

Communication

Transforming Human Resource Management Processes through Intelligent Systems

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Introduction

In order to remain competitive in a highly volatile business environment, organizations are required to engage themselves in constant learning. However, designing an effective learning organization demands acquisition and processing of knowledge distributed within and outside the organization. Technologies such as data warehousing, expert systems, best-practice databases, and intranet/internet systems have potentials to acquire, access, store and interpret explicit and implicit knowledge for an effective organizational action (Stein & Zwass 1995). In this communication, au-

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thors have emphasized on the smart-technology enabled Human Resource Management System (HRM) as a potential enabler for organizational learning and development. The objective here is to orient HR leaders towards a systematic data driven human resource decision making system which is flexible, scalable and cost effective. One of the few important considerations for building such an intelligent system is undoubtedly exploring the right HRM-IT strategy fit.

HR-IT Strategy in Action

An organization's strategic fit (with human resource management practices, employee skills and behavior) and flexibility (adopting new processes or practices) can be achieved by a collaborative HR-IT strategy. There is a strong need to define and monitor appropriate HR metrics which can create value for the business. To a great extent this demand can be fulfilled by intelligent capturing, storing, transforming and exploring data from multiple sources and channels. The data explosion across the globe with the advent of smart devices such as mobiles, tablets and online social platforms

have opened immense opportunities to tap new knowledge, talents and markets. But at the same time, to achieve a balanced approach on fit and flexibility, the complexity of organizational business processes has increased manifolds. This large and complex data, generated from different systems, processes and people are often referred to as 'Big' data. Business process automation and business intelligence tools are required to analyze such big data in order to provide useful insights (Kabra, Ghosh & Ramesh, 2017). However, the real challenge which most companies face is to deal with the high purchase and maintenance cost of these sophisticated software. Cloud computing, a web based platform (Low, Chen & Wu, 2011), is equipped with capabilities to handle such complex business scenarios and can provide an unbound scope for scalability, flexibility and cost reduction for organizations.

Though recent research has tried to emphasize the benefits of cloud architecture to portray HRM effectiveness, less focus has been given to the importance of HRM processes' automation and the role of business intelligence on a cloud enabled platform. Thus, in order to gain a sustainable competitive advantage, HR leaders can leverage the capabilities of process automation and business intelligence on a cloud platform. However, a right alignment of HR-IT strategy with the overall business strategy is necessary to achieve such goal.

Process Automation, Business Intelligence & Cloud in HRM

Process automation can significantly improve the business process cycle time

by seamlessly integrating with varied systems (HRM, learning systems, finance, supply chain, etc.). It automates time consuming HR manual activities and helps to optimize resources (people, time and cost) for any activity in a process. Through business process simulator, analysts can design an efficient process by curtailing the non-value added activities of the process.

Business intelligence applications can collect, consolidate and disseminate the information about critical business processes. They support a wide range of business decisions ranging from strategic to tactical decision-making through the flow of information (Eisenhardt & Sull, 2001). Information from multiple channels (job portals, regulatory bodies, mobile phones, laptops, iPads, sensors etc.) can be captured, consolidated and analyzed through the business intelligent tools. The "intelligent" information can be used in formulating a new HR metrics. Thus, the new data insights result in new HR "benchmarks" or "rules" formation.

The automated business intelligence driven HRM system on a web based platform (Cloud), makes all time availability of HR services to the employees. Employees can access data from anywhere through any internet enabled electronic mobile devices (smart phones, laptops, iPads, computers etc.). This gives HRs the unlimited power for scalability, flexibility and cost reduction. In particular, HR managers who seek high computational abilities to get a 360 degree view of employee data can be immensely benefited by stringing the triplets – automation, intelligence and cloud.

Next-Gen HRM Practices

Recruitment & Selection: By leveraging the benefits of HR process automation and business intelligence, an efficient recruitment strategy can be formulated. In such a condition, the business intelligence system scans the historic data of best organizational performers and prepares “benchmark profiles” for the vacant positions. These profiles are matched with the job applications to prepare a list of potential interviewees. Business process automation tools can be used for applicant tracking, interview management and offer-letter dispatch management to streamline the hiring process (Ghosh & Tripathi, 2018). The hiring services on a Cloud platform, enable potential candidates to access them anytime and anywhere from any mobile devices.

Performance Monitoring: Real-time alerts and reporting mechanisms can be intelligently configured using business intelligent systems. Employees working on complex and important projects can receive updates of any critical process, and get alerts or reminders for their immediate goals or task deadlines on their mobile devices (Ghosh & Tripathi, 2018). HRs can design multiple appraisal plans using unique combination of workflow, reminder rules, customizable forms and multiple scoring rules. Instant feedback mechanisms and contingent reward systems can be designed in a much more effective fashion.

HR Collaboration: A HR collaboration network through a Cloud based platform can make all time availability of HRs

for employees. The concept of ‘Expert Cloud’ or ‘Virtual-HR’ posits a scenario where HRs spread over geographic and organizational boundaries collaborate to share their knowledge, skill, expertise and experiences over any employee or business related problem (Navimipour, Rahmani, Navin & Hosseinzadeh, 2015). Such services are useful for employee counseling which an employee can avail on demand basis.

Compliance: The role-based access feature of process automation system on cloud facilitates appropriate HR personnel to monitor relevant key performance indicators to take just-in time decisions (Business Activity Monitoring on Cloud). The business intelligent system can generate target or threshold sustainability values for economic (e.g., compensation), environmental (e.g., green initiatives) and social (e.g., labor welfare) performance indicators by capturing different industry defined standards and norms from global regulatory bodies like GRI, CDP, UNGC and ILO (Kabra et al., 2017). Therefore, multiple compensation policies and labor laws of different nations can be supported from a centralized HR system on Cloud.

Recommendations

HR intelligent system is not a panacea. The following are some factors which should be followed while planning for HR cloud based transformation projects.

Assessing HR Cloud Readiness: HR leaders have to decide on the nature and scope of the services before they can

be moved into cloud. They should have a clear understanding on the level of control required for accessing employee sensitive data before undertaking a HR Cloud transformation project. A chain of discussions with the key stakeholders of the process is a must for identification of value-added and non-value added activities for HR process automation.

Governance Framework: A well planned governance process around the system is required to ensure proper execution of the HR system as a whole. Stakeholders of the governance process need to be identified who will be responsible for updating the existing HR service policies, making new service contracts with Cloud vendors and other third parties. They need to communicate the governance rules across the organization.

HR and IT Consultants Role: Analysis of the “As-is” business process and development of “To-be” HR processes need to be carried out on a joint-basis. Both HR and IT consultants should work together on the consolidation of activity monitoring reports, business intelligence parameters and report building, and impact analysis of the changes in statutory and regulatory norms (e.g., taxes).

Conclusion

Organizational learning can be facilitated using ‘cloud technology’ where accessing, storing and retrieving relevant information can take place anywhere and at any time. Automation and business intelligent systems make the organizational learning more meaningful, customized and

effective. Corporates have been embracing such technologies in order to capture skill information, design customized programs, identify training requirements, collect feedback and report data to the senior management. It is well assumed that predicting human behavior and actions is the Next-Gen HR system which is achievable through process automation and intelligence on a cloud platform.

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