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The relationship between Talent Acquisition and
Organizational Performance: The Role of HR Analytics

By

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Dedication Page

for my Grateful Devoted Parents

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The Relationship between Talent Acquisition and Organizational Performance: The Role of HR Analytics

Dalia Oueidat

Abstract

One of the main issues discussed in today's dynamic world is talent acquisition. Matching job seekers with the right job is considered one of the main concerns for HR managers. Human Resource Analytics has proven its importance in talent acquisition. Implementing Human resource analytics in the management of personnel has many advantages. HR analytics is necessary to have a competitive talent pool and a competitive edge. Most previous studies have confirmed that talented personnel are pivotal for achieving high organizational performance levels.

This study aimed at identifying the potential impact of implementing HR analytics on the relationship between talent acquisition and the performance of the corporation. The design of this study is exploratory research design. The analysis of the literature has pointed to how frequently HR analytics is utilized to improve hiring and organizational performance. Analysis of the results of this study shows that implementing HR analytics impacts the association between talent acquisition and the performance of the firm.

Deploying the Knowledge-based view and the Dynamic Capabilities View as the theoretical framework, three hypotheses were formulated. Regression analysis and Haye's Process Model were used to test the hypotheses and results showed that talent acquisition is positively related to organizational performance, human resource analytics is significantly linked to the organizational performance, and HRA mediates the relationship between talent acquisition and organizational performance.

The benefits of employing HR analytics were highlighted in this study notably in terms of improving organizational performance. The results gave some insights on the level of adoption of human resource analytics for enhancing the hiring process in organizations operating in Lebanon. Finally, the study addressed a gap in the literature regarding the significance of HR analytics adoption in Lebanese businesses.

Keywords: Keywords: Talent Acquisition, HR analytics, Organizational performance, Knowledge-based View, Dynamic Capabilities View.

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Chapter One

Introduction

1.1 Background of the study

With globalization and digitalization organizations coming to the surface, and the fact that the world has become a knowledge-based society, there is an emphasis to properly manage talents (Blass, 2012). Information, knowledge, intellectual, ideas, and creativity are the key to a competitive advantage (Bryan and Joyce, 2007). Blass 2012 suggested that international companies have devoted their attention to the importance of having a talented pool that is widely linked to competitiveness. Agarwal (2018), talent acquisition has been the key that contributes in building talented teams to meet organizational performance. Ruohonen (2015), reported that talent acquisition has become more advanced with the integration of HR analytics. HR analytics is one field of HR analytics that will be discussed further (Anand and Kar, 2020). HR analytics is a set of practices that lead to extracting reliable and organized data to be analyzed, evaluated and interpreted so that HR managers can make crucial business decisions for the present and the future (Anand and Kar, 2020). In fact, HR analytics is one of the most discussed concepts in today's dynamic and complicated world (Anand and Kar, 2020). Talented personnel are the cross road to achieve high performance, organizational growth and meet business strategies (Kirtane, 2015 as cited in Opatha, 2020).

The term HR analytics helps HR managers to make the right decisions and generate crucial data that will lead a good quality of people in work. Furthermore, HR analytics helps to make future decisions rather than just reporting the past. HR analytics link HR

efforts to the organizational results. Furthermore, HR analytics focuses on three pillars: Efficiency, effectiveness and impact (Dooren, 2012 as cited in Opatha, 2020).

An international survey was conducted, and the results show that 50% of HR managers that are employing and using HR analytics are able to evaluate job seekers' capabilities and develop a fair job offer, and at least 60% of companies are able to acquire and retain top talents (Gartner, 2019).

In other words, managing personnel wisely will absolutely lead to organizational success and growth Gardner (2002, p.158). Furthermore, it is very necessary for each and every company to conduct HR analytics in the talent acquisition sector to grow up organizational productivity. HR analytics is considered a quantitative analysis of data. The purpose of HR analytics is elucidating human capital management strategies and assessing HR initiatives to boost performance (Cheese et al., 2008).

The benefits of employing HR analytics to improve organizational performance in the Lebanese private sector by strategically managing staff acquisition processes are examined in this study. It also emphasizes the difficulties in applying HR analytics to the TA processes. This paper will fill a knowledge gap on the importance of HRA in Lebanese enterprises.

1.2. Research questions:

Based on the above, this thesis attempts to address the following research questions:

- What is the present status of talent acquisition in Lebanese firms today?
- What role does HR analytics play in the talent acquisition process in private sector companies in Lebanon?

- What role does HR analytics play in organizational performance in private sector companies in Lebanon?
- How does HR analytics impact the relationship between talent acquisition and organizational sustainable performance?

1.3. Aim of the study

The purpose of this study is to emphasize the value of using HR analytics during the talent acquisition process. Given this, the purpose of this study is to assess the potential advantages of utilizing HR analytics. The study's findings will be helpful for all sectors and not solely and private sector. This study will benefit particularly HR managers, as they will be more encouraged to utilize HR analytics in talent acquisition, which will lead to improved performance.

1.4. Research hypotheses:

H1: Talent acquisition is significantly linked to organizational performance

H2: HR analytics is significantly linked to organizational performance

H3: HR analytics mediates the relationship between talent acquisition and organizational performance.

1.5. The layout of the study

This study aims to assess how HR analytics affects talent acquisition and organizational performance. This dissertation is divided into five chapters, each of which has a specific function. The first section of chapter one will include the background of the study, the

problem that the study aims to address, the inquiries for the investigation, the study objective and hypotheses. Chapter 2 will review previous literature pertinent to the research issue and will concentrate on the key variables: talent acquisition, HR analytics, and organizational performance. The theoretical underpinning for the research will be covered in Chapter 3. The methodology used to carry out the research will be discussed in Chapter 4; the target population, research design, sampling method, sampling procedure, instruments and techniques for gathering data, and data analysis or statistical measurements will all be highlighted in this chapter. The interpretation and analysis of the information gathered will be presented in Chapter 5. Discussion of conclusions and findings will be in Chapter 6.

1.6 Research Significance

The significance of the study cannot be overstated, since it will benefit a wide range of stakeholders. For example, the findings of this study may aid HR managers who will begin, if they have not already begun, to rely on HR analytics in the talent acquisition process in order to achieve high organisational performance. These insights may also help top management understand how to synchronise talent management methods in order to achieve good organisational performance.

Chapter Two

Literature Review

2.1 Definition of the term Talent Acquisition:

The phrase "talent acquisition" is now widely used. The systematic process of finding, acquiring, and onboarding outstanding talent is known as talent acquisition, and it is used to rapidly and effectively handle changing organizational demands (Jeremy Cepin, 2013).

To fill available positions in a firm, applicants with the appropriate talent and abilities must be found, acquired, and hired. Additionally, talent pipeline development, future workforce requirements, and relationship maintenance with potential candidates are all parts of the talent acquisition process (TA). Only a well-defined and well-executed talent resourcing plan from beginning to end generates consistent, law abiding results and gives an organization a competitive edge in the competition for talent. Recruiting and Attracting, Interviewing and Evaluating, Verifying References, Making Final Decisions, Hiring and On-Boarding are all aspects of talent acquisition (Ronn, 2007).

2.2The concept of HR analytics

The importance of developing metrics that define the impact of HR activities on the organization created the notion as HR Analytics (Jain and Nagar, 2015 as cited in Opatha, 2020). Descriptive analytics, predictive analytics, and prescriptive analytics are the three types of HR analytics. Simple statistical approaches such as mean, median, and standard deviations, as well as data description, are used in descriptive analytics. It provides

answers to the queries, "What is going on?" and "What happened?" To anticipate variables and construct prediction strategies for future trends, impacts, and issues, predictive analytics use more complex techniques such as regression analysis, correlation analysis, and so on. It provides answers to the following questions: What will happen? Prescriptive analytics uses research methodology and decision-making science to save money and answer the question, "Why should it be done?" HR Analytics is a methodology to evaluate and understand the relation between HR practices and the outcomes of the organization such as: profit, customer satisfaction etc... In addition, it provides a foundation for the decisions made by the organization that affect the performance and business strategy through applying statistical techniques based on efficiency, effectiveness and impact (Dooren, 2012 as cited in Opatha, 2020). HR Analytics is a mixture of quantitative and qualitative data that gives important views to support the management when taking decisions.

2.3 Organizational Performance:

Organizational performance includes three distinct areas of business outcomes: shareholder return, financial performance, and product market performance which may include sales, market share, etc (Richard et al., 2009). Most business owners are concerned to organizational performance. Organizational performance reflects the growth and success of an organization. It is the end result and the purpose of every organizational process. The aim of each company is to fulfill high performance levels. Moreover, Organizational performance is divided into two categories: Financial performance such as (financial gain, sales volume, return on investment dividend, etc.) and the non-financial

performance such as (number of products, market share, quality of products or services, etc.) (Richard et al., 2009).

2.4 The concept of HR analytics and its application in talent acquisition

Benitez-Amado (2015), reported that human resource analytics is becoming more and more important in talent management. HR analytics improves talent management, which raises productivity. Russel and Bennett (2014), confirmed that The inclusion of HR analytics would make it possible to obtain more accurate and exact information, which would improve decision-making and lead to high performance levels. According to outlook data for winter 2013, 2013, 63% of HR managers rely on data in recruiting available positions (Morley *et al.*, 2015).

According to the Economist Intelligence Unit Study, commissioned by KPMG International: Evidence-Based HR: The Bridge Between Your People and Delivering Business Strategy, 2015 survey, 82 percent of respondents expect their company to use big data in the next three years, either for the first time or to increase its use. The CAHR partner meeting on HR analytics yielded some fascinating results (2011), All of the 500 corporations that participated admitted to using HR analytics for basic reporting purposes. Eighty percent of these respondents were confident in their ability to employ quantitative data approaches in their work.

As a result, organizations must continue to work on maintaining appropriate quality data in order to meet adequate organizational performance levels. A research done by Sierra-Cedar has concluded that 45 percent of big international companies and 51 percent of middle small enterprises are boosting their HR IT spending (Sierra Sedar, 2016). Business owners are now aware that utilizing HR analytics will help business hire, locate, select

and retain individuals more effectively and efficiently. Moreover, it helps in determining weak and strength points and future opportunities (Sierra Sedar, 2016).

2.5 The Status of Lebanon in adopting HR analytics:

The utilization of HR analytics depends on the size of the company (Miles, 2014). For instance, International companies have the capabilities and enough resources, instruments, and information needed to facilitate HR analytics (Falletta, 2014; Vargas, 2015). On the other hand, small and medium enterprises have low adoption of HR analytics because they lack the necessary tools to use HR analytics and they are convinced that HR tools are not important. Most Big companies are aware of the importance of HR analytics. Lack of awareness will most likely lead to failure. One of the main reasons that small and medium companies reject to use HR analytics is that they are afraid of metrics and measurements and are familiar with such statistics, software and systems (Vargas, 2015; Rafter, 2013; Giuffrida, 2013). Fitz-Enz & Mattox (2014), confirmed that small companies prefer to deal with traditional quantitative data such as profit without giving importance to other metrics such as employee engagement, employee commitment, satisfaction, etc..

The implementation of HR analytics in businesses is hampered by a variety of issues worldwide. SMEs' view investing in HR analytics as a cost rather than an investment (Miles, 2014).

Miles (2014), reported that underdeveloped firms believe that investing in human resources is a waste of money and won't result in immediate financial success.

Lebanon is considered a small country and it attracts numerous foreign businesses. However, it can be inferred that the main barrier in Lebanon is a lack of understanding and

expertise in HR analytics, as well as a lack of preparation on the part of HR professionals to use it.

According to Everett Rogers' thesis on adoption, this lack of HR preparation has resulted in a dearth of creativity, which is a crucial component for the acceptance of any technical progress.

There have also been mentioned financial, strategic, and technological barriers (According to the study done by Human resources analytics adoption factors in Lebanon (Slim, Maryam Ghanem, 2019).

2.6 HR Analytics Challenges in Lebanon

The literature review conducted for this study revealed some gaps in the application of HR analytics, and we list some of the obstacles that prevent HR professionals from using HR analytics to its full potential. A lack of critical skills, say 77% of CEOs polled by PricewaterhouseCoopers (PwC), is the biggest danger to their business (Twenty-first PwC CEO Survey, 2017). In addition to technical business experience, crucial skills that will be needed in the future workplace include adaptability, problem-solving, creativity, and leadership. Many CEOs experience difficulty finding staff with extremely specialized and hard-to-define skills. As a result, they are relying more and more on insights, with 50% of CEOs saying they utilize data analytics to find and keep the finest workers. HR data analytics may also help CEOs and CHROs deal with a number of important concerns, including workforce diversity, geographical choices, hiring strategy, competitive benchmarking, workforce planning, and employer branding (2017, 20th PwC CEO Survey). Studies have also highlighted the information system flaws in the HR department. Many businesses fail to update their human resource information systems, making them antiquated and unable to take advantage of advancements in HR analytics. Outdated HR systems are solely used for reporting and responding to questions about employee performance, not for building models and predicting business

insights. Software providers abound that provide people management HRIS solutions that connect to other departments like finance and accounting. All significant integrated people management suites have analytics modules in compared to earlier HRIS systems, which are marketed as a key advantage (Angrave et al., 2016). According to HR experts, rather than the organization's fault, the limitations of HR analytics are caused by employees' unwillingness to engage with their employers. Some workers decline to give their employer any sensitive or private information that might be used against them. In the future, HR analytics will rely on information on employee preferences, feelings about specific situations and events, their own opinions of specific clients, and occasionally even their social media activity. Organizational silos prevent data on productivity and performance variables and HR-related data from being combined, making it challenging to create analytical models that examine the significance of HR-related aspects while accounting for other relevant elements (Angrave et al., 2016).

2.7 Software Applications that could be used in HR Analytics:

Papaya Global is an automated SaaS platform that offers an end-to-end global labor management solution with cross-border payments in more than 160 countries. It is one of the software programs that could be utilized in HR analytics. The software integrates your global workforce data into a single view for your complete multinational team and supports all employee alternatives (payroll, EoR, contractors). IntelliHR is another program that enables staff members to evaluate their own performance as well as that of their peers, enabling managers to identify staff members who require additional training or encouragement. Furthermore, Qualtrics People Analytics is another software. It can read and analyze the survey replies from your staff, identifying the themes that emerge over time. Sage HR is yet another software. This system's user-friendly interface makes it clear to HR professionals how each employee helped achieve a certain objective. Visier is the last but not least. This software generates comprehensive reports that allow HR staff to examine analytics data, such as headcounts by department, and compare it to predetermined workforce goals. Visier can give medium and large businesses a general picture of what is going on with their staff. HR professionals may track hiring, firing, and turnover patterns through software's data collection, analysis, and presentation of the information in thorough report (Tim Reitsma 2022).

Chapter Three

Theoretical Framework and Hypothesis Development

This chapter discusses the research's theoretical foundation.

With the help of this theoretical framework, it is possible to look for any links between the ideas mentioned earlier and create a conceptual model and a hypothesis that will be evaluated later on in the research.

3.1 Theoretical Framework

The Knowledge-based view and the Dynamic capacity view are the two fundamental theoretical pillars of this work.

The definition of dynamic capabilities is the capacity of the organization to combine, grow, and rebuild external and internal expertise in order to respond to a changing environment (Teece, Pisano, and Shuen, 1997). It was initiated by David Teece, Gary Pisano, and Amy Shuen (Teece, David; Pisano, Gary; Shuen, Amy, 1990). Dynamic capacities have been defined in great depth by prior research. Dynamic capabilities may occasionally be built upon specific changes in routines and analyses, but at their core, they frequently exhibit creative managerial and entrepreneurial activities. They show how fast and efficiently the business may realign its special assets and competences to seize opportunities and satisfy market demands. Assets, skills, and dynamic capacities are fundamentally intangible. They frequently require development (Teece, 2007). The ability to align and realign resources and competences to make them more responsive to the business environment is assessed by dynamic capabilities, as was previously noted.

Sensing, seizing, and changing are three specific organizational traits that enable firms to evolve and co-evolve with the business environment.

Exploration and exploitation are similar to feeling and grabbing; Exploration, such as research into a potentially disruptive technology, is riskier and has a longer time horizon than exploitation (March, 1991). One solution for the two types of activities that require different management styles is an "ambidextrous organization," which connects two distinct subunits with different cultures through shared corporate values, senior managers with a broad perspective, and appropriate incentives. As was previously mentioned, a firm's fundamental skills, when sharpened, allow it to carry out the tasks it sets out to do effectively. However, the enterprise's dynamic capabilities decide whether it is now producing the proper items and targeting the right market segment as well as whether its future plans are appropriately aligned to customer requirements and technical and competitive prospects. In turn, dynamic capabilities necessitate that the organization establishes hypotheses, test them, and realign resources and competencies for changing requirements. They make it possible for the business to successfully coordinate its resources, competencies, and other assets.

Academics have suggested that in order for a company to have a competitive advantage, the company needs to develop distinctive talents and ongoing learning in order to be competitive in the market. As a result, maintaining competitive advantage is an endless and dynamic process. (Hung, Yang, Lien, McLean, & Kuo, 2010),

Any company won't be able to keep its competitive advantage if it lacks dynamic (Gnizy, Baker, & Grinstein, 2014). Resources change as a result of being acquired, amalgamated, and recombined to provide new strategies, which results in dynamic capabilities (Grant,

1996). A company's dynamic capacities are a reflection of its capacity to coordinate activities, assets, and resources within the framework of global specialization (Teece, 2007). This theory requires expanding, changing, or, if necessary, completely redesigning what the firm is doing in order to keep a good fit with the environment and markets that the organization inhabits (Teece, 2007).

To gain a competitive advantage, another tactic known as a knowledge-based approach was developed by Grant that makes use of knowledge as a strategic resource (Grant, 1996). The need of creating, sharing, and integrating information inside the organization was underlined by Grant.

Because of the difficulty in replicating the information, knowledge enterprises become specialized. Knowledge is therefore regarded as the source of competitive advantage (Felin and Hesterly, 2007). Duplicating the firm-specific skills is difficult, but it is not impossible. It is impossible to attempt to duplicate another person's talents, knowledge, experiences, or abilities (Spender, 1996).

3.2 Talent Acquisition and Organizational Performance

Cooper, D.R. confirmed that varied organizations have different definitions of what talent acquisition is. For instance, in one business, it may imply focusing on long-term sustainability, while in another; it may mean focusing on discovering high-potential people. Onboarding, recognizing, analyzing, and growing the organization's internal talent are all examples of talent acquisition.

Farndale E. (2014), proposed that when a position opens up, talent acquisition ensures organizational success by providing crucial information and methods for development and change. It helps companies to locate the most gifted individuals. In addition to identifying and concentrating on qualified personnel, talent management aims to make sure that reinforcement and evolution plans are in line with the purpose, direction, goals of the company. Previous studies, particularly that one's examining the implications of talent management, identified significant affects the firm productivity, efficiency, and growth. Talent acquisition is deisgned to meet the strategic goals of the business (Namusonge, G.S.; Karanja, K., 2017).

Additionally, people management techniques help the business become more productive, but machinery, products are simple to replicate and only provide temporary competitive advantages. Attracting, developing, retaining, motivating, and rewarding outstanding people have all been identified as talent acquisition approaches that produce in long-term competitive advantages. Lyria, R.L.(2017), reported that "talent acquisition," "talent retention," "learning and development," and "career management" are components of talent management.

According to this study's findings and the knowledge-based approach, businesses that apply talent acquisition strategies will ultimately experience excellent organizational performance.

H1: TA is positively related to organizational performance

3.3 Relationship between HR analytics and Organizational performance

Anand (2020) reported that Organizations have found that HR analytics aids them in completing HR tasks, for instance building a qualified team, meeting people, employing right individuals in the right positions. Technology appears to have also closed the gap in determining the optimal person-job fit (Deshpande, 2018). This is due to the fact that businesses now have access to a variety of digital channels that can provide them with exceptional talent from all over the world.

Gaur, Shukla and Verma (2020), confirmed that the Benefits of Using HR analytics in the Lebanese Industrial sector are many. Among the benefits, Quality applicants or talents are being monitored. Companies can decrease their hiring cost.

Uddin and Arifin (2016), reported that dealing with job seekers is a time-consuming as well as costly process. In this context, Ali Jokhio, (2018) confirmed that HR analytics is a solution for the high hiring cost. All professionals having social media handles and email accounts; this allows recruiters to get in touch easily with job seekers. Indeed, according to the survey, some companies looking into hiring millennials are increasingly utilizing computer models that help in identifying motivated individuals who intent to participate in a high quality position (Thanh et al., 2020).

Akinremi and Adedeji (2019), confirmed that with the use of HR analytics, the behaviors, cultures, and proclivities can also be studied, aiding in strengthening teamwork and on the other hand lowering disagreements and disputes in the organization.

Sharma & Sharma, (2017) defined HR analytics as a systematic identification and quantification of the human capital drivers of business outcomes with the purpose of making better decisions (Heuvel and Bondarouk, 2017). HR can make a significant contribution to an organization's ability to make better decisions by depending on data that is analytic (Chaturvedi, 2016). According to Spahic (2015), by focusing on predictive analytics rather than previous mistakes, HR can foresee future outcomes, correct past errors, and prevent them from happening again.

HR analytics has also increased the scope of making HR a strategic partner in organizations (Boudreau, J. W. & Lawler III, E., 2009). The use of analytics to understand HR practices and its impact on organizational performance is a way to add value to businesses (Boudreau, J. W., Levenson, A. & Lawler, III, E. E., 2004). A McKinsey article highlights how powerful HRA has helped organizations improve their engagement and productivity.

HR Analytics is an integrated process developed to enhance the performance of the organization through improving the quality of people in decision-making. It depends on statistical tools and analysis and claims high qualitative data, leadership, talented employees and analysts and a broad-based agreement that HR Analytics is a helpful tool to improve the organizational performance (Kirtane, 2015 as cited in Opatha, 2020). HR may participate strategically in organizational decision-making due to HR analytics. Human capital management has improved, employee productivity has grown has increased (Mihalcea, 2017).

The need to promptly and efficiently fill open positions is greater than ever for employers. With the heightened danger of talent transfer, the obstacles intensify (Liberatore and Luo, 2010; Yabanci, 2020). According to a research, 83 percent of the 924 companies assessed worldwide are still have low rate of HRA adoption, contrasted to businesses with high levels of maturity that developed advanced methods. Sivathanu and Pillai (2018) pointed out two main benefits of Smart HR: attracting, developing, retaining new-age talent, and more efficient, faster HR operations resulting in leaner HR departments.

Thiruchelvam and Kumar, (2020) emphasize the importance of talent analytics to facilitate talent acquisition. The influence of HR analytics on business outcomes is enormous. The role of the implementation of information technology in collecting authentic and accurate information that will result in a better decision making and better productivity (Russel and Bennett, 2014).

Benitez-Amado (2015), stated that information technology improves people management by enabling long-term operations, resulting in improved efficiency and productivity. More precise data management, aided by information technology, would lead to decisions that

are more reliable and, as a result, improved organizational performance (Russell and Bennett, 2014). According to Data from HR Outlook, Sixty Three percent of hiring managers believe they can learn and benefit from data (Morley et al., 2015).

Another technology that is rapidly being used in talent management is artificial intelligence (AI). Artificial intelligence can substitute activities that required human intellect to complete, such as picture recognition (Lu and Pan, 2020). AI is a subset of HR analytics (Koochang and Nord, 2021). Since all of the former's techniques require a lot of data, artificial intelligence is inextricably connected to the idea of large data. The term "big data" refers to vast analyzable data.

HR analytics was one of the first management concepts to help businesses improve their operations by detecting trends and forecasting project outcomes. HR analytics plays a range of functions in HR, including assisting in the acquisition and retention of valuable employees (Ghosh et al., 2014). It aids in the classification of an organization's available talent in relation to its culture.

The Deloitte Global Human Capital Trends Reported that analytics is being used so often in recruiting, performance measurement, remuneration, and workforce. According to a McKinsey article, HRA has proven to be effective in increasing employee engagement and productivity. For instance, one company was able to save \$20 million in retention expenditures and decrease staff attrition in half. It emphasizes the significance of utilizing analytics to hire the proper individuals. It does not replace direct engagement with employees, but rather assists and advises managers in gaining data-driven and organization-specific insights on human capital.

To measure business outcomes through case studies, Jeanne G. Harris, Elizabeth Craig, and David A. Light, 2011 identified six analytical tools: "database of employees," "talent segmentation," "focused investments," "customized approach toward formulating the employee value proposition," "planning of workforce in the future," and "supply chain of talent."

In their analysis, Laurie Bassi, McBassi & Company define 'talent' and identify three types of data: individual data, data on the effectiveness and efficiency of the talent process, and the amount of HRA support culture in the UK. The paper summarizes the significance of identifying needs in order to identify individuals and groups for whom specific and focused attention will be beneficial to the organization. For all talent procedures, essential indicators must be carefully defined and, when possible, linked to business Key Performance Indicators.

An exploratory analysis was undertaken by I Setiawan, S Suprihanto, A C Nugraha, and J Hutahaeon, to assess the impact of staff attrition on establishing organizational competitive advantage (Setiawan, S Suprihanto, A C Nugraha, and J Hutahaeon, 2019). Employee attrition was identified using logical regression, and eleven variables, including "total working hours," "number of years with latest management," "frequency of business trip," "poor environment satisfaction," "department human resources," and "marriage status," all had a significant impact.

Sentiment analysis is used to assess critical HR aspects by modeling key performance indicators (KPI) (Roy Gelbard, Roni Ramon-Gonen, Abraham Carmeli, Ran M. Bittman, and Roman Talyanksi, 2018). This research focuses on a method for conducting predictive analytics by evaluating HR constructs such as performance, engagement, leadership,

workplace dynamics, organizational support, and knowledge creation using digital models (text mining), which provide insight into an organization's employees' sentiments. This type of sentiment analysis, according to the study, helps an organization to improve its ability to track and predict emerging behavioral patterns, allowing them to take preventative and promotion activities to shape the behavior in the right direction.

HR Analytics is giving HR a more strategic role using evidence-based insights, with the purpose of assisting enterprises in achieving their strategic goals and intended outcomes (Heuvel, S., & Bondarouk, T., 2017).

Additionally, Lakshmi and Pratap (2016) proposed that HR analytics plays a strategic role and influence business outcomes. HR analytics promote a variety of desired organizational outcomes, including better organizational performance, employee engagement, and satisfaction.

When properly implemented, HRA has the potential to make HR more efficient and cost-effective, resulting in more desirable business results (Chattopadhyay, D., Biswas, B. D., & Mukherjee, S., 2017). Additionally, only those organizations who manage to establish and maintain a balanced blend of different key competencies will be successful in HR analytics" (Coolen P., & IJselstein, A., 2021).

Mukherjee, S., 2017 reported that HR analytics have radically transformed how individuals think about and conduct business today. Organizations understand that HR analytics are the key to more effectively achieve their business goals and objectives.

To ensure organizational success, organizations must incorporate HRA into their operations in order to make more informed and evidence-based decisions.

HR Analytics helps hiring managers to give them reliable data that they need to connect HR operations to employee department. Boudreau, J. W., (2017), confirmed that HRA has a positive relationship with organizational effectiveness, according to their research.

This assertion is supported by his ROI analysis of HR analytics, which comes to the conclusion that there is a connection between organizational effectiveness and the amount of money and time invested in HR analytics (Ben-Gal, 2019). Similar to this, HR analytics strengthens HR's credibility by enhancing the efficacy of its policies and processes, leading to better OP levels (Naula, S. 2015).

In this study, it is suggested that HR analytics are capable of generating high performance levels.

H2: HRA is positively related to organizational performance.

3.4 Relationship between Talent acquisition and HR analytics

HR analytics, according to (Ghosh et al., 2014), was one of the first management concepts to assist firms in bettering their operations by spotting trends and predicting project results. HR analytics is used in HR for a variety of purposes, including helping to hire and keep valuable personnel. By taking inferences from established patterns that can be applied to the company's broader operations, HR analytics help rebuild the talent acquisition and retention process to make it more predictable. It helps to categorize the talent that a business has on hand in connection to its culture, enabling effective employee succession planning and the upkeep of a balance between the supply and demand of human resources within the firm.

By merging quantitative methods, information technology, and decision making, Mortenson, Doherty, and Robinson (2015) proved that integrating HR analytics into talent acquisition and management procedures increases the predictive analysis of HR data available to the organization.

According to Jeanne G. Harris, Elizabeth Craig, and David A. Light (2011), six analytical tools—a "database of employees," a "talent segmentation," focused investments, a "customized approach toward formulating the employee value proposition," planning for the future workforce, and a "talent supply chain"—can be used to measure business outcomes through case studies.

In this study, it is suggested that HR analytics strengthen the relationship between talent acquisition and organizational performance.

H3: HRA mediates the relationship between TA and Organizational performance

In light of the foregoing, the conceptual model can be described as follows.

Figure 1: The conceptual model with mediating effect of HR analytics

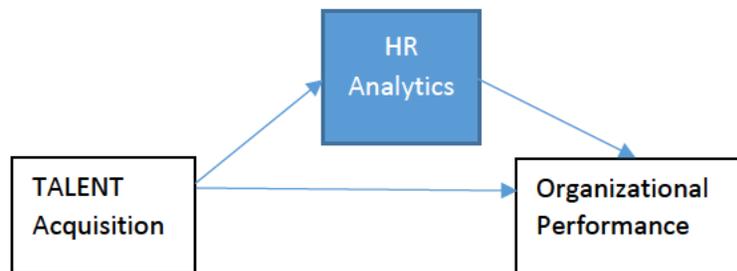


Figure 1 shows the potential influence of talent acquisition on organizational performance, and how HR analytics can mediate the relationship between talent acquisition and organizational performance.

Chapter Four

Methodology

4.1 Introduction:

The research methodology will be outlined in this chapter that aims to examine the effect of HR analytics on talent acquisition and organizational performance. Chapter Four will outline the characteristics of the survey respondents and discuss the demographic, sample frame, sampling method, and sample size. This chapter will also focus on the procedures for gathering and analyzing data, such as the research tool or questionnaire and data analysis approaches.

4.2 Quantitative Data

The following factors influence the choice of quantitative data: they are accurate, dependable, consistent, and simple to analyze.

4.3 Approach

In this research a sampled fraction of the population is subjected to a quantitative survey.

Following the consideration of pertinent theories, a literature review, and an analysis and interpretation of the data, the hypotheses will be developed and evaluated.

4.4 Survey and data collection

The researcher used a correlational research design. This study's design is better suited to the subject at hand because it enables the use of a structured questionnaire to get information from a wider group of participants. Based on the data they have gathered; researchers might use correlational studies to infer a positive or negative link or association between two variables. The potential causal effects of HR analytics on the two constructs as well as the connection between talent acquisition and organizational performance are investigated in this study using a correlational methodology. Scales of

measurement have been created, tested, and applied. This investigation focused on employees of Lebanon-based businesses.

A widely disseminated questionnaire was used to gather the information. The research chose ten companies based in Lebanon for the study. Eventually, 117 workers were chosen from the 10 chosen companies. On the basis of this, the scale's content validity was examined.

The scales used to measure responses' attitudes and opinions about Talent management, talent acquisition, talent development, talent engagement, talent retention, HR analytics adoption, artificial intelligence capability, level of HR analytics, and performance in their organizations made up the measurement scales in the questionnaire. Response forms were five-point Likert scales with a range of 1 (strongly disagree) to 5 for organizational performance and 1 (strongly agree) to 5 for talent management, talent acquisition, talent development, talent engagement, and talent retention (strongly agree). In assessing talent management, talent acquisition, talent development, talent engagement, and talent retention, the scale was adopted from (Mujtaba, M., Mubarik, M.S., & Soomro, K. A., 2022). Talent management, talent acquisition, talent development, talent engagement consisted of 5 items, and talent retention consisted of 6 items. The HR analytics adoption and Artificial intelligence capability scale was based on Zhang, H., Song, M., & He, H., 2020). Whereas, Level of HR analytics adoption was adapted from Johnston and Warkentin, 2010); Venkatesh et al., 2012). Finally, to measure organizational performance, three items scale adapted from (Henri, 2006) were used, and to measure non-financial performance, eight item scale adapted by Teeratansirikool, siengthai, Badir and Charroengam, 2013) were used.

Constructs' loading and reliability were tested for. Results have shown that all constructs have loadings that are higher than 0.6 and high reliability (higher than 0.6). Athanasiou and Mavrikaki (2013), Awang (2014) stated that alpha's coefficient of 0.6 is an acceptable factor loading. Pallant (2001) states also that 0.6 is an acceptable of Cronbach alpha and considered high reliability. Cronbach's coefficient ranged from 0.6 to 0.841.

For variables obtained via questionnaires, Cronbach's coefficient ranged from 0.663 to 0.7.

This study variable was operationalized using the mean of the responses to each variable's questionnaire item.

4.5 Sample:

Employees ranging from junior, supervisory, and managerial levels from 10 Lebanon-based enterprises, primarily in the industrial sector, will be chosen for the sample. One hundred (117) working adults who are employed by the ten companies with operations in Lebanon will make up the sample size. Burmeister and Aitken (2012), confirmed that for quantitative studies, a sample size of 100 people is deemed enough. The online survey can be accessed by participants from their own personal computers or mobile phones. The questionnaire was created using Google Form and the responses will be downloaded. After agreeing to take the survey, participants will receive a link. A total of 300 questionnaires were issued, each with a cover letter outlining the research and guaranteeing the confidentiality of the respondents' responses.

300 questionnaires were distributed, and 117 people responded, for a response rate of 39%.

4.6 Data collection method

Survey methods were used to collect primary data, for which a Google Forms questionnaire was built. Secondary data came from research, books, and journals that had already been published.

Chapter Five

Findings and data analysis

5.1 Introduction

The findings of the statistical analysis done on this investigation are described in this chapter.

The investigation used statistical techniques to assess how HR analytics affected talent acquisition and organizational performance.

5.2 Descriptive Statistics

Tables are used in this part to offer numerical summaries of the respondents' responses.

Here are some of these:

The majority of the sample size were females (44.4%) and relatively with ages ranging from 26-30. The sample consisted of 53% from supervisory staff, 31.6% Managerial staff, 15.4% Junior staff. Most of the respondents had either 1-5 years or above 21 years. Furthermore, the majority have diploma (53%), and 38.5% have master's degree and above, 6% have Higher National Diploma, 2.6% has other certificates.

Table 1: Gender of the population

Gender		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	32	27.4	27.4	27.4
	Female	52	44.4	44.4	71.8
	Prefer not to say	32	27.4	27.4	99.1
	Other	1	.9	.9	100.0
	Total	117	100.0	100.0	

Table 2: Age of the population

Age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	21-25	21	17.9	17.9	17.9
	26-30	58	49.6	49.6	67.5
	31-35	22	18.8	18.8	86.3
	36-40	6	5.1	5.1	91.5
	41 and above	10	8.5	8.5	100.0
	Total	117	100.0	100.0	

Table 3: Position/ Rank of the population

Position/Rank

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	junior staff	18	15.4	15.4	15.4
	Supervisory staff	62	53.0	53.0	68.4
	Managerial staff	37	31.6	31.6	100.0
	Total	117	100.0	100.0	

Table 4: Experience level of the population

Working Experience

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	fewer than one year	8	6.8	6.8	6.8
	1-5 years	37	31.6	31.6	38.5
	6-10 years	21	17.9	17.9	56.4
	11-20 years	14	12.0	12.0	68.4
	above 21 years	37	31.6	31.6	100.0
	Total	117	100.0	100.0	

Table 5: Educational Level of the population

Highest Educational Qualification

			Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Higher National Diploma		7	6.0	6.0	6.0
	Diploma		62	53.0	53.0	59.0
	Master's degree/Above		45	38.5	38.5	97.4
	Other		3	2.6	2.6	100.0
	Total		117	100.0	100.0	

5.3 Data analysis:

In order to test the significance of mediation, the Sobel test for mediation and Preacher and Hayes' SPSS Macro for mediation assessment were used in the data analysis with SPSS. The sobel test is based on the work of statistics professor Michael E. Sobel of Columbia University in New York. In mediation, it is theorized that the link between the

independent and dependent variables has an indirect effect because of the third variable's influence (the mediator).

A factor analysis was done to verify and confirm the unidimensional conformity of the factors. Additionally, an exploratory factor analysis was carried out to verify the factor loadings. After that, a Kaiser-varimax rotation was performed to check the loadings of talent acquisition, HR analytics, and Performance.

The findings in Table 6 show that the different items significantly contributed to the various constructs and demonstrated strong Cronbach's alpha values above 0.6 , proving the scales' convergent validity and contrast reliability. Alpha Cronbach's value above 0.6 is considered high reliability and acceptable index (Nunnally and Bernstein, 1994). All the Cronbach alpha value ranged between (0.663 and 0.7).

All the items that have a factor loading less than 0.6 were deleted from the measurement model. All the items having low factor loading could have had low loadings due to several reasons. Among the reasons are ambiguous statement, double meaning statement, etc.. The loadings in table 6 show a threshold above 0.6. The factor loading for every item should be 0.6 or higher (Awang 2014).

A multiple linear regression analysis was carried out to determine the nature of the relationship between Talent acquisition, performance, and HR analytics.

Furthermore, regression analysis with mediation testing was carried out to look at the probable causal impact of these variables on organizational performance.

In order to assess the hypotheses posed in the study, a number of regression models were constructed.

Meditational models were computed in accordance with Baron and Kenny's (1986) guidelines.

The four steps were followed before doing a mediation test (James and Brett, 1984)

The first step was done to prove that talent acquisition is significant to organizational performance.

The second step was to prove that talent acquisition is significantly related to HR analytics.

The third step was to prove that HR analytics is significant to organizational performance.

After the first three steps are met, the mediation test was valid for conduction.

The fourth step was the mediation test to check whether HR analytics mediate the relationship between talent acquisition and organizational performance.

Finally, the results compared the coefficient for talent acquisition (was 0.3307) and the P value was (0.0002) which means that there is a significant relationship , with the presence of HR analytics the coefficient of TA became 0.1615 and the P value became 0.1175 which is less than 0.05. So with the presence of HR analytics talent acquisition is not anymore significant.

Table 6: Factor Loadings and reliability scores for TA, HR analytics, and Performance

Variable	Items	Factor loading	Cronbach's α
Talent Acquisition	TA2	0.60	0.7
	TA3	0.646	
	TA4	0.766	
	TA5	0.644	
HR Analytics	HRA3	0.824	0.663
	HRA4	0.776	
	HRA5	0.68	
Performance	Perf1	0.603	0.699
	Perf2	0.752	
	Perf3	0.737	
	Perf8	0.738	
	Perf9	0.725	
	Perf10	0.787	
	Perf11	0.744	

All the items that have a factor loading less than 0.6 were deleted in the measurement model. All the factor loading that are higher than 0.6 were extracted. The factor loading for every item should be 0.6 or higher (Awang, 2014). The findings in Table 6 show that the items significantly has strong Cronbach's alpha values (ranging between 0.663 and 0.7), proving the scales' convergent validity and contrast reliability.

To investigate the relationship between talent acquisition and organizational success, a simple linear regression analysis was conducted.

$R^2 = 0.082$ and $F = 9.246$ (sig. = 0.003) were used to fit the ANOVA model.

Table 8, 9, 10, and 11's findings demonstrate a positive and strong link between Talent acquisition and Performance.

Table 7: Variables Entered/ Removed.

Variables Entered/Removed^a

Model	Variables Entered	Variables Removed	Method
1	TAavg ^b	.	Enter

a. Dependent Variable: Perfavg

b. All requested variables entered.

Table 8: Model Summary

Model Summary

Model	R	R Square	Adjusted Square	R	Std. Error of the Estimate
1	.287 ^a	.082	.073		.62327

a. Predictors: (Constant), TAavg

Table 9: Simple linear regression test

ANOVA^a

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	3.592	1	3.592	9.246	.003 ^b
	Residual	40.012	103	.388		
	Total	43.604	104			

a. Dependent Variable: Perfavg

b. Predictors: (Constant), TAAvg

Table 10: Coefficients^a

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.444	.375		6.523	.000
	TAAvg	.314	.103	.287	3.041	.003

a. Dependent Variable: Perfavg

Talent acquisition could be a predictor of performance because the significance level is less than 0.05.

So H1 has been supported (Talent acquisition is positively related to organizational performance).

Similar analysis was done for OP and HRA. With R square 0.233 and F=15.365 (sig.=0.01), the ANOVA model was fit.

The analysis' findings are displayed in tables 12, 13, 14, and 15 respectively.

Since significance is less than 0.05, the findings demonstrate that HR analytics is a predictor of organizational performance.

H2 has thus gained endorsement.

(HRA and performance are positively correlated.)

Table 11: Variables Entered/Removed

Variables Entered/Removed^a

Model	Variables Entered	Variables Removed	Method
1	TAavg, HRAvg ^b	.	Enter

a. Dependent Variable: NFPavg

b. All requested variables entered.

Table 12: Model Summary

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.478 ^a	.228	.213	.61205

a. Predictors: (Constant), TAavg, HRAvg

Table 13: ANOVA Test

ANOVA^a

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	11.527	2	5.763	15.385	.000 ^b
	Residual	38.959	104	.375		
	Total	50.485	106			

a. Dependent Variable: NFPavg

b. Predictors: (Constant), TAavg, HRAvg

Table 14: Coefficients^a

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.117	.461		2.423	.017
	HRAvg	.473	.115	.378	4.111	.000
	TAavg	.221	.108	.188	2.041	.044

a. Dependent Variable: NFPavg

HR analytics could be a predictor of performance because the significance level is less than 0.05.

The aforementioned findings serve as the starting point for examining mediation effects.

Measurement of the Simple Mediation Effect:

The second step in our research entailed examining the potential mediation effect that HR analytics may have on hiring practices and organizational effectiveness.

This mediation could be measured.

This indicated that the HR analytics has a full mediation effect on Talent acquisition and organizational performance. Since R square=0.1242. The above analysis support H3.

The main findings are represented in Table 16.

Table 15: Mediation effect of HR analytics on talent acquisition and organizational performance.

Run MATRIX procedure:

***** PROCESS Procedure for SPSS Version 3.5.3 *****

Written by Andrew F. Hayes, Ph.D. www.afhayes.com
 Documentation available in Hayes (2018). www.guilford.com/p/hayes3

Model : 4
 Y : Perfavg
 X : TAavg
 M : HRAvg

Sample
 Size: 117

OUTCOME VARIABLE:
 HRAvg

Model Summary

	R	R-sq	MSE	F	df1	df2	p
	.3525	.1242	.2724	14.6111	1.0000	103.0000	.0002

Model

	coeff	se	t	p	LLCI	ULCI
constant	2.4145	.3138	7.6940	.0000	1.7921	3.0368
TAavg	.3307	.0865	3.8224	.0002	.1591	.5023

OUTCOME VARIABLE:
 Perfavg

Model Summary

	R	R-sq	MSE	F	df1	df2	p
	.4685	.2195	.3337	14.3394	2.0000	102.0000	.0000

Model

	coeff	se	t	p	LLCI	ULCI
constant	1.3301	.4358	3.0518	.0029	.4656	2.1945

TAavg	.1615	.1023	1.5785	.1175	-.0414	.3645
HRAvg	.4616	.1090	4.2325	.0001	.2453	.6779

***** DIRECT AND INDIRECT EFFECTS OF X ON Y

Direct effect of X on Y

Effect	se	t	p	LLCI	ULCI
.1615	.1023	1.5785	.1175	-.0414	.3645

Indirect effect(s) of X on Y:

Effect	BootSE	BootLLCI	BootULCI	
HRAvg	.1526	.0657	.0312	.2897

***** ANALYSIS NOTES AND ERRORS

Level of confidence for all confidence intervals in output:

95.0000

Number of bootstrap samples for percentile bootstrap confidence intervals:

5000

----- END MATRIX -----

Table 16: Correlations

		TAavg	HRAvg	Perfavg
TAavg	Pearson Correlation	1	.362**	.287**
	Sig. (2-tailed)		.000	.003
	N	114	113	105
HRAvg	Pearson Correlation	.362**	1	.461**
	Sig. (2-tailed)	.000		.000
	N	113	115	107
Perfavg	Pearson Correlation	.287**	.461**	1
	Sig. (2-tailed)	.003	.000	
	N	105	107	108

** . Correlation is significant at the 0.01 level (2-tailed).

Four steps were followed before doing a mediation test (James and Brett, 1984)

The first step was to prove that talent acquisition is significant to organizational performance and this hypothesis was supported. TA is a predictor for performance.

The second step was to prove that talent acquisition is significantly related to HR analytics and this was supported as well.

The third step was to prove that HR analytics is significant to organizational performance and this was supported too.

After the first three steps are met, the mediation test was ready to be conducted.

The fourth step done was the mediation test to check whether HR analytics mediate the relationship between talent acquisition and organizational performance.

Finally, results were compared and found that the coefficient for talent acquisition was 0.3307 whereas the P value was 0.0002 , with the presence of HR analytics the coefficient of TA became 0.1615 and the P value became 0.1175 which is less than 0.05. So with the presence of HR analytics talent acquisition is not anymore significant. So talent acquisition impacts job performance through HR analytics and it is safe to can conclude that a full mediation is present.

Chapter Six

Discussion of Findings

6.1 Summary of Findings

The most significant findings, along with their theoretical and practical ramifications, are reviewed in this chapter. Additionally, the study's weaknesses are assessed, and recommendations for additional research are given.

In recent literature, a number of academics have advocated that businesses should invest in HR analytics in talent acquisition since it may ultimately provide a competitive advantage (McAfee & Brynjolfsson, 2012; Kiron et al., 2014; Fosso Wamba et al., 2015; Gupta & George, 2016).

The study's results indicated that there is a significant positive relation between TA and OP. However, the relation between TA and OP was not significant with the presence of HR analytics. TA affects OP through HRA. This can be associated to Dynamic capability theory and Knowledge based theory. Indeed, HR analytics is a dynamic capability. The aforementioned topic is relevant to this study since HR analytics provide the way for the company to achieve its strategic goals, including but not limited to operational excellence, the development of new goods and services, and customer intimacy (Treacy and Wiersena, 1993). These are chances that, with careful planning and management, can improve the performance of the business and help it advance.

It's possible that knowledge management alone won't be enough to provide the desired organizational capabilities. Therefore, to improve an organization's capacity to exploit its knowledge assets and create the best possible market strategies and decision-making processes, HR analytics' advanced analytical functionalities are essential. The findings specifically suggest that big data analytics can have an impact on the knowledge management process' three components of collection, conversion, and application in order to produce corporate value. These are chances that, with thoughtful management and planning, can improve the performance of the business and help it advance. It's feasible that knowledge management will not be sufficient on its own to give organizations the

capabilities they need. Therefore, HR analytics' enhanced analytical functionalities are crucial to enhancing an organization's ability to exploit its knowledge assets and develop the best possible market strategies and decision-making processes. The results specifically point out that in order to create business value, big data analytics might affect the three steps of knowledge management collection, conversion, and application.

The results demonstrate the potential of HR analytics helps in hiring top talents.

Organizations should monitor the levels of information sharing activities in order to hire a staff that is competitive. It said that the relationship between TA and OP can be mediated by HR analytics.

As a result, we may draw the conclusion that the three hypotheses were proposed and assessed in light of the impact that HR analytics has on an organization's overall performance and talent acquisition. The knowledge-based theory discovered in Grant (1996) and the dynamic capabilities method (Teece et al., 1997) have been merged in this study.

This was accomplished by identifying the factors that businesses should consider in order to increase performance. The association between talent acquisition and organizational performance as well as the relationship between HR analytics and organizational performance were both investigated using regression analyses. The Hayes mediation analysis was used to further examine the significance of the mediation between the application of HR analytics and talent acquisition and performance. The three hypotheses were proven correct, demonstrating how important HR analytics implementation is for improving corporate performance. The results show that talent acquisition enhances company performance using HR analytics. It is confirmed that the entire mediation process was seen. The findings provide important and exciting new information about how HR analytics performs the tasks that have previously been the subject of investigation. HR analytics should be applied during the hiring process to gain competitive advantages and superior organizational performance.

Furthermore, this research focused on the dynamic capability theory, which describes a firm's capacity to recognize, seize, and rearrange resources in response to changes in the competitive market environment. Based on these arguments, we may conclude that companies must start using HR analytics because the talent acquisition alone is no longer giving them a competitive edge.

6.2 Final Thoughts and Suggestions

One of the Middle East's most technologically advanced nations is Lebanon, yet it still has considerable obstacles, including a skills shortage, a lack of HR analytics professionals, a lack of tools, data quality, data disorganization, and infrastructure gaps. Organizations that do not prioritize HR analytics will see an increase in turnover and the quality of HR decision-making. All of these issues will have an impact on the quality of HR decisions and organizational performance. Businesses should begin utilizing HR analytics with the help of specialized tools and qualified personnel.

- To manage HR analysis, businesses need hire highly qualified HR analytics professionals.
- HR analytics should be used in all assessments, recruitment, selection, and onboarding procedures.

6.3 Future Research

Experts should conduct a study to determine whether there has been any progress in the level of application of HR analytics in Lebanon. In addition to that, scholars can investigate the various ways of HR analytics use, as well as the sectors in which it is employed, by evaluating those organizations that have employed it. This research will raise alertness of the subject and inspire HR managers to learn more about it and, perhaps, adopt the new technology.

6.4 Limitations of the Study

There were various flaws in this study. First, the sample was small and only included 1 nation., and thus it is fewer applicable to hypothesize. This study was done during COVID-19, a time when some respondents had remote work experiences that influenced their opinions of the talent acquisition process.

References

- Al Aina, R., & Atan, T. (2020). The impact of implementing talent management practices on sustainable organizational performance. *Sustainability*, 12 (20), 8372, <https://doi.org/10.3390/su12208372>
- Almarzooqi, A. H., Khan, M., & Khalid, K. (2019). The role of sustainable HRM in sustaining positive organizational outcomes. *International Journal of Productivity and Performance Management*, 68(7), 1272–1292. <https://doi.org/10.1108/ijppm-04-2018-0165>
- Angrave, D., Charlwood, A., Kirkpatrick, I., Lawrence, M., & Stuart, M. (2016). HR and analytics: why HR is set to fail the big data challenge. *Human Resource Management Journal*, 26(1), 1–11. Retrieved from <https://scihub.se/10.1111/1748-8583.12090>
- Barbar, K., Choughri, R., & Soubjaki, M. (1970, January 1). The impact of HR analytics on the training and development strategy - private sector case study in Lebanon: Semantic scholar. undefined. Retrieved from <https://www.semanticscholar.org/paper/The-Impact-of-HR-Analytics-on-the-Training-and-Case-Barbar-Choughri/9003dac9a7ff13513f86e4ef820ce74b061fb903>
- Bozionelos, N., Lin, C.-H., & Lee, K. Y. (2020). Enhancing the sustainability of employees' careers through training: The roles of Career Actors' openness and of supervisor support. *Journal of Vocational Behavior*, 117, 103333. Retrieved from <https://doi.org/10.1016/j.jvb.2019.103333>
- Chalutz Ben-Gal, H. (2019). An ROI-based review of HR analytics: Practical implementation tools. *Personnel Review*, 48(6), 1429–1448. Retrieved from <https://doi.org/10.1108/pr-11-2017-0362>
- DELANEY, J. T., & HUSELID, M. A. (1996). The impact of human resource management practices on perceptions of organizational performance. *Academy of Management Journal*, 39(4), 949–969. Retrieved from <https://doi.org/10.2307/256718>
- Falletta, S. V., & Combs, W. L. (2020). The HR analytics cycle: A seven-step process for building evidence-based and ethical HR analytics capabilities. *Journal of Work-Applied Management*, 13(1), 51–68. Retrieved from <https://doi.org/10.1108/jwam-03-2020-0020>
- Fink, A. A., & Sturman, M. C. (2017). HR metrics and talent analytics. Oxford Handbooks Online. Retrieved from <https://doi.org/10.1093/oxfordhb/9780198758273.013.25>

- Grant, R. M. (1996). Toward a knowledge-based theory of the firm. *Strategic Management Journal*, 17(S2), 109–122. Retrieved from <https://doi.org/10.1002/smj.4250171110>
- Gupta, M. (2020). HR analytics: A tool for talent management. *International Journal of Psychosocial Rehabilitation*, 24(5), 2667–2673. Retrieved from <https://doi.org/10.37200/ijpr/v24i5/pr201968>
- Kompaso, S. M., & Sridevi, M. S. (2010). Employee engagement: The key to improving performance. *International Journal of Business and Management*, 5(12). Retrieved from <https://doi.org/10.5539/ijbm.v5n12p89>
- Marler, J. H., & Boudreau, J. W. (2016). An evidence-based review of HR analytics. *The International Journal of Human Resource Management*, 28(1), 3–26. Retrieved from <https://doi.org/10.1080/09585192.2016.1244699>
- Mayo, A. (2018). Applying HR analytics to talent management. *Strategic HR Review*, 17(5), 247–254. Retrieved from <https://doi.org/10.1108/shr-08-2018-0072>
- MOHAMMED, A. B. D. U. L. Q. U. D. D. U. S. (2019). HR analytics: A modern tool in HR for Predictive decision making. *JOURNAL OF MANAGEMENT*, 10(3). Retrieved from <https://doi.org/10.34218/jom.6.3.2019.007>
- Mukherjee, S., Gupta, S., Rawlley, O., & Jain, S. (2022). Leveraging Big Data Analytics in 5g-enabled IOT and industrial IOT for the development of Sustainable Smart Cities. *Transactions on Emerging Telecommunications Technologies*. Retrieved from <https://doi.org/10.1002/ett.4618>
- Opatha, H. H. D. P. J. (2020). HR analytics: A literature review and new conceptual model. *International Journal of Scientific and Research Publications (IJSRP)*, 10(06), 130–141. Retrieved from <https://doi.org/10.29322/ijsrp.10.06.2020.p10217>
- Radtchenko-Draillard, S. (2021). Human resources in the professional sphere: Performance and flaws in their management. *Academia Letters*. Retrieved from <https://doi.org/10.20935/al2499>
- Rogers, D. P. (2012). HR metrics and analytics. *The Encyclopedia of Human Resource Management*, 252–257. Retrieved from <https://doi.org/10.1002/9781118364741.ch46>
- Simons, R. (Ed.). (2011). *Human Resource Management: Issues, Challenges and Opportunities* (1st ed.). Apple Academic Press. Retrieved from <https://doi.org/10.1201/b12878>
- Tahir, N., Yousafzai, I. K., Yousafzai, I. K., Jan, D. S., & Hashim, M. (2014). The impact of training and development on employees performance and productivity

a case study of United Bank Limited Peshawar City, KPK, Pakistan.
International Journal of Academic Research in Business and Social Sciences,
4(4). Retrieved from <https://doi.org/10.6007/ijarbss/v4-i4/756>

- Teece, D. J., Pisano, G., & Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic Management Journal*, 18(7), 509–533. Retrieved from [https://doi.org/10.1002/\(sici\)1097-0266\(199708\)18:7<509::aid-smj882>3.0.co;2-z](https://doi.org/10.1002/(sici)1097-0266(199708)18:7<509::aid-smj882>3.0.co;2-z)
- Torre, T., Sarti, D., & Antonelli, G. (2021). People analytics and the future of competitiveness: Which capabilities HR departments need to succeed in the “Next normal.” *HR Analytics and Digital HR Practices*, 1–24. Retrieved from https://doi.org/10.1007/978-981-16-7099-2_1
- Ur Rehman, S., Bhatti, A., & Chaudhry, N. I. (2019). Mediating effect of innovative culture and organizational learning between leadership styles at third-order and organizational performance in Malaysian Smes. *Journal of Global Entrepreneurship Research*, 9(1). Retrieved from <https://doi.org/10.1186/s40497-019-0159-1>
- Zaid, A. A., Jaaron, A. A. M., & Talib Bon, A. (2018). The impact of Green Human Management and Green Supply Chain Management Practices on Sustainable Performance: An empirical study. *Journal of Cleaner Production*, 204, 965–979. Retrieved from <https://doi.org/10.1016/j.jclepro.2018.09.062>

Research Questionnaire

Section I is from:

Mujtaba, M., Mubarik, M. S., & Soomro, K. A. (2022). Measuring talent management: a proposed construct. *Employee Relations: The International Journal*.

Section I – Talent Management

Identification of critical positions

Rating Scale: 1. Strongly Disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly Agree SD
D N A SA

1	My company identifies key positions in line with the organization	2	3	4	5
2	My company designs the roles of key positions	2	3	4	5
3	In my company, the competencies of important positions are based on the basis of the desired output	2	3	4	5
4	In my company, the capabilities of key positions are based on the requirements of the current and upcoming projects	2	3	4	5
5	My company develops an inventory of available key positions	2	3	4	5

Talent acquisition

1	My company prefers to identify talent within the organization	2	3	4	5
2	My company uses an employer brand to attract talent	2	3	4	5
3	The sustainability practices of my company support talent acquisition	2	3	4	5
4	The professional/social network of my company supports talent acquisition	2	3	4	5
5	Social media is an important source for my company to acquire talented people	2	3	4	5

Talent Development

1	Competency training of my company helps to acquire current and future job requirements	2	3	4	5
2	Technology supports me in performing my tasks	2	3	4	5
3	Challenging assignments of my company encourage me to learn	2	3	4	5
4	The job rotation policy of my company improves my skills	2	3	4	5
5	In my company, mentorship supports me in achieving excellence	2	3	4	5

Talent engagement

1	My company gives me autonomy in assigned tasks towards achieving organizational performance	2	3	4	5
2	Involvement in the process of decision-making improves my company's performance	2	3	4	5
3	My emotional attachment with the company forces me to work	2	3	4	5
4	Effective communication regarding clarity of my role motivates me to work with full dedication	2	3	4	5
5	My company trusts the integrity of talented people to work with full capacity	2	3	4	5

Talent Retention

1	My company provides career development Employees	2	3	4	5
2	Managerial support of the company inspires me to	2	3	4	5
3	The conducive environment of my company stay a longer period	2	3	4	5
4	Attractive compensation and benefit incentives Company	2	3	4	5
5	My company provides more avenues to high	2	3	4	5
6	My company applies a performance-based rewards motivate high performers to remain in the organization	2	3	4	5

Section II – HR analytics Adoption

Section II and III are from:

Zhang, H., Song, M., & He, H. (2020). Achieving the success of sustainability development projects through big HR analytics and artificial intelligence capability. *Sustainability*, 12(3), 949.

1=no/very low capability

2=low capability

3=moderate capability

4=high capability

5=very high capability

- (1) Our capability to use advanced tools (analytics and algorithms) to extract values of the big data is
- (2) Our capability to discover relationships and dependencies from the big data is
- (3) Our capability to perform predictions of outcomes and behaviors from the big data is
- (4) Our capability to discover new correlations from the big data to spot market demand trends and predict user behavior is
- (5) Our big HR analytics staff has the right skills to accomplish their jobs successfully.

Section III - Artificial Intelligence Capability (AIC):

- (1) Our capability for simulating human intelligence behavior in making prediction of customer decisions is

- (2) Our capability for developing human-inspired algorithms to predict customer behavior is
- (3) Our capability for developing devices to replicate human intelligence and other cognitive functions is
- (4) Our capability for developing AI for learning (the acquisition of information and rules for using the information), reasoning (using rules to reach approximate or definite conclusions), and self-correction is

Section IV – Level of HR analytics Adoption

Level of HR Analytics Adoption: [Adapted from Johnston and Warkentin (2010); Venkatesh et al. (2012)]

Venkatesh, V., Thong, J. Y., & Xu, X. (2012). Consumer acceptance and use of information technology: extending the unified theory of acceptance and use of technology. *MIS quarterly*, 157-178.

Johnston, A. C., & Warkentin, M. (2010). Fear appeals and information security behaviors: An empirical study. *MIS quarterly*, 549-566.

1=SD----- 5=SA

My organization is putting a policy in place to use HR Analytics

I am beginning to explore using HR Analytics

I am interested in using HR Analytics

I am recommending my organization invest in HR Analytics

I use HR Analytics for some specific tasks

Section IV – Performance

To measure the financial performance, the three items scale adapted from Henri (2006) was used and to measure non-financial performance the Eight-Item scale adapted by Teeratansirikool, Siengthai, Badir and Charoenngam (2013) was used. The responses were measured using a five-point Likert scale ranging from strongly agrees (5) to strongly disagree (1). This scale shows a satisfying reliability coefficient alpha of 0.858.

Financial Performance

1. My organization profit increase gradually within the last 3 years
2. My organization sales volume increase gradually within the last 3 years
3. My organization return on investment increase gradually within the last 3 years

Non-Financial Performance

1. The number of new product in my organization increase within the last 3 years
2. My organization market share increase significantly within the last 3 years
3. My organization market development increase significantly within the last 3 years
4. My organization quality of product/services of organization increase within the last 3 years
5. My organization employee commitment or loyalty to the organization increases within the last 3 years
6. My organization employee productivity increase within the last 3 years
7. My organization personnel development increase the last 3 years
8. My organization employee job satisfaction increase the last 3 years

Section V – Demographics

Age

21-25

26-30

31-35

36-40

41 and above

Gender

Male

Female

Prefer not to say

Other

Highest Educational Qualification

Higher National Diploma/BSC

Diploma

Master's Degree/Above

Other

Experience on the job

less than 1 year

1-5 years

6-10 years

11-20 years

Above 21 years

Position/Rank

Junior Staff

Supervisory Staff

Managerial Staff