# Covid-19 Pandemic: Need for Businesses to Incorporate Human Resource Information System (HRIS)

Moneswari Boro\*, and L. S. Sharma\*\*

#### ABSTRACT

The most critical goal for businesses is to strike a balance between office productivity and employee morale. The Covid-19 issue has disturbed the professional community, worsening the complexities of human resource management. Faced with this, technical advancements are speeding up, and a plenty of apps and HRISs are being developed to make Human Resource (HR) teams and workers' lives simpler and easier. In an age of emergency digital transformation, the goal for businesses is to keep the modern job organisation and its operations alive and well through digitalization. As a result, organisations of all sizes are raising their budgets for restructuring and adopting HRIS in order to comply with the covid-19. This is a theoretical paper that discusses about the various benefits of HRIS based on secondary data. An effort is made to broaden awareness about HRIS capabilities throughout Covid-19 pandemic. The article gives an insight about HR departments short-term and long-term objectives throughout Covid-19.

**Keywords:** Human resource information system (HRIS); Human resource (HR); Digitalization; Covid-19 pandemic.

#### 1.0 Introduction

With the advent of mass teleworking in industries, human resources played an important part in what has been known as the "new-norm." For them, it's about allowing workers to work from home while also promoting their well-being and maintaining a positive connection with the firm. Many businesses have been required to unlock work in order to make it more flexible as a result of their confinement. The definition of "work from home" has shifted dramatically. Teams who have had to quickly adjust to new digital technologies now have access to new digital tools (Talentia solutions, 2021). Businesses have been compelled to alter their business models. However, the true meaning of flexible employment lies not in the place or tools, but in the transformation of labor productivity.

Managing an office floor of hundreds of thousands of workers at a time when social distancing and employee wellbeing issues are outpacing the fundamentals of conventional Human Resource concerns including efficiency and human relationships (Sharon, 2020). Human Resource Information System (HRIS) technologies and systems, which have already seen a global digital revolution as a result of millennials' rising demands and digital technology, are now experiencing a much greater disruption. The sector is now on the lookout for new ways to strike a balance between rapidly shifting workplaces and planned job outcomes (Talentia solutions, 2021). Changing times necessitate a significant change in job policies and procedures. Managing workers is one of the most difficult obstacles that businesses face. When an employee's job, productivity metrics, and position become unpredictable as a result of health preferences, economic uncertainty, and shifting social expectations, this problem can become increasingly more complex (HR & HRMS Tech press release, 2020).

<sup>\*</sup>Corresponding Author; Research Scholar, Department of Management, Mizoram University, Aizawl, Mizoram, India. (Email: boromoneswari@gmail.com)

<sup>\*\*</sup>Professor, Department of Management, Mizoram University, Aizawl, Mizoram, India.

It all started on March, 2020 when the covid-19 pandemic outbreak dismantles the final remaining impediments to digital transformation. The pandemic's impact on organisations throughout the world was huge; affecting the most valuable resource i.e., human beings in every organisation, which was the virus's primary target (Talentia solutions, 2021). Human resources have been raised to the most crucial operational department in any organisation; people are what matter most, and safeguarding them while continuing to trade was the top concern of any organisation (Amodeo, 2021).

# 1.1 Objectives

To explore the need for businesses to incorporate human resource information system (HRIS) during and post COVID-19

## 1.2 Methodology

The use of an information system from the user's point of view does not work in itself; rather it provides the user with a beneficial tool to work. The study is carried out based on the survey reports published by various online sources. The study also attempts to explore the need of HRIS in businesses in the new-norm era. This paper is exploratory in nature with theoretical evidences based on secondary data. Secondary data was obtained from a number of research papers, survey reports, news articles, e-papers, industry news and blogs searched through internet.

## 2.0 HRIS: A Key Tool for Human Resource Department

As a result of COVID-19, HR administrators are continually forced to take the next move in order to keep workers comfortable and keep their organisations running smoothly (Sharon, 2020). Some basic information like what percentage of our employees can function remotely if necessary? What percentage of employees had already switched to operating remotely as a result of COVID-19? What's the general theme when we develop this capability? What is the total length of time that workers are out due to COVID-19 - sickness or otherwise? (Strategic solutions, 2020). This is when things get complicated, and HR need to gather more data in addition to what they already have. This would almost certainly include input from managers, with HR serving as the core hub. This information can ideally be collected and stored inside HRIS, but it's possible that HR have to start with a spreadsheet because HRIS does not have the requisite fields for everything that need to be track outside conventional absence and availability data (Butler, 2020). Organisations today are looking for solutions to improve employee productivity, tax filling problems, timely payment of wages, optimizing labor cost and to achieve these, organisations has been collaborating HRIS software companies and in the process some key areas of study has been identified viz., access to multiple devices, customization issues, excess deployment time, cross border issues relating to wages and technological integration according to a white paper on "HRIS software market- critical pain points overview."

## 2.1 Features of HRIS

HR professionals face a major headache when it comes to feature customization. Several HR professionals are looking for specific features in a platform that will be beneficial to them. However, they usually end up paying for the entire platform, including features that they don't need (ATR report, 2020). Organizations must take steps to minimize business interruption and safeguard personnel. Now is the time to assess existing technological capabilities (Robberts, 2020).

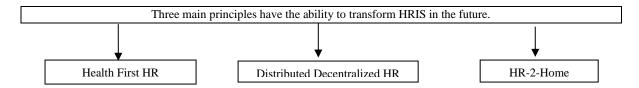
Table 3.1 Features of HRIS

Sl. No.	Feature	Assist with
1.	Organisational charts	Organizational charts based on direct and indirect reporting, as well as the total number of positions at each organisational level, are available.
2.	Chatting in real time	By connecting to WhatsApp, organisation can reduce the communication costs.
3.	Maker checker facility	All employees can keep updating their information as needed, decreasing the HRD's data entry workload and ensuring a clean and validated database.
4.	Gallery	Assignment, poll, suggestion box, contacts, and home page message, among other things can be handled from the portal's main page.
5.	Automatic allocation	HRIS allows to auto-assign all workers based on several hierarchies such as company, department, designation, location, and so on. Manual assignment is also possible, as well as the import of assignment data.
6.	Inter-company transfers with the same employee code	The HRIS procedure is made extremely simple.  When an employee is transferred from one organisation to another, data such as leave, attendance, claims, wages, and investments are automatically transferred. Options to preserve the previous employee code or to give the employee a new employee code are also available after which an employee is immediately assigned with all new position's regulations.
7.	Employee networking features	Employees, a private and public photograph gallery, and an address group are all available in HRIS (to be used for calling or sending emails),
8.	Reporting Chart for Employee Positions	It features a terrific technique of showing employee reporting charts by expanding or collapsing them according to preferred perspective, which includes the employee's photo, classification, and a brief bio. It creates a tree structure as well.  Dual reporting is also an option. If a CEO has both a manager and a driver reporting to him, the driver will be significantly lower in the organisation than the manager.
9.	Employee code pattern	Any permutation combination based on hierarchy may be used to build an employee pattern.
10.	Personal data	At any moment, one can make changes to his/her personal information, which must be approved by the individual involved.
11.	Search Buddy facility	One can simply search employees in the organisation and know their data like department, designations, location, cell number, email id so that they may immediately get in contact with them for certain problems
12.	Provision to manage the list	It has a feature that allows keeping track of all the paperwork that need to be filed by all the workers. Facility to preserve a systematic list of all academic, past employment experience, and other papers.
13.	Standard forms	It has the ability to upload standard forms such as Form 16 so that when an employee signs in, he can see his Form 16 filled out with his own information and download it anytime he wants.
14.	Visibility of documents	Only personnel to whom it is relevant can read policy papers such as travel, leave regulations, and so on.
15.	Survey or poll	A client may construct any type of survey or poll with graphical results using the ability to build many surveys in categories and subcategories.

Source: Adapted from HR Mantra (2021) and Employee Connect (2021)

## 2.2 Principles of future HRIS

A company that is unprepared for future upheavals may discover that its whole HR Management spirals out of control and becomes a nightmare in the event of an unforeseen and unanticipated tragedy. When these mounting worries are combined with the current pandemic-related disruptions, a more complete image of the HR industry's future trajectory emerges, arising some issues that have the potential to become global focal areas for the HR business in the future years. Therefore, there are three main changes in current HRMS practices that will increase in the next months and years, requiring HR professionals to adjust their policies and attitudes (HR & HRMS Tech press release, 2020).



Source: HR & HRMS Tech press release

- I. The corona virus pandemic has brought the importance of health monitoring to light. HR administrators have begun anticipating this need and are preparing to meet it with the assistance of cutting-edge HRIS technologies that priorities employee wellbeing as one of the most critical data points to monitor. Employee health monitoring has the power to alter the way HR practices are structured in the workplace. HR clinicians will priorities short-term health screening such as temperature, general health criteria, psychometrics, and health precautionary steps as a result of Covid-19. This condition has now been bolstered by federal regulatory enforcement and an organization's general corporate continuity criteria. As a result, a Health First HR solution will emerge, which will become a key component of the HR policy process. Mental hygiene, a satisfaction quotient monitor, physical fitness dashboards, and other concepts that offer a cognitive insight into workers can act as a critical barometer to help assess an organization's human resource management capability. Employers are searching for digital HR features that can better facilitate social distancing and contactless employee scheduling to help with the back-to-work process. Global HRIS pioneers such as Sage HRMS, Bamboo HR, Orange HRMS, and others have also implemented numerous automated methods of handling workers, focusing on touchless staff attendance control and social distancing (Sharon, 2020). In India, the industry has grown in a similar manner. Startup HRtoolkit (2021) Pocket HRMS, one of the country's most well-known HRMS providers, has introduced Selfie Attendance with Facial Recognition as a modern and creative way to accomplish this. This gives workers the biometric protection of facial recognition while also allowing staff to use contactless mechanisms. Being able to monitor employee wellbeing in real time, promote workforce fitness, and analyse employee Health First HR efficiency indicators on a regular basis would become critical in driving every company to a healthy workplace atmosphere and, eventually, even higher productivity rate.
- II. The year 2020 was expected to be the pinnacle of the tremendous digital advances that have made in the previous decade, ushering in the four corners of technology (social, mobile, analytics, and cloud (SMAC) through numerous sectors and organisations. That was going to be the start of a new decade, which will have brought in significant changes in operating methodologies and how businesses interacted with their human capital. Nobody might have predicted, though, that the year would be remembered for enforcing limits on organisations' otherwise usual operations in order to impose social distancing and other government policies. The implementation of work-from-home policies is the most significant development that has accelerated as a result of this. Despite the fact that this idea is not recent, its success has skyrocketed, and it is now practiced religiously all over the world. It has caught the private sector off guard, as nearly all workers are no longer required to work in the workplace. Fortunately, the introduction of numerous cloud-based HRIS technologies has simplified and simplified the management of a company's employees (Employee Connect,

2021). This has placed HR professionals in an unusual, albeit intriguing, role. They don't need to manage their employees from their headquarters, branch, or even a separate agency. Managing staff outside of the office appeared impractical, optimistic, and modern a decade ago. However, the year 2020 has ushered in an HR revolution, permanently changing the way HR professionals work. The flexibility of cloud-based HRIS has opened up new avenues for becoming platform and location agnostic. As a result, a new paradigm known as Distributed Decentralized HR is emerging. HR & HRMS press (2020) HR administrators in different regions in tier II cities, or even HR executives in distant areas, will be able to oversee staff and answer requests flawlessly in the future. The need for a centralized human resource management system is slowly diminishing, opening the way for a more decentralized HR department to emerge.

III. While employee health management and HR decentralization are two ideas that have the ability to change the HR space, a third trend, HR-2-Home, emerges from the two. Employees and managers alike have benefited from the increasing popularity of working from home, with many businesses now changing job practices to make them more adaptable to working from home. Employees are no longer restricted by their residential locations or their distance from the workplace. As a result of the extended scope and diversification that this transition provides, HR practitioners' horizons have been broadened. Today, more and more workers are heading to a home-based setup, and conventional office work is losing ground in the business world. Despite the fact that this way of working has been around for a long time, it has seen a dramatic increase in popularity as a result of COVID-19, and the results are getting clearer by the day. Employees are becoming more capable of managing their job requests thanks to the emergence of new human resource management technologies such as self-service portals, HR chatbots, alerts, internal social networks, and sharing, to name a few. Apps that allow project management, time tracking, and much more through web portals and smartphones make team planning much easier. However, if such items go unnoticed, they may become a source of worry. Working from everywhere has never been easier thanks to this innovative method of working. However, it allows for human error, mismanagement, and violence. As a result, need for better technologies that will overcome barriers to job performance management and subject them to adaptable productivity indicators are required. For optimum work output outcomes, these metrics may be established, correctly described, and implemented consistently. With the assistance of HRIS apps, businesses can flawlessly communicate with their workers and bring their HR to the employee's new workplace i.e., home. HR experts would need to be technologically synchronized with the future with the HR-2-Home solution. This will allow for the efficient implementation of resources such as answering questions about appraisals, goal-setting, self-help, team development, preparation, and career advancement. Employees could receive HR counselling at their homes or at their favorite workplace site (HR & HRMS press, 2020).

These three main ideas have the ability to transform HRIS in the future. While the future remains uncertain, foreseeable developments could usher in the most significant shift in HR since the advent of cloud services, with new frontiers opening up as a result of the implementation of mobility, artificial intelligence, bots, and machine learning (HRPS blogs, 2020). The real struggle is recognizing the magnitude of these challenges as well as the possibilities they offer. These principles' innovative and dynamic strategies have the potential to do more than just push HR management to the next level. It has the potential to achieve a previously unheard-of equilibrium between employee wellbeing, organisational performance, and global scope.

# 3.0 Benefits of HRIS During and Post Covid-19

HRIS has many advantages including HR data centralization for improved corporate performance and HR activity monitoring. HRIS is available 24 hours a day, 7 days a week, and it's accessible from any online browser (Talentia software, 2021).

**Table 4.1 Benefits of HRIS** 

Sl. No.	Benefits	Uses
1.	Employee Applications	Employees can apply for leave, On Duty, Over Time, attendance
	r system rr	regularization, and reimbursements and employers can authorize or deny
		such requests.
2.	Send a text message or make a	Employees may use their mobile phones to contact or send SMS to
	phone call	someone without having to store that information on their phones or
	F	memory cards.
3.	Programs of Instruction	Employees may register for training programmes via the company's
		website.
4.	Obtaining Tickets	Employees can generate request tickets for any IT, ride, or administrative
		helpdesk and receive SMS notifications when they are closed.
5.	Survey	Employee self-service can allow employees to access and update their
		personal details, request time off, connect with coworkers and HR
		professionals, and display their schedule information. Employees and
		administrators benefit from self-service websites because they are always
		available from any mobile device.
6.	Creating Employee Codes	One of the most critical aspects of HRIS module is dynamic employee
		code generation, which generates a code pattern automatically based on a
		combination of alphabets or serial numbers.
7.	Official Information Page	The official information page of the human resource system shows
		hierarchies such as the organisation and place he refers to, as well as the
		date of confirmation and retirement.
8.	Personal Management	Employees can change their personal information, such as their marital
		status, interests, athletics, extracurricular events, and honours they have
		won.
9.	Academic Information	Apart from that, the work history, academic, and qualification-related
		information of the employee may be processed.
10.	Disciplinary Procedures	Disciplinary actions such as bans, pay reductions, and terminations may
		also be maintained in HRIS.
11.	Reports on Human Resources	It is very simple to find employees based on criteria such as age and
	Management	experience in the company and to generate HRM reports for them. By
		making models, one can deliver email and SMS to their employees.
12.	Structure of the Organization	It includes a robust org chart maker that displays the number of locations
		where the organisation is located, as well as a list of divisions and
		designations.
13.	Reporting in Great Detail	A comprehensive reporting map is also available, which shows employee
		identities, designations, and snaps, as well as their reporting relationships.
14.	Exit Form	When an employee exits the organisation, perform an exit interview after
		filling out the exit form, which requires to list the reasons for the
		departure, the date of dismissal, and the date of separation, as well as if
		someone wish to preclude from logging into HRIS from this point
		forward.
15.	Checker Facility for Makers	Employees can go online and edit their personal information, such as
		mobile phone numbers or addresses, or when they get a new certification,
		using HRIS. This detail is then escalated to HR, who must then
		authenticate the modified data before it can be updated in the data bank.
16.	HR Analytics Software	A powerful HR analytics tool is included in the HRIS to aid in employee
		data management.

Source: Adapted from HR Mantra, 2021

## 3.1 HRIS for remote and onsite workforce

Amodeo (2020) in the article HR Transformation mentioned following COVID-19 suggests that HRIS can be heavily used to ensure that the remote workforce is successfully handled. Organizations would effectively determine whether or not to continue working from home, work in the workplace, or work from home and the office after COVID-19, with the majority of organisations opting for a hybrid of remote and in-office work. This may become a major challenge for HR management, which must figure out how to ensure their staffs are cared for in this modern and sometimes perplexing work climate. HR teams could depend on HRIS to reduce the burden of managing daily HR duties in order to effectively handle this new climate. This is accomplished by ensuring that HR administration will use an integrated electronic workflow system to streamline heavy HR operations to ensure that HR tasks are performed quickly and easily regardless of where an employee is located.

One way that HRIS may be used efficiently for the remote workers after COVID-19 is to create contracts or provide essential details that management needs to send to employees. Simply by using an all-online system, a manager may choose which employees they choose to receive respective details from and then send them. During the workflow process, HR departments can receive an automated notification to approve this, during which it may continue to be sent to employees (KPMG survey report, 2020). Finally, the employee can read and sign the documents, triggering an automated notification to the respective inbox. This is all achieved remotely in a paperless scheme, ensuring that the distributed workforce is easily looked after in the post-COVID-19 HRIS system.

Some of the major HR functions that are practiced within an organisation to ensure employees work productivity and their satisfaction are given in the below table.

Table 4.2 HR functions

Sl. No.	HR Functions	After COVID-19, HRIS can be used successfully to involve staff even more effectively
1.	Employee	than before. Employee retention rates are becoming particularly important to HR
	Engagement	agencies, and it can be seen that workers are more likely to leave in a typical market
		setting (post COVID-19) than during a global pandemic where workplace insecurity and
		risk are evident. In order to better involve workers, HR teams should use HRIS to analyse
		primary employee indicators such as productivity levels to ensure that employees are
		satisfied at all points of their careers within an organisation after COVID-19. These
		metrics can be identified by effective HRIS by interaction surveys, such as a pulse test,
		which is sent to workers on a weekly or monthly basis to determine their current level of
		happiness. The HRIS will also include detailed data that HR teams will use to determine
		existing levels of employee retention and, as a result, make recommendations that can
		ensure employee loyalty and satisfaction remain strong in order to keep an employee on
		board.
2.	Employee	Throughout the post-COVID-19 era, HRIS ensures that employee contact is a top
	Communication	priority. Employee contact from HR offices to staff is critical after COVID-19, when
		workers are mentally uncertain about the future. HR departments should use HRIS to
		effectively rally information from one person to another in order to effectively reduce the
		psychological fears that employees may have following COVID-19 and ensure that
		employees remain positive. This can be accomplished by an appropriate HRIS, which
		could have a notice board that shows critical information for a group of workers to learn
		and read. Furthermore, HR offices may use HRIS to deliver direct updates to staff and
		supervisors about something that needs to be answered or said. Specifically, the HRIS
		feedback mechanism will be successfully used such that once HR teams analyse key
		indicators for workers, they are able to efficiently relay their issues to the appropriate
		people, who can then take steps to either address the current problem or actively improve
		employees.

3.	Learning and	Post COVID-19, HRIS can be used more widely to ensure that workers are effectively
	Development	trained by learning opportunities delivered within a transparent HRIS framework.
		Following COVID-19, businesses must specifically identify all new practises or acts that
		worker must recognise and carry out. Furthermore, employee aspirations for career
		advancement are likely to have risen after COVID-19. HR divisions should use HRIS
		mechanisms to actively involve staff in learning and growth activities within the
		organisation to comply with this situation. This can be accomplished by using a highly
		efficient HRIS offer a forum for HR organisations to provide staff with learning and
		training courses to complete, which can then be analysed by HR teams to see how
		effective the activities were. Furthermore, effective HRIS post COVID-19 will
		effectively provide a platform for employees to identify development points that they
		want to achieve in order to advance not only their knowledge and skills, but also their
		careers, to which HR departments can effectively outline the steps the employee needs to
		take in order to develop by providing training and motivation along each step within the
		organisation.
4.	Recognition	HRIS may be used to streamline automated celebrations for workers, such as
	and Rewards	anniversaries of work within the organisation, or even to recognize and honour best
		performers in order to recognise and compensate them. HRIS can be used to strategically
		incorporate a compensation scheme focused on performance management by
		implementing incentives for the best earners in a sales team to motivate workers.

Source: Adapted from HR Transformation by Jake Amodeo

#### 4.0 Conclusion

The current COVID-19 scenario is transforming the way we live and work. The importance of technology and remote working has never been greater. An HRIS is made up of numerous modules that are deployed according to the company's individual needs. It has a high level of versatility and grows with the organisation. Because of the interoperability of unified platforms, businesses can schedule, monitor, and optimize global people operations using a single data base. Using HRIS can personalize employee interactions and use an engaging tool such as chatbots to help workers find fast answers to HR queries, all with highly configurable workflows that provide scalability and localization. Since every organisation has established the technology and infrastructure to manage employees working remotely, is the reason why a greater number of employees will continue to work remotely (HRPS Blog, 2020).

The study finds that HRIS has a wide range of applications (Talentia solutions, 2021). The HRIS database can be used as a central repository for all records since it allows for efficient knowledge sharing between HR processes and the HRIS information technology (IT) platform, such an interconnected platform for singular optimization. It can direct users and increase usability by using chatbots and voice activation. Many employees including those with disabilities, those who require flexible scheduling, those who have long travel times, and others, can benefit from working remotely. It's also great news for businesses. The lower the office overhead expenses, the more employees who can work remotely.

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