CHAPTER – I

INTRODUCTION

1.1 INTRODUCTION

Human Resource Management has developed extensively over the decade and has grown quite popular as the time passes, and now it is one of the vital conjoint characteristics for just about all organizations worldwide. The main base of its repute is the conjecture that HRM is a foundation for the competitive advantage which in turn controls the organizational outcomes and performance which leads generally to a progressive route. In order to attain a competitive upper hand over its opponents, every organization must arrange their HRM strategies with its comprehensive business approaches. Hence for doing so, organizations must embrace the arrival of new IT technology in every functional department. As the human resources are a vital part of every firm, accepting this new IT technology namely HR analytics provides them a better advantage to tackle every problem of HRM. The research undertaken explores more in details and assesses the alleged relationship between HRM strategies and organizational performance with HR analytics as a mediator. The chief hint behind understanding the relationship among HRM strategies and organizational performance is that HR strategies have a substantial effect on the members of staff outlooks and performance that stimulates better operational
performance, such as efficiency, excellence, and modernization, which in turn have a beneficial outcome on the market and financial performance.

This chapter gives a bird’s eye overview of the complete research. It elucidates the statement of the problem, the research objectives with various hypotheses, which has been proven by testing the integrated conceptual proposed model, the blueprint of the methodology undertaken and a brief conclusion. The concluding part of the chapter gives a gist of investigation structure along with the definition of the various key terms that have been used in the entire research.

1.2 BACKGROUND OF THE STUDY

For acquiring an apt of sustainability and development, every organization’s essential objective is to attain the highest profitability and good outcomes. For achieving its overall objectives, human resources needs to be managed to its highest possible means so that they can contribute to increased its performance resulting in improved organizational performance. Presently organizations have admitted the fact that the firm’s human resources are a vital part and a unique foundation to gain a competitive advantage over its competitors. Barney (1991) outlines that people employed in organizations are a basis for competitive advantage unlike other resources, which means these resources are quite rare and tough to replicate by its opponents. Presently it can be comprehended that many companies all around the globe are having units and staffs who are utterly
dedicated to handling these human resources. As the time passes it can be seen that Human Resource Management (HRM) has progressively turn out to be a strategic contributor giving substantial value to the organization for better competitive advantage.

Human Resource Management has advanced in numerous forms and plays innumerable different parts such as human capital, laborers, and personnel and currently as human resources. New revolutionizing roles of HR also mean alterations in the approach of human resource managers planning’s and their strategies in managing their workforce. The advancement of Human Resource Management has improved over the time, before when people were mistreated in slavery working environments to the current modern settings where employees are now given more value, appreciations and regarded as inevitable strategic partners to business.

In today’s extremely competitive world, business has become the device which is wholly about investments, revenues, and profits. Every single function of business is now calculated in numbers and values, then why must HR be abandoned. Human resources have always been the vital asset for organizations for gaining the competitive edge in this competitive market. Nonetheless controlling and managing of these resources has relentlessly spawned a challenge among the HR professionals. However, that breached has been
packed up with the support of HR analytics the latest IT technological software which refurbishes the raw HR data into the insightful fact-based story which clarifies the HR managers with needed information to frame improved policies and strategies which generate better prospect for every organization. HR analytics supports the Senior HR management to quantify the worth of human resources which justifies the investments by backing it up with the hard reliable evidence. HR analytics helps the HR management to produce net benefits gained from the initiative.

Armstrong (2006) has enlightened by giving the meaning of human resource management as the premeditated and expressive style to the management of an organization’s most esteemed possessions – the people working there who individually and collectively complement the achievement of its objectives. From this definition, it can be comprehended that fundamentally HR will work to relations intended which will expand Worker execution in administration from claiming their employer’s vital purposes. (Johanson, 2009). HR is predominantly concerned with people management inside organizations that majorly focuses on the systems and policies (Collings & Wood, 2009). Department of HR in the organizations are customarily liable for several events, that includes recruitment of employees, giving training and development, managing the performance appraisal, and giving them rewards (e.g., managing pay and benefits systems) (Paauwe & Boon, 2009).
HR as an instrument for competitive advantage benefits every organization in the quantification of the challenges like staffing & recruitment issue, succession planning, attrition, compensation, performance management, retention problem, training and development, HR effectiveness measurements and much more which are being faced by HR professionals today. Being a perennial problem ever, F.W.Taylor has suggested in his book “Principles of Scientific Management” techniques to improve the economic efficiency, especially the labor throughput with the application of scientific ways and means. “Time and motion study”, proposes the use of standardized gears and enactment of standardized work systems that synthesizes the workflow in the organization that results greatly in improving the productivity of the employees wherever it is applied. As a consequence, Taylorism has fabricated the groundwork to transform HRM today. Owing to the prompt economic discrepancies and globalization, Human Resource department is repeatedly facing trials and are in persistent predicament towards decision making. Every passing day every single encounter is becoming more extreme. The high attrition rate is one of the most capricious aspects of any organization. If the turnover frequency can be prophesied accurately then it will support in improved workforce planning. This will aid the HR managers to develop improved compensation and benefits packages thus reducing the employee turnover rate. As every single variable of HR are interrelated, knowing the cause and effect of one problem can assist in devising solutions for all the others.
1.3 EMERGENCE OF HR ANALYTICS

HR professionals have been bearing gigantic duties and accountabilities on their shoulders at the moment. They look after starting from the staffing to hiring, payroll, and compensation, performance management, succession planning etc. HR contributes a lot to the organization from every single aspect. As the role of HR does not directly associate in the generation of profits, so they're worth in the organization is generally unappreciated.

For a very long time, HR has struggled to substantiate its individuality. But at the moment HR has prospered in discovering new ways which are away from a traditional support part to becoming more strategic and data-driven one. For many of HR experts, the role has become more about the numbers and analytics. Just as how the data has changed marketing, put through its paces towards the HR as well.

Lately, HRA has to turn out to be a massive catchphrase in the world of human resource management. HRA is mainly established an extremely on new concepts and thinking which have existed in the turf of HR extensively. Bassi (2011), noted that back as far as the late 1970s, metrics, and measurements were always considered as part and parcel of HR. Fitz –Enz (1984) also indicated that HR experts have always embarked upon with problems associated with the measurement of human resource management over 30 years back. As we look back on time, HRM ancestries can be sketched back to the writing of Peter Drucker’s from the 1950s, where HRM made its immense revolution in the mid-
1980s (Beer, 2015; Kaufman, 2015; Marciano, 1995). Later in the late 1990s, the attention has progressed from looking at the individuals as a profitable authoritative asset to the capability that can create upper hand for gaining competitive edge (Barney & Wright, 1998; Huselid, 1995; Pfeffer, 1994; Ulrich, 1997; Ulrich & Lake, 1990; Wright, Dunford, & Snell, 2001). Therefore, the innovative key buzzwords, human and intellectual capital become successively dynamic in both research academic and in the management community world (Stewart, 1997; Edvinsson, 1997; Ulrich, 1998).

In the years that took after, much concern was synchronized at budding new technologies and techniques for reckoning out the ROI on human capitals. (Fitz-Enz, 2000; Bontis & Fitz-Enz, 2002).

A new innovation, for instance, HR Scorecards and Workforce Scorecards has been established in the first half of the 2000s, (Huselid, Becker, & Beatty, 2005; Ulrich & Beatty, 2001). These tools have permitted organizations to estimate and quantify the effect of HR undertakings on the performance of the organization.

In the mid- the 2000s, new and more scientific and evidence-based ways and means to HR were being called upon (Boudreau & Ramstad, 2007; Pfeffer & Sutton, 2006; Rynes, Colbert, & Brown, 2002; Rynes, Giluk, & Brown, 2007). HRA relatively has to turn out to be the theme of discussion in many journals.
that mainly are merging on HR and people strategy (e.g. Feather, 2007; Fink, 2010; Levenson, 2005, 2011; Waber, 2013).

In a previous couple of years, HRA has received sizeable responsiveness in a protuberant oriented practitioner of management pipes such as Harvard Business Review, and others in their sequence of reports that are especially transcribed by the global consulting and technology giants. HRA the current buzzword is presently the theme of much discussion in the HR, the whole kit and caboodle (Rasmussen & Ulrich, 2015; Ulrich & Dulebohn, 2015). The chief highlighting of the research on HRA is mainly on how to use HRA as a decision assistance device that mainly gives a prognosis about the future actions, which is known as the “predictive analytics” (Fitz-Enz & John Mattox, 2014; van den Heuvel & Bondarouk, 2016, p. 8). Also, it is clear that the proliferation and accessibility of Big Data have prepared for HRA, as a great part of the reasoning around HRA resulting in the presentation of Big Data (Angrave et al., 2016). Big Data generates an endless prospect to make usage of the enormous volumes of data that supports in the HR-related decision-making processes (Angrave et al., 2016; Shah, Irani, & Sharif, 2016).

For the past century, Human Resource Management has renovated drastically. It has evolved from an operational discipline and directed to be more strategic discipline. The term has grown more popular over the period of time and the Strategic Human Resource
Management (SHRM) exemplifies this. The data-driven ploy that portrays HR analytics is in line with this development. By utilizing HR analytics HR professionals does not have to be governed by the gut feeling anymore. Analytics endows the HR professionals to make data-driven conclusions. Likewise, analytics also supports to evaluate the efficiency of HR policies and different intermediations.

The rich history of HR analytics can be outlined back to the late 1900’s where Fredrick W. Taylor evaluated the job performance of the employees and put down the dimension of performance to do the job in the factory in his Scientific Management studies. In early 1960’s, decision support system (DSS) began as computer-supported models which were generated to assist with the decision-making system (Bersin, 2012). Then in the late ‘70s and early ‘80s with the rough guide of reporting and basic metric capabilities, came the widespread usage of Human Resources Management Systems (HRMS) and the benchmarking opportunity introduced by the Saratoga Institute. Standard practices for calculating and reporting common metrics – like turnover, headcount, EEO representations - originated to take hold. The application of the process is fixated on the metrics such as time to fill, organization-oriented metrics including HR staff employee headcount, and financial based metrics such as cost per hire, which steered to efforts in the ‘90s to use balanced scorecards that supports HR leaders to reflect on goals and measure improvement and results. (Joanne Bintliff-Ritchie, 2011)
1.4 RATIONALE BEHIND THE STUDY

Resources are scarce. Hence every company desires to make most favorable utilization of each and every scarce resource. Finances are limited and hence everyone has their jobs cut out to create the finest possible use of this limited resource. In order to attain this, every business function has to diminish costs, increase revenue, maximize operational efficiency and lay emphasis on the strategic initiatives to stay beneficial, endure agility and attain sustainable development. One of the prevalent challenges an organization faces is when it plans to launch a fresh and innovative new merchandise or services is recruiting of right people for the right job, in time for carrying out bearing the costs, when talent exists in the organization. Retaining the top talent is needed for the company as it supports the cutting down on a lot of costs. So in order to commendably manage the best and existing talent, one needs to boost the compensation strategies so that a company can attain a sustainable compensation policy. Moreover, it grows awful for any organization if their best talents join hands with opponents. So the bottom line is the companies cannot standardize but they need to customize their compensation strategies, tailor-made for each and every employee which will in turn assists in achieving the larger organizational performance.
1.5 SIGNIFICANCE OF THE STUDY

HR Analytics is the latest emerging area in the world of HR. Worldwide organizations are using HR Analytics for making a better strategic decision. But in India, the concept is still new and very few organizations have started using HR Analytics for better workforce strategic decisions. Hence, very less research has been done in this area, which gives a lot of opportunities to explore and analyze its utilization and significance for organizational performance. Also, papers that are published are basically the whitepapers, which has given an ample opportunity for conducting empirical research and explore its in-depth knowledge.

1.6 PROPOSED CONCEPTUAL MODEL FOR THE STUDY

![Proposed Integrated Conceptual Model: Organizational Performance under HR Analytics](image_url)

*Figure 1.1: Proposed Integrated Conceptual Model: Organizational Performance under HR Analytics*
1.7 INTRODUCTION TO THE CONCEPTUAL FRAMEWORK

After a thorough and rigorous review of related literature, it can be seen that there is a need to study the relationship between organizational performance and HR strategies when they are mediated by HR Analytics. Based on the review of the literature, it has been found that the studies done relating to HR Analytics is mainly in the western countries and not in India specifically. Also, less study has been done relating to the relationship between organizational performance and HR analytics. Hence there is a lot of opportunities to explore and analyze its utilization and significance for organizational performance when HR Analytics is implemented for overall strategy formulation.

The conceptual framework below will offer a strong foundation for examination and explore the study which will help in verifying the relationships between various HR strategies such as compensation strategy, talent management, and workforce optimization with organizational performance when HR Analytics mediates their relationship.

A conceptual framework has been proposed in this chapter, and in chapter 2 detailed and elaborated literature has been given. An integrated conceptual model has also been developed to test the relationship between the variables and constructs. A number of hypotheses have also formulated to test the
conceptual model in the study. This hypothesis was then tested in the empirical stage of the research with the help of SEM.

1.8 **BRIEF INTRODUCTION TO THE METHODOLOGY**

The methodology is the technique of discovering hidden answers to the taunting inquiry that starts the exploration and along these lines involves a critical part of any study. The research methodology that is chosen needs for improving the reliability and conjecture of the outcomes. The topics which have been covered in this chapter include research design, sampling procedure, measurement variables and instrument design, data collection method, questionnaire design, and data analysis.

Based on the theories, concepts, and frameworks discussed in the literature review, an *Exploratory cum Descriptive research design* is applied to arrive at conclusions. As the research is seeking a new insight into the subject of HR analytics by asking new questions and trying to bring a new light into it, thus the Descriptive Research – an exploratory approach has been chosen.

For this study, a total of 500 sample i.e 20 employees from every level of management of 26 organizations spread across 13 different sectors from various cities of India has been considered as a sampling unit. As the study is
exploratory in nature, **Purposive sampling** was used to prepare a selected organizations on the basis of obtainability of essential HR analytics practice.

In order to test the relationship of organizational performance and HR strategies with analytics as the mediator, a conceptual integrated model: Organizational Performance under HR Analytics has been developed and to test this model several hypotheses have been formulated. For testing the model, 5 points Likert scale with multiple items has been used which measures the independent, dependent and mediating variables. Data was then collected through the structured questionnaire which consisted of 2 CS, 3 TM, 3 WO, 3 HRA, and 3 OP items. Data were analyzed with the help of Structural Equation Modelling (SEM) using SPSS version 22 and Amos version 23.

### 1.9 DESCRIPTION OF CONCEPTS USED IN THE STUDY

The following are the key terms which have been used in the study. The terms used has been defined with the support of literature review to meet the objective of the study.

#### 1.9.1: TALENT MANAGEMENT

One of the objectives of the study is on talent management and its effect on organizational performance. Human resource management is such a function of
the organization which is made up of various vital facets and one of them is talent management. As defined by J.P Mavdev (2015), talent management is a set of unified organizational HR practices which is intended to attract, develop, motivate, retain and engaged employees inside the organizations. Further, it can also be expressed that the talent management suggests to the expertise of appealing highly trained workers, integrating new workers, and developing and retaining current workers to encounter the existing and forthcoming business objectives.

Talent management can also be defined as a dynamic management system used by organizations to recognize, capture, utilize, cultivate, grow and nurture the ability of employees to the benefits of the work team and the organization at large (Meyer, Becker & Vandenberghe, 2004).

Talent management mainly comprises of mechanisms placed together that ensures attraction, retention, and development of talent (D’Annunzio-Green, 2008). Talent management very critical as it benefits the organizations to effectively charm and offer the most skilled employees and uphold the necessary talent.

Ally Weeks (April 2017) defined Talent management as the function of HRM that attempt to discover means to appeal, identify, cultivate, engage, retain and deploy employees who are mainly treasured in an organization. Supervising this
talent strategically, organizations will be capable of building a high-performance place of work, stimulate a learning organization, enhance value to branding plan, and contribute to management with diversity.

The operational definition of Talent management adopted for the study is the combined review of definitions of many authors. After the rigorous review of related literature, talent management can be defined as the combined as a set of talent acquisition, retention, performance management and career development of the employees.

1.9.2 COMPENSATION STRATEGY FORMULATION

Gary Dassler (2011) expresses compensation as all methods of pay going to the employees arising from their service.

Compensation denotes to the benefits (cash, vacation, etc.) that an employee accepts in exchange for the service they offer to their employer. Employee compensation is generally one of the major overheads or expenses for any organization. (Mckinney P., n.a)

Also Bryan Sharp in his blog describes compensation as everything that a firm offers its workforces in place for their talent and time.
S.P. Robbins defines the term compensation management as the process of managing a company’s compensation programme. The dominant intention of compensation management is to design a cost-effective pay structure that will entice, stimulate and retain proficient workers in the organizations.

Briana Whiting in her study blog defines Compensation management as the endeavor of distributing monetary and non–monetary value to an employee’s effort through the organization's policy or procedures. In simple words, compensating an employee which is basically centered on the decided pay and benefits package for the certain post. The overall objective of compensation management is to discover superiority people who carry out quality work and then compensate them in order to retain them and ease the turnover rates. (Whiting B, n.a)

Hence from the above statements, the operational definition of compensation management for this study is compensation management is an act of allotting monetary and non–monetary value to a member of staff’s work by abiding in the firm's policy or procedures.
1.9.3 WORKFORCE OPTIMIZATION

Genesys (2017) defines workforce optimization as a strategy which used to incorporate countless technologies and automated ways for dipping operational costs and manage employee performance more resourcefully thus resulting in greater efficiency and higher client contentment.

As defined by Angela Stringfellow (2017) Workforce optimization (WFO) is a sequence of business strategies that highlights on improving the efficiency of the employee. Organizations implement these strategies by keeping a watch on a particular position’s action and assigns a suitable number of employees to meet the forecasted activity.

Scott Kendrick (2016) states that a WFO normally contains tools for workforce management, quality monitoring, liability recording, coaching and eLearning, performance management, surveying and speech analytics.

Hence the operational definition of workforce optimization for the study is a practice of filtering the overall effectiveness of workforces at an organization which can be obtained through monitoring the activity of a particular situation and then aligning the right number of employees with the forecasted activity.
Thus the workforce optimization comprises of proper workforce management, quality management and forecasting and scheduling.

1.9.4 ORGANIZATIONAL PERFORMANCE

Business dictionary defines organizational performance as an analysis of an organization’s performance by comparing them to the goals and objectives. Within corporate organizations, three primary outcomes are generally analyzed namely financial, market and shareholder value performance.

Organizational performance can also be defined as an overall firm performance which includes productivity, efficiency, profitability, market value, and competitive advantage (Melville et al., 2004 AU29)

James Adows (2012) gives the definition of organizational performance as the evaluation and comparison of an organization's goals and objectives them with its actual performance mainly with three major parts namely financial performance, market, and shareholders value.

Nwuche CA, Awa HO (2011) states that the organizational performance also rests on the training and development of their workforce. Thus Organizational performance hinges on the employee development because employee
development enhances the knowledge base of the organization and also retains the top talents in the organization.

Hence the operational definition of organizational performance is generally organization’s performance which includes productivity, efficiency, profitability, market value, employee development and competitive advantage.

1.9.5 HUMAN RESOURCE ANALYTICS OR HR ANALYTICS

Erik Van Vulpen (n.a) defined Human Resource analytics (HR analytics) as it is about analyzing an organizations’ people problems.

HR analytics demonstrates the causal relationship between the activities exacted by an HR department and the business outcomes that result from this activity. HR Analytics actually does is demonstrate the impact that an HR department has on the organization in which it is embedded.

HR analytics can also be defined as “the systematic identification and quantification of the people drivers of business outcomes” (Heuvel & Bondarouk, 2016).
Hence the operational definition of HR analytics can be stated as the use of substantial data mining and business analytics methods to human resources data. The objective of human resources analytics is to make organizations available with the insights which will help in effectively handling workforces so that business aims and objectives can be reached swiftly and proficiently. (Aleksandra Swerdlow, 2015).

1.10 RESEARCH METHOD FLOW CHART

![Flowchart of Entire Research Study](image)
1.11 BRIEF SUMMARY TO THE THESIS STRUCTURE

For attaining the aim and objective of the study, the chapters have been presented in the following sequences:

CHAPTER I: INTRODUCTION

This chapter mainly gives the summary of the entire research. It gives a bird's eye view of the concepts and background of Human Resource Management and HR Analytics. This chapter concludes with the arrangement of analysis as well as the definition of the key terms which has been used for the study which includes compensation management, workforce optimization, talent management, organizational performance and HR Analytics.

CHAPTER II: INTRODUCTION TO HR ANALYTICS

This chapter explains the concept of Human Resource Management and HR Analytics. It gives the background concept of HRA and its emergence and development. The chapter mainly focuses on emergence, definitions, conceptual background and significance of HR Analytics.

CHAPTER III: REVIEW OF RELATED LITERATURE

Chapter 3 gives a meticulous evaluation of the pertinent literature. Review of these prominent studies is indispensable for establishing the gap in the present study. Hence, this chapter covers a meticulous and exhaustive review of related
literature in order to gain an insight on what is Human Resource Analytics and how it supports the organization in performing better. In order to explore the opinion of the established researchers related to the study undertaken; the reviews of numerous research papers, white papers, video clips and articles in both national and international journals have been embarked on and also several related and focused books which contributed a broad perspectives on the study undertaken and supported to establish the research gap.

CHAPTER IV: RESEARCH METHODOLOGY

This chapter explains in detail about the methodology that has been used for the study. The research methodology that has been chosen for this study aids for improving the reliability and conjecture of the outcomes. This chapter specifically includes information which is pertaining to the population, sample size, choice of measuring instrument, research blueprint of the study, the procedures, statistical techniques used, and delimitations of the study.

CHAPTER V: DATA ANALYSIS & INTERPRETATION

In this chapter, the results of data collected are interpreted and reported. The sample outlines of the target populations have been properly elaborated and explained in details. The determinants of reliability, validity and SEM modeling results have been discussed and statistical analysis of the hypothesis testing results is also reported in this chapter. Elaborated and detailed explanation of SEM step by step procedure is also described in chapter V.

B.B.A.U, Central University, Lucknow
CHAPTER VI: RESULTS & FINDINGS

Chapter VI contains the detail explanations of the results of the previous chapter. Here the results of the findings have been discussed in details. This chapter gives an explanation of the entire research. In this chapter, discussions on the major findings of the study are related back to the initial problem statement, objectives, hypothesis, and conclusions are drawn which is based on the empirical evidence.

CHAPTER VII: CONCLUSION, LIMITATIONS & SUGGESTIONS

Chapter VII mainly consists of the various limitations the researcher faced during the study, suggestions for future research and the conclusion of the study. The simple objective of this segment is to sketch a summary and deliver the conclusion in the perspective of the established research objectives. This chapter introduces the summary of the entire research trailed by the recommendations and conclusion at the end. The scope of the study was also emphasized along with the exhaustive findings of the study which has become the core of this segment. The section also offers the importance of the research in the study.

REFERENCES

APPENDIX
1.12 SUMMARY

The main aim of chapter I was to give a preview of the entire research. This chapter highlights how the research has been undertaken showing the blueprint to give the basic idea of the study. The research entitled “HR Analytics as a precursor to Organizational Performance and Compensation Strategy: An exploratory study in select Indian Organizations” tries to explain the relationship between HR Analytics and organizational performance. The study has suggested that the various HR Strategies helps in enhancing the organizational performance when HR analytics is implemented for overall business strategy formulation.