

Cloud Management and Management Learning in I-fy Era

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Abstract

This paper is to study the influence and utilization of i-fy technology on management and learning. It introduces the concept of leadership cloud, outlines the process theory, suggests an interactive cloud management model, and presents a learning model to convey the essence of management learning. The results suggest that impacts and developments of i-fy technology are irresistible; individuals and organizations must comply with the trend to make suitable responses. Leadership cloud is the core value of cloud management, and both of them can be apply to management learning. After the study, the paper recommends that synchronous or asynchronous collaborative website or platform can be used as the bridge and supporter for management learning.

Keywords: I-fy Era, Cloud Management, Management Learning

1. Introduction

I-fy technology extensively and deeply influences human mental ability and structure as well as the social structures and activities. I-fy era can be defined as the era of using internet and information management to deal with the affairs or business, to control and response situations, to explore unknown, and to discover new substance or knowledge concerning the survival and development of human being (Chen, 2009). In i-fy era, workplace democracy has become both more common and advocated. Gradually, some organizations distributing leadership and management functions to the employees and workers, each of them implement a portion of the functions. Leadership and management correlate closely with organization structure and organization learning (Allinson, Armstrong, & Hayes, 2001), hardly can they exempt from the influence of i-fy technology.

Cloud management, a style of management by which the leaders and managers lead and manage, is similar in concept to cloud computing (a style of computing in which dynamically scales the servers to actual demand and often virtualized resources are provided as services over the internet; and, cloud computing is a natural evolution of the widespread adoption of virtualization, service-oriented

architecture, autonomic and utility computing). The internet cloud is the base of cloud computing. Similarly, leadership cloud is the foundation of cloud management (a set of process and manipulation of management based on collaborative website).

Since 1990s, Management learning has been a subject of research and practice area, drawn from longer established areas of management education and development (Burgoyne & Reynolds, 1997; Cunliffe, 2002); it is the extent of both professional practice and theoretical enquiry, whereby professional practice enables management learning, and theoretical insights enable practitioner activates (Gray, 2007; Thorne & Wright, 2005). Review the correlative articles (Hodgson, 1997; Pearn, Roderick, & Mulrooney, 1995; Schank, 1997), the model of cloud management may provide individuals and organizations a virtual and/or real concepts and circumstances to study and to implement management learning.

Few papers study the utilization and influence of i-fy technology on management and management learning. Thus, the purpose of the present paper is to introduce i-fy era and its impacts, to propose the cloud management model, to suggest a networked learning model, and to state the cloud platform for practice of learning and research on management learning. The sequence of fallowing paragraph is along the above mentioned terms.

2. I-fy Era and the Impact of I-fy

A plaque of “Birth of the Internet” at Stanford University inscribes the architecture of the internet and the design of the core internetworking protocol TCP were conceived by Vinton Cerf and Robert Kahn. Since 1973, birth of the Internet announced the beginning of i-fy era. During the next ten years, they proceed to refine the protocols and to implement the work on operating systems. The usage of internet basically includes creating the possibility for a very deep and hierarchical sub-network and allowing greater flexibility in working hours and location. I-fy technology and facilities penetrate our daily life and will play a more important role of our future development.

Nowadays countless real and virtual individuals or organizations use internet and its ancillary equipment for their communication and management. I-fy technology is one of new forms of intervention that changing social interaction, activities, and organizing with its basic features such as widespread usability and accessibility. The Internet on line business and virtual company or organization greatly changes the society of developing and developed countries. The impact of Internet on the individual and organization results in build and reconstruction of their ideology and knowledge system. People in i-fy era tend to use multiple policies for decision-making and flexible administration in different circumstances. The

reformation of education and learning for young generation and reeducation of the adults to cope with the change of i-fy world is important.

3. Cloud Management

We live in the “cloud” of visible and invisible photon, electromagnetic-wave, data, information, knowledge, and ideology. The wired and wireless internet manipulates all of the cloud elements and the set of elements. Since the concept and applications of cloud computing is realistic, the term “cloud” is used in many scholastic topics and pragmatic services. The component of cloud field includes infrastructures, storages, platforms, applications, services, and clients.

3.1. Leadership Cloud

Leadership and management are the most widely presented and studied topic in the organizational literature because they may decide effectiveness and growth or disruption of an organization (Johns, 1996). Leadership cloud, the foundation of cloud management, includes and relates the times and occasion, the environment and situation, the internal and external participants, the events, and established or extemporaneous policy. Leadership cloud is the region of leadership attributes and situations surrounding leaders and these elements are embedded in the virtual cloud. Figure 1 is the model of leadership cloud.



Figure 1. The Model of Leadership Cloud

Figure 1 shows leadership cloud and its connotations that can be differentiate into five categories. The first is “why” that includes vision, ethics, and honor. The second is “who” that is human being and/or deity leaders. The third is “how” that is maximized co-value policy. The fourth is “intention” that includes a sense of mission

and voluntary service. Finally, the fifth is “implementation” that includes mutual understanding, mutual trust, willingness to cooperate, and undertaking the responsibility. This vision-assessment-mission ecology is the basic processes to obtain pragmatic strategy of leadership cloud.

3.2. Process Model

Because to process leadership cloud is by cloud management, the concept of process has to be specified. Process theory is a commonly used form of scientific research study in which events or occurrences are said to be the result of certain input states leading to a certain outcome or output state, following a set of process. In management research, process theory provides an explanation for “how” something happens and a variance theory explains “why.” Some theorists claim that all natural or many artificial processes have complex phases in which the output state of the process is not determined by the input states of the processes. From process theory, some process models can be proposed (Cobb Jr., 2000). The process model is used in various contexts; the organization or enterprise process model is often referred to as the administration or business process model. This process model is roughly an anticipation of what the process will be and what the process shall be determined during actual system development.

Choosing kinds of implementation method for the project or program has to select processes from different approaches and tune them to the needs of the reality (Recker, et al., 2009). The Deming PDCA (plan, do, check, and act) cycle is an iterative four-step management process typically used in business and learning. PDCA should be repeatedly implemented in spirals of increasing knowledge of the project that converge on the ultimate goal. One can envisage an open coil spring, with each loop being one cycle of the PDCA, and each complete cycle indicating an increase in our knowledge of the project during implementation. This approach is based on the belief that our knowledge and skills are limited, but improving. Cloud management uses the PDCA process model that stated in the following.

3.3. Interactive Cloud Management Model

Cloud management, a style of management by which the leaders and managers lead and manage. By the turn of the 21st century, the term "cloud computing" began to appear more widely, although most of the focus at that time was limited to software as a service (SaaS). In 2007, companies and a number of universities embarked on a large scale cloud computing research project, around the time the term started, it was a pounding topic. By 2008, cloud computing gained popularity in the mainstream press, and numerous related events took place. Researchers observed that organizations are switching from company-owned hardware and software assets

to per-use service-based models and that the projected shift to cloud computing will result in dramatic growth in IT products in some areas and reductions in other areas.

The fore-mentioned process theory and the PDCA model can be utilized as organizations or enterprise administrative affairs. At present, management process systems are proposed to build automatic routine procedures. Automation demands an established terminology, well-understood domains, partially predefined schedules or plans, clear organizational roles, and repetitive or semi-repetitive processes. Corresponding to automation demands, cloud management has to establish paradigm to process under leadership cloud. Interactive cloud management models are created and updated by the project participants to reflect evolving leadership cloud. The execution of such models is partially controlled by users, leaders, and programs. An interactive process system should 1) enable modeling by end users, 2) integrate support for ad-hoc and routine work, 3) dynamically customize functionality and interfaces, and 4) integrate learning and knowledge management in everyday work. An interactive process model is developed as Figure 2.

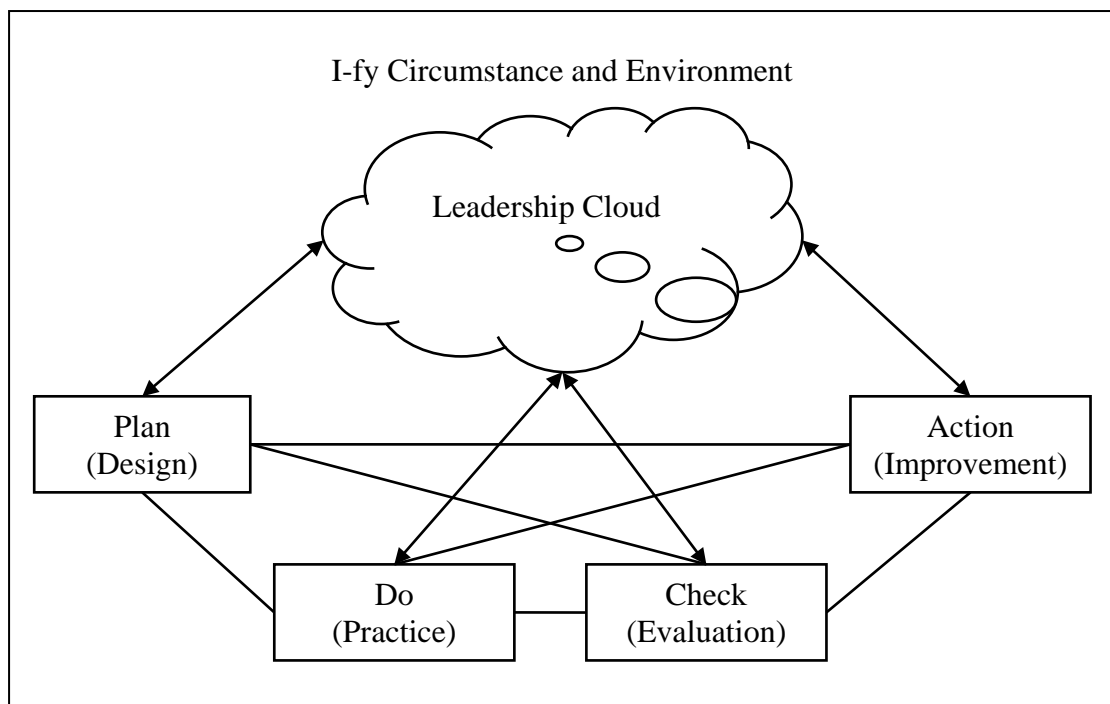


Figure 2. Model of Cloud Management (group decision and implementation system)

This Interactive process models will be evolving and incomplete. Initially, we define interactive enactments that automate well-defined parts of the model; subsequently, the model may ask users to handle ambiguous parts and refine the project. Users can also override the default interpretation to correct or add database. From Plan, Do, Check, and Action, the stages explicitly model the policy and decisions that control the flow of work, can be used for both structured and ad-hoc

processes. Structure may be added or removed throughout the process, enabling users to plan their work with the level of detail that they find useful by adequate feedbacks (Finlay & Marott, 2002). The prototype has to be tested by a number of projects, and integrated with i-fy technology for modeling, simulation, and real-time collaboration. The Data from on-line meeting, interviews, and questionnaires show that the system can be realistic and useful. Models developed by different users or organizations will illustrate its practical applications.

4. Management Learning

Learning is acquiring new or modifying existing knowledge, behaviors, skills, values, or preferences and may involve synthesizing different types of information. Based on the process (Plan, Do, Check, and Action) of cloud management, the suggested Figure 3 is the model of reflective and reflexive learning. Actually, the learning model is performed the operations in every P, D, C, and A block or subsets of PDCA stages, and the whole PDCA improvement cycles.

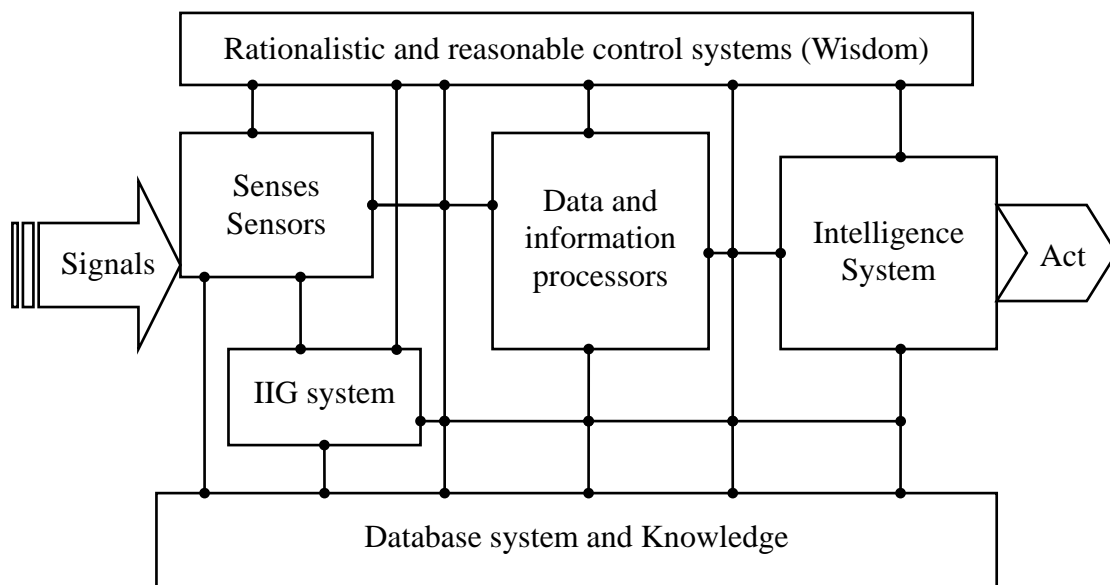


Figure 3. The Reflective and Reflexive Learning Model

Figure 3 showed signals accepted by senses and sensors or generated by internal information-quanta generating system (IIG system), the data or information is processed by data and information processors, and then the intelligence system exerts the action. Database system and knowledge is the library of human beings or data warehouse system (reflective foundations). The control system (reflexive norms and guidelines) has the function of inspector and decision maker; by the same token, Wisdom works as the rationalistic and reasonable control systems.

Wisdom is the ability of control and applying information, knowledge, and intelligence to make decision, to produce the optimum results, to check, and to reform sensors, IIG system, data and information processors, database system, intelligence system, and the control system. Wisdom has to do with intuiting the long view, understanding systems in the context of their larger whole, and acting in resonance with what is known as true. Wisdom can guide effective decisions on how we invest our concern, both individual and organizational, in the conditions of urgency. Because moral and ethics are the foundations of wisdom, learning and management learning have to take moral and ethics as the highest guiding principle.

5. Discussion and Conclusion

Today the utilization of i-fy technology is inevitable. I-fy technology impacts on individuals, organizations, and societies because of its powerful online access, services, trading or interactive platform, and social networking capabilities. The impacts include changing interpersonal relationship, rebuilding social structure, processing reorganization, and the method of learning and management learning.

In nowadays hypercompetitive and democratic i-fy society, everyone can be a leader. The congruence and harmony of the cognitive and ideological style among leaders is crucial for the formation of leadership cloud (Armstrong & Hird, 2009). Leadership cloud is the requirement for cloud management like the internet cloud is the foundation of cloud computing. Leadership cloud includes and relates the time and occasion, the environment and situation, the internal and external participants, events, and established or extemporaneous policy. To take effect of leadership cloud is to practice the processes of cloud management. In i-fy circumstance and environment, the core of the interactive cloud management model is leadership cloud. Because the interactive cloud management models will change while they are executed, it is an evolving and a being modifiable model.

Learning is processes of intelligent activities; through reflective and reflexive dialogues and interactive practice (Cunliffe, 2004; Gray, 2007), these activities are inspected and guided by Rationalistic and reasonable control systems to obtain wisdom achievement. By referring and practicing the interactive cloud management model and the reflective and reflexive learning model, management learning activities and studies will make sense for individuals and organizations, because management learning is an amalgam of management education and development and mixture of both career development and organizational change (Burgoyne & Reynolds, 1997; Thorne & Wright, 2005).

The merit of cloud management learning is autonomic management and active learning; organizations may refer the models of this paper to create collaborate

websites or platforms and to lead, to manage, and to learn. Cloud management may avoid fall into the defect of the pattern of oligarch lead and solo. When the time is changing, the technology is advancing, and the structure of organization is reforming, it possibly appears some new management models and learning models; we may often pay attention on the evolution of the models in i-fy era.

6. References

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