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Knowledge Management Cycles and Their Usefulness in Organizations

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Abstract

This paper discusses the purpose of knowledge management and knowledge management cycles. In addition, it describes the processes of the Meyer and Zack, Bukowitz and Williams, McElroy, and Wiig knowledge management cycles. Ultimately, this paper proves usefulness of knowledge management cycles and how organizations can utilize them to ensure knowledge products are used to their fullest extent.

## **Knowledge Management Cycles and Their Usefulness in Organizations**

Knowledge can be defined as information processed by individuals and which relates to the performance of individuals, teams, and organizations (Wang & Noe, 2010, p. 117). Although knowledge may be present within organizations, it may well be argued that it is not always effectively translated and exercised to its greatest potential. Knowledge management (KM) is the idea of organizing and managing internal and external and current and new information within an organization.

The knowledge management cycle (KMC) consists of tools that enable organizations to identify, obtain, refine, share, use, store, and divest information and aid in the development of organizations in a sufficient way (Mohajan, 2016, p. 121). For a cycle to be considered a KMC it must demonstrate how knowledge is acquired and captured, organized and stored, retrieved, distributed, and maintained. By meeting these criteria, the KMC evinces ways that organizations can handle and utilize knowledge at various stages of their life within the organization (Mohajan, 2016, p. 121).

KM is ultimately crucial in ensuring that knowledge is translated and exercised to its utmost extent and the KMC is a great tool for organizations to ensure that this indeed is transpiring. The four well-known KMCs include: Meyer and Zack, Bukowitz and Williams, McElroy, and Wiig. These four KMCs not only meet the criteria to be considered as KMC, but also act as a great tool for organizations to utilize present knowledge to its greatest extent.

### **Meyer and Zack KM Cycle**

Michael H. Meyer and Michael H. Zack created the Meyer and Zack KMC in 1996 with its primary target being the design and development of information productions (Meyer & Zack, 1996, p. 43). Although the ideology behind their KMC focuses on physical information products,

it can also extend to the focus of knowledge products (Mohajan, 2016, p. 122). The fundamental basis of the Meyer and Zack KM focuses on repository and refinery. Knowledge repository functions as a platform for knowledge products, also commonly referred to as a product family (Meyer and Zack, 1996, p. 45). This step requires the organization to gather all available knowledge, both physical and digital. Knowledge refinery consists of five knowledge processing stages that focus on refining the knowledge present within an organization (Meyer and Zack, 1996, p. 48). These five stages include acquisition, refinement, storage/retrieval, distribution, and presentation.

The acquisition phase refers to the collecting of present knowledge and information material, but also judging its quality, scope, breadth, depth, credibility, accuracy, timeliness, relevance, cost, control, exclusivity, and more (Meyer & Zack, 1996, p. 48). Following acquisition is refinement, which is the process of adding value to knowledge products. Refining information not only adds values to the repository, but also enables knowledge information to be stored flexibly to enable efficient generation of various products (Meyer and Zack, 1996, p. 48). Storage and retrieval can be visualized as a link between the knowledge platform and knowledge generation (Meyer & Zack, 1996, p. 48). This process stores knowledge products usually by means of computerized storage, but can also utilized physical storage means, such as folders and files. The distribution phase emphasizes on the medium of delivery and the timing and frequency as well, ensuring the data format is delivered by proper and accessible means (Meyer & Zack, 1996, p. 48). Lastly, the presentation phase focuses on presenting the newly refined knowledge information. This phase determines the success of the KMC. If value was added and the knowledge is properly utilized, then the KMC is determined successful. If the content does not contain useful context to be made use of, then the KMC has failed.

With the use of Meyer and Zack KMC, organizations are able to repurpose knowledge information within their organization and ensure that the information is not only being effectively presented, but also utilized to its fullest extent. The Meyer and Zack KMC captures information through its acquisition phase, organizes knowledge through refinement, storage and retrieval stores knowledge for future use, the distribution phase acts as the medium of delivery of knowledge, and is maintained by testing if the knowledge is properly utilized. By meeting the KMC criteria, the Meyer and Zack KMC is a great means for ensuring knowledge is properly utilized within an organization.

### **The Bukowitz and Williams KM Cycle**

The Bukowitz and Williams KMC's objective is to "outline how organizations generate, maintain, and deploy a strategically correct stock of knowledge to create value" (Mohajan, 2016, p. 123). This KMC focuses on only utilizing knowledge information that will match intellectual capital to strategic needs. Although there are seven overall steps outlined in Bukowitz and Williams KMC, they are vastly divided into two processes: tactical and strategic ones. Tactical process includes the get, learn, and contribute phases. These three stages are utilized for market-driven demands and are typically exercised on a daily basis. The last four steps are intended for long-term processes of matching intellectual capital to strategic requirements (Mohajan, 2016, p. 124). The strategic process of the Bukowitz and Williams KMC includes the assess, use, build/sustain, and divest phases.

Each phase is a vital part of Bukowitz and Williams KMC and beneficial for achieving the best possible outcome. The get stage consists of searching for information required for decision making, problem solving, or innovating. The second stage, assessing, appertains to a continuous process of organizing and assessing information collected to ensure its viable towards

the end goal. With the use phase, formative innovations are developed to ensure that new knowledge will be effectively utilized from the start and long-term. The build and sustain step tracks the sustainability of knowledge information to ensure employees are able to apply it towards to end goal but also determine its usefulness and if transformations are needed to be made. Lastly, the divest step includes disposition of knowledge information assets if they no longer produce intellectual value. This step helps ensure time and capital isn't being wasted on something that isn't creating value in return.

Considering this KMC is descriptive of its processes, is extensive, and can be implemented in real world settings, the Bukowitz and Williams KMC undoubtedly meets the criteria for KMCs. With the seven descriptive steps, this KMC can easily be suitable for organizations looking to particularly increase intellectual assets and capital while minimizing loss.

### **The McElroy KMC**

In order to minimize loss while incorporating knowledge into an organization, it is immensely important to thoroughly evaluate knowledge formerly present. The McElroy KMC aims to evaluate knowledge and whether or not it should be integrated into the organizational memory. This KMC can be broken up into two processes: knowledge production and knowledge integration. Knowledge production consists of individual and group learning, knowledge claim formulation, information acquisition, codified knowledge claim, and claim evaluation.

Prior to beginning the knowledge process, a knowledge claim must be formulated stating that there is a knowledge gap present within the organization. Once a knowledge claim is formulated, the knowledge process begins with the first process: individual and group learning. The individual and group learning phases allows individuals to discuss and validate the

knowledge claim as true or false. If confirmed true, data is collected between continuous individual and group integrated feedback. The phase of knowledge claim formulation involves collection of additional data from organizational levels, external resources, and knowledge claims from individuals and groups. Information collected from these phases act as a form of information acquisition. These formulated claims are then innovatively codified and stored. The final step of knowledge production process consists of evaluation the knowledge claim. The process of knowledge integration focuses on introducing new knowledge claims into the organization. This is done by broadcasting, searching, teaching, and/or sharing new knowledge information.

The overall importance of the McElroy KMC is not just to address the management of knowledge, but rather to identify knowledge content that holds value to the organization and its employees (Mohajan, 2016, p. 125). The McElroy KMC is an exceptional KMC that allows organizations to integrate both external and internal claims on knowledge present within an organization. In addition, The McElroy cycle meets the criteria of KM. Knowledge is captured through individual and group learning, organized and stored by knowledge claim codification, and retrieved, distributed, and maintained through knowledge integration. With knowledge production and integration, an organization is able to determine which knowledge holds value and which no longer does and present it in a variety of ways. The McElroy KMC is substantial for organizations seeking to organize current knowledge present and ensure all knowledge integrated is useful.

### **The Wiig KMC**

The Wiig cycle is another great KM tool in determining knowledge usefulness because it stresses the importance of not only how knowledge is built, but also how individuals and/or

organizations use knowledge. Wiig (1993) states that an organization should satisfy three conditions regarding carrying on business, these conditions are: there should be products and/or services and customers, the organization should have resources in the form of people, capital, and facilities, and lastly, the ability to act on its decisions.

Considering this, the Wiig KMC is based on four important stages: building, holding, pooling, and using knowledge. The building stage aims to obtain, analyze, reconstruct, synthesize, organize, codify, and model knowledge (Mohajan, 2016, p. 126). Simply put, different forms of knowledge are collected and analyzed in search of common relations. Knowledge is then reconstructed and synthesized to form general principles and establish common grounds. The knowledge is then codified and modeled in a manner that will be best understood and presented.

Once knowledge is built, it is then transformed into forms of materials that will allow individuals to remember it, also referred to as holding knowledge. This stage aims for individuals to recollect knowledge, accumulate, or add onto present knowledge, and embed this knowledge in repositories, where it is archived for future use.

The third stage – pooling knowledge – refers to the coordinating, assembling, and accessing and retrieving of knowledge (Mohajan, 2016, p. 126). Coordinating consists of gathering knowledge through individuals, assembling is the process of gathering knowledge sources into repositories for later use, and lastly, access and retrieval consists of obtaining knowledge information from repositories or from others (Mohajan, 2016, p. 126).

The final stage is using knowledge. In this stage, tasks are implemented and knowledge is observed closely and analyzed. Following, knowledge is then synthesized and evaluated. Final implementations are made after corresponding decision are taken.

As mentioned, KMCs must acquire and capture, organize and store, retrieve, distribute, and maintain knowledge. The Wiig KMC displays acquisition and capturing of knowledge through the building stage. The process of holding knowledge represents how knowledge is organized and stored for future retrieval. Pooling knowledge displays how organizations can retrieve and distributed stored knowledge. Lastly, knowledge is maintained and implemented during the use stage. Not only does the Wiig KMC meet the requirements for an organizational KMC, it's also stresses how organizational memory can be put into generate value for individuals, groups, and the organization (Mohajan, 2016, p. 127).

Conclusively, knowledge consists of the information processed by individuals and which related to the performance of individuals, teams, and organizations (Wang & Noe, 2010, p. 117). KM is the idea of organizing and managing present information within an organization. KMCs can be considered as valuable tools for individuals to make use of knowledge products because a KMC must capture, organize and store, retrieve, distribute, and maintain internal and external existing knowledge. Meyer and Zack, Bukowitz and Williams, McElroy, and Wiigs KMCs meet these guidelines and prove usefulness in knowledge product refinement. Each KMC consists of different cycle processes allowing the organization to decide which cycle suites their needs best. These KMCs have been and are meant to be implemented in real world settings, contain descriptive processes, and are ultimately a great tool for organizations searching for a way to ensure knowledge products within their organizations prove useful.

Reference

- Mohajan, H. K. (2016). A Comprehensive Analysis of Knowledge Management Cycles. *Journal of Environmental Treatment Techniques*, 4(4), 121-129.
- Meyer, M., & Zack, M. (1996). The Design and Implementation of Information Products. *Sloan Management Review*, 37(3), 43-59.
- Wiig, K. (1993). *Knowledge Management Foundations*. Arlington, TX: Schema Press.
- Wang, S. and Noe, R.A. (2010). Knowledge sharing: A review and directions for future research. *Human Resources Management Review*, 20(2), 115-131.