# Chapter 2 Human Capital Management Process Based on Information Technology Models and Governance

**Darko Galinec** *Ministry of Defense, Croatia* 

### **ABSTRACT**

Human capital management (HCM) inside large systems is very complex and demanding, to achieve successful accomplishment high quality information support is necessary. There are many cases where human capital management process is not conducted in a satisfactory way. Key decisions usually come late, very often because of impossibility to consider a problem in its entirety. The cause of it usually lies in weakness and understatement of the human capital management itself and in this connection data management is not given adequate consideration. Data originating from inside and outside sources within information system (IS) are not integrated in a way which will provide an optimal use. In this connection, this paper examines possibilities to innovate the entire human capital management process through the integration of respective data. Data warehousing (DW) possibilities and position within the integral business intelligence (BI) concept are noted as a first step towards its realization. In this paper the necessity to innovate and promote permanently the quality of human capital management process is considered; the main features of the process are given as well. Business process innovation (BPI) as a systematic approach with a view to achieve significant business process change is presented; its connection with data aspect of IS is given too. According to the research of this paper, HCM BPI is achieved by the data integration within existing IS. DW model intended for HCM has been elaborated as a solution which will innovate the process itself. The position and the role of DW within entire BI organization concept have been established as well. Finally, the benefits achieved by the research are explained.

DOI: 10.4018/978-1-4666-0924-2.ch002

### INTRODUCTION

Human capital management is the basis to obtain comparative advantages and integral efficiency since human potentials are the most important resources nowadays. Successful functioning and realization of aims defined in the chosen strategy, within functionally oriented and hierarchically structured organizational system it is necessary to upgrade human capital management processes. This can be obtained by innovation of the already existing and development of new processes and procedures which will result in the integration of the information system's data. Improving business processes is the top business priority for CIOs in 2009, while improving enterprise workforce effectiveness is at the 3<sup>rd</sup> place of business expectations for IT focus on improving current operations and performance (McDonald & Begin & Fortino, 2009). In the organizational context, innovation may be linked to performance and growth through improvements in efficiency, productivity, quality, competitive positioning, market share, etc. All organizations can innovate, including for example hospitals, universities, and local governments. While innovation typically adds value, innovation may also have a negative or destructive effect as new developments clear away or change old organizational forms and practices. Organizations that do not innovate effectively may be destroyed by those that do. Hence innovation typically involves risk. A key challenge in innovation is maintaining a balance between process and product innovations where process innovations tend to involve a business model which may develop shareholder satisfaction through improved efficiencies while product innovations develop customer support however at the risk of costly research and development that can erode shareholder return.

Innovation, like many business functions, is a management process that requires specific tools, rules, and discipline (Davila & Epstein & Shelton, 2006). Information system which usually

supports human capital management is not completely satisfying, since the data within it are not integrated on the data model level and because of inherited modularity they are disunited. The aforesaid disunity is manifested through inadequate (insufficient) connection between information subsystems within HCM IS. Possibility to make complex and user defined data analyses on the basis of time dimension which is indispensable in the decision making process are insufficient too. Obtained desired improved process should render possible the integration with other functional areas and processes within an organization. They can also be improved through other different approaches (neither necessarily through data integration, nor by elimination of it). Integration within organization system will be conducted on the basis of chosen and accepted strategy, in conformity with defined priorities, disposed human potentials, organizational procedures and chosen technology. Functional logics should be defined in order to satisfy conceptual unity of the improved process which is the first element of the IS unity. Improved process must be open and connecting point must be provided for. Aforementioned processes should lead to enterprise information integration (EII), as concept of data abstraction in addressing the data access challenges associated with data heterogeneity and data contextualization.

The unanticipated changes in the IT infrastructure forced IT personnel to set new priorities that caused delays in other aspects of their work. There are several problems that information technology (IT) directors must monitor carefully when their organizations introduce complex IT-based projects that have strategic implications. Six major tactics that an organization may employ in order to ensure continuity and flexibility in its IT functions are: retaining by continuous training, evaluation by objectives, reward for smooth operations, reducing stress and burnout by encouraging creative ideas, job rotation, and finally involving IT personnel in the hiring process of new employees (Watad & DiSanzo, 1998).

# 15 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

www.igi-global.com/chapter/human-capital-management-processbased/64084

### Related Content

### Pre-Service Teachers Engaging with Twitter as a Professional Online Learning Environment

Narelle Lemon (2016). Professional Development and Workplace Learning: Concepts, Methodologies, Tools, and Applications (pp. 1434-1464).

www.irma-international.org/chapter/pre-service-teachers-engaging-with-twitter-as-a-professional-online-learning-environment/137257

### A Multidisciplinary Problem Based Learning Experience for Telecommunications Students

Carlos Figuera, Eduardo Morgado, David Gutiérrez-Pérez, Felipe Alonso-Atienza, Eduardo del Arco-Fernández-Cano, Antonio J. Caamaño, Javier Ramos-López, Julio Ramiro-Bargueñoand Jesús Requena-Carrión (2011). *International Journal of Human Capital and Information Technology Professionals (pp. 15-28).* 

www.irma-international.org/article/multidisciplinary-problem-based-learning-experience/55988

# Identifying Criteria for Continuous Evaluation of Software Engineers for Reward and Recognition: An Exploratory Research

Sreejith S. S.and Muthu Mathirajan (2016). *International Journal of Human Capital and Information Technology Professionals (pp. 61-78).* 

www.irma-international.org/article/identifying-criteria-for-continuous-evaluation-of-software-engineers-for-reward-and-recognition/163411

# Project Scheduling and Cost Minimization with Multiple Availability Constrained Resources under Stochastic Conditions

Rui Moutinhoand Anabela Tereso (2015). *International Journal of Human Capital and Information Technology Professionals (pp. 46-63).* 

www.irma-international.org/article/project-scheduling-and-cost-minimization-with-multiple-availability-constrained-resources-under-stochastic-conditions/133199

# Utilization of Project Management Software in Qatari Government Organizations: A Field-Force Analysis

Salaheldin Ismail Salaheldin, Khurram Sharifand Maysarah Al Alami (2010). *International Journal of Human Capital and Information Technology Professionals (pp. 1-15).* 

www.irma-international.org/article/utilization-project-management-software-qatari/39055