



Article

# The Influence of HR Analytics on Corporate Success and the Mediating Role of “Access to HR Technology” Between Their Relationship

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**Abstract:** Despite the increasing adoption and execution of Human Resource Analytics (HRA), it remains uncertain whether HRA can impact corporate success in relation to “Access of HR Technology” (ACHRT). Therefore, this study aims to investigate this important matter by analyzing the reasons, techniques, and timing of how HRA enhances corporate success, as well as identifying the mechanisms that facilitate this enhancement. Using data collected from four different organizations in the NCR region, structural equation modeling was applied to assess the impact of four types of HRA (Descriptive Analytics, Diagnostic Analytics, Predictive Analytics and Prescriptive Analytics) on corporate success with “Access to HR Technology” playing a mediating role. The findings of the research support that Descriptive Analytics and Predictive Analytics aids in improved corporate success as compared to Diagnostic Analytics and Prescriptive Analytics and “Access to HR Technology” play a mediating role in the relationship of HR Analytics and Corporate success. This study makes a substantial contribution to the literature on HR analytics. Initially, the research enhances our comprehension of the reasons behind and the mechanisms through which HR analytics can improve corporate success. Additionally, the authors highlight that having access to HR technology serves as a facilitator and a precursor to HR analytics resulting in improved corporate success.

**Keywords:** HR Analytics, HR Analytics tools, HR Technology, Corporate success.

## INTRODUCTION

Due to the continuing digital transformation, numerous HR departments have started utilizing workforce data to make informed decisions in areas like recruitment and selection, performance assessment, diversity and inclusion, and workforce planning (Tursunbayeva et al., 2021 & Hamilton and

Sodeman, 2020).As a result, this interest has extended across multiple management fields, including human resource management (HRM), as demonstrated by the increasing adoption of HR analytics by HR departments to enhance decision-making and drive greater corporate success.(McCartney et al., 2020 & Fernandez and

Gallardo-Gallardo,2020). Therefore HR analytics focuses not only on examining and enhancing aspects of human capital but also on using analytical methods and employee data to guide organizational strategy and boost performance. Additionally, the rapid expansion of access to HR technology has further supported these efforts (Huselid,

So far, existing HR analytics research has explored various topics, including the present limitations and obstacles hindering its development (Jeske and Calvard, 2020), and better effective approaches for building and applying HR analytics (Falletta and Combs, 2020)

In the contemporary landscape, overseeing personnel within an organization is a multifaceted endeavour that requires collaboration and shared responsibility. The dynamic nature of business and technological advancements have enabled the management of employees and the tracking of their performance to be conducted online through the utilization of HR analytic tools. The application of HR analytics has significantly enhanced employee performance and bolstered efficiency within organizations, leading to advancements in recruitment quality, talent management, employee productivity, and a reduction in turnover rates. The role of human resources is often diminished in numerous organizations; however, in today's technologically advanced landscape, a variety of analytical tools have emerged, utilized by large corporations. The management of human resources centres on optimizing the utilization of individuals to fulfill both organizational and personal objectives. The primary emphasis is on the processes of recruitment, management, and exit within the organization. To ensure that employees remain energized and that productivity continues to ascend, human resources assess employee performance and create innovative training programs tailored to their needs.

In the early 20th century, there was a significant influence from the work of Frederick Winslow Taylor, who lived from 1856 to 1915. John R. Commons, an American institutional economist, was the first to employ the term "human resource" in his 1893 publication, "The Distribution of Wealth." Nevertheless, it was only in the 20th century that formal structures for managing the dynamics between employers and employees were established within organizations.

The management of performance holds significant importance within the realm of Human Resources, serving as an ongoing dialogue between managers and employees aimed at fulfilling organizational objectives while simultaneously fostering the

development of employees' skills. This comprehensive communication process entails articulating precise expectations, setting objectives, delivering ongoing feedback, and analyzing outcomes. Performance Management establishes a communication framework between a manager and an employee, developed over the course of the year, with the aim of achieving both organizational and individual objectives. To comprehend employee managers, one must meticulously analyze all the gathered data and address the performance discrepancies highlighted within it. A range of instruments is employed to collect such data, including HR Analytics.

HR Analytics involves the systematic gathering and utilization of talent data to enhance essential human resources. This approach is fundamentally employed for making informed decisions based on the data at hand, enabling the prediction of employee turnover, the identification of high performers, and the assessment of skills that require enhancement. HR Analytics is alternatively referred to as people analytics. This allows your organization to assess the influence of HR metrics on overall business performance and make informed decisions grounded in data.

Many research papers have been published so far related to the topic (Margherita, 2020 & Gallardo-Gallardo, 2020) but despite that, there is dearth of research related to impact of the types of HR Analytics on organizational success

(Margherita, 2020 & Fernandez and Gallardo-Gallardo, 2020)

## LITERATURE REVIEW

### *HR Analytics*

HR analytics involves systematically identifying and measuring the human factors that influence business outcomes to support more informed decision-making. Equally significant is the understanding that such insights can be produced using different levels of technological advancement (Margherita, 2020). According to Marler and Boudreau (2017), there are four types of HR Analytics: Descriptive Analytics, Diagnostic Analytics, Predictive Analytics and Prescriptive Analytics.

### **Descriptive Analytics**

Collecting unprocessed data may seem futile and often lacks utility; however, when it is organized and arranged in a systematic manner, its value becomes apparent. Descriptive analysis, often characterized by observation and reporting, represents the foundational form of analysis and is frequently employed. It systematically gathers all available historical data and distills it into a comprehensible

format. The enumeration of personnel within the organization or a particular department falls under the realm of Descriptive Analytics. More intricate metrics such as turnover rates are also categorized under descriptive analytics. They analyze historical data with the objective of elucidating past events.

### **Diagnostic Analytics**

Descriptive analytics elucidates the events that transpired, while diagnostic analytics seeks to uncover the underlying reasons for those occurrences. We delve deeper than merely observing events; we seek to understand the underlying reasons for their occurrence. In this context, one begins by making an observation, subsequently identifying the elements of descriptive analysis, and then progressing to the diagnostic analysis.

Diagnostic analytics employs a range of techniques, such as data drilling and data mining. To explore the underlying factors contributing to issues and identify effective resolutions, organizations must comprehend the reasons behind the emergence of these challenges.

### **Predictive Analytics**

Descriptive analytics focuses on historical data, examining what has already occurred, while predictive analytics anticipates future trends and outcomes. Various statistical models and forecasts are employed in these analyses to anticipate potential outcomes. The objective of this analysis is to identify the requirements of the organization. Models are constructed based on the patterns identified through descriptive analytics. It may assist in forecasting the duration of an employee's tenure within the organization, or it can aid the talent acquisition team in assessing whether the employee aligns well with the organization's culture.

### **Prescriptive Analytics**

Once the future has been forecasted, the subsequent inquiry pertains to the actions that can be undertaken regarding the circumstances at hand. Prescriptive Analytics offers guidance on actions to take, drawing from predictions and historical data provided. This analysis proves to be particularly beneficial for entities experiencing fluctuations in demand throughout the year. For instance, a retailer would seek to determine the appropriate number of staff needed during the holiday season. Prescriptive analytics can assist in identifying the optimal approach to hiring a new employee by evaluating the necessary skills and knowledge throughout the employee life cycle. Here, you gather all the information available at the aforementioned levels and recommend the appropriate actions to be taken. The information presented indicates the subsequent course of action that ought to be taken.

Numerous analytical tools are employed in contemporary organizations for human resources, including Visier, Tableau, QLIK, SPSS, and Microsoft Excel.

### **Linking HR Analytics to Corporate success**

The application of predictive analytics in HR analytics reveals flawed practices that are often the primary contributors to attrition, thereby aiding in the retention and maintenance of high-performing employees.

- It aids in presenting the outcomes and the methods employed to achieve them. Human resource analytics play a crucial role in the strategic planning of human resources. It aids in predicting the requirements and competencies of employees necessary for fulfilling organizational goals.
- It aids in identifying the most suitable organizational talent needed for particular roles, free from bias.
- It contributes to enhanced performance outcomes within an organization by facilitating informed decisions, particularly in the realm of talent acquisition.
- It assists in identifying critical performance aspects that could significantly influence the overall effectiveness of the organization.
- HR analytics tools frequently incorporate data visualization and automation, enabling the automatic identification of areas needing improvement and the strategic planning of necessary team skills to develop a comprehensive program for skill enhancement.

In our analysis, we have opted to expand upon a framework put forth by Anita, R. & Sumathi, N. (2019) regarding the notion of HRM-as-practice, which is further grounded in the discourse of strategy-as-practice (Whittington, 2006; Jarzabkowski et al., 2007). By positing that organizational phenomena only come into existence through their enactment in practice, this theoretical framework seeks to transcend the dualism between structure and agency. It suggests that both individual actions and structural influences gain significance solely when they are expressed in practical contexts (Nicolini, 2012). The concepts presented here have their roots in foundational sociological literature (e.g. Giddens, 1984), which serves as a basis for various practice theories. Recently, these concepts have been applied to diverse fields within business administration and management, including organisational learning and knowledge (Tsoukas, 1996), strategy (Whittington, 1996), technology (Orlikowski, 2000), accounting (Ahrens and Chapman, 2006), and human resource management (Anita, R. & Sumathi, N., 2019).

At the heart of the notions surrounding strategy-as-practice lie three interconnected concepts that

propose a focus on practices, praxis, practitioners, and the intersections among these elements in the study of social practice (Whittington, 2006; Jarzabkowski et al., 2007). The integration of these three concepts facilitates a comprehensive representation and comprehension of a social phenomenon and its evolution. The conceptualization is fundamentally grounded in the duality recognized by Giddens (1984), wherein structures and actors mutually affect and are affected by one another.

The HRM-as-practice framework incorporates these concepts and modifies them for application within the HRM domain. The conceptualization encompasses three fundamental categories, contextually delineating them as HRM practices, HRM praxis, and HRM practitioners (Anita, R. & Sumathi, N., 2019). The concept of the “three Ps” aligns with established theories of practice, which are viewed as inseparable, interconnected, and challenging to differentiate. Practices become relevant when performed by individuals within a specific context (Whittington, 2006). The framework necessitates a comprehensive evaluation of the connections among these components at their intersections, shaping the implementation of HRM as it is practiced. Based on the foundational theory, specific practices are interwoven with others, resulting in challenges when attempting to delineate clear boundaries between them. To put it differently, the tradition of practice theory highlights that practices are interconnected in groups, embodied by practitioners, and carried out by them (Jarzabkowski et al., 2016). Therefore, the differentiation presented in this article serves primarily as a conceptual exercise derived from a broader array of practices. This decision is made with analytical intent, serving as a crucial simplification to enhance comprehension of HRA practices.

The interpretation of practices differs across the literature based on the specific area of application. Anita, R. & Sumathi, N. (2019) conceptualize practices as instruments, standards, processes, and methodologies, traditionally illustrating HRM practices as routines and techniques that facilitate the execution of HRM policies, such as high-performance HRM practices. Given the absence of a conventional consensus regarding HRA practices, which are currently evolving and developing, we opt to represent them within the broader framework of the strategy-as-practice tradition as actions that are actively engaged in (Whittington, 2006). These activities are characterized by their potential for diversity and variability, allowing for combinations and adjustments based on their application within specific contexts (Jarzabkowski et al., 2007). In essence, HRA practices are perceived as acknowledged conceptual activities that

fundamentally shape HRA.

Implemented HRA practices are contextual actions, which we refer to as HRA praxis. Jarzabkowski et al. (2007) examine praxis as the continuum of real-world activities that are contextually grounded, socially realized, and impactful. In accordance with this definition, we perceive HRA praxis as a tangible endeavour, illustrating the manner in which individuals engage in HRA practices. If HRA practices are widely acknowledged patterns and principles regarding the components of HRA work, then HRA praxis refers to the tangible execution of these abstract activities in real-world contexts.

HRA practitioners are the individuals who perform, create, and reshape HRA practices through their tangible actions. The individuals engaged in this field are regarded as the key agents who carry out the essential tasks (Whittington, 2006). This study defines HRA practitioners as individuals who are actively engaged in the implementation of HRA practices. The strategy-as-practice approach, while acknowledging the influence of both internal and external actors on strategy-making, frequently emphasizes the role of individual actors and their agency. In contrast, Anita, R. & Sumathi, N. (2019) adhere to the established HRM framework, differentiating between individual and collective participants. This exploratory study adopts a comprehensive approach, aiming to uncover all potential practitioners engaged in HRA, whether individually or collectively, in order to achieve a well-rounded understanding.

Ultimately, we seek to understand the integration and manifestation of the previously discussed elements—HRA practices, HRA praxis, and HRA practitioners—into a cohesive and unified approach to HRA. Anita, R. & Sumathi, N. (2019) model posits that the three Ps are inherently intertwined, with their interrelations being crucial to the model, as HRM-as-practice emerges within these intersections. Anita, R. & Sumathi, N. (2019), while emphasizing the significance of interconnections, fail to offer detailed descriptions of the events that transpired or to identify specific entities that both impact and are impacted by the practice of HRA and its components. Anita, R. & Sumathi, N. (2019) propose a number of intriguing research questions that emerge from the intersections, offering flexibility rather than strict guidelines, which may be adapted by future HRM studies. Given the intricate and somewhat enigmatic nature of the interconnections, we seek to elucidate the topics and concepts within the nomological network of HRA-as-practice that may actualize intersections among HRA practices, HRA praxis, and HRA practitioners, thereby integrating them into a cohesive framework. Therefore we hypothesise that



*H1: HR Analytics is positively related to Corporate success*

*H2: "Access to HR Technology" plays a mediating role between HR Analytics and Corporate success.*

### Research Methodology Objectives of the study

An online survey examining HR analytics and Corporate success was created in partnership with a major professional recruitment firm in the NCR Region. To ensure face validity, the survey was pilot-tested with several HR and senior managers who had substantial knowledge of their organization's performance indicators. Minor revisions were made to some questions based on this feedback. The finalized survey was then distributed online to HR managers, business partners, and senior leadership teams across different organizations such as Walmart, Wegman, Johnson and Johnson, Google and Experian. Following the distribution of the initial email invitations, 98 responses were finalized.

### Sample profile:

Of the respondents, 64% were male, and 76% held roles as HR managers. On average, respondents had nine years of work experience (SD = 4). The surveyed organizations were from the private sector.

### Measurements:

#### Corporate success

To measure Corporate success, seven items were adopted from Delaney and Huselid (1996). Respondents were asked to rate their organization's success relative to their competitors using a five-point Likert-type scale (1 - much weaker to 5 - much stronger). Example measures include "Ability to attract

essential employees," "Ability to retain essential employees," "Quality of services" and "Customer service." The reliability was assessed, showing a Cronbach's alpha of 0.86.

#### HR Analytics

Since no established scale currently exists for measuring HR analytics, this study draws on the theoretical framework proposed by Minbaeva (2018) and incorporates items from validated scales to align with the conceptual definition. For the first dimension, *data quality*, we adopted instrument designed by Pipino et al. (2002) that included five

items, including: "The HR data we have is presented in the same format" (consistency), "The HR data we have is collected on a regular basis" (data process), "The HR data we have is sufficiently up to date" (timeliness), "The HR data we have is correct and reliable" (accuracy), and "The HR data we have is complete and no necessary data is missing" (completeness). This dimension showed strong internal consistency, with a Cronbach's alpha of 0.93.

We used Kryscynski et al. (2018) for *analytical competency*, using five items from , such as: "Our HR Department effectively uses HR analytics to create value for my organization", "Our HR Department identifies problems that can be solved with data," and "Our HR Department translates data into useful insights,". This scale also demonstrated excellent reliability with a Cronbach's alpha of 0.94.

We adapted instrument of Minbaeva (2018) for *strategic ability to act*, using three items , including: "The data-driven insights we provide are used by our organization's stakeholders.", "Our HR Department inspires relevant organizational stakeholders (e.g., senior management teams and line managers) to take action based on their findings," and "Our HR Department has success stories to justify HR analytics projects," This scale achieved a Cronbach's alpha of 0.90.

Each dimension was assessed on a five-point Likert scale (1 = strongly disagree to 5 = strongly agree). A second-order confirmatory factor analysis (CFA) was conducted to evaluate the validity of the HR analytics scale. The model fit indices indicated an acceptable fit for the three first-order dimensions under a higher-order construct ( $\chi^2/df = 161.73/69 = 2.34$ ,  $p < 0.001$ ; CFI = 0.92; TLI = 0.91; RMSEA = 0.07; SRMR = 0.03).

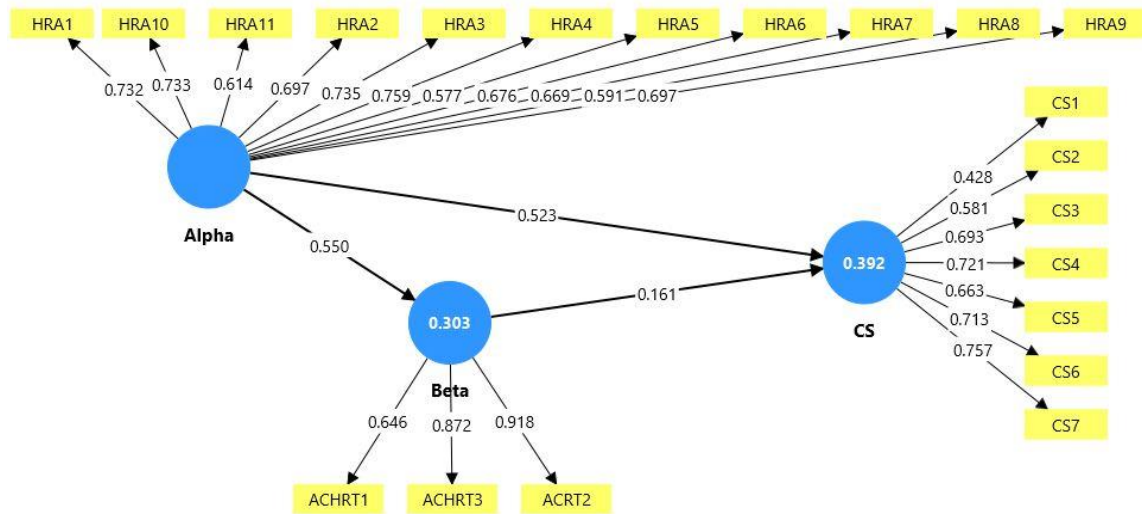
#### Access to HR technology

We adopted the instrument designed by Aral et al. (2012) using three items adapted from : "My organization has the appropriate tools for performing HR analytics.", "My organization invests in the tools needed for HR analytics," and "My organization has the necessary tools to conduct HR analytics,". These items were rated on the same five-point Likert scale, and the reliability of the scale was high, with a Cronbach's alpha of 0.92.

## RESULTS

We assessed discriminant validity across all constructs, and in light of the small sample size relative to the number of measurement items. First, for each single-dimension construct, the number of items was reduced by creating three composite indicators. This was done by pairing items based on factor loadings—starting with the highest and lowest loading items, followed by the next highest and lowest, until all items were grouped into one of the indicators. Each indicator score was calculated as the average of its constituent items. Next, a confirmatory factor analysis

(CFA) was conducted on the model. Model fit was evaluated using standard indices: chi-square, comparative fit index (CFI) (Bentler, 1990), root mean square error of approximation (RMSEA) (Browne and Cudeck, 1993), and Tucker-Lewis Index (TLI) (Tucker and Lewis, 1973). Below is fig1.1



**Fig-1.1** Our result indicate that Chronbach alpha is 0.884, Composite Reliability is 0.885 and AVE is 0.566.

|       | Cronbach's alpha | Composite reliability (rho_a) | Composite reliability (rho_c) | Average variance extracted (AVE) |
|-------|------------------|-------------------------------|-------------------------------|----------------------------------|
| Alpha | 0.884            | 0.885                         | 0.905                         | 0.566                            |
| Beta  | 0.757            | 0.859                         | 0.859                         | 0.674                            |
| CS    | 0.779            | 0.779                         | 0.840                         | 0.535                            |

**Below is the figure of Discriminant validity**

|       | Alpha | Beta  | CS |
|-------|-------|-------|----|
| Alpha |       |       |    |
| Beta  | 0.605 |       |    |
| CS    | 0.703 | 0.536 |    |

**Mediation analysis**

Mediation analysis was performed to assess the mediating role of ACHRT in the relationship between HRA and OS. The results revealed a significant indirect effect ACHRT on OS. (H1: $\beta=0.295$ ,  $t=5.794$ ,  $P<0.001$ ). The total effect of HRA on OS was significant (H1: $\beta=0.5964$ ,  $t=13.54$ ,  $P<0.001$ ), with the inclusion of the mediator effect of HRA on OS was still significant (H1: $\beta=0.264$ ,  $t=5.54$ ,  $P<0.001$ ). This shows a complementary partial mediating role “Access to HR Technology” between ACHRT and OS. Hence our H1 was supported. Our model showed that CFI was 0.92, RMSEA was 0.003, which indicates that our model is fit. The below table no-1 shows that all the values are significant

Table no-1

|                | Original sample (O) | Sample mean (M) | Standard deviation (STDEV) | T statistics ( O/STDEV ) | P values |
|----------------|---------------------|-----------------|----------------------------|--------------------------|----------|
| ACHRT1 <- Beta | 0.646               | 0.620           | 0.158                      | 4.100                    | 0.000    |
| ACHRT3 <- Beta | 0.872               | 0.871           | 0.048                      | 18.251                   | 0.000    |
| ACRT2 <- Beta  | 0.918               | 0.919           | 0.028                      | 32.542                   | 0.000    |
| CS1 <- CS      | 0.428               | 0.436           | 0.207                      | 2.068                    | 0.039    |
| CS2 <- CS      | 0.581               | 0.536           | 0.163                      | 3.559                    | 0.000    |
| CS3 <- CS      | 0.693               | 0.646           | 0.193                      | 3.594                    | 0.000    |
| CS4 <- CS      | 0.721               | 0.686           | 0.147                      | 4.916                    | 0.000    |
| CS5 <- CS      | 0.663               | 0.662           | 0.117                      | 5.666                    | 0.000    |
| CS6 <- CS      | 0.713               | 0.668           | 0.185                      | 3.848                    | 0.000    |
| CS7 <- CS      | 0.757               | 0.715           | 0.180                      | 4.205                    | 0.000    |
| HRA1 <- Alpha  | 0.732               | 0.720           | 0.090                      | 8.121                    | 0.000    |
| HRA10 <- Alpha | 0.733               | 0.722           | 0.096                      | 7.645                    | 0.000    |
| HRA11 <- Alpha | 0.614               | 0.597           | 0.111                      | 5.516                    | 0.000    |
| HRA2 <- Alpha  | 0.697               | 0.686           | 0.094                      | 7.387                    | 0.000    |
| HRA3 <- Alpha  | 0.735               | 0.723           | 0.079                      | 9.354                    | 0.000    |
| HRA4 <- Alpha  | 0.759               | 0.746           | 0.109                      | 6.994                    | 0.000    |
| HRA5 <- Alpha  | 0.577               | 0.577           | 0.103                      | 5.584                    | 0.000    |
| HRA6 <- Alpha  | 0.676               | 0.669           | 0.080                      | 8.427                    | 0.000    |
| HRA7 <- Alpha  | 0.669               | 0.669           | 0.085                      | 7.868                    | 0.000    |
| HRA8 <- Alpha  | 0.591               | 0.592           | 0.089                      | 6.626                    | 0.000    |
| HRA9 <- Alpha  | 0.697               | 0.696           | 0.076                      | 9.200                    | 0.000    |

## DISCUSSION

This study helps us to understand how HR Analytics helps in performance management, to understand reasons of employee turnover and retention and to understand employee behaviour in the organization. In this study the research methodologies pertain to the approaches that will be employed in the execution of the research. This encompasses your strategy for data collection, application of statistical analysis, observations, and more. The aim of research methodologies is to provide a foundation for your data collection methods and the central arguments of your study.

Secondary data refers to information that has been gathered through prior research efforts rather than through one's own data collection endeavours. Secondary data refers to primary data that has been collected and stored by another individual or organization, which is then utilized by others for their specific objectives. This paper presents a compilation of diverse cases sourced from an array of websites and academic journals.

### Analysis of Google

Google operates as a limited liability corporation, leveraging cloud computing and search engine technology, among other innovations. Google is regarded as one of the leading five IT companies globally, alongside Apple, Amazon, Microsoft, and Meta. In 1998, Larry Page and Sergey Brin established Google. Alphabet Inc. serves as the parent organization of Google, with Sundar Pichai currently holding the position of CEO at Google. The organization is comprised of over 140,000

individuals in its workforce. According to Fortune magazine, it achieved the top position on the list of the Best Companies to work for in the years 2007, 2008, and 2012.

- **Application of HR Analytics at Google:**  
Google initiated a program called "Project Oxygen," which essentially combines employee feedback with productivity data to analyze employee behaviour and skills, ultimately identifying the characteristics of effective managers. From this data, Google was able to identify 10 characteristics exhibited by exceptional managers.
- **Findings from HR Analytics at Google:**  
The initiative contributed to the development of aspiring business leaders and enhanced the effectiveness of the management teams. The employees placed greater emphasis on interpersonal abilities and emotional awareness rather than on technical competencies.
- **Experian**  
Experian is a prominent information service company headquartered in Dublin, Ireland, specializing in the provision of data and analytical tools to various organizations. In the year 1996, Experian was under the ownership of GUS; however, on the 10th of October in 2001, Experian distinguished itself from GUS and emerged as an independent entity. Experian engages in the collection and analysis of credit reports pertaining to individuals and businesses through a multitude of sources. Credit reports are generated and subsequently scrutinized by various enterprises, including financial institutions, healthcare providers, and automotive companies, to derive credit scores from the analyzed data. It aids in discerning the feasibility of the customer's ability to fulfill the

applied loan. In the fiscal year ending March 2020, Experian disclosed a revenue figure of US\$ 5.18 billion. The organization is registered on the London Stock Exchange. Experian is comprised of roughly 17,000 individuals across approximately 44 nations. In 2018, Experian was recognized as one of the top 100 most innovative companies by Forbes magazine.

#### **4. Application of Human Resources Analytics for Experian:**

In 2019, Experian introduced a novel analytical instrument referred to as predictive workforce analytics. The organization has encountered significant employee turnover since 2016, resulting in substantial financial losses. Although Experian was regarded as one of the premier companies to work for, it faced significant challenges with employee turnover. In 2016, it was discovered that the resignation rates exceeded the industry standard by 4 percent. From a financial perspective, each 1 percent rise in turnover was resulting in an expense of approximately \$3 million for the business. This had a significant impact on the organization. Olly and Wendy Cunningham from Experian's Global HR team have embarked on the development of an analytics solution aimed at providing global HR teams with enhanced insights into employee needs. They posited that this methodology would allow the organization to discern the advantages that individuals esteemed, thereby facilitating more enlightened retention strategies. ➤

#### ➤ **HR Analytics for Experian:**

The implementation of Visier enabled the company to decrease the time allocated to scheduled employee reporting by nearly 70%. Reports are no longer disseminated to employees, and individuals are urged to independently source information whenever feasible. For Experian, the predictive workforce analytics platform demonstrated a significant impact, yielding beneficial results for the employees while optimizing both costs and time for the organization.

#### ➤ **Walmart**

Walmart is a prominent American multinational retail entity that operates a diverse array of supermarket chains globally. The inaugural Walmart was established in Arkansas in 1960 by Sam Walton. As of 1967, the Walton family had established 24 retail locations, generating sales amounting to 12.7 million. Walmart is publicly traded on the New York Stock Exchange. In 2022, Walmart operated more than 10,585 stores across 24 countries. As reported by Fortune Global 500, Walmart stands as the largest company by revenue, boasting approximately US\$570 billion in annual earnings. The organization stands as the foremost private employer, boasting a workforce of 2.2 million individuals. Walmart conducts its business through various store formats

across different nations, exemplified by its acquisition of a 77% majority stake in the e-commerce entity Flipkart in India.

#### ➤ **Use of HR Analytics for Walmart:**

In 2015, Walmart developed a tool that enabled its team to provide data accessibility for users to incorporate into their own reports. Walmart established four segments within the framework they referred to as the "analytics engine" of their team:

- Modelling and data analysis: This is the domain where the analytical team engages in developing systems to assist with forecasting or facilitating decisions grounded in evidence.
- Investigation: - These primarily focused on unstructured information. This program conducted annual surveys for the entire Walmart workforce to gather insights on employee concerns.
- Prototype and Visualization: - In this section, various methodologies are formulated to enable the application of gathered information and data to address business challenges.
- Experiment and acquire knowledge: - Upon the formulation of the appropriate methodology, an evaluation is conducted within a retail environment or similar setting prior to its implementation within the organization. Upon demonstrating its effectiveness, the IT department disseminates it throughout the organizations.

#### **Result of HR Analytics for Walmart:**

This alleviated the burden on team leaders, allowing them to focus on their core responsibilities rather than engaging in the reporting process themselves. Projects are prioritized by the HR department prior to their allocation to various departments or specific teams. The analytics are disseminated worldwide and can be managed remotely as an integral component of a collaborative team effort.

#### ➤ **Wegmans**

Wegmans Food Markets is a supermarket chain that operates throughout the United States. The total number of stores amounts to 107. Wegmans employs a total of 52,000 individuals and has achieved the distinguished rank of 3rd on Fortune's annual list of the 100 best companies to work for. The company has consistently appeared on this list each year and notably secured the 1st position in 2005. The organization documented an annual revenue of 11.2 billion in the year 2021. The establishment of the company can be traced back to the year 1916, initiated by the Wegman brothers, John and Walter Wegman. The organization offers a range of educational contributions, including a program that allocates \$5 million annually in tuition assistance for its employees.

#### ➤ **Use of HR Analytics for Walmart:**

In 2007, it became necessary to reevaluate the healthcare benefits provided to employees. The



organization executed a survey across 17 of its top-performing locations, achieving a 76% response rate from a sample of 1,310 employees. The survey presented two distinct categories of inquiries. Employees were inquired about their perceptions regarding the distinctions between the current market and the emerging market. In the second inquiry, employees were prompted to express their sentiments regarding their rewards. Employees were presented with the opportunity to select between two distinct packages that included healthcare benefits and compensation options.

➤ **Findings of HR Analytics for Wegmans**

The inquiries revealed a clear preference among employees for health benefits as a significant factor influencing their decision to join and remain with the organization. The organization observed that the base compensation was positioned at the lowest tier of both lists concerning employee worth.

➤ **Johnson & Johnson**

Johnson and Johnson is a prominent American enterprise engaged in the development of medicinal products and pharmaceuticals. The organization achieved a notable position, being placed 36th on the 2021 Fortune 500 list, which recognizes companies with the highest revenue. In the year 2020, the company achieved a global sales figure of \$82.6 billion. The establishment of the company can be traced back to 1886, initiated by Robert Wood Johnson alongside his brothers, James Wood Johnson and Edward Mead Johnson. At its inception, the workforce comprised 14 individuals, including 8 women and 6 men. At present, Johnson and Johnson employs over 144,500 individuals.

➤ **Application of HR Analytics at Johnson and Johnson:**

The organization encountered challenges regarding the enhancement of employee performance and the retention of its workforce. During that period, individuals possessing prior job experience were recruited within the industry, under the assumption that these seasoned professionals would offer greater contributions to the organization. Consequently, the company experienced a 10% reduction in the employment of newly graduated students. The HR analytics team gathered data on 47,000 employees to examine the relationship between experience and turnover. The gathered data indicated that individuals recruited from academic institutions tended to stay with the organization for a more extended duration compared to their more seasoned counterparts. The findings indicated that there was minimal distinction between the newcomers and the seasoned employees in terms of their contributions to the organization.

➤ **Findings from the HR Analytics conducted for Johnson and Johnson:**

Upon careful examination of the findings, the organization has implemented a novel two-year leadership development initiative aimed at reducing turnover rates among recent college graduates. According to the findings of the people analytics study, the organization experienced a 20 percent increase in employment among recent graduates, which contributed to a reduction in turnover and sustained employee performance.

- In the initial scenario, it is evident that Experian encountered challenges related to employee turnover. However, upon implementing predictive workforce analytics, they gained insights into employee needs and subsequently decreased their reporting time by nearly 70 percent.
- Walmart employed analytical tools; however, shifts in aspirations and objectives rendered these tools incompatible with the company's needs. Consequently, they modified their analytical instruments to an alternative tool. This tool provided seamless access for business users, enabling employees to check in on their own reports, thereby conserving valuable time that managers would otherwise spend on reporting tasks.
- This case centred on the performance and characteristics of the employees involved. In this context, various instruments were employed to address distinct challenges. The initial challenge pertained to selection, as there was a scarcity of data regarding the employees. Consequently, the firm's technical team devised a series of online games that provided insights into the personalities and thought processes of the employees.
- The second issue pertained to daily management, for which the company employed a tool known as the Organizational Health Index. This instrument highlighted various management practices that could enhance the overall health of the organization.
- The third challenge encountered by the company pertained to employee interactions with customers. To address this, the company implemented sensors that monitored the extent of employees' physical movement within the restaurant, the tone of their conversations with patrons, and the duration spent engaging in dialogue with both colleagues and customers.
- Wegman Food Market encountered significant expenses in the renewal of the healthcare plan for its employees. A survey was conducted to assess the levels of engagement and satisfaction among employees, focusing on their perceptions regarding the rewards they receive. Participants were presented with a hypothetical scenario involving various employee packages, revealing a willingness among employees to accept lower compensation in exchange for reduced liabilities.
- In this instance, Johnson and Johnson experienced a

decline in their graduate workforce due to their emphasis on hiring seasoned professionals, under the assumption that these individuals would provide greater advantages to the organization.

- However, after conducting research, it was discovered that graduate employees remained with the company for a longer duration than their more experienced counterparts, yet there was no discernible difference in their contributions. Consequently, Johnson and Johnson established a leadership program that effectively decreased turnover rates among graduates while sustaining their performance levels.

## CONCLUSION

The organization must consider inquiries such as, "What are the reasons for employees to remain with our company?" HR analytics enables the assessment of employee needs and deficiencies, subsequently facilitating the development of systems or programs aimed at enhancing performance and retention rates. Organizations such as Google employ HR Analytics to gather data on employee performance, aiming to identify the most effective training programs that can support both high and low performers. Numerous organizations overlook HR analytics and associated, yet unacknowledged, organizational methodologies linked to this field. The research examines the potential of HR practices to shift conventional roles into transformational roles within organizations. This investigation seeks to delve into and comprehend the significance of analytics in contemporary society. The rising expectations regarding performance have shifted attention towards HR Analytics, aiming to foster a new era of innovation and competitiveness in the workplace. To fulfill the role with efficacy, HR managers and leaders require substantial backing from their organizational leaders. Initially, it is essential for them to thoroughly analyze the issue at hand. These challenges may arise from a multitude of factors, and specialists in fields such as management transformation, leadership enhancement, workforce allocation, performance indicators, and human resources analytics can assess the circumstances and propose viable solutions to address these issues.

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