A STUDY OF APPLICATION HR ANALYTICS AND ITS EFFECT ON HR WORKFORCE PLANNING

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ABSTRACT

There is an increasing demand for Big Data and Analytics in the business environment and HR as a function is also catching up with the investments in HR Analytics. Interestingly several of its applications are possible which has potential to enhance HR decision making and functioning. The purpose of this research paper is to understand the utility of Workforce Planning as an important HR function which credits the use of HR Analytics. To understand the use and adoption of HR Analytics in various HR functions this research has used a questionnaire with Likert Scale to get the respondents views across various parameters. The questionnaire was presented in both on-line and physical form to get desired number of respondents. Some of the findings showed that if the Application level on HR Analytics increases the Representation levels in HR functions also increases.Also organizations with fewer employee population has shown better experience of HR Analytics with respect to its use in various HR Functions.

Keywords : HR Analytics, Workforce Planning, Application, Adoption

INTRODUCTION

The last decade and half there has been momentum on use of Analytics in general and good amount of work internationally has been done on HR Analytics. Organizations of repute have established HR Analytics teams which are churning the data and continuously releasing analyzed report with greater insights. This means there is an intent to deviate from traditional dashboard reporting and analysis.

There is abundance of literature on HR Analytics which spans from a mere understanding or awareness level to the use of Analytics to prescriptive stage. Business impact was clearly pursued by many researchers and there is enough literature on the validity of this with the use and adoption of HR Analytics. The models suggested by some of the active researchers and practitioners has been phenomenal and bound to drive the desired business results.

Various HR Functions does consume the services of HR Analytics and there is a good literature on it. Of course it is imperative to equip the team with the requisite knowledge and skills of driving an HR Analytics agenda though. It is also observed through these literature that the method to reach these business goals is through incremental change, control and enablement of the HR processes which collectively yield the results with adequate decision making.

There is a strong sentiment with the presentation of the data thus collected which also plays a significant role in the success of HR Analytics program in the organization. Data visualization and storytelling techniques were found to have a good level of acceptance and several literature data points suggested the same.

LITERATURE REVIEW

The workforce capacity planning is about developing human resource with necessary skills to deliver effective services in the future. Unless an organization can develop and well manage skilled people it will find it difficult to keep pace with the increasing demands for high performance, competitiveness and efficiency.

WHAT ARE PEOPLE USING?
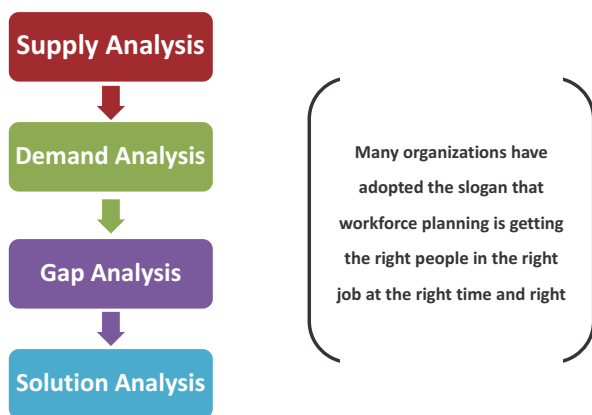**- WORKFORCE PLAINNING**
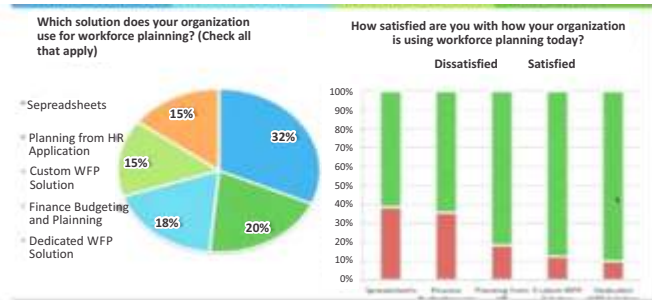
Generally, there are two tasks which are essential for the human resource management:
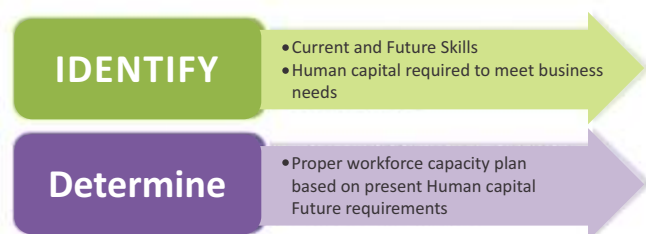
A variety of organizations have workforce-planning models that they have started to use or will soon start to use to address their "perfect storm," The models (or variations on the same model) are too numerous to mention. There is a good deal of eclecticism.

That said, it is hopefully no insult to the work being done in this area to describe the models as being dependent upon four essential steps conducted under color of what is known about the strategic direction of the organization. In abbreviated form, these workforce-planning steps consist of;

Many organizations have adopted the slogan that workforce planning is getting the right people in the right job at the right time and right

One thing that is abundantly clear in reviewing the methods, practices, and procedures of numerous jurisdictions is that there is an enormous amount of sharing and cross-pollination that has taken place. The formulation of methods, practices and procedures seems to have been enriched greatly through benchmarking at least some of the workforce planning practices of other organizations or using templates and tools of different approaches.

The basic workforce planning model begins with supply analysis focusing on "identifying organizational competencies, analysing staff demographics, and identifying employment trends." The competency analysis part of this is said to provide baseline data on the existing organization and present staff. The trend analysis part of this is describing and forecasting models for how turnover will affect the organization if no action is taken.

Further, trend analysis is said to directly inform the solution analysis. Demand analysis measures future activities and workloads plus describes what competencies the workforce of the future will need. Said another way, demand analysis tries to quantify the impact that the changing work will cause whether stemming from technological changes or other sources. Gap analysis compares the supply and demand analysis to understand the differences between the "now" and the future. "Gap analysis identifies situations in which the number of personnel or competencies in the current workforce will not meet future needs (demand exceeds supply) and situations in which current workforce personnel or competencies exceed the needs of the future (supply exceeds demand)." Solutions analysis is developing the strategies to close the gaps in competencies and to curtail surplus competencies.

Significance of HR analytics in Strategic Workforce Planning:

Workforce analytics has become a vital part of strategic planning in the HR department. HR managers today, make the decisions regarding their workforce based on the analysis of HR analytics. Every decision relating to human resources needs to be taken seriously. Hence HR analytics aids the HR manager to have a look at different perspectives and considering every aspect of human resources various strategic decisions are made. Hence HR analytics plays a critical role in strategic planning in the following ways:

- It helps to understand what is going on inside the organization

- It aids in framing what action should be taken

- It helps to track whether the implemented solution works or not.

- It also helps to track the measure of the impact of business improvement initiative.

- HR analytics helps to predict certain outcome which might happen, foreseeing which a strategic plan to tackle the problem can be calculated.

- Its purpose is to accurately track the problems in the business and formulate the strategic solution and track if the implementation is successful.

- With the help of HR analytics, HR leaders can clearly identify and communicate precisely where the company's investment in human capital is paying off.

- Helps in forward looking workforce planning by anticipating the future demand and supply of talents both locally and globally.

Workforce planning involves two types of forecasts:

The first is internal, what our workforce will look like in the future if we do nothing new: how many incumbents will we have with relevant competencies in each area in the future? The growing rate of attrition has complicated this forecast because attrition is driven by factors largely outside the control of the organization, mainly poaching by competitors. The other complication is that job requirements are broader now, and teamwork and other systems have made employees more interchangeable, offering a great many more options for meeting the demands of the organization.

The advantage of modern computing power with a model like this is that estimates are generated instantly, which allows one to vary the assumptions to see what happens. Playing around with the assumptions basically turns a forecasting model into a simulation: What happens to our forecasted headcount, e.g., if the economy slides below our assumption or if new competitors enter a market? The ability to simulate allows business leaders to see the implications of different strategies for talent, to anticipate how talent constraints could impact those strategies, and in some case, to adjust their business plans if the talent requirements are too extreme.

Christina Morfeld (2002), in a recent HR.com article, summarizes the aforementioned approach to workforce planning as consisting of the following activities to be performed by an organization:
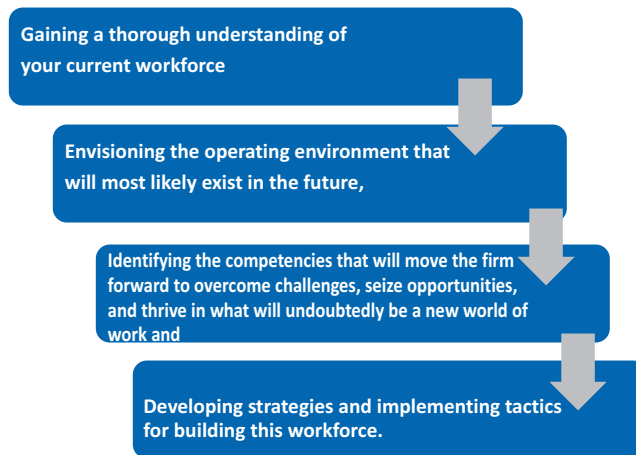
OBJECTIVES

- To examine the application of HR analytics in organizations

- To determine the factors influencing the application of HR analytics in organizations

HYPOTHESES

H1o: There is no association between application of HR Analytics and managerial levels.

H2o: There is no association between application of HR Analytics and industry types

RESEARCH METHODOLOGY

The purpose of the research work is to examine the use of HR Analytics to drive decision making resulting in business impact. This study further aims to assess the relationship between the various constructs in terms of implementation and outcomes derived. Effect of demographic factors on the analytics practice is assessed as well. Hence, this type of research is descriptive and empirical in nature.

ANALYSIS

Following are the tests conducted to achieve the above said objectives.

T test is used to examine the difference of means to check if there is any difference in application of HR analytics among various types of organizations.

H1o: There is no association between application of HR Analytics and managerial levels.

Table 1.Application of HR Analytics difference between the Services industry and Manufacturing industry

Table 1

	Organization type	N	Mean	Std. Deviation
Application	Services industry	74	4.07	.567
	Manufacturing industry	19	4.20	.575

There was no significant difference in the scores for Application of HR Analytics among the Service Industry (M=4.07, SD = 0.567) and Manufacturing Industry (M = 4.20, SD = 0.575) conditions; $t(91) = -0.865$, $p = 0.389$.

These results suggest, there was no difference in the opinion on the use of Application of HR Analytics amongst the population distribution between the Service Industry and the Manufacturing Industry. Indeed a strong relationship to determine that application of HR Analytics across HR function areas are equally perceived to be beneficial by both the groups.

Application of HR Analytics difference between the Categories of employee population

H2o: There is no association between application of HR Analytics and industry types

Table 2

	N	Mean Deviation	Std.	Std. Error
Less than 2000	39	4.13	.550	.088
2001 to 5000	33	4.05	.630	.110
Above 5000	21	4.11	.516	.113
Total	93	4.10	.567	.059

Table 3

ANOVA

Application					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.001	1	.001	.003	.959
Within Groups	29.628	91	.326		
Total	29.629	92			

A one-way between subjects ANOVA was conducted to compare the effect of employee population or size of company on Application of HR Analytics. The test was conducted to check if there is any change in ability of Application of inputs from HR Analytics among respondents from different organisations who are varying in employee populations.

There was no significant effect of Employee Population on Awareness at the $p < 0.05$ level for the three conditions [$F(1, 91) = 0.003$, $p = 0.959$].

It can be interpreted from the description table that the respondents who had an employee population of less than 2000 (M = 4.13, SD = 0.550) had higher Application levels with respect to the other groups. Though there was very little difference among the rest of the groups, the confidence level slightly reduced as the employee population went up especially between 2001-5000 (M = 4.05, SD = 0.630) it was least. It was seen that the groups with lower employee population has better Application levels with respect to their experience in various HR Functions utility of HR Analytics.

FINDINGS

- It can be interpreted that if the Technology use and adoption level on HR Analytics increases the Application levels in HR functions also increases.

- It can be interpreted that if the Application level on HR Analytics increases the Representation levels in HR functions also increases.

- It was seen that the groups with lower employee population has better Application levels with respect to their experience in various HR Functions utility of HR Analytics.

SUGGESTIONS

There is already enough evidence suggesting the adoption and implementation of HR Analytics in organizations. Through this study and presentation it is recommended that organizations should therefore quickly create a business case for initiating the analytics journey with clear goals in mind.

MANAGERIAL IMPLICATIONS

The study on HR Analytics and its use in help arrive at decision making thereby impact business outcomes, has demonstrated benefits through from adoption, penetration to implementation. However given its nascent stage of adoption or use among the HR professionals this study highlights the beneficiaries of HR Analytics within the HR Functions, this demonstrates the utility beyond the theoretical boundaries.

CONCLUSION

Human Capital Analytics and WFP are rapidly becoming core competencies that organizations cannot do without. Only 38 percent of organizations report they have the in-house skills required to successfully execute WFP, according to i4cp's 2011 WFP survey. Learning can take the initiative to develop Human Capital Analytics and WFP curriculums customized to their organization's specific needs and culture.

To improve its return on investment in talent management, an organization needs to fully understand its workforce demographics, costs and issues while continuously analyzing such issues based on future business needs and objectives. Such an analysis can help the organization identify gaps in talent needed for crucial positions and determine the types and numbers of people needed in the workforce and when they will be needed. Research shows that leading organizations integrate workforce analytics and planning with overall strategic planning and review their projections at least twice annually.

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