



Applying Causal Layered Analysis to Explore the Impact of HRIS

Review and Prospect

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Abstract -With the rapid & advanced development of information technology, there is a lot of human resource information systems (HRIS) which can improve the operational process, reduce costs or raise administrative efficiency in order to achieve competitive advantages for organizations. This study applied causal layered analysis to explore impact of HRIS, we found the results according to research analysis: In the litany level, HRIS is benefit to effectiveness and cost saving. In the systemic level, to enhance HR's administrative functions, enterprises should apply HRIS. In discourse/world view, Many of Multinational Corporations have already applied E-HRM. In the myth/metaphor level, the staffs of HR department should upgrade their competencies in response to different requirement of job content once applying HRIS afterwards. Finally, a conclusion was offered as reference for adopting HRIS of the enterprise according to the study findings.

Keyword-: causal layered analysis, human resource information system (HRIS)

I . Introduction

As market develop freely which result in deterioration of the operating environment, the completion between the same industry is more & more increasing with the result that the profit of each enterprise is also decreasing along with this trend, but the expect of customer is becoming higher than ever before. In view of this situation, most companies all try to improve operational efficiency or reduce cost to increase competitiveness.

As everybody knows that human resource is most important asset, human resource plays a crucial role in the business organization, therefore, the results of human resource management are relatively to have an important and critical influence on organizational performance. The major functions of human resources management which include recruitment, staffing, training, retention and performance development all have positive or negative impacts on the employee's productivity and work quality, and employee's productivity and work quality affect operating performance and business achievement afterwards.

Nowadays, with the rapid & advanced development of information technology, there are many developed software, hardware and systems which can improve the operational process, reduce costs or raise administrative efficiency in order to achieve competitive advantages for companies. There is a lot of human resource information systems which is the planning, implementation and application of information technology for both networking and supporting in performing of HR activities via intranet or other information-technology channels.

Our hope is that this research will help advance research on the practice phenomenon of E-HRIS application on both organizational performance and individual's benefits.

II. Literature review

2.1. Human resource information system (HRIS)

A Human Resource Information Systems (HRIS) is basically a data base system that offers important information about employees in a central and accessible location, it could be retrieved and used to facilitate human resources planning decisions (Wolfe 1998). HRIS could be used for administrative purposes which reduce costs and time and, besides, for the more analytical decision support (Kovach and Cathcart ,1999).

It's expected that by using this data, the HR department can make a contribution towards strategy formation within an organization (Sadiq et al, 2012). Human resource information system is defined by Noe and Gerhard (2007), as a computer system used to acquire, storage, manipulate, analyze, retrieve, and distribution of information related to human resources. DeSanctis (1986) explain that human resource information system is designed to support the planning administration, decision making, and control activities of human resources management.

HRIS can be regarded as a multifunctional tool to perform HR affairs. It can enable the organizations to execute the HR functions by way of web based technology and facilitate the process and execution of business plan. It will upgrade the HRM functions to higher level than ever before.

2.2 Causal layered analysis

Causal layered analysis is a theory and research method of future studies established by Sohail Inayatullah, which was originated from post-structuralism. It systematically integrates empirical, interpretive, critical, and action learning research dimensions. Each dimension has different levels of knowing and truth (Inayatullah, 2004). Therefore, it also demonstrates under which layer people realize their thinking and how restricted their space of probable variations is. "Causal layered analysis is concerned less with prediction as particular future and more with opening up the present and past to create alternative futures" (Inayatullah, 2004). Only by predicting futures accurately can one make correct decisions and have good foresight.

III. Research method

This study is a qualitative research in nature. Qualitative methods are well suited to research an area about which little is known (Stern, 1980). The analysis approach is causal layered analysis.

Causal layered analysis is composed of four levels of analysis as figure 1. Each level includes different viewpoint and thinking. Just as Inayatullah (2005) mentioned, "It takes as its starting point the assumption that there are different levels of reality and ways of knowing. Individuals, organization and civilizations see the world from different points – horizon and vertical".

The first level is the litany- Its perspective is often constructed by quantitative information and reported news. It is also cited by the mass media frequently. Publics can understand what the condition or situation is because of its obvious fact. There is no doubt or challenge toward these reality,

The second level is the systemic causes – it has something to do with political, economic, social, environmental, historical and technological causes. Statement is addressed according to real data. Most of editorial articles post in media or non-academic journals are belong to the analysis of this type (Inayatullah,2005).

The third level is world viewpoint involved with deeper structure and discourse. - It attempts to find deeper social, linguistic, and cultural reason that are beyond the person involved. Discerning the deeper assumptions behind the issue is crucial here” (Inayatullah,2005).

The fourth level is myth or metaphor – It is necessary to find the deep layer and collective events. “Find the deep stories and collective archetypes that shape our unconscious and emotional reactions to issues and events”(Slaughter & Bussey,2005). In other words, to explore the certain issue we never think.” TheLanguage used is less specific, more concerned with evoking visual images, with touching the heart instead of reading the head” (Inayatullah,2005).

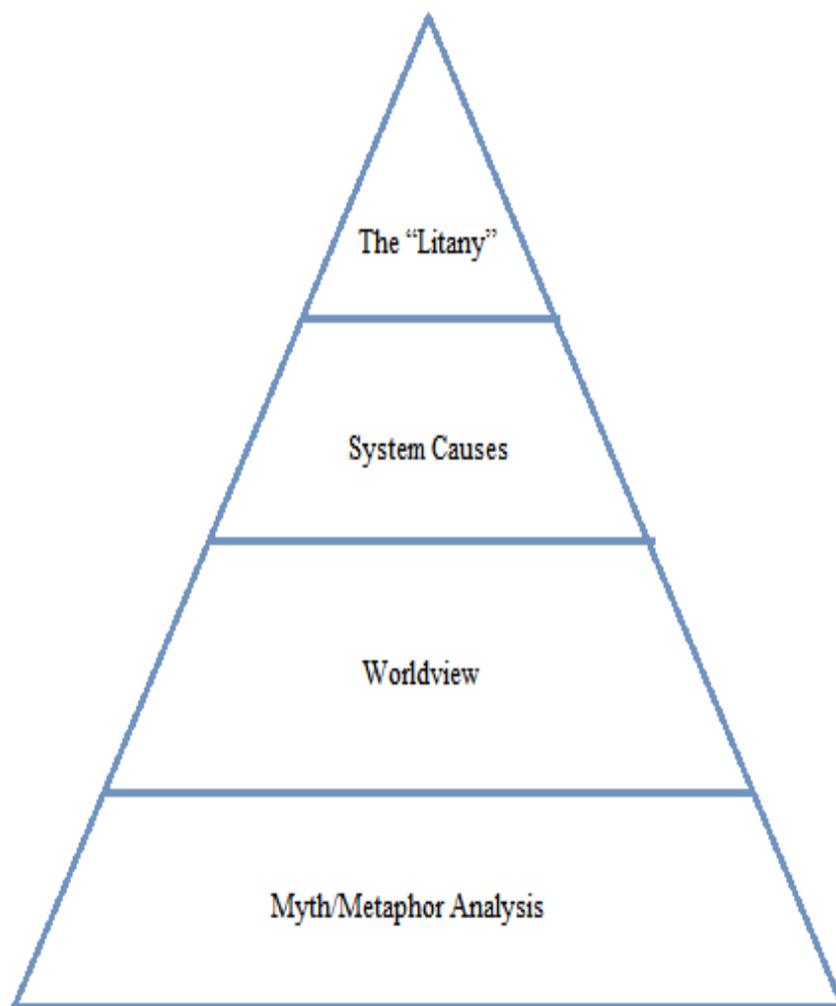


Figure 1 Causal Layered Analysis (Source: Inayatullah,2004)

IV. Causal layered analysis

4.1 The litany level

Several HRIS are helping HR staffs be more effective and more conserved. Many companies can store their whole HR databases in computers with large capacity of HRIS. A certain computers can be linked together to form networks that share information with other departments or subcontractors. A certain computers can be excel at graphic presentations of information, retrieving, calculating, cross-analysis, and providing an overall of individual database.

Nowadays, almost all large companies use human resource information systems to attract job applicants (Stone, Lukaszewski, & Isenhour, 2005). HRIS typically allow job seekers to obtain vacancies information, and uploads resumes online, companies also use keywords to search candidates who is qualified to serve the job offered, then quickly response to applicants. In addition, they are increasingly using these systems to deliver training, manage employee performance, and administer compensation and benefit systems (Gueutal & Stone, 2005; Strohmeier, 2007).

4.2 The system level

The web-based career advertisements often provide job seekers with information regarding job vacancies, qualifications, job descriptions, employee benefit and company profile, and the incentive (e.g., compensation, training & development opportunities) offered to web page viewers.

Some companies use e-selection systems to conduct online tests or assessments that are designed to assess the Aptitude or problem-solving abilities of applicants. Some companies ask candidates to complete online interview with supervisors or HR staffs to realize whether the personal qualities of candidates can fit company's culture or not.

E-selection systems are helpful because these systems enable companies to directly download a lot of candidate's resume from internet job bank. That is, companies can quickly browse many candidate's educational backgrounds and related work experience online to scan and pick up the right applicants online. Therefore, e-selection is beneficial to both increase the efficiency of the selection process and provide applicants with an easy ways of applying for jobs (Kehoe et al., 2005).

4.3 The worldview level

Owing to exploitation of computer hardware, software, and electronic networking resources, the HRIS enable several HRM affairs (e.g., strategies, plans, and services) to interact across individual and group- boundaries. Therefore, there is an obvious trend that more and more companies use information technology (IT) to provide HR service over the last decade. Especially in the multinational company, the HR department often use HRIS to monitor the accomplished extent of scheduled progress, and to accelerate communication & contact with each other across areas or countries.

Due to the consideration of the benefit of "economy of scale", many companies use HRIS to provide HR service to headquarter and also share HR service to the other branch or overseas institute, that is to say, HR service can be delivered to different areas or countries through HRIS. The provision of shared services across countries provides another important indicator of the extent to which the HR function's operations are integrated on an international basis (cf. Edwards et al., 2007).

There are many famous companies adopt HRIS to execute HR affairs, develop talent across national boundaries, accelerate cross-national training, seek the potential and adjust the multinational manpower of profession & management. such as Hewlett Packard, IBM, and Campbell Soup.

Many companies try to make an effort to maintain friendly relations with former employees (Vernon, 2003). HRIS is one of the advanced technology, including Internet, hotlines, and email, provides effective ways to foster and sustain positive employer-employee relationships (Lublin, 2007). This is very helpful if firms attempt to rehire the ex-employees when the company's condition or economic distress has improved.

4.4 The myth/metaphor level

Part of the HR data processing can be transferred to employees and line supervisors by using HRIS, they can input and revise their personal data by themselves. Since HR affairs can be proceed automatically, resulting in routine work losses and work item changes for employees of HR department. That is, In consideration of the automatic operation and information processing, such as statistic, registration and monitor, there will be less demand for HR staffing.

Due to the development of HRIS and internet, company can alter original job styles so that work can be dealt with at many locations (e.g., the office, home) at any time of the day or night. In view of this transformation, HR affairs can also be completed through outsourcing.

In many organizations, actual reductions in staffing is possible through the use of human resource information systems. Due to this technology, it has altered routine for the HR affairs. Some of the data stored in HRIS is confidential and private, it should be accessible only to certain allowed individuals under monitored conditions.

Some business may find it's more uncomplicated to outsource its HR related affairs, such as compensation, rather than employ payroll staffs to engage in the services of dealing with salary affairs.

The thought of owner is that a small business should focus its force and budget on developing the products it sells or service it offer, so business performance is much more important than HR affairs. Instead of recruiting staff, maintaining personnel files and other human resources tasks, this consideration may causes a small company to concentrate its resources on the field of production, sales and research. Therefore, there is an increased phenomenon that more small businesses adopt HR outsourcing in order to focus on their merchandises or service offering rather than employing an in-house human resources department.

V. Conclusion

By implementing the HRIS, the organization has automated, optimized, and integrated the different functions of the human resource process, while also reducing the workload of HR staffs by minimizing the amount of administrative affairs they must deal with, it enable a more consultative orientation of the HR department. The time saved with the HRIS is adopted by HR personnel to perform various affairs, and they can become more professional to the organization rather than administrative management.

The role of HRIS can be regarded and positioned in achieving organization effectiveness. HRIS is still a new topic for the research interest and HR field. To achieve modern HRM, HRM department have to be continuously devoted to ongoing research with regards to computer hardware, software, extranet and intranet. HRIS should be taken seriously as practice management for human resource.

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