High-performance organizations’ acknowledge is of a great benefit to human resource management (HRM) practices that are closely related to a greater efficiency, flexibility, and innovation capabilities (Kalleberg, Marsden, Reynolds, and Knoke, 2006). To achieve the competitive advantage, organizations must have knowledge management and learning effectiveness. The success of the organization derives from the use of knowledge management through the sharing of knowledge between employees. The study aims to fulfill the issues regarding the relationship of HRM practices affect knowledge sharing behavior, with reciprocal benefits and knowledge self-efficacy. The relationship is expected to drive the knowledge sharing behavior among employees, which will affect the firm innovation capability and firm performance. This study has used a variety of theories to explain the relationship of phenomena; knowledge- based view theory, social exchange theory and expectancy theory.

**Keywords:** HRM practice, knowledge sharing behaviour, reciprocal benefits, knowledge self-efficacy, firm innovation capability, firm performance
Introduction
High-performance work organizations acknowledge are great benefit to human resource management (HRM) practices that are closely related to a greater efficiency, flexibility, and innovation capabilities (Kalleberg, Marsden, Reynolds, and Knoke, 2006). In particular, Minbaeva, Pedersen, Bjorkman, Fey, and Park (2003) found that HRM practices in particular affected the level of knowledge sharing in organization and was conductive to goal achievement. To achieve competitive advantage, organization must have knowledge management and learning effectiveness. The success of the organization derives from using knowledge management through knowledge sharing among employees. According to human resource management (HRM) practices affect individuals and their relationships. Meanwhile, encouragement relationships between employees are important to HRM practices of the company. Moreover, HRM practices are also a mechanism that affected knowledge management (Lengnick-Hall and Lengnick-Hall, 2003). This paper studied about motivated employees (reciprocal benefits and knowledge self-efficacy). There are factors that motivate the relationship between HRM practices and knowledge sharing behavior of employees. To explain HRM practices that affect knowledge sharing in the organization, this paper focused on the HRM practices that encourage employees to share knowledge. Prior research studied about the ability to absorb knowledge of the recipient, which build opportunities for knowledge sharing, such as Argote, McEvily, and Reagans (2003). This paper demonstrates about making a practice of human resource management, which is great help to encourage motivated employees to share knowledge among employees. Innovation capability is enhanced by knowledge sharing. This helps increase the organizations performance. This paper is different from the prior study that studies only HRM practices that affect the motivation of knowledge receivers. This paper presented a conceptual model of how HR practices affect knowledge sharing behavior through reciprocal benefits and knowledge self-efficacy, which is a knowledge sharing among employees, that enhanced the firm innovation capability and firm performance. This paper performed some critical contributions to the reflections to offer development among the relationship of HR practices that affect knowledge sharing behavior. First, contribution is to study the relevance of HR practices antecedents. Second, this study aims to offer new empirical evidence regarding the proposition relationship between HRM practices and knowledge sharing behavior while it also studies the moderating effect of reciprocal benefits and knowledge self-efficacy. The study aims to fulfill the issues relating to the relationship of HRM practices which affect knowledge sharing behavior, with reciprocal benefits and knowledge self-efficacy. Mediation of the relationship is expected to drive knowledge sharing behavior among employees, which will affect the firm innovation capability and firm performance.

To address these shortcomings, this study differs from previous studies with three notions and proposes a research model that has the interrelationships among three concepts and impacts on knowledge sharing behavior of employees. Specifically, the study investigates the following research questions:
Research Question 1: What are the causal relationships of HR practices that affect knowledge sharing behavior, reciprocal benefits, knowledge self-efficacy, firm innovation capability, and firm performance?
Research Question 2: How do HRM practices, reciprocal benefits, and knowledge self-efficacy influence knowledge sharing behavior?
Research Question 3: How do knowledge sharing behavior influence the firm innovation capability and firm performance, respectively?

This paper is structured as follows: First, the theoretical background is reviewed. Second, the literature and formulate research proposition are reviewed. Finally, the findings and suggestions for further research are concluded.

Literature Review and Theoretical Background
1. Theoretical background
This study used a variety of theories to explain the relationship of phenomena such as Knowledge-Based View Theory that to describe the phenomenon of the relationship between knowledge sharing that takes place among employees. The ability of the knowledge
can add the value to consider the organization a competitive advantage (Kankanhalli, Tan, and Wei, 2005). Expectancy Theory was used to describe the relationship of incentives for employees to encourage the exchange of relations, and employees who receive incentives are able to get success as well as the expected reward (Vroom, 1964). In addition, Social Exchange Theory is used to describe the relationship occurring within a relationship of interaction between individuals who create the exchange of ideas and opinions within the organization that regards the relationship on both personal and organizational levels (Chadwick-Jones, 1976). This study illustrates a conceptual framework which is shown in figure 1.

Knowledge-Based View Theory

Based on the knowledge based perspective, knowledge of organization is considered as one of the factors that are important for the organization to use it as a mechanism to create competitive advantage and sustainability. (Kankanhalli, Tan, and Wei, 2005). Many organizations take an interest in the development and implementation of knowledge management, which deals with the knowledge resources of an organization. The appearance of two-dimensions is based on both depth and breadth of knowledge, these factors are closely related to the content and structure of organizational knowledge. The breadth of knowledge refers to disseminated characteristics associated with the scope, space for storage of organizational knowledge, and the depth of knowledge refers to the level and complexity of knowledge that is essential to the organization (Bierly and Chakrabarti, 1996). The width dimension of knowledge, whose nature of knowledge is different from the depth dimension of knowledge reflects some characteristics of knowledge and the complexity that exist in the field of knowledge. Knowledge based is a great benefit for competitive advantage of organizations (De Luca and Atuahene-Gima, 2007).

Knowledge sharing creates a new mechanism for integrating factor involved in dissemination and synthesis of knowledge. Both occurrences within the individual and organization by process are the basis for knowledge management and knowledge implementation (Kale and Singh, 2007).

Social Exchange Theory

Social exchange theory for this study is used to describe the social aspects related to the sharing of knowledge that is important to social learning. Awareness, environment, and justice are associated with the willingness behavior to share their knowledge at a high level. If employees are aware of the unfairness, they will refuse the knowledge sharing. (Chadwick-Jones 1976; Gefen and Ridings 2002). As a result, willingness behavior to share knowledge is at a low level. Eisenberger, Huntington, Hutchison and Sowa (1986) used social exchange theory to describe individuals’ honesty and obligation to the organization which is official returns.

Social exchange theory discusses about the rewards that occur in an organization and they arise from the influence of behavior in workplace. Non-negotiable social exchange differs from non-negotiable economic exchange (Bock and Kim 2002). Social exchange is associated with a sense of individual obligation and trust. Social behavior is caused by exchanging processes and the relationship between the intention and the perception of fairness in the organization. Fairness or moral principles represent the view of

![Figure 1 The conceptual model in this study](image-url)
social exchange within the organization.

**Expectancy Theory**

Vroom (1964) began to develop expectancy theory by studying the application determined by the nature of the work. Expectancy theory is one theory that is of great benefit to create employee stimulus and motivation and add incentive to employees. The employees will make every effort to get the returns as expected. Expectancy theory is associated with a concept, based on the relationship of the effective function, and the effort depends on the returns they will receive. Expectancy is the cause leading employees to make every effort to receive the expected returns. There is achievement motive that leads employees to work effectively with superior performance. Expectancy theory is composed of three major reasons: valence refers to the value of the consideration received, instrumentality refers to operations that predispose to follow to receive rewards, and expectancy refers to the efforts of individuals to be recognized.

2. The Antecedent on knowledge sharing behavior

**HRM practices**

HRM practices is defined as the system, which is linked to the development, generating interest, attracting, and retaining staff to provide operational efficiency for both organizations and employee competitiveness (Schuler and Jackson, 1987). HRM practices are a series which links up with practices. These actions are to ensure getting human capital existing in the organization that contributes effectively to the organization growth (Delery and Doty, 1996). Minbaeva (2005) suggested considering HRM practices as a set of practices that used by organization to manage human resources, facilitate the development of competencies that are specifically firm, produce complex social relation and generate organization knowledge to sustain competitive advantage. These studies summarize that HRM practices link up an organization’s operation with employee performance to operate procedures and satisfaction planning. These provide a good stimulus and maintain relation between employee and organization. Kaše, Paauwe, and Zupan (2009) acknowledge that social networks are used or considering this study. They examinethe relationship among Human resource practices, knowledge sharing within the organizations, and interpersonal relationships, which are associated with the concentration of knowledge within the organization. The study also clarifies a point about structure that is closely related to HRM practices, such as training and job design, in which the relationships are found to be more positive direction to knowledge sharing within organizations.

Giauque, Anderfuhrren-Biget, Varone (2013) studied whether human resource management practices are associated with motivation. The information was collected from 3,131 Swiss cantonal employees public of??? who will be considered the antecedents of motivation towards recognition. To performance, HRM practices was found positive and significant to motivation. In addition, the results also suggest stronger predictors when employees are aware of organizational outstanding performance. While Bock, Zmud, Kim and Lee (2005, p. 91) approve that “every organization we interviewed had implemented monetary incentives, points towards promotion, or both as extrinsic motivators for knowledge sharing.” Frey (1997) found that employees feel that the incentives associated with higher levels of self-determination will affect the behavior of sharing knowledge of the demand, the creativity and learning levels. Several scholars argue that motivation has a positive effect on knowledge sharing (Cabrera, Collins, & Salgado, 2006; Mudambi, Mudambi, & Navarra, 2004).

**Reciprocal benefits**

Reciprocal benefits are defined as the factors that determine reciprocal beneficiaries of the person, and they are factors that cause the behavior of sharing (Bock et al., 2005). The basis of the unit constructing reciprocity is important, and the relevant of knowledge sharing is an aspect to consider “a public good where members of the community collectively contribute to its provision and all members may access the knowledge provided” (Wasko and Faraj, 2000: 161). Moreover, Bock, Zmud, Kim, and Lee, (2005:91) suggest that, “every organization we interviewed had implemented monetary incentives, points towards promotion, or both as extrinsic motivators for knowledge sharing”, as money refers to “a goal
which provides independent satisfaction of the actual activity itself” (Calder and Staw 1975: 599). Financial compensation and incentives granted to the employees are an extrinsic motivation of the organization to motivate employees to respond with satisfaction in their work. Under the stimulus to employees, employee behavior is affected. There is established link between coordination and extrinsic motivation in an organization; for example, a financial incentive is closely linked to achievement goals of organizations (Osterloh and Frey, 2000). The core characteristic of the employees that received external motivation is to express themselves through knowledge sharing behavior. Receiving expected reward from an organization, the employees are driven toward success in knowledge sharing. For example, Wang and Hou (2015) examine types of employee motivation on knowledge sharing behavior in 34 organizations from 259 employees. The studies studied both individual and organizational levels. Moreover, their studies found that the effect on soft reward, hard reward, and organizational benefits was correlated significantly with knowledge sharing behaviors and also demonstrated a perspective on the self-determination theory (SDT).

As a result, the following proposition is forwarded to describe the relationship between HRM practices and reciprocal benefits in this research.

**Proposition 1:** HRM practices are positively related to reciprocal benefits.

**Knowledge self-efficacy**

Knowledge self-efficacy is defined as the considerations of the the individual’s ability to be passed to the organization and arrangement practices to get the results that are specific (Bandura, 1986). Knowledge self-efficacy is something that gives employees motivation to encourage the sharing of knowledge to colleagues. (Wasko and Faraj, 2005). Deci (1975) suggested that “there is no apparent reward except the activity itself” (Deci, 1975, p. 23), he acknowledges that commitment to the work of employee will be promoted by intrinsic motivation. Employees are motivated by intrinsic motivation which is the recognition on the participation of the work and it affects the staff ‘s creativity and learning that promotes knowledge sharing to happen in the organization. However, when an employee has ambiguity of goal, it makes incomplete knowledge (Frey, 1997). Minbaeva (2008) suggested that there was the relationship between HRM practices and knowledge sharing; therefore, the study tested human resource management (HRM), associated with the sharing of knowledge within multinational corporations from 92 subsidiaries of Danish corporations within 11 countries. As a result, the following proposition is forwarded to describe the relationship between reciprocal benefits knowledge, self-efficacy and knowledge sharing in this research.

**Proposition 2:** HRM practices are positively related to knowledge self-efficacy.

**Knowledge sharing behavior**

Knowledge sharing behavior is defined as the behavior of individuals who have the knowledge and spread the information and knowledge to others within the organization, such as colleagues. Moreover, knowledge sharing behavior is defined as how to have access to the knowledge of the individual and how to create new knowledge to take place within the organization. These approaches are extremely important to the organization. (Cummings, 2004). Chou (2005) explained knowledge sharing as “to combine individual knowledge and social knowledge to form potential team knowledge” (p. 271). Szulanski (1996) acknowledges that “the movement of knowledge within the organization is a distinct experience, not a gradual process of dissemination, and it depends on the characteristics of everyone involved” (Szulanski, 1996: 28). Knowledge sharing within a multinational corporation is very important role because the multinational corporation required the sharing of knowledge from the corporate headquarters to the subsidiary. The study linked the sharing of knowledge within multinational corporation and it collected data from 359 subsidiaries of European, US, and Japanese. In addition, the study also showed strong support of different knowledge sharing within MNCs (Gupta and Govindarajan,
Knowledge management success depends on knowledge sharing. These studies show the quality of knowledge sharing that takes place in individual level and it is associated with interpersonal relationships and motivations. Also, these studies show a direction to research on knowledge sharing (Wang and Noe, 2010). However, Fishbach, Eyal, and Finkelstein (2010) conducted a study of negative impact of motivation on knowledge sharing behavior of sales staff. In addition, Barton, Sujan, and Sujan, (1986) conducted a research to study the motivation factors that may result in both positive and negative job performance of employees. However, this study also aims to study the impact of a positive motivating force for both external motivation and intrinsic motivation. There are many studies that have been conducted to study the positive impact of the relationship between motivation and behavior knowledge transfer. For example, Hsiu-Fen Lin (2007) studies the process related to knowledge sharing from 172 employees within 50 Taiwan organizations by using the structural equation modelling. His studies showed that the reciprocal benefits which are extrinsic motivation are significantly correlated with behavior intentions to knowledge sharing of employees. In addition, this study also proposed the structural self-determination perspective. Hsiu-Fen Lin (2007) collected data from 172 employees of 50 organizations in Taiwan and used structural equation modelling to test the hypothesis. They found that absorptive capacity has a positive effect on knowledge sharing and innovation capability. In addition, the study suggested that there should be studies with different samples. Wuryaningrat (2013) examined the relationship between knowledge sharing and absorbed knowledge that caused a changing of innovation capacity. The data were collected from North Sulawesi small and medium enterprises. The results showed that the accumulated knowledge of the organization had an effect on organizations’ innovation capabilities and absorptive capacity at a higher level. It would affect the knowledge sharing, and caused the change of innovation capabilities. Many scholars suggested that knowledge sharing be promoted by intrinsic motivation, with the level of knowledge sharing based on motivation or incentives relevant and related to the behavior of their employees to share knowledge (Gupta and Govindarajan, 2000). For example, Osterloh and Frey, 2000 examined the forms of knowledge and the types of motivation. Their studies suggested that intrinsic motivation had a positive effect on the knowledge sharing. Also, the studies demonstrated a perspective on the cognitive evaluation theory, psychological contracts, and crowding theory. Hsiu-Fen Lin (2007) acknowledged that the Knowledge self-efficacy is intrinsic motivation significantly correlated with the behavior intentions to knowledge sharing of employees. The study also proposed the structural
equation modelling of 172 employees within 50 Taiwan organizations and these demonstrated the theory of reasoned action (TRA).

As a result, the following proposition is forwarded to describe the relationship between reciprocal benefits and knowledge sharing behavior, and the relationship between Knowledge self-efficacy and knowledge sharing behavior in this research.

**Proposition 3:** Reciprocal benefits are positively related to knowledge sharing behavior.

**Proposition 4:** Knowledge self-efficacy is positively related to knowledge sharing behavior.

### 3. The Consequences of knowledge sharing behavior

#### Firm innovation capability and firm performance

In the firm competitiveness, it was found that innovation can make a difference from other firms. The correlation between the innovation and firm performance helped create significant results in economic. Every firm must have the unique ability that is difficult to copy. There is the difference of firm with specific characteristics such as new processes, new technology (Penrose, 1959). The firm innovation capabilities refer to the ability of the firm’s adaptation, firm’s absorption and firm’s transformation. There is a specific action and contribution to achieve organizational success. Many empirical experiments studied the relationship between innovation capability and firm performance that showed companies need for innovation capability that is able to get a sustainable competitive advantage. These views are also confirmed by research. For example, Calantone, Cavusgil, and Zhao (2002) examined the learning orientation components and knowledge sharing among organizations. The study collected data from 187 US industries, and found that learning orientation affected firm innovation; moreover, learning orientation was a key factor for innovation and firm performance. The results of the study supported all hypotheses. Kocoglu, Imamoglu, Ince, and Keskin (2012) found that from resource based view (RBV) of the firm and dynamic capabilities view (DCV). The study focused on learning, manufacturing and R&D capabilities which created the basis for the theory of technological learning. In addition, the study implications for future research can test hypotheses to expand literature on technology and innovation. Meanwhile, Akgün, Keskin, and Byrne (2009) examined relationship between organizational capability, product and process of innovation, and firm performance by collecting data from 163 Turkish firms. The organizational emotional capability, product and process of innovation, and firm performance had a positive relationship with both firm product and process innovativeness, and the relationship also demonstrated that organizational capability affected financial and market performance. Camison and Villar-Lopez (2014) used a resource-based view perspective as a framework. The data were collected from 144 Spanish industrial firms and structural equations were used for testing hypothesis. The results confirmed that organizational innovation including both organizational innovation and technological capabilities could generate the operating results and products that are superior to competitors’. Yeşil and Dereli (2013) conducted studies about the relative organizational justice and the role of knowledge sharing on innovation capability. The data were collected from three organizations in Turkey and it was found that there was a strong relationship between the influence of organizational justice and the sharing of knowledge that was associated with innovation capability.

As a result, the following proposition is forwarded to describe the relationship between knowledge sharing and firm innovation capability, and the relationship between firm innovation capability and firm performance in this research.

**Proposition 5:** Knowledge sharing is positively related to firm innovation capability.

**Proposition 6:** Firm innovation capability is positively related to firm performance.

### Conclusions

This study aims to examine the relationships between HRM practices, reciprocal benefits, knowledge self-efficacy, knowledge sharing behavior, firm innovation capability and firm performance. This paper addressed HRM practices which affect knowledge sharing behavior, reciprocal benefits and knowledge self-efficacy. The relationship is expected to drive the knowledge
sharing behavior among employees which will affect the firm innovation capability and firm performance. Therefore, this study provides a theoretical model to explain differences in individual knowledge sharing behavior and is also a response to practical knowledge sharing within the context of organizations.

**Theoretical Contribution**

This study can help gain more understanding of the relationships between HRM practices that influence reciprocal benefits, knowledge self-efficacy, knowledge sharing behavior, firm innovation capability and firm performance. HRM practices highlighted the importance of management and operational context which demonstrates the uniquely theoretical contributions and extends the HRM practice literature by incorporating strategic management and operational fields. Drawing on knowledge-based view theory, social exchange theory, and expectancy theory, this study makes several major contributions. First, the study provides an explanation for the consistent results found in previous researches regarding the effects of HRM practices on knowledge sharing behaviors. Second, although some scholars have argued that knowledge sharing opportunities and motivations are critical facilitators in the knowledge transfer processes, this paper uses expectancy theory to describe the relationship of incentives to employees to encourage exchange relations that offer a conceptual framework that knowledge sharing motivations and opportunities simultaneously play mediating roles in a successful knowledge sharing. Third, knowledge is stored by the members of an organization. Social exchange theory of this study has been used to describe the social aspects related to the sharing of knowledge.

**Managerial implications**

The study on mainly managerial implications is especially for chief executive officers, managers, or entrepreneurs. The findings show the importance of HRM practices using both motivations and opportunities for knowledge sharing behavior. However, performance appraisals and compensation systems using knowledge sharing considerations are essential for generating motivations and opportunities because they provide repatriation with incentives to share knowledge. Moreover, building trust and collaborative relationships among employees are good ways to increase knowledge sharing. Strong social networks can value and support individual contributions.

**Limitations and suggestions for further research**

This study notes some limitations. The sharing and utilization of knowledge are a critical issue for the organization with multilevel characteristics. This framework focuses on the functions of HRM practices to facilitate the knowledge sharing behavior. Future studies should include these factors and use multilevel techniques (for example, hierarchical linear models) to test multilevel frameworks.

**References**


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