

# The Effect of Knowledge Sharing Behaviour in Influencing Knowledge-Based Economy

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*With the advent of the economy knowledge age, knowledge has become the fundamental means of wealth creation and prosperity and the most important driving force for business success. As a result, skilled workforce has been recognized as the engine of growth to support the knowledge-based economy and to ensure the permanence of innovative organizations. This article aims to provide an overview on the effects of knowledge sharing on knowledge economy by critically reviewing past literature published to date on knowledge sharing behaviour in highly competitive environments or in which knowledge has high commercial value due to the dilemma resulting from contradictory incentives to share or to withhold knowledge.*

**Keywords:** Knowledge, knowledge sharing, knowledge economy

## 1. Introduction

The knowledge economy is the latest development in global economic reengineering. The world has undergone massive transition from being an agricultural economy to industrial economy to post-industrial or mass production economy and presently to what we know today, the knowledge economy. Traditionally, the drivers of economic growth and wealth creation in organizations lay in the domain of the tangible assets such as land, building, and financial capital.

Knowledge economy is a system of consumption and production that is based on intellectual capital (Yang, 2007; Felin et al, 2009). The knowledge economy is evident by technological advancements and the globally competitive need for innovation. It is further characterized by being highly dependent on technology and human capital. In the knowledge economy, organizations are driven by the interaction between employees in the exchange of knowledge in pursuit of innovation (Powell and Snellman, 2004). The vigour of the knowledge-based economy and its relationship to traditional economics is visibly reflected in the emergent of the information society.

Globalization, the evolution of technology, and the advancement of information technology are the dynamics of the knowledge economy. These dynamics have caused massive changes in organization behaviours that shift the focus to innovative and knowledge-driven organizations (Yu et al, 2013) which also explain the importance of knowledge in the workplace and the basis why the nature of work has fundamentally changed. With the advent of the knowledge economy age, knowledge has become the source of inseparable imperative strategy of organizations that drives advantages to them (Yazhou and Jian, 2013).

The intelligent use of knowledge to generate tangible and intangible economic values (Connell and Voola, 2007) is an important element of the knowledge economy. In a knowledge economy, a significant part of an organization's value is consisted of intangible assets. Intangible assets of an organization are denominated by the value of an organization's workers' knowledge or intellectual capital (Yang, 2007). Workforce in the knowledge economy is depicted as specialized, computer-literate, and well-trained.

As a fundamental economic renewable, knowledge does not deplete by use. In fact, its importance and significance towards organizational development increases over the years when knowledge is retained within the organization (Arif et al, 2009). It is therefore, imperative that organizations invest in knowledge and a sound management of knowledge sharing initiative to face today's challenges and to increase the performance capacity of organizations. Since these investments in knowledge are characterized basically by increasing, rather than by decreasing returns, investments in knowledge and knowledge sharing initiatives are keys to long-term economic growth for organizations that industriously invest in them (Yazhou and Jian, 2013).

Employment in the knowledge-based economic era is distinguished by demand for high-skilled workers as the engine of growth for organizations. High-performance organizations are placing greater importance on worker qualities such as initiative, resourcefulness, enterprising, creativity, problem-solving, and openness to change, resulting in educated and skilled workforce more valuable and unskilled workers less valuable. These high-performance organizations are willing to pay premiums for the skilled workers, marking the knowledge-based economy with increased labour market demand for more highly skilled workers who in return enjoy higher

wage premiums (Powell and Snellman, 2004; Felin et al, 2009; Wang et al, 2012).

Therefore, our first objective is to *demonstrate the significant importance* of ensuring knowledge continuity for business success through knowledge sharing initiatives and how knowledge sharing interacts with the various knowledge management perspectives and phenomena in a knowledge economy. With the gigantic shift in the knowledge economy climate, the nature of knowledge sharing for modern workers is likely to encounter change as well. Hence, our second objective is to better *guide the use of knowledge sharing in the workplace*.

In summary, the value of this work is in synthesizing the effects of knowledge sharing on knowledge economy. This paper *starts* with an overview of the literature on knowledge sharing and provides a detailed analysis of different conceptualizations of knowledge sharing. Then, we *review* how knowledge sharing has been conceptualised and measured. Based on our review, we provide guidelines to aid future application in the study of knowledge sharing phenomena. The paper ends by proposing how researchers can use this construct to *advance further* understanding of the knowledge sharing phenomena.

## 2. Literature Review

### Knowledge

*Knowledge sharing* and *knowledge economy* are intimately related through the concept of *knowledge*. Being one of the most strategic resources in organizations, knowledge is defined by Al-Alawi et al (2007) as a combination of experiences, values, contextual information and expert insights that help evaluate and incorporate new experience and information. Knowledge, however, differs from data and information (Cecez-Kecmanovic, 2000). Knowledge, according to Konstantinou and Fincham (2010), is synonymous with the ability to function and prosper in the job.

Past literature view knowledge as an object and the main resource for products and services (Connell and Voola, 2007; Cao and Xiang, 2012; Yu et al, 2013), whereas others look at knowledge as a process (Ahmad and Daghfous, 2010), a business transaction process (Barachini, 2009), a business objective to create business value (Coakes, 2006), and that knowledge is situation-dependent and context sensitive (Bennet and Bennet, 2007).

Information and knowledge are not possessed by the organization per se, but rather by the individuals within it (Cecez-Kecmanovic, 2000). Apart from the literature on knowledge sharing, literature from the areas of knowledge economy (Powell and Snellman, 2004; Felin et al, 2009), knowledge management (Darroch, 2003; Nonaka, 2007; Chen, 2009; Jayasingam et al, 2010; Konstantinou and Fincham, 2010; Hana, 2012; Wang et al, 2012; Yazhou and Jian, 2013), organizational learning (Chang and Lee, 2007; Yang, 2007; Chiou and Chen, 2012), and organizational citizenship behaviour (Al-Zu'bi, 2011; Kabasakala et al, 2011; Lathalavanya and Thenmozhi, 2011; Ramasamy and Thamaraiselvan, 2011; Lee et al, 2013), all contribute to the notion that knowledge in organizations resides within individuals.

Knowledge is created through interaction between individuals at various levels in the organization. Knowledge not only exists in documents and repositories, but over time it becomes embedded in people's minds and is demonstrated through their actions and behaviours (Al-Alawi et al, 2007). Knowledge can be found at three different levels in any organization, that is, at the individual level, the group level, and the organizational level. As a result, this can challenge efforts to define, measure and manage knowledge (Ipe, 2003; Chalkiti, 2012; Amayah, 2013).

Christensen (2007) discloses that there are four forms of knowledge comprising of professional knowledge, coordinating knowledge, object-based knowledge and know-who. This knowledge can be characterized as explicit knowledge and tacit knowledge. A distinction is often made between explicit knowledge that can be acquired from documents and repositories (Arif et al, 2009), and tacit knowledge that is obtained on the job and resides with the individuals as know-how and experience (Nonaka, 2007).

Explicit knowledge is easy to codify, transmit, and share since it is formal, systematic and can be expressed in a language and stored in a document. Tacit knowledge is hard to communicate and formalize due to its personal quality. Tacit knowledge, acquired and embedded within the employees concerned by learning and experience, is often the most valuable knowledge asset yet often the most difficult to document, manage and share (Nonaka, 2007; Chen, 2009; Chalkiti, 2012; Borges, 2013).

Knowledge is the core resource of competitive advantage and crucial to the long-term sustainability and success of organizations facing fast industrial and technological shifts (Yu et al, 2013). Naturally, knowledge is increasingly being recognized as a critical asset to organizations and its relative importance has progressively been growing over the last few years (Yang, 2007). Knowledge that is embodied in human capital has always been central to organizational development as a business product and a productive asset (Bennet and Bennet, 2007). The concept of knowledge as a business product and a productive asset supports the creation of knowledge by organizational employees will encourage employees to transfer and better utilize their knowledge in line with the organizational goals (Bennet and Bennet, 2007; Borges, 2013).

The commercial value of knowledge has been acknowledged by both the individuals and the organizations they work in (Geiger and Schreyogg, 2011). Organizations cannot create knowledge without individuals and

unless individual knowledge is shared with other individuals and groups, knowledge is likely to have limited impact on organizational effectiveness (Ipe, 2003) and knowledge economy. Various business organizations have also started to realize the fact that knowledge will become the key resource for business organizations wanting to create core values (Chang and Lee, 2007).

The notion of knowledge as the most valuable resource of modern organizations that spurs economic growth makes the sharing of organizational knowledge within organizations as being critical for the organization's ability to leverage and use knowledge resources appropriately (Geiger and Schreyogg, 2011). However, there is still much to be learned and understood about how knowledge is created, shared, and used in organizations in a knowledge economy.

### 3. Knowledge Economy

Knowledge economy is defined as an economy based on creating, evaluating and trading knowledge (BusinessDictionary.com). Powell and Snellman (2004) define knowledge economy as production and services, based on knowledge-intensive activities that contribute to an accelerated pace of technical and scientific advance as well as rapid obsolescence. The key component of a knowledge economy, adds Powell and Snellman (2004), is a greater reliance on intellectual capabilities than on physical inputs or natural resources. Nonaka (2007), Bennet and Bennet (2007), Ma et al (2008), and Borges (2013), concur in agreement that the key distinguishing feature of the knowledge economy is the allocation of a more systematic exploitation of knowledge, in particular tacit knowledge embedded in the minds of the workers.

The knowledge economy consists of innovative organizations reorganizing work to allow them to handle, store, and share information through effective knowledge sharing processes (Powell and Snellman, 2004; Felin et al, 2009). The knowledge economy directly relates to the knowledge generated and possessed by the organization members. A knowledge organisation is one that is able to engage in continuous learning and innovation. At the heart of a knowledge-based economy organisation is its management of knowledge, as an individual, group and organisational phenomenon (Cecez-Kecmanovic, 2000).

Organizations that can generate and effectively manage their own unique knowledge and competitive advantages (Ma et al, 2008) are crucial to the knowledge economy. According to Wang et al (2009), effective management of knowledge is an organization's relative propensity to build on its achieved wisdom (organizational memory) as well as the propensity to share (knowledge sharing), assimilate (knowledge absorption) and be receptive to new wisdom (knowledge receptivity). This is why managing knowledge effectively and strategically through a knowledge sharing process that comprises knowledge acquisition and creation, knowledge dissemination, and the use or responsiveness to knowledge within and between organisations (Darroch, 2003) should become a key measure of successful knowledge economy.

The process of establishing and implementing knowledge sharing practices can facilitate creating new knowledge (Yu et al, 2013). As organizations provide opportunities for their workers to share their experiences, new knowledge, and perspectives with others, knowledge sharing can help intensify knowledge economy (Yang, 2007). When employees are more involved in knowledge sharing, they will internalize a greater amount of knowledge. Konstantinou and Fincham (2010) are of the opinion that by combining the information and experience of different individuals and groups means that organizations can create new knowledge and then accumulate and distribute the new knowledge as a more widely available resource to inform practice. This newly created knowledge becomes organizational knowledge (Yang, 2007) which institutionalizes the knowledge economy.

Successful management of knowledge should emphasize knowledge sharing as it is the core and basis of knowledge economy. A socio-technical approach in managing knowledge is required where the social aspects of knowledge sharing need to be considered alongside the technical aspects (Coakes, 2006) because effective management of knowledge sharing is critical to business success and performance achievement (Ipe, 2003; Amayah, 2013).

The final purpose of knowledge, sharing, no matter the perspectives, is to develop skills and competencies, support competitive advantages, and increase organizational value (Mueller, 2012; Yazhou and Jian, 2013) that will eventually lead to faster knowledge deployment to portions of the organization that will greatly benefit from it (Al-Alawi et al, 2007). Therefore, it can be argued that the vital process underlying knowledge economy is that of knowledge sharing.

### 4. Knowledge Sharing

Christensen (2007) defines knowledge sharing as the process intended at exploiting existing and accessible knowledge in order to transfer and apply this knowledge to solve specific tasks better, faster and cheaper than they would otherwise have been solved. Similarly, Yang (2007) defines knowledge sharing as a transfer process where individual competencies are developed through sharing and learning from others. Knowledge sharing is defined by Yu et al (2013) as an element that stimulates an organization to create knowledge and to convert it

into greater strength. Likewise, Connelly and Kelloway (2003) define knowledge sharing as a set of behaviours that involves the exchange of information or assistance to others as sharing contains an element of reciprocity. Echoing the same sentiment is Ipe (2003) who defines knowledge sharing as the art of making knowledge available to others within the organization.

There exist many different perspectives on the importance of knowledge sharing in the organizations in the literature. Previous literature shows that knowledge sharing is a key as well as a challenge to business performance, both in theories and in practice (Wang et al, 2012; Yazhou and Jian, 2013). A surge of interest in the research on knowledge sharing has partly been induced by the recognition that resources have been deployed inefficiently in the past (Darroch, 2003; Chang and Lee, 2007; Chiou and Chen, 2012; Yazhou and Jian, 2013). Much research has investigated the individual and organizational factors that might influence whether a worker will be willing to share knowledge with a colleague or engage in knowledge sharing (Al-Alawi et al, 2007; Ling et al, 2008; Barachini, 2009; Fathi et al, 2011; Chen et al, 2012; Amayah, 2013; Connelly et al, 2013). Some authors have investigated whether knowledge sharing is affected by a belief that this information is owned by the organization or that the knowledge is valuable (Ahmad and Daghfous, 2010; Burke, 2011; Casimir et al, 2012; Mueller, 2012; Borges, 2013).

Knowledge sharing in dynamic labour environments is a result from a combination of organisational and individual factors. People and people-related factors are found to be critical to knowledge sharing processes within organizations (Coakes, 2006; Chiu et al, 2011). There is increasing recognition of the role of individuals in knowledge sharing and a growing interest in the ‘people perspective’ of knowledge in organizations (Connelly et al, 2013; Chalkiti, 2012). Knowledge sharing also does not occur in isolation. Instead, knowledge sharing extends from an individual to a group and then to an organization. At the heart of the people perspective of knowledge sharing is the notion that individuals in organizations have knowledge that must move to the level of groups and the organization as a whole so that it can be used to advance the goals of the organization (Ipe, 2003).

According to Yang (2007), knowledge sharing is a continuous transformation process of transferring individual knowledge to organizational systems that result in the prevention of knowledge depreciation and the reinforcement of organizational capabilities and effectiveness. Foremost at the individual level, an effective sharing process enables individuals to think about sharer’s ideas and insights and learn from them, resulting in the enlargement of individual capabilities. People within an organization, by way of sharing their thoughts, beliefs, knowledge, and experience, mutually establish their common understandings.

These findings are supported by a study by Chalkiti (2012) who found that both organisational and individual factors support knowledge sharing in the dynamic labour environment. According to Yu et al (2013), knowledge sharing can be analyzed on two levels, that is, the individual level and the organizational or group level where an individual’s knowledge sharing behaviour is affected by the individual, the group, and the organization. Even though knowledge sharing within organizations is a multifaceted, complex process, the findings by Ipe (2003) support the facts that organizations are made up of a set of individuals whose interactions are central for understanding organizations and social systems. The sharing of individual knowledge is imperative to the creation, dissemination and management of knowledge at all the other levels within an organization.

The findings by Fathi et al (2011) indicate the increasing importance of knowledge sharing among employees which has gained grounds in organizations today. It is accepted that “willing to share participants” is the key factor for a successful implementation of any knowledge sharing process. The importance of the willingness of organizational members to share knowledge to organizations today is also echoed by Ling et al (2008). Being a critical driver of productivity and economic growth leads to a new focus on the role of human capital in sharing knowledge (Felin et al, 2009). Understanding human behaviour is critical for knowledge-sharing initiatives to work (Chatzoglou and Vraimaki, 2009) as the success of knowledge sharing initiatives depends on the willingness of organizational members to share their knowledge.

### To Share or Not To Share Knowledge

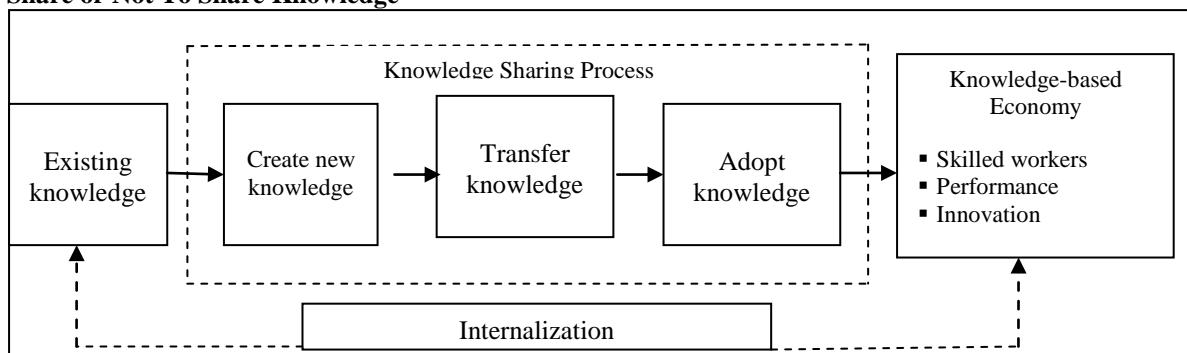


Figure 1 Knowledge Sharing Process

Theoretically, the knowing process is composed of creating, storing, retrieving, transferring, and sharing components that have a reciprocity relationship (Connelly and Kelloway, 2003; Yang, 2007). In general terms, knowledge sharing is the activity of transferring or disseminating knowledge from one person, group or organization to another (Ma et al, 2008; Chen, 2009). People knowledge enables their adaptation to multiple levels which in turn helps them to share knowledge with peers irrespective of labour instability (Chalkiti, 2012). Figure 1 illustrates the knowledge sharing process in a knowledge-based economy.

A primary objective of knowledge sharing initiatives and practices is to facilitate effective knowledge sharing among organizational members (Cheng et al, 2009). First and foremost, understanding the factors that influence individuals' behaviour toward knowledge sharing in the organizational context is crucial for the successful implementation of knowledge sharing initiatives (Chatzoglou and Vraimaki, 2009) since there present many contributing factors that lead to the intention to share or withhold knowledge among employees. Values such as supportive, collaborative, and team-oriented behaviours are more likely to encourage employees to share knowledge, compared to organizational cultures oriented towards individual results (Barachini, 2009; Mueller, 2012; Amayah, 2013). Socialization, externalization, combination and internalization have also been identified as conducive to knowledge sharing (Yu et al, 2013). Other critical success factors of knowledge sharing include interpersonal trust, communication between staff, information systems, reward system and organizational structure (Al-Alawi et al, 2007; Fathi et al, 2011).

Organizations can help employees to create and share knowledge by having a consensual culture, valuing organizational coherence, and maintaining a harmonious atmosphere through discussion, participation, and knowledge sharing (Yu et al, 2013). It is widely accepted that employees who value social relationships and social resources tend to view knowledge as a collectively owned commodity (Borges, 2013; Burke, 2013). As such, their knowledge sharing behaviour reflects the model of reciprocal social exchanges (Casimir et al, 2012) and sharing of best practices (Christensen, 2007).

Amayah (2013), for a start, indicates that there are three categories of motivating factors that have an impact on an individual's willingness to share knowledge with other employees. The motivating factors include personal benefits, community-related considerations, and normative considerations. The findings by Borges (2013) indicates that hardworking, responsible, and introverted employees tend to share their knowledge when they feel they are in a supportive and team-oriented environment, are not overly threatened by competitiveness, and experience good social interactions in the workplace.

A sense of community helps an organization to implement a more collaborative and team-oriented culture which in turn helps to encourage knowledge sharing (Borges, 2013). Project team leaders, as well as members, share knowledge with other project teams by transferring boundary objects, interchanging team members and directly interacting (Mueller, 2012). Cheng et al (2008) observes that trust is the pivot of the factors influencing knowledge sharing. Coakes (2006) meanwhile emphasizes that technology can assist to alleviate issues arising from incentives to share or withhold knowledge, and provide the organisations with ways to share and distribute knowledge throughout their processes, sites and workforces.

The findings by Ling et al (2008), Jayasingam et al (2010), Ma et al (2008), and Chang and Lee (2007) show that top management support is vital to ensure the success of knowledge sharing initiatives in organizations. However, according to Mueller (2012), knowledge sharing still takes place even though top-management does not include knowledge sharing processes in the formal work organization.

One of the most effective methods to promote knowledge sharing is to link it with rewards and performance appraisal (Wang et al, 2012; Al-Alawi et al, 2007; Amayah, 2013; Cockrell and Stone, 2010). Cockrell and Stone (2010) surmise that financial incentives and the quality of knowledge-sharing motivation fully mediate knowledge sharing. The study by Chen (2011) discovers that relationship conflict on knowledge sharing is weaker when reward is high compared to when it is low, and the negative effect of relationship conflict on knowledge sharing is weaker when reputation is high compared to when it is low. Even though the incentive mechanism is a significant predictor of a member's motivation to obtain knowledge, however, the incentive mechanism and motivation do not positively affect a member's satisfaction that causes an employee to engage willingly in knowledge sharing with others (Chen et al, 2012).

In contrary, in highly competitive environments or those in which knowledge has high commercial value, there also exists a dilemma resulting from contradictory motivations or incentives to either share knowledge, or, to withhold knowledge (Cockrell and Stone, 2010; Chen et al, 2012). The fast growth of new organizations and the increasing diversification of operations by many large organizations have unwittingly created a situation where businesses are not effectively sharing their internal knowledge and experience (Ahmad and Daghfous, 2010). Despite having a knowledge sharing strategy in place and there exists a growing awareness of the benefits of knowledge sharing in the organization, Ling et al (2008) argues that not all employees are willing to share knowledge.

The decision by organizational members not to share knowledge in organizations is found to be challenging for various reasons. Organizations need to understand that the creation of organization-wide knowledge assets might jeopardize knowledge ownership and occupational identity (Konstantinou and Fincham, 2010).

Dysfunctional knowledge sharing can subsequently be a threat to an organization's goals and control system. When employees perceive that the knowledge they possess as a valuable commodity, knowledge sharing becomes a process mediated by decisions about what knowledge to share, when to share, and whom to share it with (Ardichvili et al, 2006).

According to Cockrell and Stone (2010), there are two problems identified from the perspective of organizational control that can hinder organizational knowledge sharing. These include withholding useful knowledge, a Type I error, and sharing feigned, useless, or pseudo-knowledge, a Type II error. Withholding knowledge from those considered as competitors is often regarded as being useful in attaining one's goals (Al-Alawi et al, 2007; Connelly et al, 2013).

Knowledge sharing, in the first place, is typically voluntary. According to Connelly and Kelloway (2003), although knowledge sharing must be voluntarily, it is not necessarily spontaneous. Effective knowledge sharing is therefore challenging for organizations to implement because employees cannot be compelled to voluntarily share knowledge. Chen (2011) contends that most knowledge owners are unwilling to share their most important knowledge assets with others. The reason behind the unwillingness is that knowledge sharing after all is discretionary employee behaviour (Barachini, 2009; Chen, 2011; Chiu et al, 2011).

It is well-known that organization members may hesitate in sharing their knowledge, particularly key knowledge, in pursuit of individual benefits. Too much competition also does not promote knowledge sharing (Barachini, 2009). According to Connelly et al (2013), people who perceive significant time pressure are less likely to share knowledge while trait competitiveness predicts perceived competition. This and low task self-efficacy create a sense of time pressure, which in turn lead to people feeling too busy to share their knowledge when it is requested. In addition, most people associate knowledge with power and their promotion opportunities and individual employee is aware that they can use knowledge for both control and defense (Ardichvili et al, 2006; Ahmad and Daghfous, 2010).

The study by Ma et al (2008) reveals that explicit knowledge promotes knowledge sharing while tacit knowledge creates barriers to knowledge sharing in project teams. Employees' tacit knowledge, by its very nature, is difficult to transfer which in return may hinder knowledge sharing (Nonaka, 2007; Ma et al, 2008). Organizations can manage knowledge resources more effectively only if employees are willing to share their knowledge, particularly tacit knowledge, with colleagues (Bennet and Bennet, 2007; Nonaka, 2007). In organizations where an individual's tacit knowledge becomes his or her primary source of value to the organization, sharing this knowledge might potentially result in diminishing the value of the individual, creating a reluctance to engage in knowledge sharing activities that may eventually lead to knowledge hoarding instead of knowledge sharing (Nonaka, 2007; Benet and Bennet, 2007).

Regardless of the level from which knowledge sharing emanates, it is still derived from individual motivation. According to Chatzoglou and Vraimaki (2009) and Amayah (2013), intention to share knowledge is largely influenced by employees' attitude toward knowledge sharing, followed by subjective norms. Although employees perceived knowledge sharing as a mandated part of their job, their different employment motivations suggest different attitudes towards knowledge sharing (Chalkiti, 2012). Therefore, it is important that resistance to knowledge sharing must be overcome, knowledge exchange must be encouraged, and well-developed knowledge sharing systems need to be developed (Chen et al, 2012).

## **5. Effects of Knowledge Sharing on Knowledge-Based Economy**

The need for workers to acquire a range of skills and to continuously be able to adapt and utilize these skills at the workplace that is consistent with innovation underlies the knowledge economy. In addition, new issues will arise and need to be addressed regarding the implications of knowledge sharing on knowledge economy, particularly with regards to the employment and employability of workers, as well as, the role of organizations in the development and maintenance of the knowledge base in the organizations (Felin et al, 2009).

Knowledge capital and effective management of knowledge are today the biggest competitive advantage for innovative organizations and knowledge economy (Powell and Snellman, 2004; Yu et al, 2013; Yazhou and Jian, 2013). Organizations are increasingly aware of the advantages of sustaining the process and sources of generating new knowledge and that the collective value of knowledge assets increases with sharing (Ahmad and Daghfous, 2010). The more knowledge capital is transferred to organizational assets, the greater the degree of strength of organizational capabilities will become (Yang, 2007). As an integral part of the overall corporate strategy, effective management of the organizational knowledge can increase shareholder value (Ma et al, 2008; Chatzoglou and Vraimaki, 2009).

Knowledge sharing is important as an engine of economic growth for organizations (Cockrell and Stone, 2010) to gain a competitive edge. Knowledge sharing is highly causative to knowledge economy given that knowledge resources yield high returns, is rare and difficult to imitate or substitute. While traditional economies used to rely on tangible assets such as land and capital, today's economy has evolved to treat knowledge as a primary resource to value creation (Al-Alawi et al, 2007; Connell and Voala, 2007),

heterogeneity (Cao and Xiang, 2012), and one of the building blocks of successful businesses (Burke, 2011) on which competitive advantage rests (Ma et al, 2008; Fathi et al, 2011; Amayah, 2013). The knowledge economy view considers knowledge-based organizations as a set of knowledge assets (Nonaka, 2007; Powell and Snellman, 2004; Felin et al, 2009), and the role of the organization in creating and deploying these assets is to create value (Connell and Voola, 2007).

Knowledge sharing provides a link between individual and the organization by moving knowledge that resides with individuals to the organizational level where it is converted into economic and competitive value for the organization (Ipe, 2003). Ma et al (2008), Chen (2009), and Borges (2013) believe that knowledge sharing is about passing knowledge on in order to receive back. According to Yang (2007), knowledge sharing enables managers to keep the individual learning flowing throughout the entire organization and integrating it for practical applications. For that reason, the process of knowledge sharing help foster innovation by encouraging the free flow of ideas, understanding the market demands and customers' needs, and encouraging the development of both vision and strategies (Powell and Snellman, 2004; Ahmad and Daghfous, 2010).

Knowledge sharing enables organizations to either create new knowledge by differently combining existing knowledge or to become better at exploiting existing knowledge (Christensen, 2007). In this regards, organizations can create new values to improve development and growth through knowledge sharing and interactions among employees across departments where these values will have a positive effect on producing new products or improving services (Chen, 2009). Coakes (2006) notes that knowledge sharing can help organizations to create, capture, organize, access and use the intellectual asset of the organization in order to provide the user of knowledge with the ability to acquire, document, transfer, and apply the said knowledge.

Other significant contributing factors of having employees sharing their knowledge with each other include knowledge sharing allows employees to solve increasingly complex and ambiguous problems and improves decision making at an individual and organizational level. Commitment to sharing stressed many straight forward functional reasons. Among them are to either support the team, to avoid re-inventing the wheel, and to enable others with different expertise to work on a problem, learn from others' experiences and improve their own performance (Connelly et al, 2013).

The joint knowledge of many individuals is aggregated up to the organization-level knowledge (Chatzoglou and Vraimaki, 2009). The ultimate value of knowledge to knowledge organizations in particular, and knowledge economy in general, comes from the willingness of the organizational members to share the knowledge with one another and the ability of the organizations to retain the knowledge within the organizations (Felin et al, 2009; Amayah, 2013). The willingness of the organizational members to share knowledge allows organizations to exploit the unique properties of knowledge for business success (Burke, 2011; Yazhou and Jian, 2013).

The most critical implication of knowledge sharing facing organizations ultimately is to retain knowledge within the organization due to employees who leave the organization through retirement, resignation, or due to any other reasons. When certain individuals leave, knowledge leaves the organization with them (Arif et al, 2009), thus, rendering the performance of the whole organization to suffer. Retaining as much knowledge continuity as possible ensures the minimum of amount change. According to Ma et al (2008), the inability to share knowledge, particularly key knowledge, often lead to huge loss of valuable organizational knowledge once the key employee retires or leaves the organization, turning the knowledge generated in the organization less useful. Although efforts have been taken by organizations to encourage knowledge sharing activities in order to retain knowledge within the organizations, it is often more difficult for organizations to engage employees in knowledge sharing.

Organizations should therefore include knowledge sharing strategies to support collaboration between employees, build competencies, enhance employee retention rates and minimize the negative effects of brain drain whenever employees leave the firm (Fathi et al, 2011). Understanding the employees' competencies is one of the knowledge sharing strategies for maintaining organizational productivity. Organizations can motivate or encourage their employees to engage in knowledge sharing strategies by promoting knowledge sharing almost immediately between employees. New employees might often require more than just a formal orientation to the organization and training for their job. They may need to adapt to a new destination in which their usual support networks are different and they are exposed to different situations (Chalkiti, 2012). As more individual intellectual capital is transferred to organizational assets, the greater the degree of strength of organizational capabilities will become (Ipe, 2003).

Organizations need to adopt and manage knowledge as a successful knowledge sharing initiative enables an organization to become more innovative, better coordinated in its efforts, rapidly commercialize new products, anticipate surprises, become more responsive to market change and reduce the redundancy of the knowledge (Burke, 2011). The new model of knowledge sharing involves people and actions (Al-Alawi et al, 2007). The recognition of knowledge as the key resource of today's organizations affirms the need for processes that facilitate the creation, sharing, and leveraging of individual and collective knowledge (Ipe, 2003). The key to successfully managing knowledge is now being seen as dependent on the connections between individuals

within the organizations (Ipe, 2003). Effective knowledge sharing includes a range of practices to identify, create, represent, and distribute knowledge within an organization provides a vital resource for organizations as they move forward (Ahmad and Daghfous, 2010).

While it is well understood that knowledge resides in individual people, it is less understood that it resides in groups and organisations as well. When knowledge is created and shared within a group, it becomes *collective knowledge* which enhances the group's ability to deal with problems and situations. With collective knowledge, a group or an organisation can undertake activities or resolve problems that no single individual, however knowledgeable, would be able to achieve (Cecez-Kecmanovic, 2000).

Effective management of knowledge within and across departments and teams is hence necessary for the success of an organization depends on effective knowledge sharing (Chen, 2009; Mueller, 2012). Effective knowledge sharing and dissemination can enhance efficiency in applying existing knowledge and subsequently increase competitiveness by improving efficiency and quality (Yazhou and Jian, 2013). Effective knowledge sharing promotes organizational culture which encourages knowledge sharing and accumulation of individual knowledge, minimizes time and space barriers and improves knowledge representation that increases accessibility by all members of an organization. The findings by Chalkiti (2012) also stresses on the importance to ensure that knowledge is managed properly and is retained within the organization to ensure the success of business. Organizations, in particular knowledge managers, recognize that the most important task in knowledge sharing is assigning and appropriately distributing knowledge to workers who need the knowledge to achieve their tasks (Chen, 2009).

Successful organizations are those that succeed in acquiring, creating, retaining, deploying and leveraging knowledge (Hana, 2012). The survival of modern organizations is commonly associated with the development and management of knowledge (Borges, 2013). The importance of knowledge in accomplishing the mission of the organization (Bennet and Bennet, 2007) is because it is the primary driver of the organization's value and strategically related to innovation and operationally related to performance quality and production efficiency (Borges, 2013). Effective mechanisms, supported by human capital management strategies, need to be in place to assist in the sharing of information and ideas between individuals and they need to possess the skills where they learn about and from each other (Felin et al, 2009; Wang et al, 2012). During the process of encouraging employees to share knowledge, it is necessary for the existence of human capital management strategies that can support synergies in knowledge sharing so that organizations are able to obtain, improve, and transfer the required knowledge with ease toward knowledge economy (Connell and Voola, 2007).

## 6. Conclusion and Recommendations

Being the most basic element and a key strategic resource for organizations to acquire intangible assets and capabilities (Cao and Xiang, 2012), knowledge should be managed with the same care as would be undertaken with tangible assets (Connell and Voola, 2007). However, despite public acknowledgement of the importance of knowledge investment to knowledge economy, relatively few organizations increase their investment in knowledge intangibles. This is due to the perception that knowledge investments are known to have long payback times unlike tangible assets for organizations to witness the return on investments or the actual impacts on organizational performance. Another key fact is that high-performance talents with such knowledge are known to be difficult to be retained in the organizations despite having restrictive clauses imposed in their employment contracts to deter them from leaving the organization.

Organizations must continue to focus on innovation derived from knowledge to continue to survive in a highly competitive environment (Yu et al, 2013). In order to capitalize on the knowledge that they possess, organizations need to understand how knowledge is created, used, and shared within the organization (Amayah, 2013). With the increasing importance of the people perspective of knowledge in organizations, organizations need to change from the situation where lost knowledge causes intellectual liabilities to that where shared knowledge results in intellectual assets (Yang, 2007) and where intangible assets, that is knowledge, should be managed with the same care as would be undertaken with tangible assets (Connell and Voola, 2007).

Organizations with well-developed knowledge management practices and mechanisms are more innovative (Darroch, 2003; Chen et al, 2012). An organization's capability and mechanisms to manage knowledge are of paramount importance to knowledge sharing efficiency and effectiveness since appropriate knowledge is transferred to the appropriate workers at the right time and place that helps them to share and put the knowledge into practice, improving the overall organizational performance (Yazhou and Jian, 2013) to support the knowledge economy. By establishing a well-developed management practices and mechanisms in place, an effective knowledge continuity strategy will help retain the critical knowledge of key employees in organizations even after their leaving the employment (Hana, 2012).

## 7. References

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