ABSTRACT

The HR analytics has emerged as a new fad for the management leaders that captured the head line for business world news. This paper tries to figure out the theoretical and conceptual the framework of analytics in higher education intuitions. The objectives of the study are to understand the role of HR analytics for education institution in increasing the organizational effectiveness and efficiency. The research used exploratory research design. Further study came up with categorizing the data analytics of industry it into Academic Analytics, Operational Analytics and special reference is given to HR analytic as its contribution in attaining the business excellence for the organizations.

KEYWORDS: HR Analytic, Academic Analytics, Operational Analytics, Business Excellence.

I. INTRODUCTION

In today’s 21st century the HR analytics has capture the press corner and the human resource analytics has become the new management fad. The analytics trend is growing in leaps and bounds not only due to providing powerful insight for management working but also looking forwards to HR leaders for having key decision about rewards system, decision making, organizational designing, allocation of funds to various HR activities, talent management activity to create more value for the organization.

One of the major advantages with HR analytics is that it is a evidence base study, which helps the Institutions in bridging the rationality in their decision making process by setting a mark in prioritizing the impact of HR investment for the business. HR analytics can help in upgrading the standards of HR professional working and leveraging the competitive advantages for the organization.

Bassi (2012) elaborates the understanding of HR analytics as art and science role of HR, specifying the creative aspect of HR with the knowledge, rationality and quantifying data in decision making of HR. Thus it is said that HR analytics elevate the status of both HR rationality & creativity simultaneously.

HR analysis is briefly defined with the different perspective by different researcher as:
Table 1: HR Analytics Dimensions

<table>
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<tr>
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<th>Description</th>
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<tbody>
<tr>
<td>1</td>
<td>A evidence based study</td>
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<td>2</td>
<td>Reporting of array of HR metrics</td>
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<td>3</td>
<td>Measurement of HR function from hiring to turnover, compensation, incentive system &amp; skill inventory</td>
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<td>4</td>
<td>Data Base Decision Making</td>
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<td>5</td>
<td>Setting priority in HR investment pattern</td>
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<td>6</td>
<td>Bridge between academic &amp; Industry interface</td>
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<td>7</td>
<td>Quantifying the HR functions for creation value to business</td>
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Source: Author's Research

II. AIM & SCOPE
The study aims in identifying the role of HR analytics in current business environment with specific reference to focus on envision in higher education institution & effectively handling of HR issues. Further the study identifies the significant assessment of HR analytics with respect to functions of teaching & learning environment. Study look up in proposing a model for HR analytics to Academics Analytics for education Sector.

III. METHODOLOGY
From the foregoing discussion and research prevailing in the field our study focused on understanding the role of HR analytics in the education environment. The research used exploratory research design to solve its purpose. The study has opted for a research paper (as Elsevier and prominent magazines, site data of corporate houses) intended to infer the relations among the variables in practical context. Our study embodies qualitative methods.

IV. BENEFITS OF ANALYTICS
Analytics helps in understanding the pattern of HR investments which in turn provide aid and strength to business data and consequently decision making. To name a few benefits that are harvested by business through analytics are as follows.

- Quantifying the returns on Investment of HR in to business excellence drive.
- It leads in redirecting investment to tangible and accountable outcomes from employees towards businesses excellence and their own self development.
- Providing a base in terms of investment for proper funding to HR activities in terms of investment on right candidate instead of otherwise and utilizing to critical metric rather than false proclamation of HR of for happy employees initiatives or engagement plans.
- Evidence, rationality & accountability of HR department is set in terms of the contribution in imparting the business outcomes.

As per the current following perception is assumed as analytics means static, which is appropriate as Jac, F. E. (2010) explains in his remarkable work that analytics defined as the sequential working of logical progress on
first phase and use of Statistical tool second phase. Analytical is also explained as science of analytics derived from the Greek word “Analutika.


V. HIGHER EDUCATION INSTITUTIONS & HR ANALYTICS

Today HR analytics has not only reported in business organizations but also paved its footprint in the premises of educational Industry. Specifically to higher education institutions, which are also looking forward for to ensure the organizational success at all level of academic operations and undergoing the utilization of all management practices and policies which can lead the academic excellence. Thus the use of HR analytics is a new management fad for these learning organizations too.

Today higher education institutions are also implementing mode of operands to ensure organizational success at all levels by deal with questions about employee retention, Students admissions, fund raising, and operational efficiency.

HR analytics has moved in the higher education Institutions as mix of business analytics & Academic analytics in a responsibility functionaries as:

<table>
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<th>Table 2:  Human Resource Analytics dimension in Higher Education Institutions</th>
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</table>

Source: Author’s Research
Researcher has also explained a significant role of HR analytics in terms of gaining the cost leadership for educational leaders and enhancing the teacher learning environment of the Institutions.

Literature has show that the envision of HR analytics in education sector is in more conceptual ways than the functional ways examples as a wise accurate and measure investment has to be made research and development initiatives of the organizations as its as a backbone of these leading organizations, and which can’t be taken keep the academic community and R&D initiates independently.

VI. LITERATURE REVIEW

Derrik (1980) Analysis of the policies & practices in teaching education covering the principles of critical race theory use as a analytics & explore tools to invade the concept.

Vinita (2012) illustrate the use of social media analytics as on the effective assessment too for behavior perspective & higher education Institutions are also utilizing the outcome of the study in terms of recruitment & hiring practices of faculty and staff members. the study further heights the role of social media analytics and developing conceptual framework to understand the importance for behavior assessment.

Laurence (2017) states business world is having a buzz of big data & potential of HR analytics is transforming the organizational performance. It has been taken up as an strategic decision by the higher institution to follow the approach of HR analytics for delivering a high Quality for the organization.

Reasmusse (2015) starts with supporting the HR analytics can be of huge potential to bring great value of management leaders. HR leaders can strategically use the data informatics in strong decision making the rightful utilizing organizational capital and serving the intuition with evidence. As quoted academic & HR centric approaches being governed by COE – Center of Expertise’s distant from the business. HR is one just one element of this value chain and end to end business analytics are required.

Few of the study reviewed are as follows:

<table>
<thead>
<tr>
<th>Study</th>
<th>Author</th>
<th>Year</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>People analytics: Recalculating the route</td>
<td>Laurence Collins, David R. Fineman, Akio Tsuchida</td>
<td>2017</td>
<td>Author emphasizes on the fact that data is being utilized by for organization operational efficiency and analytical tools are being entrench into day-to-day decision making.</td>
</tr>
<tr>
<td>Maximizing the Impact and Effectiveness of HR Analytics to Drive Business Outcomes</td>
<td>Mondore, Scott; Douthitt, Shane; Carson, Marisa.</td>
<td>2011</td>
<td>Researcher investigated on various Integrated Analytics for the HR domain used in the organizations as Succession Planning HR Strategy Development CEO People Dashboard</td>
</tr>
<tr>
<td>Learning from practice: how HR analytics avoids being a management fad</td>
<td>Thomas Rasmussen, Dave Ulrich</td>
<td>2015</td>
<td>Author evaluated the talent scorecard which are the resultant of HR analytics as a business drives. He state the contribution of data analytics into HR process and neutralizing the biasness of the traditional systems into succession planning and talent management.</td>
</tr>
<tr>
<td>Raging Debates in HR Analytics</td>
<td>Laurie Bassi, McBassi &amp; Company</td>
<td>2011</td>
<td>Author states the HR analytics application on in as a evidence based approaches for management strategic decisions.</td>
</tr>
<tr>
<td>The New HR Analytics - predicting the economic</td>
<td>Jac Fitz-enz</td>
<td>2010</td>
<td>Emphasizing the role of HR analytics in Human capital Management for 21 century</td>
</tr>
</tbody>
</table>
values of your company's Human Capital Investment researcher illustrate role of industrial-era, gap-analysis, structure-focused model and focused on four phases 1. Scanning.2. Planning 3. Producing. 4. Predicting.

<table>
<thead>
<tr>
<th>Predictive Analytics for Human Resources</th>
<th>Jac Fitz-enz, John Mattox, II</th>
<th>2014</th>
<th>The authors put the focus on the application of the fundamentals of predictability and incorporate the framework of logical questions for providing aid to analytic program or project, via the use of clear explanation of statistical applications.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analytics in Higher Education: Establishing a Common Language</td>
<td>Angela van Barneveld, Kimberly E. Arnold, and John P. Campbell</td>
<td>2012</td>
<td>Researcher investigates the role of Analytics in higher education is a relatively new area of practice and research. The intent of paper is to present the distinct perspective of different types of analytics being observed in the academic industry. It synthesized different definitions for analytics in academic institutional environment</td>
</tr>
<tr>
<td>Academic Analytics : the use of management Information and Technology in Higher Education</td>
<td>Goldstein, P. J., &amp; Katz, R. N.</td>
<td>2005</td>
<td>Different Academic Analytics has been proposed by the author with special reference to higher education Institutions and use of MIS to it.</td>
</tr>
<tr>
<td>Harnessing the power of HR analytics</td>
<td>Levenson, A.</td>
<td>2005</td>
<td>Analytics enable HR to make strategic contributions, but not all analytics offer equal insights. Alec Levenson make a comparatives study of acceptance and utility of ROI, cost-benefit, and impact analysis as the HR tool to make a strategic contribution towards organization. He also emphasizes the formation of HR analytics centre of expertise and create a foundation of analytic skills across the function.</td>
</tr>
<tr>
<td>Critical Race Theory and Interest Convergence as Analytic Tools in Teacher Education Policies and Practices</td>
<td>H. Richard Milner</td>
<td>2008</td>
<td>Author investigate the concept of critical race theory in interest coverage of educator as an most influential tool in Academic environment policies and practices</td>
</tr>
</tbody>
</table>

VII. PROPOSED MODEL FOR HR ANALYTICS IN HIGHER EDUCATION INSTITUTIONS.

Higher education institution is under huge stress - to increase enrollment, maintain operational efficiency ensure optimization of investment, proper research faculties with ensure the constant learning experience in the institution with being competitive in market. These pressures are encouraging the institutions, colleges and universities to develop and re- a new strategies and way other than their traditional approaches .Thus many Academic institutions and universities leaders has stated approaching the tools of data analytics to find effective solution to their emerging problems. To attain their objective organizations have understood that it does not request a single system reporting rather than exploring the deep institutional data, analyzing sharing and acquired the required meaning full insight & information for all level in the institution.

While considering the demand of organizational efficiency the educational institution has to focus a lot towards management of their academics community and other employees of the organization. As the member of this
The academic community is the sole backbone of the educational organization. Colleges and universities are known for their faculties, educators or researchers. Thus high concern is to be paid on the human capital of this institution. Human Resource Analytics is the prominent area to be worked in this concern and universities are also looking forward to it. With this note we have proposed a model to understand the analytics used in higher education institutions for organizational excellence.

**Figure 3: Proposed Model For HR Analytics In Higher Education Institutions.**

**Source:** Author’s Research

The Analytics of the Higher Education is categories under three heads as determines:

**Academic Analytics**

The academics analyses specially cater to all the data mining and management related to the day today academic and student working of the institutions.

- **Strategic Enrollment:** Data analytics becomes most important for educational institutions with respect to student enrollments, as this the entry point of organization. Division in admission in by different courses offered in the college and universities.
- **Student Retention:** Student retention rate and reason can also be monitored through the analytics and special focus is given to the explanation so that drop out issues can be reduced over a period of time.
- **Learner Engagement:** Participation of the learners of the institutions in various activities of the of the institution to upgrade their intellectual level and to predict learner failure and can help in improving the outcomes.
- **Fiscal Success:** Fiscal success in higher education today has stretched out beyond the conventional divergent set of quantifiable metrics used to describe financial status to include the culture and financial structure and classifications that grip in the elements of transparency, responsiveness, accountability and efficiency, it helps instructions in measuring their activity and performance objectively and consistently.
- **Effectiveness of Institutional Research:** Higher education under a huge pressure and demands from the federal government, state governments, and accrediting bodies to upgrade their standards of research. These statistics become openly accessible on websites and, become the basis for public policy decisions and the standard upon which institutions are ranked and positioned.
Operational Analytics

- **IT’s Ability to Support the Institution**: In today’s higher education environments, students and educators are very tech savvy and keep on playing with data and colleges & universities also need to have a huge data base to significantly understand patterns, trends, growth area and opportunities for business excellence. This data in turn help institution higher percentage students succeed in their academics and to make their institution, colleges and universities more effective and competitive. Higher education institutions gain the excellence through the of data-driven decision making.

- **University Affiliation & documentation**: Operational Analytical tool serves a bone for the administration department to have the university compliances & documentation to be done on time and information to fetched with dialectic field having strong influence in understanding university pattern in admission, result analysis etc.

- **Scheduling of classes**: The optimization in scheduling classes, lecture and time table across the department, courses and faculties is best sorted with operation analytics

- **Academic Calendar Management**: The numerous ongoing courses, regular activities of the institution, upcoming examination scheduling, upcoming seminar and conference and special event as fresher eve, sports event, Annual techno or cultural fest and any unconventional event to be well adequate through analytical tools statistic in term of its management.

- **Student Attendance Monitoring**: The larger the college and university tougher the task becomes to manage the attended of each student in each course in each lecture and utilizing the data for further placement, complaining examination requirement and understanding the diligence or any medical case of the student in further decision making.

- **Fee Management**: One of the most crucial function which can be only handled best with data analytical tool is the fee management as it is the sole function which when properly infer by financial leader can state about the profitability of the organization and details about the pending dues to the organization which are to be fixed only under specific time durations.

Human Resource Analytics

HR Analytics deal with the crucial data and informatics inferred about and for the knowledge capitalist of the organizations an member of academic community and other staff members.

**People Analytics and Planning**: The talent management analytical tool helps in providing a centralized view of people and data in the higher education environment relating to.

- facilitate in employee engagement, and develop the employees
- Understanding the of mix of millennial and aged people in work force and their role.
- Endow with actionable insight into the workforce decisions.

**Recruitment & Selection**: HR analytics helps in the well structure recruitment and selection patter for the organization as

- Merit-based recruitment with team evaluation and selection reports
- Online reference checking platform
- Job description and Job specification library
- Talent & Skill warehousing

**On boarding & Placement**: Major higher education institutions have come up with problem of misplacement of employees leading to employee turnover by appropriate orientation.

- Step to Step integration to orientation programs
- Institutional reporting for Employee interest and placement

**Performance and Succession**: Educational leader also look for the fair appraisals and succession planning in higher education that can be well catered by academic institutions as:

- Computerize performance management system with online reviewing facility for managing people.
- Automated mechanism for identification of employee skill and capability and to match respective profile for succession planning
- Portal to map skill gap and specify the training needs.
Learning and Development: The highest need of higher education institution is to increase the knowledge capital of the employee of the organization as our HR analytics solve this purpose by
- Focusing on learning and development programs for new and existing employees.
- Maintaining the records on learning and certifications of employee.
- Understanding the compliance requirement for learning and Individual skill gap analysis.

VIII. MANAGERIAL IMPLICATIONS
HR analytics is not a one department problem solution tool rather it is a comprehended data system design to support the Academic learner, administrator & decision makers of the higher education institutions. It proves a comprehensive informatics to handle various challenges and opportunities existing in educational environment to manage between student demands, upraising industry benchmarking, liaison with government regulations, meeting the norms of accreditation society. Understand the analytical frame work and especially human resource domain can have a significant mark in the institutional growth.

As the human capital in these organizations is sole the source of knowledge capital growth of these higher education. Thus providing a considerable thought to the dynamics of academic community hiring & retention analytics is the need of the day. At times the WOM publicity of customers of these institutions is highly driven by the tenure of community members as faculties & educators or mentors of the Institutions.

Similarly the reward system of the higher education system are quite difference from other set of organizations as major chuck are educator who look forward for more intrinsic rewards than extrinsic rewards., that need to be studies by the organization head.

On boarding and Placement and compensations are also hold tough decision making on part of management as skill and qualifications are having tough competition with experience, research analytics, number of publications and other R&D activities. The remuneration decisions are to be taken with good evidence based data. Thus in total understanding and acceptability of HR analytics is a proven as a new strategic tool to enhance the efficiency and organizational excellence.

IX. REFERENCES


