

Creative Leadership, Knowledge Sharing and Innovation : Evidence of Small and Medium Enterprises

Ida Ayu Dewi Kumala Ratih^{1*} Wayan Gede Supartha² I Gusti Ayu Manuati Dewi²
Desak Ketut Sintaasih²

1. Doctoral Program of Management, Faculty of Economics and Business, Udayana University, Indonesia
2. Department of Management, Faculty of Economic and Business, Faculty of Economics and Business, Udayana University, Indonesia

Abstract

The purpose of this study is to prove (1) the influence of creative leadership for innovation, (2) test the effect of knowledge sharing on innovation, (3) developing the concept of the influence of creative leadership for knowledge sharing, (4) develop the concept of the role of knowledge sharing as a mediator of the effects of creative leadership on innovation in the silver industry in Bali. This study used a quantitative approach. The numbers of respondents were 61 people. The results showed that the creative leadership not significantly effected on innovation, knowledge sharing had a positive and significant impact on innovation, creative leadership had a positive and significant impact on knowledge sharing. Knowledge sharing perfectly mediated (complete mediation) the influence of creative leadership on innovation in small silver craft industry in Bali.

Keywords: creative leadership, knowledge sharing, innovation

1. Introduction

The era of the global market which is marked by advances in technology lead to uncertainties, changes in an increasingly complex market, the age of innovative products is becoming shorter, and the demands for companies to be able to protect themselves from the pressure of competitors, the strategy and activities of companies that can bolster the performance is innovation. Innovation is considered a key to the survival of the organization, it is not enough just to be better, but it should be different, faster or cheaper and acceptable for customer (Denning, 2005; Porter, 2008: 13–19).

On the other hand Darroch (2005) show different results, which found there is no effect between performance on innovation. Although there are no consistent findings, is not easy for managers who want to improve performance without innovation, because the company is at risk of losing its competitive position and will be missed.

The silver industry in Bali, especially Celuk village at Singapadu are at the stage of maturity, even a decline. They need creativity, dynamic capabilities, knowledge creation, and new skills to survive to realize both products and new processes (Esteve and Sanchez, 2012; Hannah, 2013; Parthasarathy et al., 2011).

Innovation in the organization can occur through the sharing of information, experiences, and ideas (Mumford et al., 2008; Nevalainen & Maijala, 2012; Hendriks, 1999; Wang & Noe, 2010). Knowledge sharing is the basic means for employees to be able to contribute to apply the newly acquired knowledge, innovation, and ultimately competitive advantage (Shahin & Zahra, 2010; Wang & Noe, 2010). Managerial interventions can encourage and facilitate the systematic knowledge sharing (Hsu 2008).

The purpose of this study was to examine the influence of the creative development of the concept of leadership to innovation, knowledge sharing influence on innovation, creative leadership for knowledge sharing, as well as the role of knowledge sharing as mediation on creative leadership for innovation.

2. Literature Review and Hypothesis Development

2.1 Theory of Dynamic Capabilities

Dynamic Capabilities theory (Teece & Pisano, 1994) refers to the dynamic capabilities as a source of competitive advantage, which emphasizes two aspects. First, the term refers to the shifting character dynamic environment, response, certain strategic, and the time required to accelerate innovation accepted by the market. Second, the ability of emphasizing the key role of strategic management adapted to the right, integrating, and reconfiguration of internal and external organizational skills, resources, and functional competences toward changing environment.

There are three categories to help determine the dynamic capabilities of the company, which are the managerial and organizational processes; position; and lane (Phipps et al., 2012; Teece & Pisano, 1994). Managerial and organizational process refers to the way of doing things in the company, as a routine, patterns of practice and learning patterns. Managerial and organizational process consists of (1) the integration, which is the ability of managers to coordinate or integrate the activities within the company, and how efficient and effective internal coordination and integration can be achieved; (2) study, is a process of repetition and experimentation enable tasks done better and faster as well as opportunities for new production to be identified; (3)

reconfiguration and transformation, that change is expensive and should change with maximum results.

Position, a company's strategic posture is not only determined by the learning company and coherence of internal and external processes and incentives, but also by location associated with business assets. Knowledge asset is an asset that can not be traded, a reflection of the creative mind, and other assets that complement them, such as technology assets, complementary assets related to commercialization activities, financial assets, asset locational geography is also important. Uniqueness in certain businesses can stem from locational assets and reputation and relational assets. This will determine market share and profitability.

Lane, the alternative strategies available to companies and the attractiveness of the opportunities that lie ahead, the direction in which the company will be taken is a function of the current position and the path forward. It is of course well established by previous path. Changes in products or prices will be responded quickly to the movement in and out of technology in accordance with criteria to maximize value.

2.2 Innovation

Innovation is the mechanism to produce both products / services, processes and new management system that comes from new ideas to utilize existing resources. In addition, the creation of new knowledge from external sources of knowledge in order to adapt to changes in markets, technology, and competition.

There are three types of core innovations are gaining widespread attention, namely administrative and technical, product and process, as well as radical and incremental (Damanpour, 1991). Wang and Ahmed (2004) identified five key areas that define the organization's overall innovation, namely (1) the product innovation, (2) innovation markets, (3) innovation process, (4) the innovation behavior, and (5) innovation strategy. From the search several previous studies it is known that the dimensions of innovation to be explored related to the silver industry in Celuk is product innovation and process innovation. Say so, because, according to Liao (2007) in addition to product innovation, more effort should be made to change the procedures for product life cycles become shorter. In addition, the effect was not as clear as management innovation and product innovation process because the scope of management innovations facing very broad.

The following are product innovation and process innovation. Product innovation is offering new products or services, the improvement of existing products as a result of being introduced to meet external users or market demand. Product innovation concentrates on developing new products or technological improvements. On the other hand, the innovation process is a new element that emerged due to the constraints of the production or services, input materials, specification of tasks, workflow mechanisms, information, and tools used in producing or making services. Innovation related process creation or improving methods and developments in process or system (Damanpour, 1991; Murat & Tray, 2011).

2.3 Creative Leadership

Various factors influence the innovative behavior. One of the most important factors that play a role in the innovation process is leadership (Damanpour, 1991; Mumford et al., 2003). Dahlgaard et al. (1997) states, the creative leader is a leader full of ideas that are used to solve problems and continuous improvement, to have a clear picture of the company's future and understand how to work efficiently to achieve the vision. Leaders have the courage and are ready to bear the risk of failure. He was not afraid to intervene in the conflict between staff. As a leader of a very inspiring, intervention in the conflict personnel gives good results. According to Rickards and Moger (2000), creative leadership style has much in common with transformational leadership by Avolio and Bass (1995). Research on the silver industry's need to develop a creative concept of leadership by synthesizing and combining dimensions of transformational leadership by Avolio and Bass (1995), which includes four dimensions of the concept of "4I" with dimensions of creative abilities by Jain and Sharma (2012) into three dimensions. That is idealized influence, intellectual stimulation and synthesized into a dimension of creative capabilities such as the ability of creative, inspirational motivation and individualized consideration.

2.4 Knowledge Sharing

Knowledge sharing as the basic means, that employees can share knowledge and contribute to the application of knowledge, innovation, and ultimately to the organization's competitive advantage (Wang & Noe, 2010). Technological innovation allows companies to reduce costs while increasing differentiation. Cost reduction can be obtained through joint cost of intangible assets such as knowledge sharing (Porter, 2008).

Knowledge sharing occurs at the level of individuals and organizations. Individual level, knowledge sharing occurs with the street talking to colleagues to help them work better, faster, or more efficient. For an organization, knowledge sharing is to obtain, organize, reuse, and transfer the experience based on the knowledge of the organization and provide knowledge to others in the business (Lin, 2007).

Hooff and Weenen (2004), knowledge sharing divides into two dimensions: Donating knowledge, and collecting knowledge. 1) Knowledge Donating is processes to contribute their knowledge by leaders, employees, and others. 2) Knowledge of the collecting is the process of searching for knowledge by the leader or employee

of another person.

Sharratt and Usoro (2003) identifies the factors that influence knowledge sharing, among others, the organizational structure, ease of use and usefulness of the information system, trust is based on merit, competence, and integrity of the community. In addition, having perceived closeness with knowledge sharing efforts for career advancement, a sense of togetherness, and value congruence organization. According to Seidler-de and Hartmann (2008), a climate of openness and trust between members of the organization is the basic condition of the formation of tacit knowledge, which is shared and used in the innovation process. One of the main source of successful knowledge sharing is the organization's ability to learn or acquire needed knowledge from other organizations (Lee, 2001).

2.5 The Effect of Creative Leadership on Innovation

The most effective leaders in the 21st century to help individuals and teams to coordinate and integrate different styles to encourage change through the creative process of finding and defining new problems, to solve these problems, and implement new solutions (Basadur, 2004). Innovation requires creative leaders who have an understanding of the resources to develop creativity, freedom for employees in the innovation process (Ghorbani & Ahmadi, 2011; Matthew & Sternberg, 2006). According to Rickards and Moger (2000), the behavior associated with the creative leadership team facilitator role in the implementation of the system of creative problem solving, and development of new products. Creative leadership style has much in common with transformational leadership proposed by Avolio and Bass (1995).

Gumusluoglu and Ilsev (2009); Morales et al. (2012); and Robbins and Timothy (2008), states that there is a positive relationship between transformational leadership and innovation in organizations. Leaders use inspirational motivation and intellectual stimulation in order to realize the innovation in an organization (Elkins & Keller, 2003). Pretorius and Millard (2005) says that there is a high and positive correlation between creativity and innovation (Carvalho and Roberto, 2012). Flexibility in decision making, have a different view, dare to take risks because of new ideas and innovation are characteristic of creative leaders, which can create a business organization into a good position (Bosiok and Sad, 2013). Based on the description above, this study proposes hypothesis as follows:

H₁: Creative Leadership has positive effect on Innovation

2.6 The Effect of Knowledge Sharing on Innovation

Innovation can be understood as an attempt to develop, produce, adopt and implement new ideas, methods, programs, and policies to achieve organizational goals effectively. Nonaka (1994) suggested that a major cause of innovation happening in the organization is when employees share their knowledge. The willingness of employees to donate and collect knowledge were significantly associated with the company's innovation capability. The importance of sharing knowledge and experience on the employees, enabling the implementation of new ideas, processes, products, or services that can drive the success of innovation (Cavusgil et al., 2003; Hannah, 2013; Liao et al., 2007; Lin, 2007; Reychar et al., 2012).

Innovation occurs when employees sharing and combining knowledge within the organization (Mathuramaytha, 2012) In addition there is a significant correlation between KS and innovation capabilities. Practice knowledge sharing positive effect on the speed and quality of innovation, and firm performance (Wang & Wang, 2012). Seidler-de and Hartmann (2008) stated that in the early phases of the innovation process is very important to do the transfer of knowledge, knowledge sharing is the basis of product innovation (Al-Husseini & Elbeltagi, 2013). Based on the description above, this research proposes second hypothesis:

H₂: Knowledge sharing has positive effect on Innovation

2.7 The Effect of Creative Leadership on Knowledge Sharing

Explore creative leadership knowledge sharing. These elements consist of a platform of understanding where new ideas flourish (Rickards & Moger 2000). Managerial intervention is required to encourage and facilitate the systematic knowledge sharing (Hsu 2008). Creativity and knowledge sharing are positively related (Reychar et al., 2012). Innovation can only be changed to be successful if it is supported by top management. In addition, developed an innovative creative team of employees who are knowledgeable and just by sharing their knowledge on the implementation of the innovation (Hannah, 2013; Wang & Noe, 2010).

The main task is to convert the knowledge leader in something beneficial knowledge by leveraging the intellectual assets of the organization. Another thing that needs to be done is to lead and promote the knowledge management agenda by channeling knowledge of a company into an initiative that is expected to be a source of competitive advantage (Menkhoff et al., 2005). Based on empirical data above it, the research proposes third hypothesis as follows.

H₃: Creative Leadership has positive effect on Knowledge Sharing

2.7 The Effect of Creative Leadership on Knowledge Sharing

Research results Reychav et al. (2012) showed that knowledge sharing creativity to innovation mediate influence positively and significantly. Individual creativity and knowledge sharing to be a prerequisite for generating innovative solutions. Nonaka (1994) suggested that a major cause of innovation happening in the organization is when employees share their knowledge, which enables the implementation of ideas, processes, products, or services.

Explore creative leadership knowledge sharing where new ideas flourish (Rickards & Moger, 2000). Innovation can only be changed to be successful if it is supported by top management. In addition, developed an innovative creative team of employees who are knowledgeable. The main task of the leader is to convert knowledge on something profitable, channel leaders the knowledge of a company in order to become a source of competitive advantage (Hannah, 2013; Menkhoff et al., 2005). Research Wang and Wang (2012) show that the sharing of knowledge by managers and employees to change the status quo. The sharing of knowledge shown by emphasizing the sharing of lessons learned rather than on mistakes made. Based on explanation of theory and empirical data the fourth hypothesis of this research is as follows.

H4: Knowledge sharing mediate creative leadership for innovation

3. Research Methodology

3.1 Population and Sample & Data Sources

The design of this study using a quantitative approach (positivism). This research was conducted in the village of Celuk and Singapadu Village, District Sukawati, Gianyar with the object of research are the silver industry. The choice of location is based on several reasons, which are Celuk and Singapadu village are the center of the silver industry which are the largest in Bali, is the forerunner to the development of silver in Bali, and the craft industry are included in the global market. The population in this study was the entire leadership of Micro Small Enterprises (MSEs) of silver in Celuk and Singapadu district, sub-district Sukawati, Gianyar. MSE with employees between 4-99, which amounted to 102 (Data for Small and Medium Industry Directory Gianyar, 2014). Determination of the sample of 81 respondents considered adequate by the consideration that the model predictions research can be done through the establishment of sampling 40–100 number of respondents when using Component analysis techniques based SEM ie Partial Least Square (Chin, 1996; Henseller, 2011). The samples in this study using simple random sampling method. The data were obtained by distributing research instruments. Answers were collected and tabulated and compiled using Semantic Differential scale / Semantic Differentials (Effendi and Tukiran, 2012).

3.2 Variables and Measurements

Innovation variable adopted from Wang and Ahmed (2004) . Dimensions Product Innovation uses six indicators, namely the introduction of new products, new products perceived very new, bringing new competitors, introducing more innovative products, faster launches of new products, and the success rate of new products. Dimensions Innovation process uses seven indicators of spearhead technology, the main production equipment technology, new production equipment investment, production process compared with major competitors, improve business processes, production methods change more rapidly, developing new management.

Measurement of variables Creative leadership, creative ability synthesized dimensional indicators, and the combination of indicators Ancok (2012); Avolio and Bass (1995); Jain and Sharma (2012); Phipps et al. (2012); Pratoon & Savatsomboon (2012); Zhang & Bartol (2010). Measurements using the 12 indicators that have curiosity great, generate ideas unique through the integration of new technologies with local wisdom, realizing the idea into a new product that is of value to consumers, the idea of speeding up the production process, have the self-belief that big, challenge the status quo , risk-taking, was present when employees are having trouble, finding out about the obstacles faced, manage crises with high confidence, completing challenging tasks, confidence when confronted with new situations. Indicator dimensions inspirational motivation adopt indicators Avolio and Bass (1995), Phipps et al. (2012). There are four (4) indicators that communicate clear goals, challenging employees to a high standard, inspire employees, although employees believe in the ability of employees to make mistakes. Indicator dimensions Individualized Consideration adopt indicators Avolio and Bass (1995), Phipps et al. (2012) that provide learning opportunities to employees, looking at mistakes as a learning experience, take the time for employees to learn, identify the needs of employees, meet the needs of employees.

Knowledge sharing variable adopted from Hooff and Weenen (2004) and Liao (2007). The dimensions of knowledge sharing consists of two dimensions of Knowledge Knowledge collecting Donating and dimensions . Donating knowledge indicator that is learning something new from a friend, telling about new things, sharing knowledge is considered normal. Collecting knowledge indicator that sharing information if requested, to share skills if requested , to share knowledge if I ask , and share skills if I ask .

This study uses analysis techniques Component based SEM ie Partial Least Square. PLS model

evaluation is done in two stages. The first evaluation of the measurement model (outer model) consisting of Convergent validity, Discriminat validity, Composite reliability. The second evaluation structural model (inner model) which consists of testing the effect of direct and indirect effect (mediation). As shown on figure 1

4. Result and Discussion

4.1 Sample Description

A discussion of the characteristics of the respondents in this study consisted of firm age, gender, age, education, bussiness experience shown by Table 1.

By paying attention to the information in Table 1, it appears the company age silver in Celuk and Village Singapadu most established less than 24 years (37.7 %). This is consistent with the changes that occurred in the village of Celuk since 1990, where silver demand by international tourists, so many emerging companies UMK silver. Owner of the silver industry in the village and the village Celuk Singapadu dominated by men (73.77%). The high percentage of men as leaders/owners of the silver industry, is inseparable from the obligation of men as husbands as the backbone of the family , interests and patterns of informal education done by parents in Celuk and Village Singapadu already trained boys making silver since respondents in elementary school or junior high school.

Meanwhile, if viewed from age, it turns out most over the age of 50 years (37.70%). That is the leadership/owner of the silver industry began to help manage the business of parents who are experiencing an increase in the number of tourist visits to family-owned art shop in 1990. When viewed from the level of education of the respondents, it can be seen that the majority (49.18%) leader/owner Industrial silver in Celuk and Singapadu still educated village High School/Vocational High School, then respondents were educated S1 as much as 32.78%. There are some respondents who have higher education, but did not finish for some reason did not get too many orders. That is the role of a leader/owner of the silver industry in Celuk and Village Singapadu deemed not require higher education, respondents felt the experience of managing the business is enough. Given the challenges facing the global environment as turbulent, the management of the silver industry in Celuk and Village Singapadu demanding more professional management. If seen from experience the majority (67.21%) of respondents have less than 29 years of experience.

4.2 Test Validity and Reliability Instruments

Test the validity of the test instrument using factor analysis using the Kaiser - Meyer - Olkin Measure of Sampling Adequacy and Bartlett 's Test (KMO MSA) and anti -image correlation with the following provisions. First , figure KMO MSA > 0.5 and significance < 5 % . Means sufficient sample for further analysis. Secondly, on the diagonal axis of the anti-image correlation, all must be > 0.5 and reliability tests with SPSS through Cronbach 's Alpha with the provisions when the value of Cronbach's Alpha > 0.6 (Sekaran, 2006) then construct or variable TSB reliable as shown in table 2.

Table 2 looks at the entire constructs with reflective indicators generate value loading factor > 0.70 and AVE values > 0.5 means that all indicators of the construct is valid. Similarly, the value of Cronbach 's Alpha and Composite Reliability > 0.7 can be concluded that the entire construct is a reliable indicator , so that it can continue to be tested inner models.

4.3 Structural Model Testing Results or Inner Model

Based on Table 4 R - Square value of 0.37 indicates that the variable latent creative leadership has a moderate influence on the latent variable knowledge sharing , as well as having a strong influence on innovation .

a) Testing Q-Square predictive relevance (Q2)

Feasibility research model can be demonstrated by looking at the coefficient of determination multivariate analysis were expressed as Q2 , with details of the calculation of the following techniques.

$$Q^2 = 1 - (1 - R^2 \times 2)(1 - R^2 y1)(1 - R^2 y2)$$
$$Q^2 = 1 - (1 - 0,37)(1 - 0,35)(1 - 0,66)$$
$$Q^2 = 0,86077$$

Based on the results of these calculations, the value of Q2 amounted to 0.86077 (86 %), Q2 > 0 includes a classification model is very strong or model indicates observation is excellent, meaning that 86 percent of relationships between variables can be explained by the model, while the remaining 14 percent of the factor error or other factors not included in the research model (Latan & Ghazali , 2012: 88).

b) Testing Goodness of Fit (GoF)

Goodness of Fit is a formula to measure the overall model as a single measure of the measurement model (outer model) and the measurement of the structural model (inner model) . The value of goodness of fit (GoF) have an interval between 0 and 1. Criteria for the strength of the model is based analyst goodness of fit in southern and Ghazali (2012 : 88) , ie the value of small GoF 0:10 , 0:25 medium GoF value , the value of large GoF 0:36. GoF is calculated from the average value of the square root of communality index and average R – Square in Table

5.2 . The formula used to calculate the value of goodness of fit (GoF) is as follows .

$$\begin{aligned} GoF &= \sqrt{(Com \times R^2)} \\ &= \sqrt{(0,69 \times 0,46)} \\ GoF &= 0,56 \end{aligned}$$

Calculation GoF value of 0.56, indicating the all model is fit. Thus, the path that the model can provide adequate information on the whole to look at the interdependence between the variables that are included in this research model.

c) Testing Hypothesis

Testing statistically in this study conducted on the relationship between exogenous variables, which are the relationship between the creative leadership of the endogenous variables, namely knowledge sharing, and innovation. The test results are statistically influence between variables can be seen in Table 5. It turns out that of the four hypotheses were formulated , there is a hypothesis that is the goal of research is variable Creative Leadership (CL) had no significant effect by t test criteria of 5% that is equal to 1.96 , because t the table is still larger than the t statistics obtained from the calculation of the Smart PLS is 1.025 .

The relationship between the variables creative leadership and innovation that is mediated by variable knowledge sharing . Direct and indirect relationships between variables creative leadership and innovation through knowledge sharing variables in Table 5 and Figure 2. Based on the test results Table 5 shown relationship between CL KS INO showed very fit , it can be stated to have formed through the mediation KS as shown Figure 2.

4.4 Testing the effect size (f2)

Testing the effect size (f2) aims to determine the goodness of the model of the role of mediator, in this case the role of knowledge sharing as a mediator of the relationship between the creative leadership and innovation. Cohen (1988) states the effect size is the range of values from 0.02 to 0.15 range (weak effect), the range of 0.15 to 0.35 (medium effect), and > 0.35 (strong influence). The formula to calculate f2 is as follows.

$$\begin{aligned} f^2 &= \frac{R^2_{included} - R^2_{excluded}}{1 - R^2_{included}} \\ &= \frac{0,46 - 0,66}{1 - 0,46} \\ &= 0,37 \end{aligned}$$

Description: R2

R2 included = value obtained when the exogenous variables entered into the model

Excluded R2 = R2 values obtained when the exogenous variables excluded from the model The above calculation shows that knowledge sharing has a strong role as a mediator of the relationship between the creative leadership and innovation.

4.5 Effect of Creative Leadership Against Innovation

Hypothesis test results can not prove a direct influence creative leadership to innovation significantly. Creative abilities possessed leadership / business manager silver is not enough to achieve organizational innovation given that the ideas or creative solutions not successfully implemented. Creative leadership will stop only at the level of ideas if it does not receive a positive response and support of employees as executor.

Results of this study are not consistent with previous studies presented by Basadur (2004) and Rickards and Moger (2000) related that the creative leadership of creative problem solving and new product development. Not supported by Matthew and Sternberg (2006), which states that innovation requires a creative leader who has the resources to develop an understanding of creativity and innovation process.

The results also inconsistent with the statement Ghorbani and Ahmadi (2011) and Morales et al. (2012) that the creative leadership associated with innovation and new product development. Creative leadership characteristics include flexibility in making decisions, look at the situation from a different angle, and dare to take risks when implementing new ideas into innovations, can make a business organization into a good position (Bosiok & Sad, 2013).

Results of the study were inconsistent this may be caused by a large majority (49.2%) of respondents high school education, lack of opportunities for business leaders and managers of silver technical and management training, looking at mistakes as a learning experience, so the leader / manager or employees experiencing difficulties develop the power of creation, as it also has its limitations in order to understand the development of resources, changes in market demand and the innovation process. This can be explained by the theory of Dynamic Capabilities by Teece and Pisano (1994) related competencies makes it possible for the company to create new products and processes, respond to changing market for competitive advantage, so that respondents were mostly educated High School (SMA) does not have the competence enough to adapt to

environmental changes very rapidly and competition is getting tougher.

Based on the results of interviews with leaders in companies of silver are very innovative illustrate the leadership who have curiosity great, embodies the idea into a new product that is valuable to consumers, completing tasks that are challenging, risk-taking, the idea of speeding up the production process jewelry is of good quality, by combining the ways of making traditional jewelry (hand made) with the use of sophisticated tools, employees are challenged by high standards, managing the crisis with high confidence, and identify the needs of employees (Ancok, 2012; Avolio & Bass, 1995; De Jong, & Den Hartog, 2007; Jain and Sharma, 2012; Phipps et al., 2002; Pratoon & Savatsomboon; Williams & Foti, 2011).

4.6 Influence Knowledge Sharing Innovation Against

This study managed to improve the relationship patterns of knowledge sharing and innovation to the level of research recommendations, so it could be said that a grain of questions on knowledge sharing that is reflected by the questions subgroup variable (a) knowledge Donating and (b) knowledge of the collecting is a positive and significant impact to the formation of innovation. The researchers' work is in line with the findings Hooff and Weenen (2004) in which the loading factor Donating knowledge and knowledge collecting also appears equally strong form constructs of knowledge sharing, especially indicators inform about new things that are known, and to share skills when asked.

Previous studies by Nonaka (1994) suggested that a major cause of innovation happening in the organization is when employees share their knowledge. The willingness of employees to donate and collect knowledge were significantly associated with the success of the company's innovation. Innovation involves a process of knowledge sharing that enables the implementation of new ideas, processes, products, or services (Cavusgil et al., 2003; Hannah, 2013; Liao et al., 2007; Lin, 2007; Wang & Wang, 2012).

According to Hsu (2008) knowledge sharing practices in any organization is very important to learn new techniques, improve core competencies, solve new problems, and start a new situation. The practice of sharing knowledge, which employees split and combine knowledge within the organization, this will influence the speed and quality of innovation, which in turn is associated with firm performance (Al-Husseini & Elbeltagi, 2013; Mathuramaytha, 2012; Reyhav et al., 2012; Seidler-de & Hartmann, 2008; Wang & Wang, 2012). Organizations that are considered likely to encourage the exchange of creative ideas freely across business functions. Tacit and explicit knowledge sharing gives a strong effect, whether positive or negative, in the process of transforming new ideas, be innovative solution (Shahin and Zeinali, 2010).

4.7 Effect of Creative Leadership Against Knowledge Sharing

This study proved and answer hypothesis to three which is the number three research purposes, namely that creative leadership and significant positive effect on knowledge sharing. The role of creative ability (KR) that dominate and influence on knowledge sharing has implications for the presence of an imbalance between sub-grains, the Indication of leadership attitudes that are less concerned with the needs required employees, evident from the questions individualized consideration that record the perception of not optimal view mistakes as a learning experience. If the second item above perception weakens the future, the opportunity to realize knowledge sharing will be inhibited. Nevertheless, the role of creative ability (KR) dominant proven at this time have a positive impact in encouraging the strengthening of knowledge sharing.

This research has in common with previous studies is research by Rickards and Moger (2000) which states explore creative leadership knowledge sharing. These elements consist of a platform of understanding where new ideas flourish. Managerial intervention is required to encourage and facilitate the systematic knowledge sharing (Hsu 2008). Creativity and knowledge sharing are positively related (Reyhav et al., 2012).

Innovation can only be changed to be successful if it is supported by top management. Knowledge can facilitate creative thinking, developed an innovative creative team of employees who are knowledgeable and just by sharing their knowledge on the implementation of the innovation (Hannah, 2013; Williams & Foti, 2011). The main task is to convert the knowledge leader in something beneficial knowledge by leveraging the intellectual assets of the organization. Another thing that needs to be done is to lead and promote the knowledge management agenda by channeling knowledge of a company into an initiative that is expected to be a source of competitive advantage, sharing information and knowledge freely, knowledge sharing takes place during training, consultation, collaboration and joint projects etc. (Menkhoff et al., 2005).

4.8 Mediating Role of Knowledge Sharing Influence of Creative Leadership for Innovation

The results showed that knowledge sharing in small industry silver mediates the influence of creative leadership for innovation positively and significantly. Creative leadership has a greater role in the process of knowledge sharing than knowledge sharing to innovation in the silver industry in a way the leader mengordinir employees to want to tell about your stuff, share skills, and share knowledge in order that the industry is increasingly innovative in the innovation process and make products innovative.

Results of research mediating role of knowledge sharing to test the effect size of 0:37 is included in the strong category. The study also found that small industries silver highly innovative led by a creative leadership that is able to manage the industry very well, because they have curiosity great, the idea of speeding up the production process, to manage crises with high confidence, challenging employees with high standards, it is this which inspire employees.

In connection with the findings of this research, the research results Reyhav et al. (2012) showed that a positive and significant knowledge sharing as pemediasi of variable creativity to innovation. The same thing conveyed by Rickards and Moger (2000) which states that explores the creative leadership as a center of knowledge sharing new ideas develop. Innovation can only be changed to be successful if it is supported by top management, with the support of a knowledgeable employee. Development is done only with knowledge sharing on the implementation of innovation (Hannah, 2013). In addition, leaders who distribute knowledge in a company can be a source of competitive advantage (Menkhoff et al., 2005).

Wang and Wang (2012) states that managers should pay attention to knowledge sharing knowledge sharing as efforts by managers and employees will change the status quo that will affect innovation. Knowledge sharing efforts shown by emphasizing the sharing of lessons learned rather than on mistakes made. In order to understand the market dynamics should be creative leaders share their expertise and creative abilities held for employees who can lead creative in solving problems resulting in innovative products (Tsai, 2012).

5. Conclusion And Implications For Research

5.1 Conclusion

Based on the analysis and discussion, we can conclude the following matters. First, creative leadership has not been able to increase innovation if it is supported only creative abilities, inspirational motivation and individualized consideration less attention to take the time for employees to learn and look at mistakes as a learning experience, so it can happen creative leadership will stop only at the level of ideas if it does not get responses and positive support of employees as executor. Second, implementation of the knowledge sharing that good, which is reflected by the dimensions variable Donating knowledge and knowledge collecting proven to increase innovation. This indicates that inform about new things, learn something new from a friend, share skills if requested can enhance product innovation and process innovation. Third, creative leadership can improve knowledge sharing. This indicates the creative leadership that is constructed by using three sub grains question dimensional creative abilities, inspirational motivation and individualized consideration can improve the process and knowledge collecting. Keempat Donating knowledge, creative leadership in small industry silver not proven to affect directly and a significant increase in innovation, but necessary role pemediasi knowledge sharing. Knowledge sharing the role of mediating the relationship completely (complete mediation) creative leadership on the innovation of products and processes. Creative leadership has a greater role in the process of knowledge sharing knowledge sharing compared to innovation, by means mengordinir leaders want employees to be informed about new things, sharing skills, and share knowledge that is increasingly innovative industry in the innovation process and create innovative products.

5.2 Implications Research

5.2.1 Theoretical implications

This study adds to a reference in the topic of creative leadership through knowledge sharing, to increase innovation. This finding is able to expand its leadership in explaining the concept of creative innovation, because the indicators creative leadership in this study is an indicator of the result of combining the dimensions of creative abilities, inspirational motivation and individualized consideration. The implications of this study is mapping the construct of knowledge sharing as a mediator role linking construct creative leadership to peembentukan innovation is relatively no difference in estimated value, so it can be stated that the dynamics of leadership that the protagonist has been strengthened by the construct of knowledge sharing that is able to realize the idea of the leadership of the creative into the process of strengthening knowledge sharing impacting generate innovation in the silver industry.

5.2.2 Practical Implications

Discussion of the results of the research can be formulated a number of recommendations for practitioners silver industry to increase innovation. There are several important factors that need to be managed by leaders / owners of small industries in Bali silver to encourage innovation through creative leadership and knowledge sharing. The owners of small industries silver in Bali has time to improve the creative abilities by increasing the curiosity, to realize the idea into a new product that is valuable to consumers, think about how to speed up the production process, to manage crises with high confidence, challenge the status quo, and seek out the constraints faced. Inspirational motivation dimension that needs to be improved is to involve employees in problem solving, and challenging employees to a high standard. From the dimensions of individualized consideration with regard mistakes as a learning experience, identifying the needs of employees, and provides an opportunity for

employees to learn.

Encourage the process of knowledge sharing to gain more new knowledge qualified by collecting knowledge, and knowledge Donating, namely sharing of skills, share knowledge, and learn something new from a friend. With increasing knowledge sharing process on a small industrial silver in Bali, the owners and employees will have a lot more new knowledge. Increased efforts as mentioned above will be able to leverage the dynamic capabilities of the silver industry in Bali in creating unique jewelry that is of good quality and not easily imitated by other countries, because the real competitor is the country of China, Thailand, and India.

5.3 Limitations Research

The study used the instrument in the form of a list of questions, in the period of the study in 2015, so this study can not be used as guidelines for the evaluation and monitoring of innovation in the silver industry in the future, because the study of perception can undergo a number of changes of various factors that shape , This study therefore can only give a complete picture of the character of innovation in the current year, not for the year 2016 and beyond, so that longitudinal research needs to be done. Another limitation is the methodology that causes this error because only one person is evaluated on corporate leaders silver, maybe creative ideas are not successfully translated into innovation because it requires an integrated collective creativity of leaders and employees. Not done grouping between companies that only sell silver, companies that make, sell silver for domestically alone, as well as the companies that make, sell silver for domestic and exported abroad. The external validity of these theories developed in developed countries.

Reference

- Al- Husseini, S. and Elbeltagi, I. 2013. Knowledge Sharing Practices as a Basis of Product Innovation: A Case of Higher Education in Iraq. *International Journal of Social Science and Humanity*, Vol. 5, No. 2, February 2015.p.p.182— 185.
- Ancok, Dj. 2012. Psikologi Kepemimpinan & Inovasi. Jakarta : Penerbit Erlangga.
- Avolio, B.J. and Bass, B. 1995. *Multifactor Leadership Questionnaire. Include Actual form and Ought form and Scoring Guide*. Published by Mind Garden, Inc.
- Basadur, M. 2004. Leading others to think innovatively together: Creative leadership. *The Leadership Quarterly* 15 103–121
- Bosiok, D. and Sad, N. 2013. Leadership styles and creativity. *Online Journal of Applied Knowledge Management*. A Publication of the International Institute for Applied Knowledge Management. Volume 1, Issue2.p.p.64–77.
- Cavusgil S.Tamer, Calantone, Roger J. dan Zhao, Yushan. 2003. Tacit Knowledge transfer and firm Innovation Capability. *The Journal of Business & Industrial Marketing*, Vol.18. No.1.pg. 6–21.
- Chin, W.W., Marcolin, B.L., and Newsted, P.R. 1996. A Partial Least Squares Latent Variable Modeling Approach for Measuring Interaction Effects: Results From A Monte Carlo Simulation Study And Voice Mail Emotion/Adoption Study. *MIS Quarterly, Information Systems Research, Management Science*, pp. 21–40.
- Dahlgaard, J. J.,Larsen, H. Z.& Norgaard, A.1997. Leadership Profile in Quality Management: a Danish perspective, *Total Quality Management*, 8, pp.S16– S30
- Damanpour, Fariborz. 1991. Organizational Innovation: A Meta-Analysis of Effects of Determinants and Moderators. *Academy of Management Journal*, Vol. 34. No. 3.p.p.555– 590.
- Darroch, Jenny.2005. Knowledge management, innovation and firm performance. *Journal Of Knowledge Management* Vol. 9 No. 3, pp. 101–115
- De Jong, Jeroen P.J. & Den Hartog, Deanne N. 2007. How leaders influence employees' innovative behaviour. *European Journal of Innovation Management* Vol. 10 No. 1, pp. 41-64.
- Denning, Steve. 2005. Why the best and brightest approaches don't solve the innovation dilemma. *Strategy and Leadership*. Vol. 33 No. 1, pp. 4–11, Emerald Group Publishing Limited, ISSN 1087-8572.
- Effendi, Sofian dan Tukiran. 2012. Metode Penelitian Survei. Jakarta: Penerbit LP3ES.
- Esteve, Alejandro Escriba and Sanchez, Angeles Montoro. 2012. Guest editorial: creativity and innovation in the firm Managerial antecedents and effectson employees. *International Journal of Manpower*. Vol. 33 No. 4, pp. 344–348
- Ghorbani, Mahmood and Ahmadi, Shahnaz. 2011. Relationship Between Employee's Empowerment Dimensions and Creativity Improvement in Educational Organizations. *Middle-East Journal of Scientific Research* 10 (2): 213–217. ISSN 1990-9233© IDOSI Publications.
- Hana, Urbancova. 2013.Competitive Advantage Achievement through Innovation and Knowledge. *Journal of Competitiveness*, Vol. 5. Issue 1. p.p.82– 96.
- Hendriks, Paul. 1999. Knowledge and Process Management Volume 6 Number 2 pp 91–100.
- Henseler, J., Ringle, C.M. and Sinkovics, R. R., 2009. The Use of Partial Least Squares Path Modeling in

- International Marketing. *New Challenges to International Marketing Advances in International Marketing*, Volume 20, 277–319
- Hooff, Van den Bart and Van Weenen, Femke de Leeuw. 2004. Committed to Share : Commitment and CMC Use as Antecedents of Knowledge Sharing. *Knowledge and Process Management*, Volume 11 Number 1 pp 13–24
- Hsu, I - Chieh. 2008. Knowledge sharing practices as a facilitating factor for improving organizational performance through human capital: A preliminary test . I-Chieh Hsu *,1. / *Expert Systems with Applications* 35 (2008) 1316–1326.
- Jain, Ravindra and Sharma, Pragya. 2012. Creative Abilities of Indian Managers and Blocks to Creativity Enhancement: An Empirical Study. *Management and Labour Studies*. 37(1) 1–16.
- Latan, Hengky dan Ghozali, Imam. 2012. Partial Least Squares Konsep, Teknik, dan Aplikasi Smart PLS 2.0^{M3} Untuk Penelitian Empiris. Semarang: Undip
- Lee, Jae-Nam. 2001. The impact of knowledge sharing, organizational capability and partnership quality on IS outsourcing success. *Information & Management* 38, pp. 323–335
- Liao, Shu-hsien; Fei, Wu-Chen and Chen, Chih-Chiang. 2007. Knowledge sharing, absorptive capacity, and innovation capability: an empirical study of Taiwan's knowledge-intensive industries. *Journal of Information Science*; 33; 340 originally published online Mar 23, p.p. 340–359. DOI: 10.1177/0165551506070739
- Lin Hsiu-Fen. 2007. Knowledge sharing and firm innovation capability: an empirical study. *International Journal of Manpower*. Vol. 28 No. 3/4.p.p.315–332.
- Mathuramaytha, Chonticha. 2012. Developing Knowledge-Sharing Capabilities Influence Innovation Capabilities in Organizations – a Theoretical Model. International Conference on Education and Management Innovation IPEDR Vol.30. p.p. 285–291. IACSIT Press, Singapore.
- Matthew, Cynthia T. and Sternberg, Robert J. 2006. Leading Innovation Through Collaboration. *Innovation Through Collaboration. Advances in Interdisciplinary Studies of Work Teams, Volume 12, 27–52.* ISSN: 1572-0977/doi:10.1016/S1572-0977(06)12002-6
- Menkhoff, Thomas ; Chay, YueWah; Evers, Hans-Dieter; dan Loh, Benjamin. 2005. Research Collection Lee Kong Chian School Of Business. Available at: http://ink.library.smu.edu.sg/lkcsb_research/2738
- Morales, Víctor Jesús García; Barrionuevo, María Magdalena Jiménez; Gutiérrez, Leopoldo Gutiérrez. 2012. Transformational leadership influence on organizational performance through organizational learning and innovation. *Journal of Business Research* 65, pp.1040–1050
- Mumford, Michael D.; Hunter, Samuel T.; Bedell-Avers, Katrina E. 2008. Constraints on innovation: Planning as a context for creativity. *Multi-Level Issues in Creativity and Innovation (Research in Multi Level Issues, Volume 7)*, Emerald Group Publishing Limited, pg.191–200
- Murat Ar, Ilker and Baki, Birdogan. 2011. Antecedents and performance impacts of product versus process innovation. *European Journal of Innovation Management* Vol. 14 No. 2.p.p.172–206.
- Nevalainen, Timo and Maijala, Miia. 2012. Creative management in TAMK Proacademy. *Development and Learning in Organization*. Vol. 26. No.6
- Nonaka, Ikujiro. 1994. A Dynamic Theory of Organizational Knowledge Creation. *Organization Science/* Vol.5, No. 1.
- Parthasarathy, Rangarajan; Huang, Chenglei and Ariss, Sonny. 2011. Impact of Dynamic Capability on Innovation, Value Creation and Industry Leadership *The IUP Journal of Knowledge Management*, Vol. IX, No. 3, pg.59- 73.
- Phipps Simone T. A.; Prieto, Leon C. and Verma, Satish. 2012. Holding The Helm: Exploring The Influence Of Transformational Leadership On Group Creativity, and The Moderating Role Of Organizational Learning Culture. *Journal of Organizational Culture, Communications and Conflict*, Volume 16, Number 2, pg. 135–145.
- Pratoom, Karun & Savatsomboon, Gomom. 2012. Explaining factors affecting individual innovation: The case of producer group members in Thailand. *Asia Pac J Manag.* 29:1063–1087
- Porter, Michael E. 2008. Competitive Advantage (Keunggulan Bersaing) Menciptakan dan Mempertahankan Kinerja Unggul. (Tim Penerbit, alih bahasa). Tangerang : Karisma. Hal. 13–37.
- Reychav, Iris; Stein, Eric W.; Weisberg, Jacob; and Glezer Chanan. 2012. The Role of Knowledge Sharing in Raising the Task Innovativeness of System Analysts. *International Journal of Knowledge Management*, 8(2), pg.1–22.
- Rickards, Tudor and Moger, Susan. 2000. Creative Leadership Processes in Project Team Development: An Alternative to Tuckman's Stage Model. *British Journal of Management*, Vol.11, pg. 273–283
- Seidler-de, A.R. and Hartmann, E. 2008. The use of tacit knowledge within innovative companies: knowledgemanagement in innovative enterprises. *Journal of Knowledge Management*. Vol. 12 No. 1.
- Shahin, Arash & Zeinali, Zahra. 2010. Developing a relationship Matrix for Organizational Learning and

- Innovativeness: With A Case Study in a Manufacturing Company. *International Journal of Business and Management*. Vol. 5, No.7.
- Sharratt, Mark and Usoro, Abel. 2003. Understanding Knowledge-Sharing in Online Communities of Practice. *Electronic Journal on Knowledge Management, Volume 1 Issue 2*, pg. 187–196
- Teece, David and Pisano, Gary. 1994. The Dynamic Capabilities of Firms: an Introduction Industrial and Corporate Change, Volume 3, Number 3. 1994 USA
- Tsai, Kuan Chen. 2012. Creative Leadership for Directing Changes. *Business Management and Strategy* ISSN 2161-7104. Vol. 3, No. 2, pg76 –84
- Wang, Catherine L. dan Ahmed, Pervaiz K. 2004. The development and validation of the organisational innovativeness construct using confirmatory factor analysis. *European Journal of Innovation Management*; 7,4; ABI/INFORM Complete pg.303.
- Wang, Zhining dan Wang, Nianxin. 2012. Knowledge sharing, innovation and firm performance Expert Systems with Applications 39, 8899–8908.
- Williams, Felice and Foti, Roseanne J. 2011. Formally Developing Creative Leadership as a Driver of Organizational Innovation. *Advances in Developing Human Resources XX(X) 1–18*
- Zhang, Xiaomeng and Bartol, Kathryn M. 2010. Linking Empowering Leadership And Employee Creativity: The Influence of Psychological Empowerment, Intrinsic Motivation, and Creative Process Engagement *Academy of Management Journal*, Vol. 53, No. 1, pg.107–128.

Table 1 Characteristics of Respondents Silver Craft Industries in Bali

No.	Characteristics of Respondents	Quantity	Percentage
Age of Company			
1.	Less than 24	23	37,7
2.	Between 25 - 29	15	24,6
3.	Between 30 – 34	6	9,8
4.	Between 35 – 39	13	21,3
5.	Between 40 – 44	3	4,9
6.	More than 45	1	1,6
Gender			
1.	Male	45	73,8
2.	Female	16	26,2
Age of Respondent			
1.	Less than 29	1	1,6
2.	Between 30 - 34	3	4,9
3.	Between 35 – 39	2	3,3
4.	Between 40 - 44	13	21,3
5.	Between 45 - 49	19	31,1
6.	More than 50	23	37,7
Education level			
1.	Elementary School	1	1,6
2.	Junior High School	0	0
3.	Senior High School	30	49,2
4.	Diploma	5	8,2
5.	Bachelor degree	20	32,8
6.	Master degree	4	6,6
7.	Doctoral degree	1	1,6
Bussiness Experience			
1.	Less than 29	41	67,2
2.	Between 30 – 34	5	8,2
3.	Between 35 - 39	9	14,8
4.	Between 40 – 44	3	4,9
5.	Between 45 - 49	2	3,3
6.	More than 50	1	1,6

Table 2 Validity and Reliability Of Indicators

Variable	Indicator	KMO MSA	Note	Cron-bach's Alpha	Note	Significance
Innovation	Product innovation	0,921	Valid	0,927	Reliable	0,00
	Process innovation	0,892	Valid	0,927	Reliable	0,00
Creative Leader ship	Creative Ability	0,874	Valid	0,939	Reliable	0,00
	Motivational Inspirational	0,891	Valid	0, 897	Reliable	0,00
	Individualized consideration	0,847	Valid	0,867	Reliable	0,00
Knowledge Sharing	Knowledge donating	0,733	Valid	0,861	Reliable	0,00
	Knowledge collecting	0,801	Valid	0,902	Reliable	0,00

Table 3 Loading Factor, AVE, Composite Reliability

Laten	Sub Laten	Loading Factor	AVE	Composite Reliability	Cronbach's Alpha
Creative Leadership	Creative Leadership		0,6705	0,9770	0,9751
	Creative Ability	0,988	0,7317	0,9703	0,9665
	Inspirational motivation	0,938	0,7521	0,9238	0,8897
	Individualized consideration	0,937	0,6548	0,9045	0,8678
Knowledge Sharing	Knowledge Sharing		0,7308	0,9421	0,9261
	Knowledge donating	0,978	0,7841	0,9159	0,8623
	Knowledge collecting	0,968	0,7739	0,9112	0,8537
Inovasi	Innovation		0,7203	0,9709	0,9673
	Product Innovation	0,968	0,7911	0,9577	0,9466
	Process Inovation	0,973	0,7413	0,9524	0,9415

Table 4 R-Square Value and Commuality

Variable	R-Square	Commuality
Knowledge sharing (KS)	0,37	0,73
Innovation (INO)	0,66	0,72
Average	0,51	0,69

Table 5 Test Statistics Between Variables

Variable	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	Standard Error (STERR)	t statistics	Note
CL -> INO	0,13	0,1258	0,1269	0,1269	1,025	Non Sig
KS -> INO	0,4232	0,4326	0,09	0,09	4,7025	Sig
CL -> KS	0,6108	0,6049	0,0587	0,0587	10,4011	Sig
CL->KS -> INO	0,5303	0,4901	0,4189	0,2189	2,42261	Sig

Figure 1 Conceptual Framework

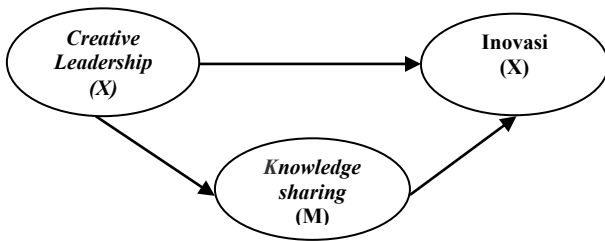


Figure 2 Indirect Relationship Between Creative Leadership To Innovation

