



The Rise of HR Analytics: Exploring Its Implications from a Developing Country Perspective

DR. Rajesh Kumar Upadhyay Professor, Department of Management Studies, Graphic Era Hill University, Dehradun.

MS. Esheta Tyagi PhD. Research Scholar, Department of Management Studies, Graphic Era Hill University, Dehradun.

Dr. Mohit Kumar Ojha, Associate Professor, Department of Commerce, Graphic Era Deemed to be University, dr.mohitojha@gmail.com

1.1 Abstract

Human resource management (HRM) has been increasingly important to the performance of businesses in recent years. When companies take advantage of this information, they gain a competitive edge. HR analytics has the potential to greatly increase HR's contribution to the bottom line if the research findings hold. The primary goal of this study is to comprehend the impact of HR analytics on businesses in developing nations like. Twenty (20) businesses and government agencies in 's Greater Accra Region participated in this qualitative study. Based on the results, it seems that HR analytics aids in a more efficient hiring process, which in turn boosts productivity and helps businesses hold on to their most valuable workers. Few businesses use HR analytics because they either don't see the value or don't have the means to implement it. There is a significant gap between the potential of analytics and its actual application in low and medium income nations, despite the fact that analytics is widely used in wealthy economies. To better train the future generation of industry leaders, it is suggested that higher education and professional development institutions reevaluate their curricula and include HR analytics courses. This study contributes to the expanding body of literature on HR analytics and gives businesses a road map for developing HR strategies to address the challenges of HR management.

Keywords: The Science, Art, and Practice of Managing People in Organizations.

1.2 Introduction

Analyzing large amounts of data is becoming standard practice in modern businesses. Since then, we've made significant progress toward more precisely (Abor et al., 2008) to sift through data on customers and rivals in order to enhance offerings while reducing costs thanks to fewer mistakes and more tax breaks. The Purchasing and Billing Cycle (Amponsah-

Tawiah, K., & Dartey-Baah, 2011) has advocated for the widespread adoption of technologies like satellite navigation, RFID tags, and data visualization software, all with the goal of making better use of location and quality data in real time. Healthcare (Angrave, D., Charlwood, A., Kirkpatrick, I., Lawrence, M., & Stuart, 2016) Biostatistics employs tried-and-true techniques for analyzing patient data with the goal of bettering medical care and generating precise prescriptions based on a thorough examination of symptoms. With its ability to shed light on a wide range of societal happenings, data analytics is rising to prominence as a field of human resource management and for deciding things (Bailey, C., Mankin, D., Kelliher, C., & Garavan, 2018).

Only a small amount of HR analytics research has been conducted using actual employees as subjects. (Bassi, L., Carpenter, R., & McMurrer, 2012); Without any foundation in fact or consensus from the scientific community and instead influenced by commercial or governmental interests (Brynjolfsson, E. & Saunders, 2009). Academics have paid scant attention to the HR Analytics phenomenon, producing only a handful of studies on the topic. (Boateng, 2014). Companies are often inexperienced with human resource analytics. (Lawler et al., 2004) demanding opinion rather than data analysis and statistics when evaluating employee performance.

More and more businesses are adopting HR analytics to better manage their workforce, thus this study will analyze its benefits and drawbacks. Given the recent interest in HR data analytics, this development was maybe predictable. (Boyce & Neale, 2006) (Boyce & Neale, 2006) Hence, companies are interested in learning more about them to see how they may improve productivity and guide HR strategy (Creswell, 2003).

The term "big data" has become commonplace in the corporate world to describe massive amounts of data that may be processed and analyzed for strategic purposes (Deloitte, 2015). Information-driven businesses, one of the defining features of big data is its sheer quantity. Companies today have access to massive data warehouses, which can be mined for actionable insights to guide day-to-day operations and long-term strategies (Earley, 2015). The HRM industry may be hesitant to incorporate data analytics, but the two are inextricably linked (Edwards, M. R., & Edwards, 2016). The field of human resources has recently recognized its utility in assessing and enhancing performance (Ejo-Orusa, H. & Okwakpam, 2018).

Management of People Resources is a profession dedicated solely to the analysis of HR information that emerged at the turn of the century. Human resource analytics, as reported by Boston Consulting Group, have been a game-changer for organizations such as Google, Best Buy, and Sysco. The average person knows nothing about human resource analytics. (Fiocco, 2017) putting a damper on managers' ability to think critically about data and forcing them to rely on gut instinct.

Human resources departments appear to be under significant pressure to prove the worth of analytics as it gains popularity in the commercial world. It is also crucial to have the appropriate abilities. Most HR professionals lack the knowledge, experience, and insight to

carry out efficient analytics that yield competitive benefits for their organizations, limiting the field's potential(Fitz-enz, J. & Mattox II, 2014).

Sierra-Cedar According to studies, 46% of large companies and 51% of SMEs value HR analytics spending highly. The poor currency, lack of savings, and inefficiencies that plague much of Africa also plague in businesses(Service, 2017). Such organizations are investing in human resource analytics, much like their competitors in the rest of the developed world. This research will pave the way for future endeavors of this kind by determining the practicality of HR analytics in a business setting specific to.

As a result of HR analytics, HR has evolved into a key business partner for many companies, Through analytics, the monetary effect of HR actions may be identified(Heuvel, S. V. D., & Bondarouk, 2016).

1.2.1 Making Analytics Decisions in HR Practice using the LAMP Framework & Process Model

An organization's value is based on the value it places on its employees' abilities to make a strategic impact when they start using "decision science" methods. Therefore, professionals have guidelines to follow while making personnel decisions such as hiring, dismissing, performance reviews, and disciplinary actions. The following prerequisites need to be satisfied: Using the LAMP stack as a starting point (Logic, Analytics, Metrics, and Processes). Within this structure, HR professionals will be able to dissect HR analytics' underlying assumptions and identify the most crucial factors in guiding managerial decisions.(van den Heuvel & Bondarouk, 2017). These four facets of a measurement system are essential for information gathering, analysis, and decision making. The HR department's primary objective should be to provide senior management with tools that improve their ability to monitor and assign workers(van den Heuvel & Bondarouk, 2017). Here you may find out more about the LAMP framework and how you can put it to use in your own projects.

1.1.1.1 Logic

The system's logic develops inferences about the data, its potential applications, and the types of results a business might anticipate(Krista, 2016). Human resource analytics allows for sound deductions into the connection between KPIs and business outcomes. The Human Capital Bridge Framework is grounded in the three pillars of strategic human resource management: influence, effectiveness, and efficiency.

An increased focus on HR delivery channels is one way that efficiency is being improved(van den Heuvel & Bondarouk, 2017). Cost-per-hire, time-to-hire, employee compensation, and training time are only some examples of HRM KPIs. It exemplifies how HR may be used to boost productivity while cutting costs. The effectiveness anchor describes how a company's talent pool and structure can be influenced by HR plans and practices. The third and final pillar, "impact," delves deeper into the HR department's capacity to direct its efforts where they will have the biggest positive influence on the company's strategic and operational

efficacy (van den Heuvel & Bondarouk, 2017).

1.1.1.2 Analytics

The "analytics" component of the system is in charge of reviewing HR files and extracting useful data. It can be difficult for human resources to see the big picture and make sense of all the moving elements without conducting thorough analysis. Human resource specialists require access to the necessary statistics and the communication skills to convey the most relevant problems in the data in order to conduct in-depth investigations, make valid conclusions, and rule out bias. Human Resources isn't the only place you may go to obtain useful information that could advance your education. Improving the company's analytical prowess is crucial for introducing new perspectives. A thorough examination of the data can reveal hidden patterns, which can then be used to zero in on the best possible answers (Johannink, 2015). Human resources professionals have a shot at making good use of HR data if they have access to HR data and a thorough knowledge of analytical principles.

1.1.1.3 Measures

In the event that we adopt the recommendations of It is well-established that human resources professionals are unable to implement changes inside their firms owing to a lack of reliable data. Accurate, high-quality tools are required for this inquiry. As a result, efforts aimed at improving efficiency have taken a second seat to those that are more immediate. The HR spectrum's apparent efficacy could be attributed to the wide variety of indicators it uses to gauge success. Numerous efforts have been made to improve the timeliness, precision, depth, and uniformity of HR data. Even though a situation could theoretically be altered, that doesn't mean it necessarily should be (Abor et al., 2008)

1.1.1.4 Process

Once upper management realizes HR analytics has the potential to improve operations and provide actionable insights, they will need to implement a change management approach. Therefore, it is important for HR managers to align their data analysis with the issues currently facing their businesses. This is a great approach for HR experts to get noticed and advance in their respective companies (Edwards, M. R., & Edwards, 2016). Assessing your workforce is an essential first step in making any organizational modifications. This method explains how many different areas of knowledge and societal norms contribute to business decisions (Edwards, M. R., & Edwards, 2016).

All of these methods are essential to good change management. Managers should keep in mind that implementing HR analytics is not only feasible, but also extremely illuminating and does not require extensive research.

We've demonstrated that the ROI formula is a useful tool for educating both senior and junior managers on financial matters. These HR programs won't be rolled out in isolation; they'll be woven into the fabric of the organization, complementing our existing mechanisms for

disseminating knowledge and encouraging creative problem solving.

1.2.2 HR Analytics Process Model

If HR is to make educated decisions that contribute to the long-term performance of the organization, the information gap between HR analytics and the various HRM processes must be addressed. (Brynjolfsson, E. & Saunders, 2009) to create income and stay ahead of competitors, have developed a five-step approach that may be automated or handled by IT professionals. Creating objectives that direct operational heads toward the organization's vision and mission is the first step.

Making ensuring the model holds up requires locating reliable measures against which to compare it. The collected information will reveal how efficient the existing model is. There are a number of helpful HR indicators, including the cost per HR employee, the cost of training as a percentage of sales, and the return on investment in training. Many other metrics, such as employee retention, hiring cost, the net promoter score, annual turnover, and quality of recruitment, are important to monitor while managing a human resources department.

Cost of abortion relative to average annual income. Every bit of information generated, kept, and utilized by workers must be logged and incorporated into a unified system for the sake of consistency and availability. The data itself is important, but the setting in which it was gathered is far more so. As if their already-full plates weren't full enough, human resource professionals are also accountable for the accuracy and timeliness of the data they use. The final step is a clear presentation of the results. In this step, information gathered from many sources (such as databases and aggregators) is transformed into actionable intelligence. Having an IT-supported, automated analytical approach improves the likelihood of obtaining reliable, standardized, and rapid results. fully automated procedure typically used to generate projections, dashboards, scorecards, and reports (Heuvel, S. V. D., & Bondarouk, 2016).

There is a last step of making choices and monitoring the outcomes. Human resources administrators should always double-check their work to avoid mistakes. By comparing historical information with current data, we may be able to get a better idea. The HR manager is responsible for ensuring that the insights gained from the scorecard are put to good use. Discrepancies, especially between desired and achieved outcomes, call for a reevaluation of goals. This method of value creation is essential because it facilitates the alignment of HR's multiple roles with the company's strategic objective.

1.3 2.1 Materials and Methods

2.1.1 Research Design

The strength of every study is only as good as its methodological framework (Amponsah-Tawiah, K., & Dartey-Baah, 2011). You should have complete faith in the veracity of the

findings when using these techniques after reading this. The research was qualitative and grounded in an Interpretivist approach. This adds more depth to our comprehension of how people live in a particular place (Malisetty et al., 2017) The mechanisms at play in any given situation can be described and understood in greater depth using qualitative methodologies. This research used phenomenological approaches (Heuvel, S. V. D., & Bondarouk, 2016) A semi-structured guide with open-ended questions about participants' experiences with HR analytics was provided (van den Heuvel & Bondarouk, 2017)

2.1.2 Population

The study of the Greater Accra Region involved the participation of numerous organizations and government bodies. It was decided to conduct our study in the Greater Accra Region because of its big and diverse labor force. Approximately 70% of 's GDP is produced in Greater Accra, which makes it the economic engine of the country (Fiocco, 2017). The city's growing importance as a commercial hub has attracted a diverse range of businesses and organizations. The sample for this research consisted of companies with either their headquarters or significant administrative operations in Accra or Tema, 's two largest cities (Abor et al., 2008).

2.1.3 Sampling Technique and Sample Size

To ensure representative results, we utilized a technique called "purposeful sampling," in which individuals are proactively selected. By drawing on samples that were selected for a specific reason, researchers are more likely to obtain useful results (Heuvel, S. V. D., & Bondarouk, 2016). Using this strategy, we can cherry-pick situations with a lot of available data for in-depth examination (Malisetty et al., 2017). Subjective sampling (sometimes termed judgment sampling) is a method used in research to select respondents depending on whether or not they exhibit particular traits relevant to the investigation (Lawler et al., 2004). Convenience sampling was used to select participants who expressed interest in taking part in the study and were deemed to be trustworthy. As part of our research into HR Analytics and HR's function as a strategic business partner, we consulted a seasoned analytics practitioner who has worked closely with HR in the past.

Human resources (HR) experts, managers, and staff from 20 corporations and organizations were interviewed. These establishments all had their own HR teams and analytics groups. When conducting research, scientists frequently use both quantitative and qualitative methods, (Miles, M. & Huberman, 1994) intimate To guarantee statistical significance, a sample size of fifteen

(15) to thirty (30) people is recommended. Twenty people got chosen at random in total.

2.1.4 Data Collection Instruments

The researcher used an interview guide to acquire information from participants in a more

organized fashion. The interview guide, which served as a synopsis, contained no more than fifteen main questions (McAfee & Brynjolfsson, 2012). There were two sections to this interview manual. In the first section of the survey, we inquired about the general demographics of our respondents. This included questions about their educational background, professional qualifications, occupation, length of service at their present company, and overall company size (in terms of employees), Part B assesses your familiarity with HR analytic tools and the benefits and drawbacks of using each. Part B puts HR analytic tools and their pros and cons to the test.

2.1.5 Data Collection Procedure

Along with their cover letters, researchers sent an appointment scheduling guide compiled by the University of Business School's Department of Organization and Human Resource Management. Where did we pick this up? By inquiring as to what time would be most convenient for them. At the time of the interview, participants were informed of the purpose of the study, their rights as research participants, and the ethical considerations that would need to be made before they signed a consent form. The remaining respondents were interviewed in-person for thirty to forty minutes using a script. The material was then transcribed and analyzed.

Table 1 - Socio-Demographic Characteristics of Interviewees

Respondent code	Educational Qualification	Job Position	Tenure	Preorganization
Respondent1	MSc Servicing	Manager,HRstrategy	7years	Private/MNC
Respondent2	MBAHRM	PrincipalHROfficer	16years	Public/Domestic
Respondent3	MBAHRM	HRBusinessPartner	6years	Private/MNC
Respondent4	PhDLaw	CountryHRDirector	7years	Private/MNC
Respondent5	EMBAHRM	HumanCapitalManager	12years	Private/MNC
Respondent6	MPhilHRM	Dir.HR,Admin&Org	7.5years	Public/Domestic
Respondent7	MSc HRM	Lead,HRShared Services	10years	Public/Domestic
Respondent8	BscHRM	HRAssistant	3years	Private/Domestic
Respondent9	MBAHRM	DeputyHRManager	16years	Public/Domestic
Respondent10	MAPublic Admin.	Director,HR	25years	Public/Domestic
Respondent11	BscMechanicalEng.	HRBusinessPartner	3.5years	Private/MNC
Respondent12	MAPublic Admin	HRProgramsOfficer	8years	Public/Domestic
Respondent13	MscHRM&Training	TalentAcquisitionPartn er	8.10years	Private/MNC
Respondent14	BscHRM	HRAnalyst	2years	Private/MNC
Respondent15	BscBusinessStudie	HRSupervisor	5years	Public/Domestic

Respondent16	MBAInternational Business	HR,AssistantDirectorI	7years	Public/Domestic
Respondent17	BASociology&Engli sh	HROfficer	8years	Public/Domestic
Respondent18	BATheatreArts	HRAnalyst,WestAfricaC luster	4.8years	Private/Domestic
Respondent19	MBAHRM	Mgr.Talent&Transform ation	18years	Private/MNC
Respondent20	MBAHRM	GroupeHRManager	12years	Public/Domestic

1.4 3.1 Results and Discussions

3.1.1 HR Analytics among Firms in

3.1.1.1 Employee Acquisition

By using analytics, companies can better manage their staff, fixing issues like low morale and productivity by placing the right people in the right roles. With the help of analytics, we are now better able to identify and recruit top talent. Decisions on who to hire may now be made more quickly and with more accuracy thanks to HR analytics. HR experts' assessments and judgments of how a candidate's skills and knowledge affect an employee's performance might be subjective, thus this is a reasonable alternative enhanced productivity in the business of hiring people (Minbaeva, 2018).

For example;

“...there are series of assessments like cognitive and behavioral even with internal recruitments. The applicants take about three assessments and analytics has helped us to whittle down until we finally get the shortlisted numbers to interview. This has improved the quality of people we bring into the organization.” (Respondent 10)

Chief executive officers are putting pressure on human resources departments to adopt analytics in order to gain a competitive edge and produce value (Johannink, 2015). (McAfee & Brynjolfsson, 2012) verified the positive effect analytics is having on the recruitment strategies of certain Nigerian organizations. Employing analytics has been shown to increase productivity, hire quality, revenues, and staff retention. Any business owners who have any interest in their HR department or bottom line will examine their current hiring procedures and look for methods to improve them.

The full potential of analytics can't be reached if the correct individuals aren't assigned to the right roles due to internal politics. However, HR professionals have recently started using analytics to help with talent acquisition, with an initial emphasis on graduate internships that may lead to full-time positions. As a result, data will play a bigger role in HR decisions. If the right people are placed in leadership roles, businesses have a better chance of succeeding. Successful companies are embracing analytics to improve the matching of employee abilities to job requirements, which in turn increases productivity and keeps the

best employees with the company(Krista, 2016).

3.1.1.2 Increased Performance

How productive workers are can have a major effect on a company's bottom line and day-to-day operations. When there is good congruence between employee outputs and broader corporate goals, and when strong employee leadership traits are exposed through assessment of performance rating systems, organizations have leveraged performance to outmaneuver competitors(Mukundan, 2017).

“So yes, at the end of every year, we use the performance management tool, which helps us to derive our KPIs. We feed it into the system, run the analysis, at the end of the year, we churn out our reports and employees that are not performing are put on performance improvement plans. At the end of the year, the reports are available to help us make decisions on our high performers because performance must be linked to rewards.” (Respondent 3)

The extent to which an organization's human resources department is able to reduce expenses is indicative of that organization's performance. The corporation stands to save a significant amount of money if the HR division is brought up to speed (McAfee & Brynjolfsson, 2012). Analytics may help human resource managers and executives save money without compromising quality by keeping tabs on spending and revealing wasteful spending patterns.(Minbaeva, 2018), HR analytics is a certain approach to increase productivity and decrease overhead costs for any organization.

“Through HR analytics, we’ve reduced 3 million pounds of cost this year. This 3 million is on Overheads alone.”(Respondent 11)

Intriguingly, the introduction of analytics to the practice of performance management has prompted a radical departure from traditional methods of evaluation. Employee assessments will be more accurate if HR data is linked to performance measurement tools. There has always been an element of subjectivity in assessing performance, but the use of various data analytic techniques is helping to reduce that. If you base your performance conversations on data from performance management, you can increase the likelihood of creating a level playing field(Patton, 2015).

3.1.1.3 Employee Retention

Today's firms may better protect their most valued employees with a wider variety of tools than in the past. The reason for this is because it is now easy for human resources professionals and managers to estimate the likelihood that an employee will resign within a given time frame. Human resource analytics has made it possible to calculate employee turnover rates. Due to the high stakes involved in replacing departing employees with new ones, companies are paying close attention to their recruitment and retention strategies. Companies who take the time to study employee turnover can learn what causes it and how to prevent their best workers from jumping ship to the competition;

“We have deployed the employee engagement survey which is conducted every November. We have 67 questions with different indexes, including engagement, performance, diversity, innovation, safety, work life balance, work environment with about 98% participation from employees. We analyze the results and based on that we come out with action plans to make the work environment the best that it can to retain our employees.”(Respondent 4)

Analyzing personnel data and attrition records is one way analytics may be used to cut down on staff turnover(Malisetty et al., 2017). The part played by human resources in controlling employee turnover was highlighted. Organizations that are serious about retaining their employees frequently conduct surveys in which staff members are asked to rate the significance of various aspects of the company's culture to their daily job. Changes in areas like pay, career prospects (including training and education), and business values and ethics can all boost employee engagement by applying the insights gathered from the data analysis. With employee engagement and retention at the forefront of business strategy, it's crucial to undertake in-depth analytics to assess current and future trends in the employee experience, with the ultimate goal of better tailoring it to each individual worker and retaining the best of the best. There was a connection between (Fiocco, 2017) Ideally, companies' attrition rates would be reduced by millions of dollars each year, saving the companies in question a considerable amount of money.

“...over the past three years, the average attrition rate annually is just below 2% and it might be one of the best.”(Respondent 1)

Staff turnover is costly to businesses that lose valuable personnel to competitors (Malisetty et al., 2017). Staffing data is analyzed so that the company may keep hold of its most valued employees (those who have a significant impact on ROI and business success).

3.1.2 Challenges Associated with HR Analytics use Among Firms in

3.1.2.1 Lack of HR Analytics Competency

If human resources doesn't use the data it obtains, a skills gap will develop(Miles, M. & Huberman, 1994). HR practitioners and managers are hampered in their ability to make strategic use of HR data when they lack analytical capabilities. To analyze employee data effectively, most HR professionals and managers lack the requisite statistical training an argument that, until HR is ready, line managers should take care of analytics. The lack of HR analytics specialists is a hindrance to the practice's widespread implementation in businesses. Managers in human resources will have difficulty carrying out their duties if they have not gotten sufficient training.

“I think that HR people, in general, are not numeric. Running analytics need some level of statistical mind and even the interpretation of it.” (Respondent 20)

It is not uncommon for managers to lack the analytical skills required to suggest and

implement solutions that would improve their company's efficiency and output of value (Patton, 2015)[28].

Many people working in human resources avoid analytics because they associate it with numbers and statistics. Managers should invest in Human Resources to improve the company's performance and competitive edge. Human resource professionals who want to succeed in people management must develop analytical thinking skills.

3.1.2.2 Lack of Management Support

The HR group should be the primary recipient of any HR-related initiatives. The effectiveness of the analytics team is dependent on leadership's recognition of the value analytics can provide. The provision of analytical technology and the learning of necessary skills and knowledge to push its implementation are also potential avenues of aid (Power et al., 2018).

“The major challenge is really getting management support to invest in some of the analytic tools.” (Respondent 18)

Management support for HR analytics implementation, including money for training and the purchase of analytical equipment to facilitate efficient analyses of employee data, was reported by only 20% of respondents. Contrary to previous research, this new finding They discovered that a lack of support from senior management was the most frequently stated concern in a qualitative review of HR analytics deployment at three different organizations. Many firms fail to reap HR analytics' many benefits because upper management hasn't done enough research into the field.

“Management has really supported us since we started running analytics in this organization.

We are constantly going for training on analytics.” (Respondent 17)

Human Resources needs management buy-in to collect and analyze employee data effectively. Therefore, it is the responsibility of business and government leaders to equip human resources professionals and managers with the tools they need to succeed in their roles and increase productivity. Managers and human resources specialists are receiving coaching in the use of analytics to better comprehend their staff.

3.1.2.3 Poor Data and Tools Management

Human resource professionals need access to accurate HR data from both internal and external sources so they can define, explain, predict, and optimize employee performance. It is essential to the success of any analysis to comprehend the context in which the data were gathered (Bailey, C., Mankin, D., Kelliher, C., & Garavan, 2018). The field of management and human resources has struggled to collect relevant data and make informed decisions. Providing straightforward access to analytics tools has also proven challenging (Ejo-Orusa, H. & Okwakpam, 2018) Despite the fact that these methods have been developed and refined in recent years, this remains the case. (Rubin, H. J., & Rubin, 2005)

“...the problem is getting the right or accurate data set. It had to take 2 years especially

performance data and we are still struggling through it.” (Respondent 7)

Unfortunately, this availability and accessibility has become a concern at a time when precise data and tools for producing information are vital (Rubin, H. J., & Rubin, 2005) they should be put to use in the same way as the rest of the company's funds. Strategic decisions based on employee data can't be made if the essential analytical tools and data aren't easily accessible to human resources experts and managers. Human resources efficiency and productivity will also rise as a result.

“Well, we don't have the tools except the Excel we have which is not enough.” (Respondent 6)

Having high-quality, trustworthy data is vital for obtaining actionable analytics results, which should be emphasized (Rubin, H. J., & Rubin, 2005). Because of this, it is crucial to double-check all employee data for accuracy and relevancy before using it. If issues are discovered in advance, the data quality can be corrected before analysis begins. The correctness of HR records should be routinely checked by managers and executives in advance of any evaluation.

1.5 4.1 Contribution to Research and Practice

By isolating and contrasting distinct HR processes, we can quantitatively assess the effects of using HR analytics in both the public and private sectors. Considering the significance of HR analytics and HR practice, a longitudinal study is warranted.

The findings of this research can be utilized by the Employers Association (GEA) and other organizations to better inform their members of the benefits of HR analytics. Working with HR groups like the Institute for Human Resource Management Experts can help businesses better analyze market trends and identify areas where HR professionals or practitioners can bring value through the use of HR analytics (IHRMP). This will serve as a guide for the development of cutting-edge professional analytics and human resource management education courses. The inclusion of HR analytics courses in the core curriculum is also crucial.

1.6 5.1 Conclusion

To date, the design and implementation of analytics systems have received the most feedback from individuals outside the HR department. As a result, HR is being taken over by HR Business Partners with backgrounds in IT, engineering, and statistics to manage the data that drive the department. Despite their importance to the HR department, human resources managers and experts appear to be underutilized. The study's findings stress the need of HR managers and practitioners having a deep familiarity with analytics. Human resources (HR) experts and managers may soon be redundant in data-driven industries like information technology.

References

1. Abor, J., Adjasi, C. K. D., & Hayford, M. C. (2008). How does foreign direct investment affect the export decisions of firms in Ghana? *African Development Review*. <https://doi.org/10.1111/j.1467-8268.2008.00193.x>
2. Amponsah-Tawiah, K., & Dartey-Baah, K. (2011). Corporate social responsibility in.
3. Angrave, D., Charlwood, A., Kirkpatrick, I., Lawrence, M., & Stuart, M. (2016).). HR and Analytics: why HR is set to fail the big data challenge.
4. Bailey, C., Mankin, D., Kelliher, C., & Garavan, T. (2018). *Strategic Human Resource Management (2ed.)*. NY: Oxford University Press.
5. Bassi, L., Carpenter, R., & McMurrer, D. (2012). *HR Analytics Handbook*. Amsterdam.
6. Boateng, R. (2014). *Research Made Easy*.
7. Boyce, C., & Neale, P. (2006). *Conducting In-Depth Interviews: A Guide for Designing and Conducting In-Depth Interviews for Evaluation Input*. Pathfinder International.
8. Brynjolfsson, E. & Saunders, A. (2009). *Wired for innovation: How information technology is reshaping the economy*.
9. Creswell, J. W. (2003). *Research design Qualitative quantitative and mixed methods approaches*. *Research Design Qualitative Quantitative and Mixed Methods Approaches*. <https://doi.org/10.3109/08941939.2012.723954>
10. Deloitte. (2015). *Global Human Capital Trends 2015. Leading in the new world of work*.
11. Earley, C. E. (2015). Data analytics in auditing: Opportunities and challenges. *Business Horizons*. <https://doi.org/10.1016/j.bushor.2015.05.002>
12. Edwards, M. R., & Edwards, K. (2016). *Predictive HR Analytics: Mastering the HR Metric*. London.
13. Ejo-Orusa, H. & Okwakpam, J. A. (2018). *Predictive HR Analytics and Human Resource Management amongst Human Resource Practitioners in Port Harcourt*.
14. Fiocco, E. (2017). *HR analytics at work: Exploring diffusion of innovation within a Swedish Based MNC*.
15. Fitz-enz, J. & Mattox II, J. R. (2014). *Predictive Analytics for Human Resources*.
16. Heuvel, S. V. D., & Bondarouk, T. (2016). *The rise (and fall) of HR analytics: a study into the future applications, value, structure, and system support*.
17. Johannink, R. (2015). *The future of HR Analytics: A Delphi Method Study*.
18. Krista, J.-E. (2016). *The role of HR analytics in creating data-driven HRM. Textual network analysis of online blogs or HR professionals*. *Organizational Dynamics*.
19. Lawler, E. E., Levenson, A., & Boudreau, J. (2004). *Center for Effective Organizations HR Metrics and Analytics Uses and Impacts*. *Human Resource Planning*.
20. Malisetty, S., Archana, R. V., & Vasanthi Kumari, K. (2017). *Predictive analytics in HR Management*. *Indian Journal of Public Health Research and Development*. <https://doi.org/10.5958/0976-5506.2017.00171.1>
21. McAfee, A., & Brynjolfsson, E. (2012). *Big data: The management revolution*. Harvard

Business Review.

22. Miles, M. & Huberman, A. (1994). *Qualitative data analysis*. Thousand Oaks: Sage Publications.
23. Minbaeva, D. B. (2018). Building credible human capital analytics for organizational competitive advantage. *Human Resource Management*.
<https://doi.org/10.1002/hrm.21848>
24. Mukundan, S. (2017). *Analytics in HR: A snapshot view*.
25. Patton, M. (2015). Module 59: Question Options and Skilled Question Formulation. In *Qualitative Research and Evaluation Methods*.
26. Power, D. J., Heavin, C., McDermott, J., & Daly, M. (2018). Defining business analytics: an empirical approach. *Journal of Business Analytics*.
<https://doi.org/10.1080/2573234X.2018.1507605>
27. Rubin, H. J., & Rubin, I. S. (2005). *Qualitative Interviewing: The Arts of Hearing Data* (2nd Ed.).
28. Service, S. (2017). *Integrated Business Establishment Survey Phase II: Summary Report*.
29. van den Heuvel, S., & Bondarouk, T. (2017). The rise (and fall?) of HR analytics. *Journal of Organizational Effectiveness: People and Performance*.
<https://doi.org/10.1108/joepp-03-2017-2020>