capacity (Ode & Ayavoo, 2020). As explained in the introduction to this paper, this research has succeeded in closing the following 4 gaps by offering knowledge and the conceptualization of newly comprehensive models, and providing a clear and systematic understanding of the interrelationships between variables.

1. Research on innovation capability has been investigated in various antecedent formations. However, before now it had not been tested with a comprehensive model involving the links between HRMP, KM, creativity, and innovation. Therefore, this model provides a holistic understanding that HRMP largely contributes to creativity and organizational innovation capability. Meanwhile, KM is one of the more important predictors in terms of knowledge that potentially aids in developing creativity (Saulais & Ermine, 2012) to increase organizational innovation capability (Grimsdottir & Edvardsson, 2018; Mardani et al., 2018) innovation, and performance. We aim to shed some light on the consequences of Knowledge Management (KM).
2. This research explains the relationship between HRMP and innovation. This has not previously been extensively examined (Barba-Aragón & Jiménez-Jiménez,

- 2020), even though innovation is an important aspect of organizational development (Chaubey et al., 2021; Zhao et al., 2020).
3. This research explains the way and manner in which HRMP influences innovation through a mediation model to provide a structured description (Easa & Orra, 2021), as well comprehensively illustrating views concerning the relationship between these two variables – an area which was previously regarded as a black box (Messersmith & Guthrie, 2010; Beugelsdijk, 2008). In this research, creativity acts as a double mediator connecting HRMP and innovation, as well as within the KM and innovation pathways.
 4. SMEs in developing countries, especially Indonesia, provide important insights into building innovation as a culture (Arsawan, Koval, et al., 2020) by adopting creativity in a sustainable manner (Areed et al., 2021; Saulais & Ermine, 2012). They also view innovation as an important strategy (Du, 2021) in order to compete in a competitive business environment and withstand high market turbulence (Grimsdottir & Edvardsson, 2018).

5.2 Managerial implications

From a managerial perspective, this research provides a grid for practitioners to gain a better understanding of their tasks in terms of optimizing the role of creativity and innovation capability in SMEs. First, this research shows that managers need to optimize HRMP when seeking creative employees to boost innovation capability. There is a need to develop analytical skills to improve KM practices at all managerial levels, because these practices support creativity (Stojanović-Aleksić et al., 2019). Therefore, innovation is developed while capability is sustainable. Managers need to realize that KM not only signifies knowledge acquisition, but also greatly establishes metacognitive strategies for adopting, disseminating, and creating new ideas.

Managers are also expected to optimally manage intellectual capital (Grimsdottir & Edvardsson, 2018), enabling employees to develop in respect to their potential. Furthermore, the appreciation of their contribution fosters collective intelligence and the professional development of innovation (Ayanbode, 2020). Conversely, managers need to strategically focus on designing innovative policies from a multidimensional approach (Exposito & Sanchis-llopis, 2018). Consequently, developing relevant HRMP patterns also aids in building innovative work behavior (Arsawan, Rajiani, et al., 2020), business performance, and sustainability (Arsawan, Koval, et al., 2020) – especially in terms of HRM (Popescu et al., 2020).

5.3 Limitations and future research

This research has some limitations. First, it used a self-reported instrument in determining the way respondents felt about the variables. Self-reporting is suitable for measuring psychological ownership, and, in terms of research variables, it is the best

evaluation method. However, only respondents themselves are able to understand this effect – although this is inseparable from the effects of bias.

Second, the subjects of this study were limited to woodworking SMEs in Bali, a context which indeed demands creativity and innovation. Therefore, these results need not be generalized. In future, behavioral research needs to be carried out to investigate the relationship between creativity and innovation capability by involving more variables and adopting a longitudinal design. Therefore, it is necessary to conduct comparative research in order to compare SMEs with other fields, such as the educational, banking, and information technology sectors. Moreover, research opportunities regarding innovation are more interesting when other control variables such as company size, age, and ownership type are used.

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