

Banking on AI for integration of Employee Services and Digital Finance

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Abstract: Artificial Intelligence (AI) has come up as the recent tool in every aspect of business globally. It can replace a large volume of manpower under Human Resources (HR) with minimum human-errors in routine HR jobs. Employee Services has a major role in HR to facilitate the internal customers of an organization. A good amount of man-hour is engaged, especially in a large organization, to execute these activities for a huge volume of routine work such as processing various claims, providing Compensation and Benefits, Travel Expenses, Medical bills, etc. and payment of other perks as well. Though digitalization has already been into practice for the last few years in most of the big organizations such as Multinational Companies (MNC) and Public Sector Units (PSU), the use of AI has become a necessity now to reduce the cost and minimize the execution time. Many organizations are already into developing and shifting these roles from employees to AI. Several discussions and studies are being done on the recent launch of various AI tools and their usage in day-to-day HR activities. There is still a gap in developing a system to connect Digital Finance with Digital HR for the benefit of employees and the organization. This study is all about identifying the factors affecting to develop and use of AI tools, which can connect these two. It encompasses various aspect of decisions, policies, guidelines and shift of job description from human to machine without employee's disengagement in top Indian PSUs.

Keywords: Digital Finance, Employee Services, Artificial Intelligence, HR Services, Digital HR.

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Introduction

In the current economic and technological environment, humans have crossed the digitalization platform and entered the world of Artificial Intelligence (AI), where various tools are developed and being used to execute the job and taking decisions on behalf of mankind. It not only helps to perform the job with accuracy, but it also helps to save time for routine work. Off course policy making and strategy still needs human intervention. Large organizations, viz Multinational Companies (MNC), Public Sector Units (PSU) and Govt. Organizations were recently shifted to digitalization in the last few years. With the launch of various AI tools, it has become a necessity for them to use these tools for high volume jobs. Both in Human Resources (HR) and finance, various AI tools have been utilized for execution of work. Yet there is a need to connect these two verticals to achieve synergic growth. Digital HR and Digital Finance must go hand in hand.

The HR professionals today are focusing on optimizing the combination of human and automated work to gain a simple, seamless, and intuitive work environment. It provides them with time for creativity, intelligence, and empathy to deliver an enhanced candidate and employee experience. [Source: Use of Artificial Intelligence in Human Resource Management: "Application of Machine Learning Algorithms to an Intelligent Recruitment System" Achhab, Saïda]

AI can be utilized in all aspects of HR, right from Recruitment to Talent Management and Retention and for the post-retirement

benefits of the employees too. Apart from various HR interventions, Employee Services (ES) play an important role in HR. It takes care of Compensation and Benefits (C&B) of the employees along with many Employees Engagement programs for them. It is important to note that the new generation is very particular about timely execution of these aspects to continue in an organization.

Similarly, Digital Finance is an application of AI tools for timely execution of finance job with utmost accuracy. Most of the large organizations have shifted to digital finance. The digital payment was just a beginning.

Relevance

While going ahead with the application of AI tools for connecting Digital HR and Digital Finance, the following basic questions arise:

1. Is there a need to connect Digital HR with Digital Finance?
2. What are the opportunities and threat involved in it?
3. What are the different aspects to be taken care while synchronizing Digital Finance with HR and Employee Services in particular?

To answer these questions, a detailed study is required to be conducted for a sample of organizations to arrive at a conclusion. This study encompasses various aspects of decision makings,

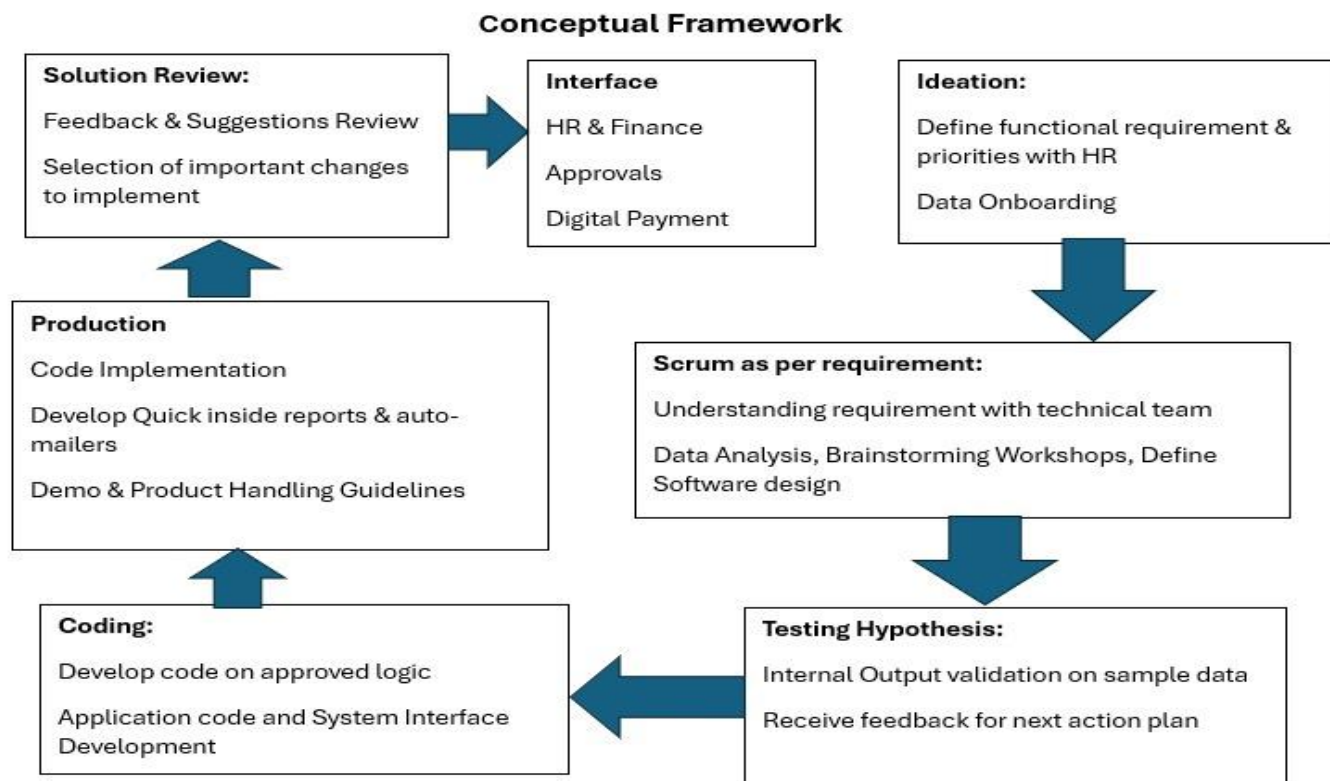
policies, guidelines and shift of job description from human to machine in top Indian PSUs. Care needs to be taken whilst application of AI tools so that employee’s engagement in the organization should not be negatively impacted.

Objective

With the availability of various AI tools, employees are prudent to use these tools for their day-to-day operations. Large organizations

need to develop a system where these AI tools are utilised properly with utmost care for digital HR and connect it with digital payment by finance. A good synchronization of Digital HR and Digital Finance will lead to faster execution of work and timely payment to the internal customers. The study suggests the precautionary measures to be taken for using AI and developing policy guidelines for implementation of the same.

Conceptual Framework



The above framework speaks about the methodology adopted to develop and implement the interface between HR process and digital Finance. Although the purpose of HR is solved manually, there is a need to pursue the ideation to identify the exact functional requirement and set the priorities for AI interface. Data requires it to be onboard. The complete data is made available to Information Systems, who are involved in developing and arranging for the scrum of software by way of understanding the requirement with the technical team. Data needs to be thoroughly analyzed in the brainstorming sessions to define the software design. The sample data is run to test the hypothesis with internal output and feedback is received for the next action plan. Then, coding is done on approved logic. These codes are applied, and the system interface is developed. The codes applied are implemented and a quick inside report is prepared and forwarded to the person concerned with the auto mailer. Demo is presented with product handling guidelines for the users. Then after, the feedback and suggestions are reviewed again with a selection of important changes to be implemented as per the suggestions. And finally, the interface is run between HR process and Finance, approval is taken by the competent authority, and the payment is made through digital finance. The entire cycle is repeated for each HR process for integrating Digital HR and Digital Finance.

Methodology

10 Indian PSUs have been identified for the study, where Employee Services Tools are being used for payments to the employees. Various HR policies and financial circulars were reviewed to study the same as secondary data inputs. Primary data is collected by taking feedback from stake holders through a questionnaire for effective implementation of AI tools for payment related to the Employee Self Services Scheme.

Discussion

In most of the PSUs, Employee Self Services (ESS) is implemented, where routine HR jobs are executed through the portal. On approval by HR function, the payment is directly made digitally by Finance to their employee’s account. These services are related to Compensation and Benefits, Travel Expenses, Medical bills, etc. and payment of other perks as well. A big junk of manpower is engaged for execution of this routine job where decisions are made based on written down HR policies. Approvals at different level require more of manhour and delay in final payment. Thus, intervention of AI tool is highly recommended to execute these jobs. However, if the policies and guidelines are not clear, it may lead to complications.

As artificial intelligence accelerates its integration into the modern workplace, organizations are re-evaluating their strategies to remain competitive and resilient. AI is recasting the work for accomplishing the task, presenting unparalleled opportunities for productivity, innovation, and growth. Yet, the adoption of AI technologies also brings forth pronounced challenges, including workforce readiness, skills gaps, and the imperative for ethical oversight and inclusive implementation.

AI integration offers immense potential, but its success lies in balancing innovation with a strong commitment to people. Organizations that prioritize training, upskilling, and employee well-being alongside their digital transformation efforts will emerge as leaders in the future of work.

There are benefits and challenges too while connecting ESS with Digital Finance. However, a mis-link can lead to financial mesh in a large organization. A system needs to be developed to audit the process from time to time to avoid a financial disaster to occur. A continual improvement in the process would be required for every typical case, where the integration is difficult or ambiguous.

The role of ESS has a wide spectrum. It operates in almost every field of HR. The following picture explains the applications of the same in various HR verticals.



[Source: Dynamics 365 Employee Self Services Integration Solution]

Right from Recruitment, Trainees Induction Module to Training Need Identification, Talent Development of Employees, payment of C&B, payrolls and other HR interventions, ESS is widely being used. However, many organizations have made it limited to a common platform for communication only.

With recent development of ESS portals, most of the top PSUs have shifted their HR activities through ESS portal only. It gives employee satisfaction and leads to transparency in the system. At any point in time, employees can view the status of their claims and progress of their bills through the system. Even the salary slips can be downloaded and the details about the loans and other perquisites are readily available for each employee. Various declarations viz. Property Return, Private Foreign Visit, Income Tax declarations, Declaration of Will, etc. can also be made through ESS portal.

[Resignation Request](#), Exit Interview, e-release and joining on promotion and transfers are a few other HR processes, which are being shifted and done through the portal. Tour, Tickets and Travel Expenses have already been implemented in most of the organizations via ESS portal. In fact, the ESS portal has proven to

be a successful platform between the organization and the employee directly for sharing information and updating records.

There are many other benefits of the Employee Self Service, which can be summarized and presented by the following chart.



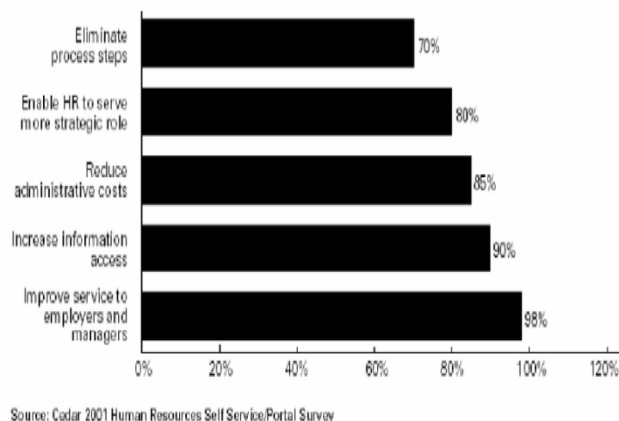
Thus, A wide range of HR operations that were previously performed via a paper transaction or a few online solutions can now be handled with a single gateway. [Source: <https://www.selecthub.com/hr-management/6-self-service-hris-benefits/>]

Most of the large PSUs in India have already implemented this. However, the AI intervention for execution is yet to be done for recommendations and approvals at various stages. Many of these organizations are now opting for AI tools especially for regular payments, viz. reimbursement of medical bills, other perks, booking of guest houses, travel expenses, etc. It makes the system unbiased with maximising efficiency and optimizing man-hour.

It also facilitates transparency in streamlining communication between the management and staff, thus achieving higher employee satisfaction. AI saves time and ensures data accuracy. It can be very effective in cost cutting and managing expenses.

For a PSU, there is much statutory compliance by HR, which are handled by Employees Relations department. HR Self Service can help ensure mandatory compliances by the Public Sector employees and can keep track on-line.

In a survey conducted for benefits to of ESS in 2001, the following observations emerged out.



[Source: https://www.researchgate.net/figure/11ustrates-the-five-main-objectives-that-are-reported-by-companies-introducing-e-HR_fig1_237293298]

By using AI tools for payment through Employee Self Service, the manpower cost can be reduced further with timely execution and minimum occurrence of error.

A survey was conducted amongst the employee regarding use of AI at workplace and the question was asked - How frequently do you leverage AI at work? The answer to the question was found as below:

A few times a year or less	5%
Monthly	13%
Weekly	37%
Daily	33%
Several times a day	12%

[SOURCE: FROM ADOPTION TO EMPOWERMENT: SHAPING THE AI-DRIVEN WORKFORCE OF TOMORROW, SHRM, 2025]

As regards feedback received from stakeholders, it is well accepted that there is a need to connect Digital HR with Digital Finance to save cost and time. Employees were agreed for intervention of Digital Finance through ESS portal.

There are many challenges to implement these tools as the format for entering the details vary for different organizations and there are chances of error to occur, while using AI tools. It is difficult to check on unauthorized and bogus claims through AI. The format needs to have very clear inputs with verification of bills, payments and other details. For example, if an employee is entitled for reimbursement of medical expenses, the limits and process must be defined clearly in the policy guideline.

A step-by-step guideline for different claims and declarations needs to be circulated to all concerned employees for effective implementation of the process. The following guidelines were studied in detail for Digital Payment being implemented in the sample organizations.

1. Furniture PC Mobile ESS Overview
2. How to apply for Furniture Advance in ESS?
3. How to take print out of the submitted Furniture Advance/Quotation
4. How to update Bill Details in Furniture Quotation/ Advance?
5. How to take printout of updated Bill Details for a Furniture Advance / Quotation?
6. How to apply for Furniture Claim in ESS?
7. How to take printout of the Furniture Claim?
8. How to apply for Furniture Maintenance in ESS?
9. How to apply for Furniture Buyback in ESS?
10. How to apply for Mobile Claim in ESS?
11. How to Take Print out of Mobile Claim?
12. How to apply for mobile buyback?
13. How to apply for PC Advance/ Quotation in ESS?
14. How to take print out of the submitted PC Advance/Quotation?
15. How to update Bill Details in PC Quotation/ Advance?

16. How to take printout of updated Bill Details for a PC Advance / Quotation?
17. How to take printout of the PC Claim?
18. How to apply for PC Maintenance in ESS?
19. How to apply for PC Buyback in ESS?
20. How to apply for PC up gradation claim in ESS?
21. How will PC /Furniture Approvers or dealing personnel approve the pending PC/Furniture/ Mobile claims?
22. Process Steps of Furniture/ PC/ mobile ESS
23. How to Upload Documents in ESS

Systems must ensure that the above guidelines are strictly followed so that the digital payment is errorless. Also, there is a need to educate the employees to use the portal correctly so that refusal/rejection or delay in payment of claims can be avoided.

Similarly, other portals like Learning and Development, e-Learning. Etc. can be developed and integrated with digital finance for updating records, nominations, payment of honorarium to the faculty and reimbursement of amount for online course fees, etc.

Integrating HR and Finance through AI can be very useful in many of such applications, where human intelligence does not actually require anymore. HR team can better utilize their professional knowledge and competence for improvement in the process rather than doing the routine job.

Artificial Intelligence is beneficial in the sense that it can improve public service delivery in South Africa as the HRM personnel is enabled to focus more on the strategic areas of management by taking over routine tasks, and that it helps minimize bias in public service recruitment and selection. In contrast, research on potential challenges has revealed that combining Artificial Intelligence and Public Sector Human Resource Management may pose a threat to white-collar jobs (Chilunjika et al., 2022).

AI is impacting the entire HRM process ranging from resource planning to talent acquisition to learning and development, performance management, reward and recognition, retention and job design(Chilunjika et al., 2022)

Let's take the example of an e-learning portal, where various online courses available on different platforms are linked to the e-learning portal of the employees. Interested employees can directly access the site and register themselves for the course and complete it. The approval for pursuing the course is through the e-learning portal. It is also connected with the digital finance for reimbursement of amount against the course fee. The report on the total number of courses completed by the employee is also recorded for future reference.

Here is another example of Learning and Development Portal for conducting a training program, which is connected to the digital finance for payment of honorarium to the faculties. Step by step process for the same is described below:

Process starts with creating a programme based on training need identification and analysis for category of employee such as technical staff, middle management, senior management, etc. Training Calendar is prepared by selecting the dates and venue. Faculty is decided and sessions are deputed to the concerned as per the approved list of faculties. Nominations are done by seeking through the TNI (Training Need Identification) or through the

functional recommendations. Now, the nominations are approved by the coordinator and invitation mails are sent to the participants and faculties. Administrative arrangements are mentioned in the mail for the benefit of the participants. Attendance is marked for each session and the feedback are collected for the session and the programme online. Finally, the payment to the faculty is processed and approved by the function and connected to the Enterprise Resource Planning (ERP) / System Application and Products (SAP) portal through interface of ESS and Digital Finance. The payment would only be done to the internal faculties and external faculties, who are already in the approved list as per the e-learning / Learning and Development portal.

Another example can be related to recruitment process, where many applications can be shortlisted in no time with the help of AI, noisy data can be easily removed. This way, an organization can improve the hiring process and reduce the cost of recruitment. Sometimes, we receive a large number of resumes and there is a possibility to miss out the one which best suits the job requirement. After reviewing application or resumes, HR approves the shortlisted candidates, and the next process begins only when the shortlisting process is complete. Till such time, the applicants must wait for the shortlisting to be completed or is at least sufficient. AI plays a vital role in completing the process. Once the candidate is selected, the compensation and benefits are directly connected to the pay role through the interface of digital HR and digital Finance.

The emergence of artificial intelligence (AI) engenders both prospects and obligations for entities endeavouring to exploit its functionalities. A subset of organizations is pioneering innovation by assimilating AI into their fundamental strategies and operational processes. However, the reality remains that the rates of adoption are markedly dissimilar. Numerous entities are contending with substantial barriers, including variances in workforce preparedness, intergenerational discrepancies in adoption rates and deficiencies in access to educational resources and technological tools. These challenges elucidate a pivotal concern for both employers and employees ensuring that the transition toward an AI-augmented workplace yields advantages for all stakeholders, rather than a privileged minority.

The proliferation of AI adoption continues, yet disparities persist. Almost half of the workforce in the United States (45%) indicated engagement with AI in their professional environments. Yet, the rate of adoption exhibits considerable variation across demographics such as age, gender, and industry. Younger individuals and males are disproportionately represented among AI users, revealing critical gaps that necessitate the formulation of equitable implementation strategies. Mitigating these disparities is imperative as organizations strive for widespread and inclusive adoption.

Artificial intelligence catalyses significant enhancements in productivity and quality of work. Among U.S. employees utilizing AI, the advantages are strikingly evident. A substantial majority (77%) asserted that AI enables them to achieve greater outputs in reduced timeframes, while 73% acknowledged enhancements in the quality of their work. These benefits are particularly pronounced in organizations that offer comprehensive upskilling and reskilling initiatives, thereby underscoring that investment in training is a pivotal factor in the success of AI integration.

Human oversight and collaboration are indispensable. A substantial proportion of the U.S. labour force expresses support for a future wherein AI augments, rather than succeeds human competences.

Nearly three-quarters of U.S. employees (74%) concurred that AI should serve as a supplement to human talent, while significant majorities emphasised the necessity for oversight and cooperative engagement. These perspectives reinforce the significance of adopting an ethical, human-centred framework for AI implementation.

Strategic deployment of AI is depending upon proficient HR leadership and effective change management. Despite the potential of AI, a minimal number of HR professionals evaluate current implementation initiatives as remarkably successful, with less than half asserting that best practices in change management are being adhered to. HR practitioners within organizations that employ such practices are 2.6 times more likely to report favourable outcomes. This underscores the imperative for HR to assume a more proactive role in directing AI strategies through readiness evaluations, workforce training, and the continuous management of organizational transformation.

Upskilling and reskilling are instrumental in fostering AI readiness. The necessity for targeted educational programs remains acute, with 51% of U.S. employees identifying enhanced training as the foremost priority for optimizing AI results. The effective amalgamation of AI and human intellect is crucial in elevating employee satisfaction regarding training initiatives. HR professionals are pivotal to this endeavour, utilizing their expertise to align human competencies with AI functionalities and developing training programs that are inclusive, actionable, and transparent.

In recent years in India, there are instances where organizations are laying off their employees for want of upskilling and reskilling in IT sectors in the name of AI interventions. This is a challenging situation in the field of Human Resource Utilisation and Employees Turnover. Organizations are facing criticism for their attitudes towards social responsibilities for their own people. There lies the role and responsibilities of HR to provide support in developing people for the present and future roles based on the requirement and feedback received from the employees through ESS portal for their professional growth and individual requirement. With AI intervention, the TNI and expedition of training and developmental programme can be integrated with credit points or incentives to employees for their upskilling and reskilling as per the need. Employees should be encouraged to upgrade their knowledge and skill to adapt in the changing environment such as use of AI tools, use of Non-Conventional Energy Resources, recent technical upgradation, etc. The organizations too can be benefitted this way to achieve their sustainability.

Conclusion

It is derived from the study that the introduction of AI in ESS has a wider scope in HR and Finance, both. Synchronizing Digital Finance with HR ESS leads to saving cost, time and optimizing Human Resources with increased accuracy and transparency in the system. Though the opportunities are there for utilizing AI tools for the ESS in HR, there is always a threat of error due to incorrect data input. Hence, extra care is required to be taken while developing and implementing the portal, which is connecting ESS data with Digital Finance. The overall response of the stakeholders is positive for moving ahead with AI tools for Employee Services. Yet there are challenges in implementing AI tools on a large scale. Routine HR jobs can be replaced by utilizing AI tools in various

applications of ESS. It will not only replace human resources with effective utilization in strategic jobs, but also save the cost, time and improve transparency.

Further Scope of study

This study is done with Indian PSUs, who are using ESS platform for their employees. Similar exercise can be done with large MNCs and other organizations who are implementing Digital Finance for their internal customers in line for Employee Services under HR. The study may be extended to other verticals of HR and other functions as well.

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