

# HR Analytics Responsiveness in the Times of COVID-19

\* *Rekha Bishnoi*

\*\* *Poonam Arora*

## Abstract

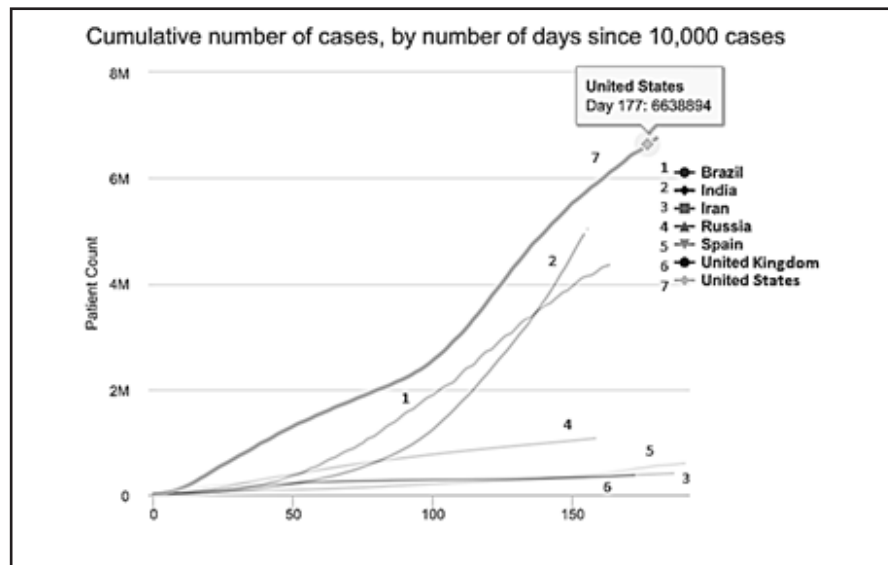
HR Analytics in an era of pandemic is playing a vital role in aligning all the functions of HR processes towards business outcome and giving competitive advantage. Disruption in economy and business has impact on both employers and employees in various ways. This becomes important to gauge the impact of COVID-19 and relevance of HR Analytics in the present era. This paper attempts to find the relevance and responsiveness of HR Analytics in remote working. There are different challenges in front of organizations due to sudden outbreak of Coronavirus. This paper depicts how HR Analytics is playing a crucial role in tapping COVID infection among employees and managing employees at worksite and remotely implementing various HR analytics strategies.

**Keywords :** COVID-19, HR analytics, people analytics, prediction

## I. INTRODUCTION

The number of COVID-19 confirmed cases surpassed 12 million worldwide in July 2020, with the death toll exceeding 5,50,000 (Fig.1). South America has become an epicenter of the pandemic, and cases continue to rise in

emerging markets such as Brazil, Russia, and India. Around 55% of confirmed cases have recovered globally. In the past also, a century old Spanish Influenza that caused 50 million deaths failed to teach us about the 'Humane' in Human Resources, despite warnings from the World Economic Forum and Harvard Global Health



**Fig. 1. Cumulative Number of Cases by Number of Days Since 10,000 Cases**

Source : [www.worldometers.info](http://www.worldometers.info). [26]

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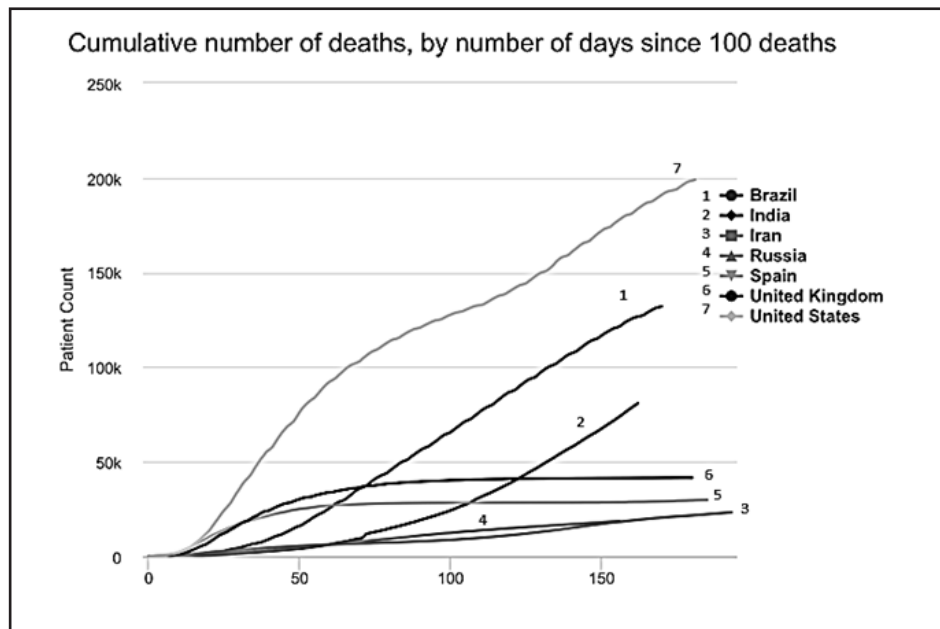
\* R. Bishnoi is a Research Scholar at the School of Management, The North Cap University, Haryana - 122017.

(Email : [rekhabishnoi3@gmail.com](mailto:rekhabishnoi3@gmail.com))

\*\* P. Arora is Assistant Professor with School of Management, The North Cap University, Sector 23 A, Gurugram, Haryana - 122 017.

(Email : [poonam2127@gmail.com](mailto:poonam2127@gmail.com))

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**Fig. 2. Cumulative Number of Deaths, by Number of Days Since 100 Deaths**

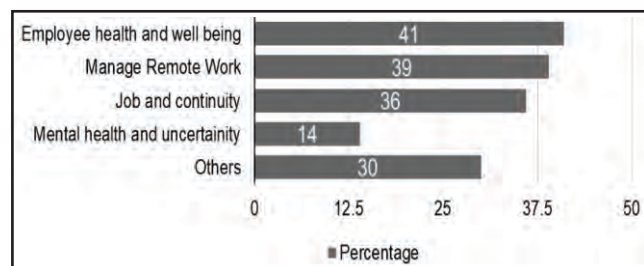
Source : [www.worldometers.info](http://www.worldometers.info). [26]

Institute, but COVID-19 did! Coronavirus has created an immense shock for every part of the world including economy, health, business, governments, and communities. In the context of business, the major impact of Coronavirus seems on company financials condition, company culture, employer brand, and employee value propositions as well as the health of communities and societies in which they operate. In COVID-19 era, management everywhere was wondering and struggling to bring people back to work and providing essential tools for remote working. In a pandemic, a chief people officer can make or break a company's business. HR people capable of analytics can help to guide affected organizations in navigating towards greater capabilities, better positioning in competitive markets, and becoming responsible corporate citizens. Nearly half (46%) of organizations are implementing remote work because of the epidemic [15]. All these facts led researchers to investigate more about responsiveness of HR Analytics in COVID-19 era. Fig. 1 and 2 show the number of cases and deaths respectively.

## II. LITERATURE REVIEW

The COVID-19 pandemic has impacted not only companies but also employees who struggle with

productivity, mental health, and engagement issues in this dramatic shift [12]. Due to this crisis, the role of HR has become more critical and it needs HR measurement to encourage talent, provide psychological safety to employees, deliver learning and growth, and creating the 'right' culture and engagement. HR analytics aids organizations to better understand the impact of COVID-19 on employees and to develop the most effective HR strategies to combat productivity loss in this pandemic. Survey of over 75,000 employees worldwide says that around 71% employees are concerned and 60% people have low work life balance. Moreover, there is productivity loss of 25–50% people due to other distractions [14]. So, it becomes important to identify what works in a particular situation and what doesn't. There is emergence of need of integrating public health



**Fig. 3. Joshbersin Survey**

Source : [Joshbersin.com](http://Joshbersin.com) [11]

data into HR analytics to gain insights about employee health and to predict their potential return to work. Moreover, companies are using HR Analytics to lay off current employees who share same kind of responsibilities and ultimately deciding about critical and trivial employees.

### III. TOP HR PRIORITIES

Companies like Service Now say that HR should put itself in three areas which require utmost attention, that is, communication, remote work, and reporting. The cloud computing company immediately developed a global response team (led by the CIO) and created a set of channels for communication, tools for remote work, and daily reporting capabilities on infection, location, and information about work from home.

At the same time Joshbersin [11] survey (Fig. 3) reported that HR organization's response has fallen into four important areas: physical health and wellbeing, followed very closely by remote work, and then quickly followed by issues related to jobs and work continuity, and finally, an urgent need for mental health, resilience, family support, and dealing with uncertainty. In addition to this, according to Economics Times [22], nearly two dozen companies like TCS, Dabur, Flipkart, Ola, Axis Bank, Bank of Baroda, Vedanta, RPG Group, EY, KPMG, Panasonic, Siemens, Deloitte, Microsoft, WiproNSE 2.24%, ITC, AMD, Tata Steel, Schneider India, Dalmia Bharat Group, Accenture, Swiggy, Motilal Oswal Financial Services, RBS India, BigBasket, and Welspun Group, said saving human capital and wellbeing of employees is the most crucial task before their managers and HR leaders.

Deemed to emerge into one of the most difficult global economic situations since the Second World War, the aftermath of the newly rampant and virulent strain of the Novel Coronavirus, (COVID-19) is soon going to change the way one looks at businesses as well as employment. HR data and analytics are tools that are necessary during this time to ensure leaders can predict trends and make informed decisions when strategizing for an uncertain future.

### IV. OBJECTIVES

The main objectives of this study are :

(1) To identify the relevance of HR Analytics in an

organization in the COVID-19 era.

(2) To study the various challenges faced by different sectors due to COVID-19.

(3) To identify responsiveness of HR Analytics in the times of COVID-19.

### V. RESEARCH METHODOLOGY

This research paper is framed and based on qualitative research method. The main aim is to understand and explore impact and responsiveness of HR Analytics in various companies and how HR Analytics can help to manage the crisis of COVID-19. For this, secondary data sources are used and reviewed in a systematic form. Various excerpts from several organizations internationally and nationally show how HR Analytics is responding to the outbreak of the pandemic since December 2019.

### VI. RELEVANCE OF HR ANALYTICS IN COVID-19 ERA

#### A. Analytics for Measuring the Impact of COVID-19 on Employees

Due to unexpected and continued growth of Corona virus, companies need to take extreme care of employees' health and well-being. HR Analytics can help show the pattern of COVID-19 and impact on workforce. Recovery from COVID-19 will also be gradual and all this information about COVID-19 status of employees can be generated with HR Analytics.

HR managers face difficulty in answering questions like:

- ↳ What percentage of employees will be efficient if switched to work remotely?
- ↳ What percentage of employees are currently not away from work due to COVID-19?
- ↳ What are infection rates in different zones of the company?
- ↳ What percentage of productivity has been lost due to COVID-19?
- ↳ What is the trend in employee infection rates and how do they compare to the relevant country/state/province?
- ↳ What is the risk level of employees on various factors like area, age, sex?

✎ How many employees need to be laid off due to COVID-19?

✎ How many infected employees have recovered and are back to work?

✎ How much time is required to achieve optimum productivity after COVID-19?

All these questions need data support and need to be answered in a sophisticated manner [4]. Here, HR in pandemic era gets tricky and needs more data than expected. Till now HR Analytics was collecting data on basic points, but to be responsive HR needs to collect event based data on employee health, quarantine status, infection status, and start/stop work (when remote) because of illness. Integrating this data with existing data will create a tracker on current status of employees and thus, analyze the impact of COVID-19 on business outcomes.

New key metrics need to be developed :

✎ Regional infection rates

✎ Currently working percentage

✎ Working from home percentage

✎ Active, quarantine, infected, recovered by age, location, and department

✎ Ability to work from home percentage

✎ Lost productive hours (key here are the dates when people stop and return to work)

✎ Days from infection to recovery

✎ Number of reinfections, reinfection rate

### ***B. Relevance of Analytics in Mental Wellness***

The spread of Coronavirus has caused stress to people around the world and for companies it has put employee benefits and programs under a microscope. The benefits of mental health was an area which did not show up in the dashboard and has not even been tracked yet [10]. The long term approach for employee benefit aligns with business outcomes [25]. Many companies are investing in mental health first aiders or mindfulness courses to support employees.

Lysithea, Hitachi's integrated human resources solution used stress prediction model by performing machine learning algorithm on the data obtained from employees. The company basically used different

techniques on employee data like logistic regression, Gradient Boosting, Random Forest, Deep Learning, and Neural network to find out the probability of an employee to be affected by mental illness. Some of the algorithms are capable of finding the reason behind employee stress. These prediction models can be applied to data that was not used in developing the model to assess how well it could identify employees having mental health reasons. Hitachi [17] has systematized the process of using the latest collected data to revise the model each month based on current working practices and other aspects of the workplace environment and to issue new predictions for next two months.

### ***C. Relevance of Analytics for Employee Engagement in COVID-19 Era***

COVID-19 has put an unprecedented challenge in front of organizations to keep their employees engaged during these tough times. Job security is uncertain and the situation got worse causing huge stress and anxiety among employees. Organizations need to follow the 4Cs – communication, caution, care, and compassion to engage employees in pandemics [19]. Companies may teach yoga and have group exercise programs online. Some innovative companies chose to teach cooking classes, and one company has launched a “happiness challenge” for people working at home. Moreover, Global Tech Company took the Friday “Beer Bashes” online [11].

### ***D. Relevance of Analytics for Employee Training and Learning During COVID-19***

Learning and development is a key enabler of organizational growth and change. COVID-19 era requires an agile learning and development strategy to minimize business disruption in this tough time. Showing empathy to staff and understanding of their problems and concerns, which could improve organizational performance. Communication and mindfulness is needed to focus for training [24]. Emotional intelligence training will enable managers to combat stress. Moreover, McKinsey [2] predicted that 14% of the global workforce would have to switch occupations, or acquire new skills by 2030 due to emergence of automation and Artificial Intelligence. Additionally, employee's critical digital and cognitive capabilities, their social and emotional skills, their adaptability and resilience needs to be developed for

remote workspaces. Due to COVID-19, there is adoption of fully digitized learning approaches via live video and social sharing. There is relevance in measuring the impact of remote work on collaboration on productivity. Remote working in COVID-19 requires a lot more than connectivity and overall productivity. Work from home can be effective if organizations extend all the required facilities to employees including collaboration tools, working platforms like cloud, server, and accessories. People analytics have capabilities to reveal challenges encountered by employees while working from home. People analytics collects various real time data points like diversity inclusion, level of interaction, and communication between teams, time tracking of working, monitor behavior of employees, discovering patterns about employee progress, or any lack thereof [20]. For example, sociometric analysis can measure how social relationships affect employee productivity. In addition to this, Zoom, MS TEAMS, Miro, Skype, Mural, Trello provided various facilities to companies to conduct virtual collaboration [6].

#### **E. Challenges for HR in COVID-19**

COVID-19 has created such circumstances of disruptions to life and work which is more profound than peoples' imagination. Moreover, the organizational structure and processes are almost unprepared to combat such situation. Earlier crises like World War II, The OPEC Oil Price Shock of 1973, The Asian Crisis of 1997, and The Financial Crisis of 2007–08 impacted the global economy for five or ten years but this global crisis of pandemic seems unsure and can leave its imprints for one

or two generation [3]. Employees are battling a new set of distractions and experiencing an unexpected fusion of professional and personal life [6]. All these challenges have led to adaption to new environment to strike balance between various aspects of life. Both employees as well as employers are facing challenges due to the Corona virus pandemic. However, people analytics solutions are continuously upgrading their capabilities and now offer numerous ways to help address critical future-oriented questions like understanding the current state and the future state [5][6].

## **VII. TOP HR RESPONSES VIA ANALYTICS IN THE ERA OF COVID-19 PANDEMIC**

### **A. People's Wellbeing**

As COVID-19 pandemic is not allowing work in physical space and well-being of employees is top most priority for everyone, this has led to disruption of many new jobs like artificial intelligence for every function including HR. Companies like PwC have developed technology platform named *Be well, work well habit bank* that reminds people to stand up for short meetings, make timetable, to have adequate sleep, to spend some time with nature, and decide what not to do and to remain focused on their jobs [25].

### **B. New Blended Workforce of Human and Chatbot**

Companies are taking competitive advantage by using Virtual Assistant for their employees. A survey of around

**TABLE I.**  
**WORK FROM HOME (WFH) CHALLENGES**

<b>Challenge for Employees in WFH</b>	<b>Challenge for Employers in WFH</b>
Managing remote work	Employee communications
Uncertainty about job	Lack of agility, consistency, trust, commitment
Hardware and software issues	Employee engagement / collaboration,
	Process and policy compliance
Screen Fatigue	Contingency plans for critical roles
Distractions at home	Flexible work arrangement
Lack of paid sick leaves and other employee benefits	Lack of commitments
Policy changes	Team management at work place

Source: [6], [16], [21]



8000 global HR leaders shows that 50% of employees are already using some sort of artificial intelligence and up from 32% in 2018 [23].

Amazon Alexa for business, Nokia's MIKA, JIM by DBS bank have changed the scenario for some companies to impact employee productivity in work from home scenario. As 25% of workers will use a virtual employee assistant (VEA), consumer and business spending on Virtual Assistant speakers will be around \$3.5 billion in 2021 [7]. Moreover, such chat bots are helping in talent acquisition in high-volume jobs for

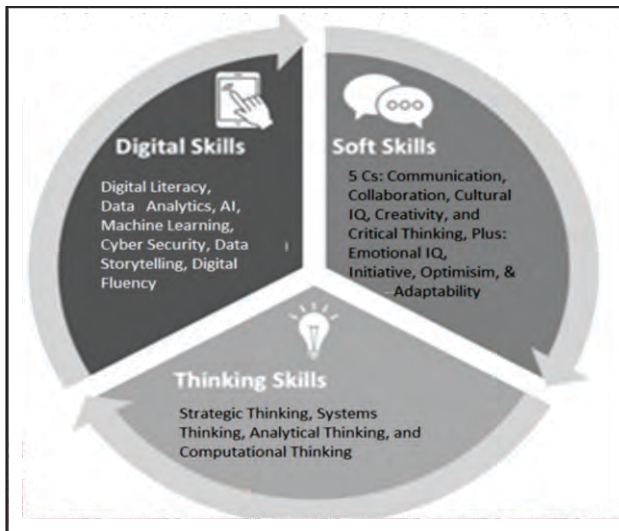
consumer banks like DBS, the largest bank in Southeast Asia. Such blending of bots with humans helps to enhance candidate experience when their screening time reduced from 32 minutes to 8 minutes, and almost 96% candidates queries are responded [9].

### C. Extended Use of Artificial intelligent in HR

Sexual harassment at workplace needs to be explored and technology has a lot to support it. An AI powered platform to report sexual misconduct in the workplace gives power to employees when they may have fear of retaliation. Companies like Da Vita uses AI Bot help to report discriminatory behaviour of employees while the sufferer is reluctant to report these events [25].

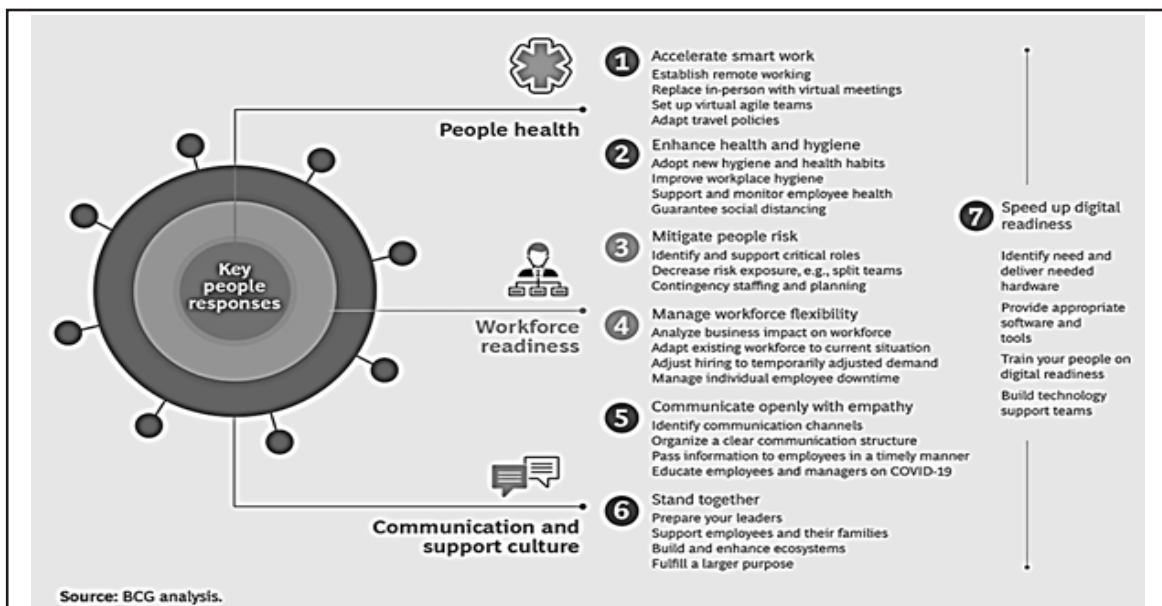
### D. Power Skills

Digital transformation in HR across all industries has created more jobs but these jobs will need digital, analytical, and human skills. So in the wake of VUCA world, employers are focusing on multiple skill development. In HR also, new hires are required to be good at coding as coding builds critical thinking skills in HR [13]. PwC collaborated with Coursera [5] in 2018 to develop courses to help people become more confident and diversified as the future is uncertain and is impacted by pandemics. According to Future Workplace [18], closing the skills gap survey found out three main skills,



**Fig. 4. Digital Skills, Soft Skills and Thinking Skills**

Source : Oracle and Future work [13], [18]



**Fig. 5. COVID-19 Responses for Seven key People Topics**

Source : <https://www.bcg.com/en-in/publications/2020/people-solutions-response-covid> [24]

that is, soft skills, digital skills, and thinking skills need to be developed by workforce to be stable in job due to any disruption (Fig. 4).

### **E. Corporate Training with Virtual Reality**

Till now, Virtual Reality (VR) was struggling to penetrate the real world of consumer market, but the pandemic COVID-19 has added impetus to adoption of VR in corporate training and development. By 2022, the VR training market will reach \$ 6.3 billion.[1]. Many companies are deploying employee listening tools to stay abreast of how workers are feeling at home and to gauge their sentiment on returning to the workplace. Platforms like Qualtrics, Yva, Perceptyx, and Limeade offer such survey tools, some of which include artificial intelligence capabilities to make it easier to compile and analyze survey results [27].

## **VIII. SUGGESTIONS**

For companies that have slipped in HR analytics efforts during COVID-19, it is time to recognize that it is an essential tool that speeds up digital readiness to take back up. Companies need to focus on using technology, collect real time data, integrating various platforms, designing new metrics that can help to refine data and generate valuable insight possible from a broad range of KPIs. In addition to this, research related to HR Analytics response is needed to be evidence based and context specific.

## **IX. CONCLUSION**

In today's scenario, COVID-19 pandemic has devastated the world economy and the impact would continue for several years. 90% of companies like Google, Amazon, Facebook, Accenture, Wipro, TCS, and other IT companies have decided to operate virtually but several sectors like banking, FMCG, hospitality, tourism, manufacturing, logistics, export, and imports witness hard challenges hit places going online. Moreover, digital platform companies are facing various challenges and they need at least 12 months to recover [8].

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## About the Authors

**Rekha Bishnoi** is a Research Scholar at the School of Management, The NorthCap University, Haryana. She is pursuing research in the domain of human resources. Her areas of interest are People Analytics, Workforce Analytics, and Rewards and Incentives.

**Dr. Poonam Arora** is Assistant Professor at The NorthCap University. She has 10 years of experience in academia and industry. Dr. Poonam Arora's qualifications include a Ph.D. in the area of Organizational Commitment, and M.B.A. (HR). She has ten years of teaching experience, including corporate experience. She has written more than 10 research papers and case studies for prestigious international journals.