



Growth and Challenges of HR Analytics in the IT Industry: An Empirical Study

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Abstract:

Organizations today are increasingly becoming globalised and facing VUCA (vulnerability, uncertainty, complexity and ambiguity) in the business environment. Under such conditions, making the right decisions and sustaining competitive advantage are the goals of any organization. Business analytics has emerged as an important tool to address these goals. Present paper provides a captious-analysis of the HR-analytics in Indian IT sector and attempts to explore its approach towards analytics" development and application. Corollary, HR-analytics in Indian IT sector has a vast-potential but inadequacies in HR systems, teams and people skills. This calls for need to have rational HR professionals for strategic decision-making and competitive advantage, as we believe creative and innovative minds can generate the best economies in the world. To ensure the presence of such talent in the organization, we need good assessment tool as well

Keywords: Analytics, HR analytics, IT sector, MNC, Strategic decision-making

INTRODUCTION

Human Resource analytics is defined as methodology to relate and interpret human resource practices and employee performances in terms of organizational effectiveness (Boudreau & Ramstad, 2006). It is used to understand and evaluate the casual relationship between these variables. HR analytics doesn't deal with just gathering data it also interpreting and use it for relevant decision making proves.

Indian IT sector has acknowledged the value of HR analytics generally for recruitment and selection strategy. More than 80% of these business firms declared that they have Full-bodied analytical process and structure in place (People Matters editorial team, 2015). Sixty-seven percent of US\$ 124-130 billion market appoints ten million workforces, makes India the world's largest sourcing destination for the information technology (IT) industry (IBEF, 2017). IBM using data analyses for retaining the best talent and acquisition whereas TCS used big data analytics not only



for talent management but also analyzing its impact on overall business outcomes (TCS, White paper, 2014). Most of the organization invested on analytics only for metrics of headcount, payroll or salary and not for the data that fits together and linked to organizational performance (Higginbottom, 2014). Moving forward, there is a need for exploring the Indian IT sector in the field of HR analytics, which what are the prospects of HR analytics, the challenges and problems faced by them in implementing the Use of HR analytics and what benefits it brings.

LITERATURE REVIEW

Review - 1

The Survey on HR analytics and HR transformation, **Author(s):** Alec Levenson, John Boudreau, E.Lawler, 2005

This study aims at identifying the analytical competencies those exist within HR department of an organization and how they are applied. What are the systems used to build, develop and deploy analytics in HR department. The issues faced by these analytics department and the level of complication involved in this department. The relation between HR analytics and Organization effectiveness.

The study provides new empirical evidence that there seem to be a gap in the analytical competencies among HR professionals working on analytics and other HR professionals. HR analytics is used to a considerate extent only among various industries. The organization leaders perceive there seems to be a relationship between the extents of usage of HR analytics towards organization effectiveness.

Review – 2

Human Resource Analytics in Practice, **Author(s):** Joerik van Dooren , 2012

The study investigates the contingency factors affecting the applicability of HR analytics and the extent to which they are affecting in Dutch Organizations. The study also aims at explaining that financials of a organization also related to the HR analytics.



Results of the empirical study showed that only few signs show there is increase of financial perspective by HR analytics. The old organizations, organically structured organizations, large organizations etc have less scope of improvement in HR analytics.

Review – 3

Human Resource Metrics: Can Measures Be Strategic? **Author(s):** John Boudreau, Peter M Ramstad, 1998

The main objective of this paper is to suggest a general frame work for integrating SHRM and measurements through strategic HR metrics. The fundamental SHRM theoretical dilemmas identified in this article are how theoretical and Operational issues faced by SHRM can be addressed with the help of measurements.

The research proposes few propositions as in the organizational strategy requires set of employees responses, HR policies produces those unique set of employee responses. The paper gives an overview of challenges faced in SHRM as in the nature and quality of metrics to be used. The usage of metrics and selection of right metrics should be based on the strategic focus.

Review- 4

Maximizing the Impact and Effectiveness of HR Analytics in Driving Business Outcomes
Author(s): Scott Mondore, Shane Douthitt and Marisa Carson, 2011

This paper describes the process of using analytics to develop several case studies by HR professionals and interpret those using analytics. The paper focus mainly on process analytics and integrated analytics for business cases

The article suggests HR professionals to concentrate on Business process and providing strategy for improving the organization strategy rather than concentrating only on improvement of employee engagement activities. To become a strategic business partner the article suggests analytics as only way.

Review-5

Status of HR Measurements in India **Author(s):** M. Srimannarayana, 2010



This study is concerned about HR measurements in India. The study identifies some positive factors that will help the HR measurement system to be in line. The study also indicated that ITES sector is more efficiently using HR measurement compared to manufacturing or IT sector. The study also says private sector makes more investment in HR measurements compared to public sector thereby they advance them.

The research shows that, Organizations with population between 5000 to 10000 have more impact on HR measurements and they progress more on this. The research suggests that organizations in which CEO's recognize the HR manager's investment on HR measurements performs better. There is no measure on Cost benefit analysis so the HR professionals need to concentrate on that. The public sectors also need to make investment on HR measurements.

Review-6

Wipro Ltd. has started using different software for holding back talent and social media analytics for grabbing new skills, through cloud based HCM (Human Capital Management) software. The main factor which led need to adopt the latest technology and innovation for human resource is labor mobility (Wipro Annual Report, 2015). The transition of Wipro Ltd from cloud based oracle system to their own Wipro HR sprinter software for augmenting talent management, gives strategic insights for decision-making. This software shows trends of each employee by just a click, the data of employees in the system predict their behavior as well. In real life, business firms are not investing enough for developing HR analytics. HR should claim entitlement for HR analytics, mainly in a dedicated role. Managers use HR metrics for recruitment, selection and retention rather than seeing the overall performance of the Human Resource Department. As we know that recruitment involves lengthy process, it deals with lots of data about the employees. Hence, managers can use descriptive and predictive analytical tools for recruitment of employees and deciding about the salary. Recruitment efficiency will be improved up to 80%, if analytics is used (Mc. Kinsey survey, 2016).

Infosys is no way behind in adopting the software called as my Nest HR Analytics and dashboard (Infosys Consulting Blog). HR analysis aided the organization in understanding its internal hiring as well as external hiring ratios. Infosys further adds that organizational success depends on employee's performance and it can be analyzed by the use of analytical tool. HCL technologies are one-step ahead than these two companies have analytics tool. Semantic analysis is one of the tools used by HCL for investigating database of over 5 million candidates and internal employee's records, while Predictive Index is for hirers and recruiters to employ right person at the



right place. It is also using talent transformational analytics and 17% demand is fulfilled (Singh. N, 2016). This paper explores that Indian IT industry is still on initial stage of acceptance and needed a sound structure for HR Analytics. Hence, Indian IT markets have many prospects in terms of HR analytics to be explored.

Research Objectives

1. To understand the present prospects of HR Analytics in IT Sector.
2. To discuss about the benefits of using HR Analytics.
3. To determine the obstacles facing HR analytics in IT Sector

Research Question

- ✓ What prospects do Indian IT sector have with the use of HR Analytics in an organization?
- ✓ While applying HR Analytics, what kind of challenges does an IT organization face if any?
- ✓ How far the use of analytics by HR department is benefitting to an IT organization?

Research Methodology

This study is conceptual and descriptive in nature. The purpose of this paper is to report the findings of comprehensive overviews of HR analytics based on secondary data collected from various journals, research papers, and websites which helps to understand the concept of HR analytics in It Sector and also helps to understand the challenges in implementing HR analytics as a tool in organizations.

Hypothesis of the Study

H1; HR analytics is not utilized in strategic business decision

H2: HR analytics is also considered for strategic business decision

Sampling technique & size: The sample size is 20 organizations and snowball sampling is used for the study. The Research Methodology of the study will be to collect information through a questionnaire. Sample size of a 21 employees would be taken up for the study from 20 IT UGC CARE Group-1,



Companies operating all over South India with a relevant work experience. This is done so that employees with relevant work experience can have better clarity and knowledge on the various HR analytics tools and metrics implemented in the organization.

Data Collection Tools Used: A standardized tool measuring usage of HR Analytics for Decision Making Questionnaire developed by Levenson Boudreau and E. Lawler, Centre for Effective Organization, 2005. The tool was adopted to study the same in the Indian context for Employees in IT Organizations in South of India.

Challenges Faced by HR Managers in Implementing HR Analytics

HR professionals usually adopt trusted and tried metrics, which is commonly used for making workforce strategy (CIPD Research Report, 2013). Home-based structure is required to give precise answer to problem, which exists in organization and it also helps in overcoming irregularity and unpredictability in data itself (Boudreau and Jesuthasan, 2011). There are three major blocks in implementing HR analytics as mentioned below (CIPD, 2013):

Silos: Structural barriers in the system of organization that mainly hamper timely and efficient access of data termed as “Silos”. It is prompted not only because of structural barriers among HR but also among the other department, that hinders the exchange of data. The system silos are those relating to infrastructure for data analysis and issues such as systems unsuitability, safety-security, and IT skills issues.

Skills and Smarts: One of the main factors for blocking the use of analytics is need of “skills” due to which organizations are not able to use HR analytics. HR department adopts analytics only when they can appoint new analytical talent and can produce high impact business focused insights. HR Analytics can only move to the next level when human resources have numerical knowledge.

Wipro Ltd. labelled their challenges more passionately and deeply by explaining the above three barriers as follows (Wipro, 2015):

- ✓ Responsiveness to talent needs and execution of forward-looking talent strategy
- ✓ Complex employee policy
- ✓ Customized benefits
- ✓ Dynamic career plans
- ✓ Flexibility



✓ Collaboration/insights

Challenges in using analytics in Indian IT sector are many, which required their solutions. Cindy, (2012) mentioned: Another challenge of HR managers are overloaded data information, which leads to chaos among them to use for decision-making, Jacqueline Lee (2015) mentioned in her article that; data analysis is resource-intensive for IT, and many smaller companies simply do not have the infrastructure for Hadoop of analytical programs. Acute analysis of the IT industry clarifies; there is lack of analytical skilled Human resource.

Benefits of Using HR Analytics in Strategies

“HR is very keen to take benefit of the competency to predict talent demand, gauge talent supply, and retain the employees who anticipate HR-related outcomes”, says Elizabeth Craig, a research fellow with Accenture Institute for High Performance (Trends Reshaping the Future of HR, 2014). Moving further, there is a living example named “Billy Beane”, the Oakland Athletics’ coach for baseball shows that analytics can earn winning results. He proved this in 2002 by selecting players based on arduous statistical assessments of their performance (Leigh Steinberg, 2015). This approach of selecting team based on analytics led his team to become one of the longest winning streaks in league history. Moreover, TCS refined the benefits as follows (TCS, 2012):

- ✓ Pay roll can be managed by analyzing the root cause and decreases payroll cost by reducing manual processing, check bounces etc.
- ✓ Diverse workforce is monitored efficiently. The system identifies the dynamic features that increase employee output, boosting employee morale, attrition causal analysis and trends.
- ✓ Best talent is retained. Top performers are identified regarding job tenure, pay scale, performance rating, and past attrition rate.
- ✓ Effectiveness of training and development programs are investigated. It assesses efficiency of various internal and external training and programs to deal with skill gaps.
- ✓ This HR system helps in ensuring compliance with local, regional and country specific compliance requirements

Wipro Ltd. using HR analytics has increased capabilities for training, motivating and compensating employees, discovering new and exciting opportunities for organization. It also gives planned vision to the HR leaders for making decision about employees who will be star performer and which one will leave organization (Wipro, 2015). Almost all the IT companies use predictive Index



(PI), which creates a communicative profile of the employee and provide an exact depiction of employee's central energies and job preferences (Singh. N, 2016).

Data Analysis:

Particulars	Positive	Negative
Measure The Business Impact of HR programs and processes	61.90%	4.80%
Measure the cost of providing HR services	38.10%	23.80%
Conduct Cost Benefit Analysis of HR programs	61.90%	19.00%
Measure the effects of workforce in terms of competence, motivation, attitude, behaviour, etc,	57.10%	23.80%
Evaluate and Track the performance of outsourced HR activities	55.00%	25.00%
Connect Human Capital practices to Organization effectiveness	52.60%	21.10%
Making decisions and recommendations that reflect company's competitive situation	66.70%	14.30%
Identify where talent has the greatest potential for strategic impact	60.00%	20.00%
Assess the HR programs before they are implemented	47.60%	28.60%
Pinpoint HR programs that should be discontinued	27.80%	44.40%
Assess the feasibility of new strategies	47.40%	21.10%
Evaluate the effectiveness of HR programs and practices	61.90%	14.30%
Measure routine HR process Execution	85.70%	0.00%
Support Organizational Change Effort	47.40%	15.80%
Assess and Improve the HR department	66.70%	14.30%
Assess and Improve Human Capital strategy of the company	52.60%	15.80%
Contribute to decision about Business strategy and Human capital	57.10%	4.80%

Source: Primary Data

Findings:

- ✓ The study shows that there is considerable knowledge and growth in terms of analytics and metrics in HR department. Also, there is huge growth in terms of implementation of them across different functions and practices in HR.
 - ✓ The routine process execution seems to dominate the analysis. Almost every organization
- UGC CARE Group-1,



use metrics for these processes.

- ✓ On the other hand, in pinpoint the HR programs for discontinuity there is lack of usage of analytics or metrics. Most cases people not at all use metrics or they use to a little extent. Thereby analysis in these areas is need to invented and utilized Even though the number of usage of analytics has improved from not at all and some extent the overall usage still remains considerable extent. This has not changed for past 10 years.
- ✓ The Demographic factor shows that experienced professionals are employed in this field. Majority of them are between the ages of 26 to 30. There are the generations of Gen Y who are Technology natives where as 30+ are Gen X mostly who are technology immigrants so most of them won't be comfortable with usage of technology and analytics.

Suggestions:

Organizations should look at motivating employees for usage of data's for supporting their decision rather than just verbal arguments. The data is available in abundance in the organizations which are never considered most of the times. These data can be used to interpret each and every process of organization as everything in measurable in current trend with the help of available technology.

Developing a culture for supporting every decision making process with the help of data would help to have a strong points for discussion over a decision and analysis of the effectiveness of the implemented decisions. Analysis of data would also give way for several different perspectives and new suggestions for new decisions or alternatives.

Conclusion

Human Resource Analytics is key element for changing HR leaders across all sectors. HR analytics shows trend for every employees going to leave the job or stay and track the performance of each employees. Recently, it is adopted by the IT sector for making better HR decisions. This research paper is conceptual in nature and based on secondary data sources such as research journals, magazines, newspapers, company reports on HR analytics. The analyses of given researches explores that Indian IT industry has just now awakened with the idea of adopting the big data analytics for better HR decisions.

It can be concluded that, in the context of the study, Organizations are slowly moving to the digital



age in accepting quantitative analysis for every process which were not employed earlier. The HR's are being considered more as strategic functions rather than a support functions. There seem to be few traditional organizations which are slowly growing as learning organizations in this trend. Even though there seem to be a positive growth of analytics in the sector the margin between positive and negative is too less by fractions in major case. The change is slightly observed here but need to grow on a faster phase to compete with global organizations as this is almost similar to the earlier survey conducted in US. There seem to be a huge gap in between earlier and this survey and also the demographics but the result seem to coincide mostly. Thereby it shows that US is going 10 years ahead to us in the usage of technology and data. To compete with the global market we need to improve in terms of analytics and its usage to fight in this competitive global environment. The organizations should invest in identifying various metrics and their advantages and try to deploy that in the evaluation.

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