Impact of Globalization on Human Resource Management

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ABSTRACT

The roles and responsibilities of Human Resources departments are transforming as the modern business faces pressures of globalization. The global supply of talent is short of its long-term demand, and the gap is a challenge for employers everywhere. The shortage between the demand and supply of talent is likely to continue to increase, notably for high skilled workers and for the next generation of business executives. Now organizations need to place greater emphasis on attracting human capital rather than financial capital. Global staffing and management of a workforce diverse in culture and language skills, and dispersed in different nations are the key goals of global human resources. Only those multinational enterprises willing to adapt their human resource practices to the changing global labor market conditions will be able to attract and retain high performing employees. Companies with the ability to foresee their business needs and their workforce needs – especially for high skills – will gain the decisive competitive advantage.

Keywords: Human Resource Management, Globalization, Data Analytics, Data Warehouse, Online Analytical Processing, Data Mining, Key Performance Indicators, Dashboards, Scorecards.

INTRODUCTION

Human Resources departments are transforming as the modern business faces numerous and complex challenges, and exploit opportunities. The transformation of human resources today is a direct call of the rapid changes within businesses due to factors such as globalization. In the global competition within the flat and connected new world, decision making in organizations has become increasingly intricate and convoluted. The new global world has widened the talent pool for excellent and marginal workers, and for permanent and fluid workers. An organization's talent can be a source for a sustained competitive advantage and can affect important organizational outcomes such as survival, profitability, customer satisfaction level, and employee performance (Pfeffer, 1994; Prahalad, 1983). Human resources need to take advantage of technology and data analytics to build a global human resource information system that collects and stores data from various sources. The system will help to analyze the data to provide business insights, predict future needs and develop strategies to fill those needs. Companies with the ability to foresee and sustainably manage their workforce needs – especially for high skills – will gain the decisive competitive advantage (World Economic Forum, 2010a).

The global supply of talent is short of its long-term demand, and the gap is a challenge for employers everywhere. The shortage between the demand and supply of talent is likely to continue to increase, notably for highly-skilled workers and for the next generation of middle and senior leaders. Most emerging nations with large populations, including Brazil, Russia, India, and China, may not be able to sustain a net surplus workforce with the right skills for much longer. Now, more than ever, organizations need to place greater emphasis on attracting human capital rather than financial capital. Because capital is broadly available from investors and lenders, and innovations can be duplicated relatively easily and quickly, effective human resource management is the best way to differentiate one company from another. Global staffing and global leadership development are the two components of global human resources with the greatest potential for powerful leverage for global firms (Pucik, 1996). Only the multinationals that will be willing to adapt their human resource practices to the changing global labor market conditions will be able to attract, develop and retain the right talent, and will likely succeed in the global competition.

The remainder of this paper is organized as follows: In section 2 we describe drivers of globalizations, and in section 3 we discuss some key challenges to globalization. We discuss the changing roles and responsibilities of human resources due to globalization in section 4. In section 5 we discuss global human resource information system and its major components. We summarize and conclude the paper in section 6.

FACTORS DRIVING GLOBALIZATION

The increasing prevalence of globalization is driven by a number of factors, including shortage of talent in developed countries, availability of low cost labor and growing consumers in developing countries, and technological progress.

Shortage of Talent in Developed Countries

Despite the current economic downturn and unemployment, most developed countries, including the United States, Germany and Japan will face long term talent shortages mainly due to ageing and the retirement of baby boomers. There are more workers retiring than entering the labor force in these countries. By 2020, for every five retiring workers, only four new workers will join the labor force in most developed countries. According to one estimate the United States will need to add 26 million workers to its talent pool by 2030 to sustain the average economic growth of the two past decades (1988-2008) unless a technological breakthrough replaces manpower, while Western Europe will need to add 46 million employees (World Economic Forum, 2010). The shortage of workers is predicted across most industries, including manufacturing, construction, transport and communications, trade, hotel and restaurants, financial services, IT and business services, health care, public administration, and education.

Availability of Low Cost Labor from Emerging Countries

The opportunity has never been greater for multinationals to attract top talent from emerging countries, such as Brazil, Russia, India, and China, or to outsource work to these countries. Global population growth differs greatly between developed and developing countries. In the developed countries, USA, EU, and Japan, the current annual rate of growth is less than 0.3 per cent, while in the rest of the world the population is increasing almost six times as fast. According to McKinsey Global Institute, there are approximately 33 million potential professionals in emerging markets and they are growing very quickly. The stock of suitable, young professional talent in emerging markets is growing at 5.5 per cent annually, while the number in developed countries is growing at just 1 per cent annually (McKinsey Global Institute, 2005 - II). The total number of university-educated workers in low-wage countries far exceeds the number for higher wage countries. Currently, India produces as many young engineers as the United States, and China produces more than twice as many. Russia produces 10 times as many finance and accounting professionals as Germany. According to the International Organization for Migration, there were an estimated 214 million international migrants in the world in 2010, and fifty-seven per cent of all migrants live in high-income countries (World Migration Report, 2010). The number of migrants is likely to grow exponentially in the coming years. Furthermore, the migration of workers and outsourcing of work would not be limited to unidirectional flow from emerging countries to developed countries.

Technological Progress

Globalization is made possible by the development of cost effective, yet very powerful technologies, including the Intra- and Internet, enterprise resource planning system, data warehouse, data mart, and data analytics. Friedman (2005) defined globalization a whole set of technologies and political events converging—including the fall of the Berlin Wall, the rise of the Internet, the diffusion of the Windows operating system, the creation of a global fiber-optic network, and the creation of interoperable software applications, which made it very easy for people all over the world to work together—that leveled the playing field. It created a global platform that allowed more people to plug and play, collaborate and compete, share knowledge and share work, on a scale never seen before. Cloud computing and new advances in remote access and support technologies also seem to fuel globalization. Many service jobs, such as call

centers, animation, transcription, and software development can be carried out remotely. It is estimated that 160 million jobs, or about 11 per cent of the projected 1.46 billion service jobs worldwide in 2008, could be carried out remotely, barring any constraints on supply (McKinley Global Institute, 2005 - I). Section 5 discusses a global human resource information system that collects and stores large volumes of data from various sources, including external and remote sources. The system is designed so human resource personnel are able to analyze the data to get business insights, predict future needs and develop strategies to fill those needs.

CHALLENGES OF GLOBALIZATION

As stated in the previous section, the pool of talented individuals has been growing and is expected to continue to grow in the near future, mainly because of increased educational opportunities in emerging nations. In addition, the demand for such talent is likely to grow even faster in the same period. Based on data from 22 countries and 12 industries, a World Economic Forum study predicted that vast talent gaps between the supply and demand of highly skilled workers would appear by 2020 (World Economic Forum, 2011). The demand for talented people is growing not only from developed countries, but from the developing countries themselves as they pursue their own nation building.

Human resource professionals at multinational companies in emerging markets such as China, Hungary, India, and Malaysia have reported in a recent survey that candidates for engineering and general-management positions exhibit wide variations in suitability (Guthridge, Komm, and Lawson, 2008). According to the McKinsey Global Institute, only 13 to 19 per cent of 33 million university graduates in developing countries are suitable to work in a multinational company, due to their lack of language skills, low quality of educational system, and lack of cultural fit. Also, only a fraction of these people are willing or able to relocate to foreign countries for employment (McKinley Global Institute, 2005 - I).

It also remains the biggest challenge for global organizations' human resource departments to manage a workforce diverse in culture and language skills, and distributed in various countries. It is critical that the businesses not only familiarize with local ways of doing business, and understand the needs of local consumers, but also develop a global mindset among their employees. Being at the center of globalization, multinational organizations need to learn to integrate diverse value systems and espouse shared global work values to create an environment, where workers are able to communicate and coordinate their activities to reach common goals (Rosenblatt, 2011; Erez and Drori, 2009; Ralston et. al., 1997). Human resources must play new roles and responsibilities in leading the organization in uncharted waters of globalization.

ROLES AND RESPONSIBILITIES OF HUMAN RESOURCES

In the past, the function of human resources was typically considered a cost center and an administrative overhead. The human resource departments focused on short-term gains and savings. They focused on administrative efficiency and compliance activities. They tended to expense investments in talent intangibles rather than capitalize and tended to raise short-term earnings by cutting discretionary expenditure on people development (Guthridge, Komm and Lawson, 2008; Hamel and Prahalad, 1994; Schuler and Jackson, 1987, Bryan, 2007). Such tendencies achieved short-term successes but encountered long-term problems when the objectives were achieved at the expense of employee productivity.

The role of modern human resource departments is to focus on organizations' long-term objectives. Instead of focusing exclusively on internal human resource issues, modern human resource department takes a balanced and broader approach. They place emphasis on future-oriented plans and objectives and value adding initiatives (Adler and Ghadar, 1990; Adler, 1997; Kobrin, 1988; Milliman et al., 1991; Tung and Punnett, 1993). Ulrich (1996) defines the roles of human resource based on the following four functions – Strategic business partner, Change Agent, Employee champion, and Administration Expert. They are also champions of globalization and technology savvy.

Strategic Business Partner and Change Agent

Strategic business partner and Change agent functions are about leading and helping in formulating the organization's overall business strategy and to align human resource activities and initiatives with the organization's overall business strategy. Unless the human resource strategy is appropriately formulated and skillfully implemented, success of the organization is at risk (Belcourt and McBey, 2010). In these roles, the human resource professional contributes to the formulation and the accomplishment of the organization-wide business plans and objectives, and formulates the human resource business objectives to support the attainment of the overall strategic business plans and objectives.

Talent planning should be inextricably linked with strategic planning and, as such, regularly addressed by human resource executives. Companies need to develop leaders capable of generating growth and effectively managing a multicultural workforce. Leaders themselves need to represent diverse cultures and backgrounds so the structure of the decision-making bodies within organizations reflects a more diverse composition of the marketplace (World Economic Forum, 2010).

The human resource personnel do periodic evaluation of the effectiveness of the organization at the corporate level. The personnel anticipate changes and understand what is necessary to implement them. The human resource professional is skilled in acquiring business insight in order to predict changes, and make informed decisions at operational and strategic levels. The human resource professional accesses current requirements and anticipates future skills shortages through strategic skills planning. Business volatility and uncertainty increase the need for companies to rely on advanced analytics, scenario simulations, and other sophisticated workforce-planning levers (BCG and WFPMA, September 2010).

Partner with Frontline and Middle Managers

One of the characteristic features of human resource literature is the pivotal role that has been given to frontline managers as a delivery point for a variety of employment policies that are intended to raise the performance of the workforce (Patrick, McGovern, Lynda Gratton, Veronica Hope-Hailey, Philip Stiles and Cather, 2007). The people and performance research carried out for the CIPD by a team at Bath University found a direct correlation between employees feeling positive about their relationship with their frontline managers and them being more likely to have higher levels of job satisfaction, commitment and loyalty which are associated with higher levels of performance (Hutchinson, S. and Purcell, J., 2003). The human resource role is to partner with frontline and middle managers to effectively acquire, develop and retain human capital for all business units in the company. Modern technology has made it possible to for human resource personnel and line managers to have virtual, without face-to-face, meetings and communications.

Employee Advocate and Champion of Globalization

As an employee sponsor or advocate, the human resource manager plays a pivotal role in organizational success via his knowledge about and advocacy of people. This advocacy includes expertise in how to create a work environment in which people will choose to be motivated, contributing, and happy (Ulrich, 1996). When employees are motivated they want to do their best work – not out of obligation but because their job matters to them, both professionally and personally. On the other hand, discipline comprises systems, policies, and practices that raise accountability. When motivation and discipline unite, employees are excited about, accountable for, and rewarded for their work (BCG and WFPMA, July 2010). Workplace flexibility is expected to be on the rise in the future workplaces and thus, most of the interaction between human resource personnel and line managers or workers will be Virtual, without face-to-face, meetings.

The human resource personnel are a champion of globalization, and help develop global mindset in its employees. Having a global mindset implies recognition of benefits that can flow to the whole organization from encouraging and valuing cultural diversity in people. Globalization is increasingly adding one more thing to low-cost labor and high-power technology: unfettered imagination–that is, high innovative and creative capabilities (Friedman, 2005). The role

of human resource is to implement the necessary organizational strategies with sensitivity to specific cultural influences (Pucik, 1996).

GLOBAL HUMAN RESOURCE INFORMATION SYSTEM

Global organizations are utilizing the organization's data to making informed decisions instead of relying on their intuitions or gut feelings.   Likewise, HR departments of global companies also assemble data such as employee, attrition and hiring, compensation and benefits, ethnic, gender, cultural, and nationality distributions, and load the same into data warehouses and data marts. By analyzing the past and current data, business analyst get business insights, and make fact based decisions.

The Global Human Resource Information System consists of a number of component systems that are interdependent. The various components may be broadly classified into the following three main sub-systems: Data Warehousing, Data Analytics, and Information Delivery. These tools and systemic processes are critical to formulate questions or hypothesis, to design data and analytical models, to compute and communicate results to appropriate users, and then for the users to draw business insight from the results to shape business decisions and, ultimately, improve performance.

The Data Warehousing System

A data warehouse is a decision support database that is maintained separately from the organization's operational databases. Operational databases contain data pertaining to each transaction while data warehouses contain summary data such as totals, counts, maximums and minimums. The data stored in a data warehouse is optimized for querying and data analysis. Data warehousing systems deals with design, implementation, and operations of a data warehouse including data extraction, data cleansing, data transformation, and loading of data from different sources. The system also includes meta-data management, security management, backup and restore, and disaster recovery.

The data warehouse is able to collect and coalesce data from various sources. Employee data is generally housed in separate human resource systems based on vertical human resource functions, such as benefits, payroll and compensation, leave, training, performance appraisals and surveys and/or horizontally across functional areas. Companies need to identify all internal and external data sources and then consolidate the data into a human resource data warehouse or, one or more data marts. Some examples of external data sources are US Bureau of Statistics, Open Government Directive Datasets (data.gov), collective agreements, labor market trends, labor regulations, and industry benchmarks.

The design of a data warehouse depends on identifying facts, dimensions, and granularity. Facts are summarized numerical data stored in a table called a fact table. Dimensions are categories by which summarized data can be viewed. Each dimension can have one or more hierarchies. Hierarchies are logical structures that use ordered levels as a means of organizing data. Query tools use hierarchies to drill down or roll up into your retrieved facts to view different levels of granularity. Granularity refers to the level of detail of the data stored in a fact table. The more detail there is in a fact table, the higher its granularity and vice versa.

We may also (for performance and confidentiality reasons) choose to store the facts at some intermediate level of granularity. As compared to the data warehouse with highest granularity, this data warehouse does not contain details that could be very valuable to the company. In general, as the granularity level is lowered, the system contains less detailed information (therefore less useful), but gains in performance (in speed and storage) and confidentiality of individual records.

Information Technology professionals are responsible overall for designing a data warehouse system that is optimal in storage and performance, while the human resource department is responsible for ensuring that each user in their group has the information in enough detail to do his or her job. Performance and usefulness oppose one another; thus, Information Technology and Human Resources departments need to find an optimal overall solution that is best in the long run for the organization as a whole.

The Business Analytics System

Global Human Resource Information systems are generally very rich in business analytics applications, including Online Analytical Processing (OLAP), data mining, and advanced analytics applications based on statistics, forecasting and predictive analytics. These applications can not only give answers to questions such as, "What happened? Why did it happen?" but also can enables the user to predict and influence the future. The advanced analytics can answer deeper human resource questions, such as "In what ways human capital investments will contribute to business performance?", "How much do human resource activities impact employee performance?", or "What skill needs and opportunities lie ahead?"

OLAP applications can retrieve summary statistics (metrics), such as totals, averages, percentages, standard deviations, maximum, minimum of data measurements (facts) from multiple dimensional views. These applications are capable of performing several data retrieval operations, including Drill down, Roll up, and Slice and dice and allow users to view metrics based on different detail levels.

Mega BI vendors have incorporated comprehensive statistics packages within their BI software system. For example, IBM has incorporated the SPSS with their BI Cognos system, and SAS Inc. has developed their BI software with a core consisting of their celebrated statistical packaged software. Microsoft has developed XLSTAT, an add-on to Excel for Statistics and multivariate data analysis. Along with the inclusion of statistical capabilities, BI vendors have also incorporated Data mining capabilities in their software. Data mining is an extension of statistical techniques such as, classical and artificial intelligence. Statistical techniques are generally applied to relatively small-size sample data selected randomly and specifically to validate a hypothesis. These techniques conform to a set of assumptions about the population and are called 'verification driven techniques'. Data mining includes techniques called 'discovery driven techniques' that do the exploration and analysis by automatic means of large quantities of data in order to discover meaningful hidden patterns in order to find relationships, associations, and trends among the data measurements (Kim, 2002; Tan, Steinbach, and Kumar, 2006; Shmueli, Patel, and Bruce, 2010) and this knowledge is then applied to achieving specific business goals. By contrast, predictive analytics includes statistical, mathematical, and data mining analyst-guided (not automatic) techniques that do the exploration and analysis of large quantities of data in order to make decisions by forecasting the outcomes. Whereas OLAP and data mining focuses on past performance, predictive analytics forecasts behavior and results in order to guide specific decisions. If OLAP and data mining can elucidate what has happened and why, predictive analytics can advise on the appropriate response action.

The Information Delivery System

The information delivery system gives business users the ability to access reports and continuously monitor performance of a project or entire organization at enterprise and lower levels. End users are also able to monitor key activities such as trends, metrics, and Key Performance Indexes (KPI) in easy-to-understand designs, such as configurable information portals, scorecards and dashboards. Depending on an individual's role and responsibility, he or she is presented with the trends, metrics, and KPI at appropriate aggregate levels. Some users can get to the lowest detail that exists in the warehouse.

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SUMMARY AND CONCLUSIONS

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The increasing prevalence of globalization is driven by a number of factors, including shortage of talent in developed countries, availability of low cost labor and growing consumers in developing countries, and technological progress. Despite the current economic downturn and unemployment, most developed countries, including United States, Germany and Japan will face long term talent shortages mainly due to ageing and retirement of baby boomers. There are more workers retiring than entering the labor force in these countries. By 2020, for every five retiring workers, only four new workers will join the labor force in most developed countries. The shrinkage of talent will be more than compensated by growing number of professional talent produced in emerging nations, yet the global supply of talent is short of its long-term demand, and the gap is a challenge for employers everywhere. The shortage between

the demand and supply of talents is likely to continue to increase, notably for highly skilled professionals. The demand for talented people is increasing from developed and developing countries alike.

Only the multinational enterprises that will be willing to adapt their human resource practices to the changing global labor market conditions will be able to attract, develop and retain high performing employees, and will likely survive, and succeed in the global competition. Management of culturally diverse and geographically dispersed workforce is a key goal of global human resources. It is also critical that the businesses not only familiarize with local ways of doing business, and understand needs of the local consumers, but also develop a global mindset among their employees. Human resources must play roles and responsibilities in leading the organization towards openness to cultural diversity.

The human resources need to focus on organizations' long-term objectives and on future-oriented plans. Instead of focusing exclusively on internal human resource issues, human resource departments need to take a balanced and broader approach. HR departments of global companies must assemble data on factors, such as employees, attrition and hiring, compensation and benefits, ethnic, gender, cultural, and nationality distributions, and load into data warehouses and data marts. By applying advanced analytical techniques on the data, human resource professional will get business insight, predict changes, and make informed decisions at operational and strategic levels. The human resource professional accesses current and anticipates future skills shortages through strategic skills planning. Global organizations not only need to a networked, collaborative and open to culturally diverse workforce, but also consists of high talent.

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