

Chapter 5

Application of Statistics in HR Research

Dipak Kumar Bhattacharyya
Xavier University, India

ABSTRACT

Application of statistics in HR research has been briefly explained in our introductory chapter. It is now acknowledged, with statistics, we can ensure our HR research is more effective. Such research results can also help to take critical HR decisions at organization level. In this chapter, we have discussed on application of statistics in HR research in two critical areas, i.e., human resource planning (HRP) and performance management. Both in HRP and performance management, we can make extensive use of various mathematical, econometric, and statistical tools. Also, we have many established models. However, here our focus is restricted to only some of the simple statistical tools that can help in research in this two-critical human resource management areas. As the purpose of this chapter is to explain use of statistics in two major areas of HR research, it will cover only some selected areas of application. At the outset focus is on the specific research nitty-gritty, as these may help prospective researchers to get their basics clear, before they proceed for research in HRP and performance management areas.

HRP AND ITS STRATEGIC IMPORTANCE

HRP integrates all HR activities and the strategic plans of an organization to coordinate recruitment, succession planning, promotion, performance management systems and training and development. It is the primary level function of HR and it precedes all other functions of HR. HRP balances the demand and supply of

DOI: 10.4018/978-1-5225-4947-5.ch005

manpower, aligning with the strategies and business plans of the organizations. Rothwell and Sredl (2000) observed HRP helps to analyze the environmental trends that may affect the HR supply chain and in the process, narrow the gaps between present human capital supply and the forecasted human capital demand. To ensure strategic alignment of HRP with the company's business plans, Rao and Rothwell (2005), recommended the need for developing a HR framework that can put more emphasis on results and measurable achievements. Rothwell and Sullivan (2005) also endorsed the similar views. In both the cases the use of balanced score card as a tool have been suggested.

For obvious importance of human resources, as the source of sustainable competitive advantage, now we also use the term human capital planning (HCP). HCP is a critical business process because of its transformational impact on the value the function delivers to the business (Brush and Ruse, 2005). HCP is used to identify the human capital needs of goals and objectives tied to the business strategy. According to Zula (2007), HCP involves the recruitment, selection, allocation, and retention of human talent (intellectual and knowledge resources), including the training and education of these resources, which are linked to critical business strategies; and goals and objectives to gain competitive advantage to earn above average return on investment (ROI). Brush and Ruse (2005) proposed a model of human capital planning based upon their work in industry. The model proposed by Brush and Ruse, detailed limited integration of multiple organizational systems to the alignment of human capital to business strategy. Zula contended HCP requires management support and participation; else it is not going to achieve success.

Human resources of an organization are no longer considered as important business constituent, it has now become almost inseparable from strategic and business planning issues. While the major part of human resource management issues focusses on its best optimization through practices, the process that starts after the acquisition of manpower; HRP or HCP issues are still not considered as critical, either for lack of knowledge or for unwillingness to invest time and money. Author's interactions with many top-level HR professionals (even in IT industry) were shocking; as organizations largely nurture lackadaisical attitude to HRP, people being available when they want them to hire. Their proclamation is partially true, as in many industry jobs are now fragmented and skill specific. Organizations now can also manage their manpower requirements through contingent workforce. But again, such trend is only up to specific nature of job and hierarchical level. A sudden change in top and middle level management takes the people of the organization through a cultural shock, and many prefer to quit for joining the rival organizations. Such organizational syndrome is evident from the corporate world across the globe.

Another reason for legitimacy of inclusion of HRP as part of the business and strategic plans of the organization is for the increasing complexities of business.

32 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/application-of-statistics-in-hr-research/196112

Related Content

The People as Technology Model and the Five Values

(2023). *Valuing People and Technology in the Workplace: Ethical Implications and Imperatives for Success* (pp. 70-122).

www.irma-international.org/chapter/the-people-as-technology-model-and-the-five-values/321320

Information Technologies as a Vital Channel for an Internal E-Communication Strategy

José A. Lastres-Segretand José M. Núñez-Gorrín (2009). *Encyclopedia of Human Resources Information Systems: Challenges in e-HRM* (pp. 532-537).

www.irma-international.org/chapter/information-technologies-vital-channel-internal/13278

HRIS Project Teams Skills and Knowledge: A Human Capital Analysis

Hazel Williams, Carole Tansleyand Carley Foster (2009). *Handbook of Research on E-Transformation and Human Resources Management Technologies: Organizational Outcomes and Challenges* (pp. 135-152).

www.irma-international.org/chapter/hris-project-teams-skills-knowledge/20058

How to Effectively Apply Appreciative Inquiry in Developing Talent in Organizations

Mambo Mupepi, Yalonda M. Ross-Davis, Mark Davisand Thomas S. Vachon (2017). *Effective Talent Management Strategies for Organizational Success* (pp. 20-30).

www.irma-international.org/chapter/how-to-effectively-apply-appreciative-inquiry-in-developing-talent-in-organizations/176317

Augmented Reality and the Future of Virtual Workspaces

James K. Fordand Tobias Höllerer (2008). *Handbook of Research on Virtual Workplaces and the New Nature of Business Practices* (pp. 486-502).

www.irma-international.org/chapter/augmented-reality-future-virtual-workspaces/21917