

Building Talent Supply Chain through Analytics

V.V Sateesh Kumar Annepu

Research Scholar

Gitam Institute Of Management

Sateesh.Cmt@Gmail.Com

Contact Number: 9032531153

Gitam (Deemed To Be University), Visakhapatnam, Andhra Pradesh, India

Dr. T. Sowdamini

Assistant Professor, Gitam Institute Of Management,

Sthatta@Gitam.Edu Ph.9885532350, Orcid: 0000-0002-5134-0940

Gitam (Deemed To Be University), Visakhapatnam, Andhra Pradesh, India

ABSTRACT

As organisation look for options to cut the costs in business operations, including human Resources, partnering with firms that specialize in support services becomes a possible option for such organisations. Corporation's are heading toward an outsourced support services as one of the option to maintain high quality support while reducing overall cost incurred over talent management.

Talent service providers allow the clients to build a support plan with the aim to customize to their needs and have the flexibility which can be used on an "as needed" basis. Support plans can come in many varied packages including annual or multi-year agreements, but can also be more determined on areas such as yearend processing.

Talent Supply Chain Management is a positive management approach for securing and optimizing talent supply and services through supplier network which enable the organisations to meet the human capital requirements.

Talent Supply Chain integrates managed service provider proficiency with workforce analytics including talent delivery, demand dynamics, talent motivation to deliver access to quality talent at cost effective rates and with minimized risk thereby improving the organisational efficiency.

Victorious businesses use a permutation of human capital metrics and decision tools to leverage on the performance of its human capital. Talent supply chain include different employee specific interventions like recruitment trends, attrition trends, growth trends, skill gaps, risk factors, costs, performance, professional goals vs. corporate goals, and profitability. The purpose of this paper is to build a talent supply chain framework with the support of human resource analytics.

Keywords :Talent, Supply Chain, Human Resources, Outsourcing Management, Analytics.

Article Received: 10 August 2020, Revised: 25 October 2020, Accepted: 18 November 2020

Introduction

Human resource management is the strategic tool in the hands of the management of an organization's. Human resources are the most priceless asset for any organisation. Human resource management covers the various aspects of the people working in the organisation like recruitment, talent management, and direction to people who work for the organization and also deals with employee compensation and benefits and various other aspects like dealing with organizational change, teamwork and worker/staff resistance, integration of human resources aspects

with business goals, and more. The failure or success of organization mainly depends on the successful utilization of human resource by the organization.

Human Resources Changeover:

Human Resources functions were initially dominated by transactional work such as payroll and benefits, administration, technological advancement, and due to advanced research HR now is resting on strategic initiatives like mergers and acquisitions', talent management, outsourcing partnerships.

Competitive pressures:

Global competition in manufacturing and service sectors is increasing this is supported by effortlessly transferable technology and diminishes in international trade barriers. Corporations are reacting to competition by becoming customer focused, by speeding up response times, improving service quality emphasizing market superiority through continuous improvement, accelerating the application of innovative technology, operating more flexibly and reducing cost.

The pressure has been for businesses to become 'lean organizations', downsizing and cutting out layers of management and supervision. Business corporations are shrinking the permanent staff to a core of essential work, increasing the use of peripheral workers, manpower supplier, and temporary staff and also outsourcing the business process to external service provider.

Flexible Firms:

Most of the service based firms have altered into virtual firm or corporation, where through the wide-ranging use of information technology a high amount of marketing and professional staff mainly works from dwelling or from remote locations, few employees coming into the office on particular occasions to occupy their desks and spending more time with their customers or clients virtually.

Business Process Re-Engineering (BPR):

One more response to competitive pressures is business process re-engineering (BPR) which examines the process which links business functions collectively from initiation to completion. BPR looks at processes within the organizations to establish and integrated business functions more effectively for streamlined outcome.

Human Resource Architecture Models:

A human resource architecture model is a framework by which it distinguishes employees in order to design human resource support processes. Immense downsizing undertaken by businesses to attain productivity and reduce costs however the endless efforts of restructuring and re-engineering undertaken by corporations had transformed the new service relationship into growing model for this employment

relationship took several forms.

Basically, strategic employees perform the essential tasks within the organisation, human resource systems are designed to support and manage these talent resources of the organisation. Services organisations are looking towards suppliers who are politically correct to changing market and corporate business conditions.

Talent Supply Chain :

The workforce planning landscape extends well beyond an organisations current need to fill a vacant position. It includes the talent which a Company require and the talent likely required in the future and the talent which had in the past. Companies negotiate with many suppliers so as to keep them in a state of healthy competition under short term contracts which aim for retaining suppliers on larger term contracts.

Business entities are beginning to understand that recruiting is basically an inventory problem. Workforce Analytics is a method of quantifying, reviewing workforce optimization, manpower deployment, skills diffusion and out-year employment requirements. For top positions, companies contract with executive search firms which would depend on networks of industry contacts mostly to search out executives who might be ready to consider a change of position. For many jobs lower than the executive level, in-house or external recruiters place advertisements in posted openings on bulletin boards, newspapers, newsletters, and staged job fairs, all designed to get résumés and there are various outsourcing sources which support HR functions through deployment of short-term manpower.



Source : Outsourcing, APAC, Kelly-OCG 2017

Business strategy includes long-range plan of the desired image, direction and purpose of the organisation. It is a scheme of business intent and action, which is cautiously planned and flexibly designed with the purpose of attaining effectiveness. Essentially it has various aspects which require the supply of talent to attain prioritised outcomes.

Talent supply chain process furthermore involves sourcing, procurement, conversion, and logistics activities with the support of co-ordination and collaboration with supply channel partners which includes head hunters, placement consultants, web sourcing and many more. In the supplier customer business arrangement, the effective way for suppliers is to become more responsive as per the changing business conditions.

Two-Stage Human Capital Acquisition and Management Supply Chain Model:

Application of Internet and World Wide Web provide a communication network in between suppliers and customers, in the pre-employment stage prior and up to employment of candidates, the supplier customer relationship.

Candidates considered as tier one suppliers propose for their services and employers considered as customers employ candidates basing on their service ability.

Recruiters considered as tier one suppliers function as intermediaries in identification of suitable candidates (tier two suppliers) for their services and employers

(or organisations).

In the pre employment stage, there it is required only to condense hiring process time, but also to reduce the cost of hiring and ensure quality of hired candidates. On the other hand, in the post employment stage, company should institute an efficient employee development program to develop enterprise productivity with the support of quality candidates selected during pre employment stage.

In the post employment stage the supplier customer relationship amongst employers and candidates gets reverse. That is employers considered as provider of jobs and candidates, who are now employees becomes consumers of jobs. e-recruitment process commences by posting vacancies on the corporate website or on an online recruitment vendor's website, and allowing applicant to send resume electronically through the e-form or email.

Analytics facilitate a smarter, effective data-driven approach for creating and managing talent supply chain, and delivers actionable insights for enhancing its effectiveness. Typically, companies determine their talent management strategies and the effectiveness of their talent supply chains by appraising how efficient they are in bringing talented people into the organization.



Source : Authors Conceptual Representation of Talent Supply Chain Activities

Talent Supply Chain Analytics supports the companies which look beyond themselves and the present to develop actionable insights which will enhance talent supply strategies. In particular, Talent Supply Chain Analytics utilize internal and external data, across labour types, input models and geographic locations, to strengthen perfection initiatives and set companies on a trail of continuous improvement.

Predictive Analytics :

Talent Supply Chain Analytics to drive higher worth activities and decision-making. These activities comprise of benchmarking and developing the predictive insights, which are the basic foundation of a strategic approach and workforce planning. Due to invariable shortage of skilled workforce, talented people switching jobs frequently, retirement, etc., are a small number of reasons businesses are balancing workforce in the course of talent supply chain management methodology. On top of this, the dynamic workplace demographics, the smart skills shortage in the market, ongoing financial uncertainties, and the obstacles of existing in the business world have forced the employers to think about the traditional approaches of recruiting the right talent for their organisations.

Benchmarking Talent Supply Chain Analytics:

Talent Supply Chain Analytics can be adopted to benchmark a company's supply chain management practices against their entire industry and vital verticals for a range of factors, including merchant performance where employers defining roles and

responsibilities, recruiting candidate with the required potential to transform the active workforce system. The current and potential of the talent supply chain will be a indication of wealth creators, enhanced collaboration, most recent technology, up scaling demands. The global talent supply chain is appraised on parameters, including supply thinking, digital skills, global skills, communication skills, etc.

The talent supply chain is a proactive approach to management which safeguards and optimises the supply chain services via numerous channels to meet the expectations of the HR department of diverse organisations. It requires workforce analytics expertise to obtain insights on talent, motivations, dynamics, etc.

Talent Supply Chain Metrics :

- Cost of hire
- Time to hire/time to fill
- Learning and development budget
- Training time in days
- Time since last promotion
- ROI.

Sourcing Strategy:

Sourcing in talent acquisition usually focused on where and how to source. Even then, the majority sourcing strategies focus almost exclusively on full-time employees apart from for few positions and jobs.

Digitizing Recruitment Speed and Quality:

Embedding metrics with the digital technologies for measuring performance and recruiting speediness

gives greater ability to organize hiring destiny, and turnover.

Constant Advancements:

A candidate centric recruitment and engagement model advanced solutions such as SAP's Success. Factors must be continuously tweaked towards the accurate direction as per business demands.

Talent on Demand :

Companies hardly ever know what they will be building in five years out and what skills they will need to make that happen they also don't know stipulation the people they have in their pipelines are going to be. Companies that are moving in this fresh direction include start-ups, which have a clean slate in terms of talent management practices, and professional services firms, where getting the right talent blend is especially critical. Talent supply chain management empowers employers to produce a workforce strategy aligned to broader business goals that depicted upon talent from numerous employment categories, such as fulltime and temporary employees, freelancer's, independent contractors, etc.

To support global talent supply chain needs, third-party providers are seeking a higher number of niche talent pool suppliers required to meet skill shortages. Analytics have proven its value is designing workforce solutions, and to be the most competitive, organizations want to be flexible and adaptable to meet fluctuations in market conditions.

Analytics can provide vital inputs like :

- Benchmark performance
- Identify growth opportunities
- Gain market acquaintance
- Define success by reviewing its own data
- Enhanced workforce planning
- Data driven well informed workforce planning
- Future talent needs evaluation
- Broader access to talent
- Constant Supply of talent etc.,

A competent talent supplier based on analytics provides a competitive advantage to a corporation and third party providers. The comprehensive use of predictive analytics can facilitate all talent supply chain partners involved to gain and maintain competitive advantages.

Present study makes an attempt to understand the options available to firms to build talent supply chain through Analytics. This study will also explore the challenges faced by the organizations towards the implementation of HR Analytics and its role in decision making process.

Review of Literature :

In a study by Weena Yancey et al (2016) analyzes the help of HR Analytics in HR management in solving problems in productivity or work force. The paper initially examines the data and determines the strategic move for increasing productivity. This paper is a case study analysis for this three company's one from Japanese based pharma, European based Construction Corporation and A fortune 100, software company were taken for the investigation. Each company possess different HR problems. Managers are in position to take decision based on HR analytics.

The data mining and business analytical techniques by HR managers were clearly discussed in the study Human Resource Analytics (Talent Analytics) by Rouse, M (2012) discuss about the helpfulness of HR Analytics to organisations and employees for achieving their vision and mission. This article clearly explains about the congregation of data, linking data to model and to predict the firm in getting the maximum profits.

Mishra, S. N., Lama, D. R., & Pal, Y. (2016) in their paper focused on measuring employee talent and engagement, studying employee's collaboration outline, analyzing employee churn and turnover and modelling employee lifetime value. The motive of applying HRP (Human resource predictive analytics) is to optimize performance and generate better return over investment for organizations through decision making based on data collection, HR metrics and predictive models. The paper is divided into three parts to understand the emergence of HR predictive analytics for HRM. Firstly, the paper brings in the concept of HRP. Secondly, the paper talks about three aspects of HRP: (a) Need (b) Approach & Application (c) Impact. Lastly, the paper directs to the conclusion on HRP

Harris, J. G., Craig, E., & Light, D. A. (2011) identifies six different analytical tools that HR can use

to unite HR efforts to business performance. Study results underline the value of an analytical approach while enlightening that many HR departments are heavily focused on in-house measures rather than business outcomes. Each analytical tool is demonstrated through case studies. A model is presented to suggest how executives can get started by focusing on five key areas. Study identified foremost companies are using six analytical tools to get better the connection between HR investments and company returns: employee databases, segmentation of talent, targeted investments, customization of the employee value proposition, long-term workforce planning, and talent supply chains.

Falletta, S. (2014) opined Talent supply chain (eg, analytics to make decisions in real time for optimizing instantaneous talent demands in terms of changing business conditions).

Bag, S., Wood, L. C., Xu, L., Dhamija, P., & Kayikci, Y. (2020) findings from this study show that big data analytics management capabilities have a strong and significant effect on ground-breaking product development and sustainable supply chain conclusion. Big data analytics talent capabilities have a weaker but still significant result over employee development and sustainable supply chain outcomes. Innovation and learning performance affect sustainable supply chain performance, and supply chain innovativeness has an important moderating role. A contribution of the study is identifying two trails that managers can use to advance sustainable supply chain outcomes in the mining industry depending on big data analytics capabilities.

Kremer, K. (2018) elaborates the moderating factors of Human Resource Analytics (HR Analytics), which is seen as one of the peak plans in HR today. It seems that analytics is taking the conjecture out of the decision making process by contributing a data driven approach. Although HR Analytics holds a sky-scraping priority for most organizations, the implementing process is slow and only a minor proportion of organizations even reports applying it.

Lismont, J., Vanthienen, J., Baesens, B., & Lemahieu, W. (2017) authors studied by means of a descriptive survey regarding the application of analytics with regard to five different aspects as defined by the DELTA model: data, enterprise, leadership, targets or

techniques and applications, and the analysts who relate the techniques themselves. Study found that the analytics organization in company's grows-up with regards to these aspects. As such, if companies started earlier by means of analytics, they apply nowadays more complex techniques like neural networks, and more advanced applications such as HR analytics and predictive analytics.

Levenson, A. (2018) introduce an approach to conducting workforce analytics that is designed to improve strategy implementation and organizational effectiveness from beginning to end the application of systems diagnostics. What differentiate the move towards are two analytic steps that head the analyses that are distinctive of workforce analytics today: competitive advantage analytics and enterprise analytics. Conducting these two additional steps enables the analyst to discover the critical business issues that are the major problems for senior business leaders, and to establish if structural issues impending from the organization design and culture are at play. First conducting those analyses enables traditional workforce analytics to provide insights the organization's leadership views as in fact valuable.

Mutsuddi, I. (2012) opined HR professionals need to maintain a steady supply chain of their talent resources in order to stay competitive where rival organizations may poach their employees with imposing compensation packages and Human Resource Development (HRD) policies that would persuade them to find better career and development options in such organizations. This paper makes an attempt to inspect and understand the nature, significance and peculiarity of the supply chain function in HR practices. The paper also discusses the interrelation and roles of subjects related to and the challenges of implementing supply chain management for successful people management.

Sparrow, P., Hird, M., & Cooper, C. L. (2015) articulate as organizations continue to navigate their way through turbulent waters, even as business self-assurance is returning, the demands placed upon those deemed to be leading talent are extreme.

Kaur, J., & Fink, A. A. (2017) opined most successful talent analytics teams tend to report directly to HR leadership and integrate research and analytics. It is also important for analytics to be a perceptible part of the HR strategy of the chief human resource officer

(CHRO). Centralized analytics enables an organization wide outlook, which leads to greater impact. However, even with a centralized talent analytics function, close corporation with line HR is imperative. It enables better contextualization of data and improves the data oriented approach throughout HR. Finally, HR practitioners must regard as ethical and legal considerations of data collection and decision-making.

Rana, G., Sharma, R., & Goel, A. K. (2019) believe talent analytics help the company promote and sustain innovation by revolutionizing not only the practices of HR but also how insights regarding workforce performances can be derived and applied to attain real improvements in business performance. Talent analytics, which uses advanced technologies to process billions of data points to distinguish previously unseen patterns of potential value, shows the assure of basing decisions about hiring, training, improving productivity, and retaining talent, delivering insights that can make a company more competitive. This investigative study provides an overview of the talent analytics practices of India's Balmer Lawrie & Co. Ltd., which is a company engaged in a range of businesses producing products such as steel barrels, industrial greases, specialty lubricants etc.,

Sharma, A., & Bhatnagar, J. (2017) summarizes the arguments in the form of a conceptual framework with associated propositions based on extensive literature review. It argues that the analytical potential of the human resource (HR) function along with a data oriented culture of an organization may be positively related to the application of talent analytics intended for making strategic TM decisions. This would lead to strategic TM outcomes such as pipeline development, talent retention, and talent engagement, subsequently impacting business performance.

Nocker, M., & Sena, V. (2019) discuss the opportunities talent analytics offers HR practitioners. As the availability of methodologies for the analysis of large volumes of data has substantially enhanced over the last ten years, talent analytics has started to be used by organizations to manage their workforce. Authors discuss the benefits and costs associated with the use of talent analytics inside an organization as well as to highlight the differences involving talent

analytics and other sub fields of business analytics. It will discuss a number of case studies on how talent analytics can improve organizational decision-making. From the case studies, we can identify key channels through which the implementation of talent analytics can develop the performance of the HR function and eventually of the whole organization. While discussing the opportunities that talent analytics present to the organizations, this paper highlights the costs in terms of data governance and ethics that the extensive use of talent analytics can generate.

V.V Sateesh Kumar Annepu (2020) articulate the concept of HR is a product of the early 20th century when researchers began documenting ways of creating business value through the strategic management of the workforce. Current study based on analytical approach of Human Resources for the effectiveness of the organization. This study is an attempt to investigate the efforts of Managers and Human resource personnel towards the resultants of Analytics application in Strategic Human resource management. The present study is navigated in direction to explore the current literature about the tie-up between Human Resource analytics and the role it can perform in developing the existing range of managerial and HR-related goals.

V.V Sateesh Kumar Annepu (2021) opined measuring organizational effectiveness can be an inexact science, since each individual entity will have a different list of criteria and priorities to weight and consider through self-assessment and where the assessment of leader can indicate the future of organisation. Human Resource analytics can be the essential tool in measuring the effectiveness of leader and organisation.

Sivathanu, B., & Pillai, R. (2019) aims to examine the technology usage for talent management and its result on organizational performance, it was established that talent analytics and SHRM lead to developing a sky-scraping performing talent pool, which in turn contributes to organizational performance.

Objectives Of The Study:

The study has been undertaken keeping in view the specific objectives which constitute the frame work for the enquiry.

1. To study and explore the reasons for talent supply chain management
2. To assess the possible ways to build talent supply chain.
3. Examine how successful talent supply management
4. To examine the role HR analytics talent in supply chain

Application of appropriate method and adoption of systematic procedure is crucial in every organized enquiry. This will have its` impact on the collection of reliable and accurate details of the study.

Sampling:

Keeping in of the above objectives and methods of study the sample is drawn from different categories of the respondents i.e., 1. Outsourcing firms 2. Executives 3. Employees.

Questionnaire :

The survey interview and questionnaire instrument were designed with close-ended and open-ended questions. Close ended-questions help the respondents to choose the answer or responses that have already been given by the interview questions or the questionnaire sent through e-mail.

Statistical tools:

The researcher has used SPSS 16.0 Version Software and M S Excel for the purpose of data analysis.

Results and Discussion :

Almost all business leaders (Executives) understand the basic elements of visioning and how to communicate a clear vision about talent management.

Respondents articulate that talent supply chain is a collective responsibility of all stake holders including the outsourced talent service provider. Talent once was not measured and analysed is now possible because of HR analytics.

A talent approach cannot be managed without a meticulous understanding of the accompanying HR

supply chain business strategy. Talent pools provide flexibility in the selection process for a leadership team. Creating a talent pool rather than choosing one employee with key competencies is more effective and efficient for an organization.

Human resource practices are designed to support organizational goals rather than departmental directives.

Talent analytics helps in tapping both internal & external sources of recruitment. Motivation and retaining the talents in the organization are the major problems faced by the organisations which can be overcome with the help of talent supply chain management analytics.

Success of an organization considerably depends upon the success of its individual. To be flourishing the employees require knowing their organization's mission, their role, to know what is specifically expected of them, to have the capability, resources and environment which construct success.

Companies regularly categorize people who can move higher job titles in the company. Clearly such persons are critical to the future success of the firm.

It is observed from the analysis that majority of respondents opined Outsourced employees are good as organisational employees at anticipating during implementation of talent management through analytics.

The decision to outsource is generally not always driven by cost instead, companies choose to outsource to gain service efficiencies, commitments and innovations not easily found in-house.

With the wide application of Talent analytics managers can also access and recommend candidates for interview, reducing turnaround times & ensure competent candidates are never lost in the process of supply chain.

Analytics data with all candidate information arriving into the talent management solution and in a format of the client's choosing can reduce cost, time per hire.

Each organisation's recruitment process is diverse and talent supply chain analytics system should be able to map it exactly as per requirements.

Metrics provide information regarding how well the workforce is doing. This involves both HR and line management to formulate a appropriate strategy for future needs.

Analytics facilitates just-in-time hiring as soon as an organization needs a candidate it can access the database of job portals, screen resumes and send a mass mail.

Analytics helps the stake holders to deliver excellent strategic thinking and problem solving.

Findings further suggest that influence of talent management supply chain resulted reduction in employee expenditure for example salaries to the organization is visible and brought in competitive advantage of the organization.

Respondents surveyed opined are very confident that their talent supply chain strategy is fit for the organization.

Talent supply chain metrics can correct blend of skills, attitudes for the future needs of the organisation. The respondents opined the organisation has gained expertise due to analytics. When businesses need expertise or skills that they don't have within their organization, they often turn to outsourcing to solve their problems.

Analytics allows companies to seek out and hire the best talent for specialized work. Using analytics also helps companies keep more cash on hand, freeing resources for other purposes, such as capital improvements.

References :

1. Davies, R. (2001.). 'How to boost Staff Retention.' In *People Management*, v7, i8, April pp. 54-56.
2. Gramm, C.L. and Schnell, J.F (2001). 'The Use of Flexible staffing arrangements in core production jobs.' In *Industrial and Labor Relations Review*, Jan, v54, i2, pp. 245-251.
3. Hendry, J., 1995. Culture, community and networks: the hidden cost of outsourcing. *European Management Journal* 13 (2), 193–200.
4. Kumar, S. (2003), "Managing human capital supply chain in the Internet era", *Industrial Management & Data Systems*, Vol. 103 No. 4, pp. 227-237.
5. Weena Yancey et al (2016) HR Analytics as a strategic workforce planning. *International Journal of Applied Research* 2 (5), 785-790.
6. Rouse M. Human Resource Analytics (2012) (talent analytics), Article posted in search financial applications. tech target.
7. Mishra, S. N., Lama, D. R., & Pal, Y. (2016). Human Resource Predictive Analytics (HRPA) for HR management in organizations. *International Journal of Scientific & Technology Research*, 5(5), 33-35.
8. Harris, J. G., Craig, E., & Light, D. A. (2011). Talent and analytics: new approaches, higher ROI. *Journal of Business Strategy*.
9. Falletta, S. (2014). In search of HR intelligence: evidence-based HR analytics practices in high performing companies. *People and Strategy*, 36(4), pp. 28-37.
10. Bag, S., Wood, L. C., Xu, L., Dhamija, P., & Kayikci, Y. (2020). Big data analytics as an operational excellence approach to enhance sustainable supply chain performance. *Resources, Conservation and Recycling*, 153, 104559.
11. Kremer, K. (2018). HR analytics and its moderating factors. *Vezetéstudomány-Budapest Management Review*, 49(11), 62-68.
12. Mutsuddi, I. (2012). Supply Chain Management for Effective People Management: Issues and Challenges. *IUP Journal of Operations Management*, 11(4).
13. Sparrow, P., Hird, M., & Cooper, C. L. (2015). Strategic talent management. In *Do we need HR?*. Palgrave Macmillan, London, pp. 177-212.
14. Kaur, J., & Fink, A. A. (2017). Trends and practices in talent analytics. *Society for Human Resource Management (SHRM)-Society for Industrial-Organizational Psychology (SIOP) Science of HR White Paper Series*.
15. Rana, G., Sharma, R., & Goel, A. K. (2019). Unraveling the power of talent analytics: implications for enhancing business performance. In *Business Governance and Society* (pp. 29-41). Palgrave Macmillan, Cham.

16. Sharma, A., & Bhatnagar, J. (2017). Talent analytics: A strategic tool for talent management outcomes. *Indian Journal of Industrial Relations*, 52(3), 515-527.
17. Nocker, M., & Sena, V. (2019). Big data and human resources management: The rise of talent analytics. *Social Sciences*, 8(10), 273.
18. Sivathanu, B., & Pillai, R. (2019). Technology and talent analytics for talent management—a game changer for organizational performance. *International Journal of Organizational Analysis*.
19. V.V Sateesh Kumar Annepu (2020) A Study On Bridging The Hr Analytics Gap With Reference To Selected Organisations In Bangalore City, EPRA International Journal of Multidisciplinary Research (IJMR) - Peer Reviewed Journal, Volume: 6, Issue: 10, pp.417-427.
20. V.V Sateesh Kumar Annepu (2021) “Impact of HR Analytics on The Leadership Development& Organisational Effectiveness”, Journal of Huazhong University of Science and Technology, Volume 50, Issue -3, pp. 1-21.
21. Lismont, J., Vanthienen, J., Baesens, B., & Lemahieu, W. (2017). Defining analytics maturity indicators: A survey approach. *International Journal of Information Management*, 37(3), 114-124.
22. Levenson, A. (2018). Using workforce analytics to improve strategy execution. *Human Resource Management*, 57(3), 685-700.