

## Information System to Human Resource Management in Education

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### Abstract

Information System helps to optimize the use of scarce resources through intelligent information support for decision making, helps further in its implementation by support co-ordination effort without wasteful delays. The use of information System indirectly has influenced and changed the position of human being in performing and completing their tasks. Normally, human being is the major and the only agent of change of world, nowadays; it comes into difference condition, mean they should be sincerely in making job division with any tools they use. The impact and consequences of this program can be seen from great amount of unemployed in every place. The development of information System has major influence to the role of human resource management (HRM) in education sector especially at school. HRM transforms from administrative function to become strategic function. HRM practice has developed itself into four major roles, they are: strategic partner, administrative expert, employee champion and agent of change. Several new issues have emerged as a result of HRM transformation, they are: knowledge base organization, strategic HRM and knowledge management. This paper tries to give theoretical and explanation about those issues. The goal of this paper is to encourage research about the new role of HRM in education practice.

**Keywords:** Strategic HRM, Knowledge organization, Education system transformation

### Introduction

The development of information System has major influence to all human's life sectors including education sector as well. The information System has already developed at present time has a very great influence in making such as a big change. This condition has become a big challenge to some important persons such as scientist, educated-man or some expert in deepening management field. As a real example shows that the influence of Information System used in educational field -reflected by computer-based data using in some part of educational sectors, integrated-accountable data provides well. It could also be seen at Educational Department have developed online-educational system, which is claimed to be able to accommodate all data needed by educational department. This would inform

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and contain all school identity, educators list, facilities, up to amount of students. It really shows that the development of information system always move and change.

Information system helps to optimize the use of scarce resources through intelligent information support for decision making, help further in its implementation by support coordination effort without wasteful delays. Decision making has become a very complex process due to competitive environment, scarce resources, time pressures and unavoidable compulsions to achieve goals.

With the emergence of Internet and the Web, the business processes have undergone a radical change. Information technology has made decisive inroads in all walks of life, in office, factories, railway stations, airports, communications, entertainment, education, banking, hotels, hospital, transportation and shopping. It is being used extensively for decision making, ease of operation, communication, record keeping and for obtaining higher productivity from the system in which it is put to use. Transaction have become paperless, cheque and cash are converted to E-cash, digital cash. It has opened new functions in business such as web-based business processes, secured payment process and managing business from anywhere without being in the office or organization

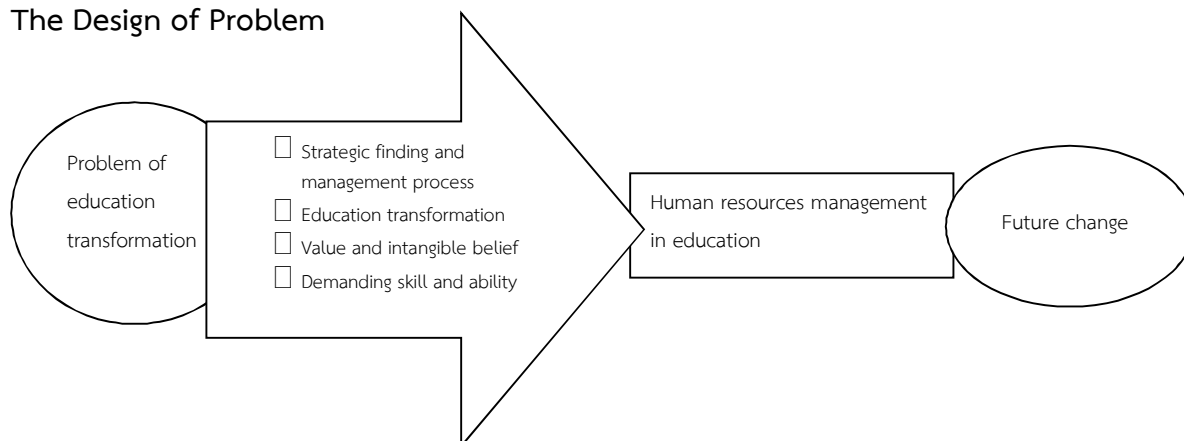
All these radical and dramatic changes have affected the working style of the manager. The management process now need speed, precision, and snapshot business status through relevant information technology support. This requires a new management information system development approach. Though basic role of management information system has not changed, it has changed inside out in terms of content and presentation. It is no more a structural system in terms of regularly processed preformatted report. The shift is from a centralized Management Information System (MIS) to a distributed and knowledge driven, user-triggered MIS system.

The previous description has really given general view that an educational organization such as school, educational institution, religious school has to make some system transformation continuously. Besides that, the fast change and information rotary claim all educational institution has to be able to anticipate and restructure strategic steps. In conformity with this case, the educational transformation of information system should be a part of each institution and done. The system transformation of education information is fundamentally needed in producing and creating a very good organization system in order to make a better change (Muzyka, de Koning, & Churchill, 1995).

Miner and Crane (1995) suggest that Human Resources Information System (HRIS) are designed as planning systems that can manipulate information to exemplify accurate and timely data that is vital in decision making during change. Some of the main benefits of having HRIS in an organisation have been identified in below, namely, reduced workload by minimizing repetitive administrative tasks like acquiring, storing, upgrading and manipulation of large volumes of information; improve analysis of available information

to support in decision making; reduce manpower costs; timely response to queries; greater information accuracy; produce a variety of HR related reports; improve employee satisfaction.

### The Design of Problem



Some education experts classify and identify four kinds of education transformation. First, transformation process is a strategic finding and management process. This process should be supported by a paradigm. Second, the education transformation and development should involve all organization components. Third, the transformation process should involve the existence of values and intangible belief. Fourth, the transformation would be created by demanding and increasing the skill and ability needed in each units including some new educational fields.

A conventional education institution which has no range of national education standard considered as a very slow motion which will step right up into a real destruction. Even they could stand on their life for many thousands of years or less but they automatically came to their life decline and a real destruction. It's described by the existences of some new reforming education institution in the midst of the development educational regulation.

The various development of educational institution with all collaborative programs offered indicates the sufficient of global need connected with the development of science and System. So that, all educational institution that lies into a rapid quantity should be able to adapt and anticipate those challenges by creating the exact educational innovation till they are not only stay in a defense to keep their existence but more than that they can make any efforts to step toward a significantly development in education.

### The Analysis

#### The Development of Information System

Lately, at 21<sup>st</sup> century, the has made some changes, development and widely movement connected with the information System (IT). The progress of information System such as internet and the other online tools give a great change and connect to the educational terms. Aware or not, the role of information System has become a part of educational field,

therefore some educational experts and the users should anticipate and prepare everything connected with the real challenge of the information System field. Some notes tell that the use of information System spread out all over people life. Face it with the deep understanding in step it right its progress.

According to McKeown and Philip (2003), the development of Information System causes some education transformation and depends on the main function of Information Technology (IT) department. Therefore, IT would not step right behind us as education development strategy but the education development strategy would step along IT progress. So that supports all kind education development strategy by the current information System usage.

A qualified educational institution which has a good quality out-put usually apply all the organization sector on well-integrated and well-organized as declaring on the main goal of its institution itself. They have described all his main goals in some planning scenes such as Strategic Planning.

In the fact, there are only a few educational institutions which have totally developed and applied all kind of the planning guide to make their institution get better improvement. They take many backgrounds of reasons not to apply them as the managerial standard in organizing their institution. First reason is lack of understanding about the importance of their implementation. They have been never aware that being failed to plan means they plan the failure. Second, they don't have a sense of belonging, understanding to the environment need, the possibility challenges would be faced by the institution.

Whereas, when an institution would find some serious development in all sectors and challenged with the external change (as a self-awareness of parents in bringing their children to school), they step right back and have never taken as serious care in committing with all kinds of challenges provided. As a real example to describe this phenomenon is Al Ries Theory, presented about focus. Based on his theory, he tries to inculcate and ensure that to achieve all kind of organizational goals, an organization, whatever the organization is, needn't divide itself into some variety of fields, but they should try to focus on a specific flexible field (Ries, 1996). To apply the theory, an organization should make any kind of changes in all sectors.

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The change and educational organization development has become widely and take some consequences flexibly and logically. It's caused by the role of human resource management. Ulrich (1998) states four roles of human resource management in organization:

1. As strategic partner for senior manager and line manager to accommodate the planning process.
2. As an expert in administrative field by performing fund efficiently but stay on a good quality in out-put.
3. Stay on paradigm of employee champion.
4. As the agent of change in organization.

Human resource management takes an important in establishing a competence atmosphere at each organization including school as well, where the VRIO (*Value, Rareness, Immutability and Organization*) is well-applied. This kind of approach is developed by Barney and Wright (1998). Some fundamental questions about values is all about how far human resource management give a contribution in improving the quality and quantity of students and minimize the rate of broken school

Some fundamental questions about values is all about how far human resource management give a contribution in improving the quality and quantity of students and minimize the rate of broken school. The core view of this case is how the implementation of human resource management able to encourage and rise job satisfaction from employee and all school staff. Some researches show that job satisfaction will influence to the quality service of education which is applied to society. As has been believed that job satisfaction has related to reward, employee and job stress.

Beside those, value is such as an important point in establishing some educational institution, but an executive of human resource management has to dig up current character of employee to be the other sources of educational institution. This becomes a base and fundamentally concept of rareness. Rareness implies and connects with skill and ability of staff. An educational institution who has some talented and skilled has possibility to inspire rareness of employee.

The following concept of rareness is immutability where some specific characteristic of institution should be imitated by the competitors. It would guarantee the progress in everlasting period. The last part of VRIO framework is organization. This part will guarantee the employee to maximize any potential they have for the development of their organization.

### **The Issue of Organization Transformation**

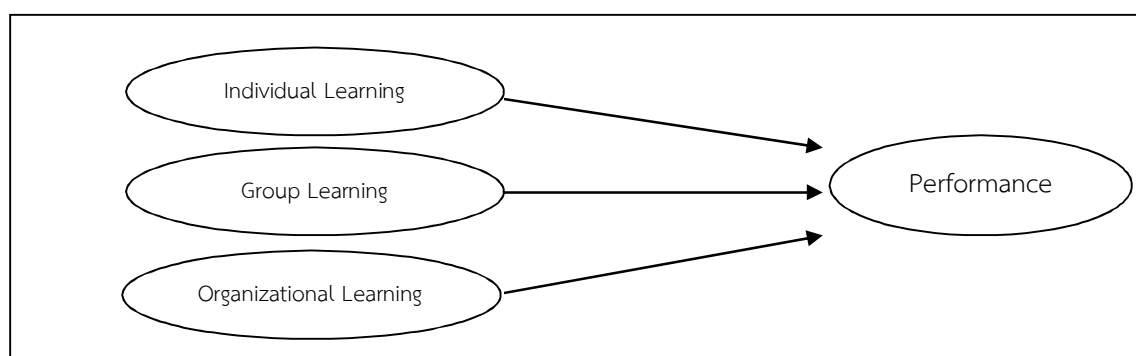
The degradation of human resource management's role causes the transformation of educational organization. The process of transformation happened has its own characteristic in influencing the degree of organization performance. The difference of each study is considered as an approach used.

Analyzing the transformation process of an organization needs a very proper tool or methodology. There are some common methodologies used in analyzing process such as:

Intellectual Capital (IC), Human Resource Accounting, Balance Scorecard. Based on empirically study done by some researchers above, in this case the writer would like to discuss the process of transformation itself by intellectual capital (IC). Stewart (1997) defines that Intellectual Capital (IC) is a material intellectual knowledge, information, copy right, and also experience which is used to create the wealth. While Brooking (1996) defines Intellectual Capital (IC) as a term used in mentioning intangible asset of marketing, intellectual property, infrastructure and human resource who can maximize all the function of organizations.

From some research performed at some educational institution in East Java Indonesia conclude that the lack of knowledge and education about System information and non-matched the background of education provoke the change in every organization. While in the other side, another research mentioned that education transformation is only caused by the depth of understanding about managerial system of an organization. So that's, finally from those researches the administration of educational institution is considered by determining the characteristic of organization based knowledge.

These changes are indicated by performing three major of learning process individually, group and organization. The instrument used is Strategic Learning Assessment Map (SLAM). This model could be described as the following table:



**The Knowledge-Based Learning Process Model in Education**

### **Human Resources Management in New Organization Form**

The previous description about organization transformation describes about modern human resources management. Administrating organization at present time should be faced in a very big uncertainty; even it can be termed as chaos situation. Administrating the situation need to think creatively, between a greatness and chaos.

As Walker (1990) sees, there must be some important thing has to be performed by executive of human source management in administrating all new organization, such as:

1. Human resource management should focus on some important issues. The key of issue is all about planning. Planning is such as an important thing in every organization as well as

school because planning can stimulate the creative thinking and discussing many complicated cases for long term activity and some main goals.

2. Management expects some fresh initiative and bright solution of human resource management. Each management usually has its own goals. To achieve the goal many things should be performed such as providing and preparing a best leadership and supporting all kind human resource, and anticipating every changes of educational environment. Human resource management also involve some activities including planning process, production, the improvement of quality, culture, reconstruction, and the other possible mean.

3. The real function of human resource management always takes and runs efficiently and flexible. So that, all the staff should have reviewed and increase the performance by reducing operational cost, reducing administration work, limit the activities and having needed-outsourcing.

### **Strategic Issue of Human Resources Management**

Most of organization which were aware that the role of information System has an important part in improving the progressive, competing with the other organization. Nevertheless, an organization will have never got the progressive goal automatically when they adopt some technologies used.

The development of organization environment both internal and external deals with some effect to the current issues which have become a claim of every organization normally. The internal environment can be talked as the communication between all staff, while the external environment implies the relationship between organization with all the environment part. By appearing some balanced values which are believed as the life guidance for people has given a different side of organization itself.

Globalization has spread out almost all important life aspect in human's life. Besides that, it's implication and influence are entirely felt by any kinds of organization. A very tight competition and competitive atmosphere is not only happened in one organization only but its average happened commonly in every organization. Therefore, some organization should make some preparation and anticipation to stay in a real existence in the midst of globalization and have to be able to utilize many kind of System progress.

One of the influences of globalization can be seen from any kinds of change in every part of human lives. Sometimes, organization assume that they have made some totally effort and strive to achieve the organizational goals whereas they are not aware that they still stand on one point. In order to be able to anticipate the previous organizational cases, at least, the organization should pay attention with some strategic issues, as the following writing described.

First, the use of information System. As has been explained before at the part of introduction that the existence of information System has become a apart of human's life at present time. In true statement, the use of System will really help the movement of human

being and facilitate while giving facilities to those who will do their activity. The development and reach of information System seems not making any limitation for the users.

Second, the maintenance of human resource management is variety. This issue has recently become a hot issue which is assumed to give different contribution to human resource management. As the example given, about how a leader communicate honestly, accountable, and also has a very high integrity in performing all the tasks. Being able to keep balance the condition of organization by interacting well so that he will be able to create a very conducive atmosphere.

Besides that pervious description, Broderic and Boudreau (1992) explained that most of managers have tried to find the efficient way in completing and increasing the productivity of the workers by adopting some computer application. They also try hard to find the suitable way in restructuring all the employee and train them with special treatment to get a very maximal result.

### **The Development of Information System: Between Solution or Problem**

The development and the progress of information System at present time tend to give some facilities which have never been actualized and got previously. In recent years, all areas in the world has witnessed the rapid growth of System and computerization and access to high speed information transmission systems almost all walks of life, the unprecedented degree of computerization has changed the way we work, study and even have a fun. But, in the other side the development of System and information system gives some negative impacts accidentally to the development of human resource management.

While human resource management should be in the highest level of improvement and the development on intelligence as well should be banned and delayed due to the progress of System. For the result of this, human resource management has never found a significantly progress or even come into the decline because when System has been a part of human life, indirectly, they have made a social contract.

Some activities which should be completed inefficiently and take a very long process can be complete easily and effectively. The progress work design conducted by system and new information system really bring considerable flexibility into where and when the work is carried out. With the advances in computer System, virtually any job-or any part of a job-that involves work that is independent of other people and special equipment may one day be performed a way from workplace. So that, the existence of human effort is not totally needed. But the users are to be aware and wise that the advance of System information and computerization doesn't mean guarantee the effectiveness of accomplished-job. In this case, the degree of job motivation and performance go into low level.

The use of information System indirectly has influenced and changed the position of human being in performing and completing their tasks. Normally, human being is the major



and the only agent of change in the world, nowadays; it comes into different condition, meaning that they should be sincerely in making job division with any tools they use. The impact and consequences of this program can be seen from great amount of unemployed in every place. This phenomenon is also caused by the progressive way of thinking, some companies and firms would like to minimize the financial they take out but they still claim the rightness and efficiency of job accomplishment.

Knowing this life problem, human resource provided would not be well absorbed. Some fresh graduation student should wait their opportunity in a very long list of job because some of possible means of job has been exchanged by the existence of tools. Therefore, all human resource have to be able to actualize themselves and could to anticipate any changes of world model. They should improve their major quality and quantity as well, so they are not only accepted and silent with the advance of information System, but can be the most important part in the use of system itself.

Therefore, in developing human resource either in education sector or other organization, they have to balance among quality, capability and all System applied because a very qualified human resource will really determine the existence of human in any life fields provided.

### Recommendation

The advance of information System claims all part of life and human resource management to have and make the function transformation. At present time, human resource management should be completed by more strategic role. All system have to work professionally as the form qualified job performed. They have to focus themselves on improving job quality than just doing it without any meaningful result.

The development of information System has caused a very big impact to any kind of organization including school as a part of it. It changes the major objective goal from process-oriented into result-oriented. As the result of the change of this organization orientation, most of educational institution has no significantly progress or even they will be merged. But we have to underline, although System has changed a half part of human position in accomplishing some job tasks, don't let it decrease them to make some skill improvement. They should remain on total effort to increase the capability. So that, they would not be discriminated by the existence of System on the contrary would be a part of its progress. Thus, the nature of human resources is to be able to constantly juggle people and technology to continue its supportive role and take an education organization into the future. So, information systems can be expected to drive the human resources function towards a more strategic role and bring about successful human-technology oriented processes that will make any education organization contemporary.

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