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ABSTRACT

This article discusses how leakage of knowledge can occur in value creation networks embedded in knowledge-intensive firms, and how a collaborative approach can be utilized to minimize risk and increase sustainability. For knowledge to be preserved from unintentional outflow, its confidential nature and description must be understood at all levels. Loss of knowledge can occur at any point; whether it is through the process of consultation or when employees do their work. Forfeiture of information can be unintended or a planned effort. To prevent such unintended leakage, it is important to develop a shared mindset among employees to minimize the risk. The socio-technical system design is a philosophical framework that enables companies to simultaneously consider both ethical and technical systems in order to best match the technology and the people involved. History has shown through a number of situations that firms that failed to comprehend new opportunities were often limited by stakeholders’ thoughts and actions.

KEYWORDS
Epistemology, Knowledge Leakage, Proprietary Information, Socio-Technical Systems Design

INTRODUCTION

Change in knowledge-intensive firms is inevitable but for that change to be successfully implemented, there must be a synergistic relationship between the people in the organization and the systems they use to produce the products and services demanded by customers. Knowledge-intensive companies are those that deploy intellectual capital to provide expert advice to corporations of all types. This paper is arranged in four sections in an attempt to answer two questions (1) how can knowledge outflow be prevented? (2) How should managers construct their discourse on knowledge leakage? The first part provides an introduction and explanation of some of the key terms used in this discussion. The notion that knowledge is a fundamental driver of the value creation process compels the organization to put a stop to knowledge leakage. The second part reviews a carefully selected literature to understand how knowledge is created, diffused, and distributed in pervasive socio-technical systems to avert risk of losing proprietary knowledge. The third part provides a socio-technical system design (STSD)

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framework to contain risk. In the last part, we draw a conclusion mentioning the limitations of our arguments.

An Overview of a Selected Knowledge Creation and Utilization Discourse

In defining the term “epistemology,” we draw from Armstrong (1989), Tenkasi and Boland (1995), and Mupepi and Mupepi (2016), among many others. Epistemology is the study of all types of knowledge such as tacit knowledge which is derived from experience. Armstrong (1989) posits that the theory on knowing can be divided into three classifications that make sense in learning and organization. The first is that beliefs were conscious occurrences in the mind of the believer. The second is that beliefs are dispositions of the believer. The third classification is that beliefs are a state of the believers’ mind. When organizations come together as corporations possessing defined goals, they utilize knowledge and proven techniques to produce desirable outcomes. Tenkasi and Mohrman (1999) propounded that the approach of a community of practice (COP) or knowledge community (KC) can be utilized to increase the gregariousness of organization to produce the goods demanded by customers. Tenkasi and Mohrman defined three knowledge diffusion techniques.

The first archetypal is the appropriability model which follows the logic that good knowledge as embodied in good technologies sells itself because it is attractive to the rational of self-interests of users such as a knowledge community (KC). As soon as a researcher invents the right idea and makes results available through numerous forms of mediated communications, organizations will automatically accept it, and therefore, additional purposive transfer mechanism are unnecessary.

Tenkasi and Mohrman (1999) suggested that the second model can be defined as the knowledge dissemination approach. This approach implies the act of spreading techniques especially information, to a wider circulation. Knowledge leakage can occur in the dissemination process.

Tenkasi and Mohrman (1999), take the view postulated by Rogers & Kincaid (1981) to imply that diffusion of innovations is best facilitated when experts such as a knowledge community (KC), inform and train potential users of the technology. The KC can be created to diffuse and distribute the explicit practices deemed necessary to progress output in the value creation system. The third model is the knowledge utilization model. In Mupepi & Mupepi (2016) the model represents the contextualization of knowledge in the value creation system (see Figure 2). It is represented in job specifications, product formulations and job descriptions. In this model, it is an attempt to understand the local context to which the knowledge is being transferred. In outsourcing knowledge is transferred in the form of technology and explicit practices to manufacture products for local and international consumption. This form of knowledge is argued in Wilson Rosen and Al-Ahmedi (2011), to be linear constituting procedures symbols algorithms and rules written in a commonly understood language.

What Does Knowledge Leakage Signify?

When knowledge leaks it implies that unauthorized third parties come to possess proprietary information. In order to guarantee the success of a commercial enterprise in a very competitive environment, managers need to enhance best practices and retain in-house and experience. The company’s competitive advantage can be lost if knowledge leaks or is lost to third parties. Wilson Rosen & Al-Ahmed suggested that managers the concept of linear knowledge must be understood in order to put effective control systems in cognitive areas distributed in the value creation system (see Figure 2).

It also implies that what needs to be done in a job remain critical in the introduction and management of the desirable outcomes. It is these segments that are of interest in building effective talent in organizations.
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