

Course Name: AI in Human Resource Management

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Week - 08

Lecture - 25

Lecture 25: Challenges of AI Adoption in HRM

Hello learners, welcome back to the course on AI in Human Resource Management. Today, we start a new module—a module that looks into the challenges and future opportunities of AI in HRM. We will try to see what the challenges are, and as it is popularly known, within challenges lie opportunities. So, we'll look into the opportunities with respect to AI in HRM. I'm Dr. Abraham Cyril Issac. I'm an assistant professor at the School of Business, Indian Institute of Technology, Guwahati. Now, when you look into AI in HRM, we have seen what AI is doing to HRM and how it is transforming the human resource management landscape altogether. In those discussions, we have also seen some of the critical barriers, biases, problems, and inherent challenges. We'll try to look into this from different angles. Let's say, what are the structural challenges? What are the financial barriers? What are the technological challenges? What are the ethical concerns? What are the legal challenges? So, we will try to categorize them. We'll try to have clean understanding about them. the challenges of AI in HRM in this particular lecture.

So let's go into that in detail. When you look into AI in HR, specifically with respect to the problems or with respect to the challenges, we see that artificial intelligence in human resource management no doubt promises to revolutionize how organizations attract, retain, develop and manage their workforce. However, its adoption comes with significant challenges that organizations must typically navigate carefully. So when you look into the AI's application in HRM, specifically, it can provide transformative benefits. Benefits like automating routine and the repetitive tasks we have seen. Something like

resume screening in which the AI can help us. Scheduling interviews. All these aspects where the mundane routine tasks or the repetitive tasks are automated.

There could be a promise of enhancing decision making through predictive analytics. Let's say predicting employee turnover. Why the employees are turning or why the employees are moving out. What is the reason? Significant idea can be derived from analysis. The proper understanding of the data, improving employee engagement through AI-driven chat boards and personalized learning platforms. So all these possibilities are there. However, Adopting AI in HRM is not without challenges. So despite the potential benefits, organizations do face a lot of, as I mentioned, technical, ethical, financial, and human-centered hurdles. So artificial intelligence in human resource management. Though it promises to revolutionize how organizations attract, retain, develop, and manage their workforce, the problems are plenty. So let's look into those challenges which act as barriers. The first one could be the technological and data challenge. When you are looking into technological and data challenges specifically, we understand something called a legacy system or we need to understand something called legacy systems. Many organizations use outdated HR systems that lack the integration capabilities necessary for AI tools. So when you are looking into a new integration with AI, you have to look into those legacy systems that are already in place. These legacy systems may not support the data formats or the computing power required for AI. So this happens to be one of the biggest problems. Implementing AI requires modern infrastructure, which can involve costly and time-consuming upgrades.

You look into data quality and availability. When you understand this as another hindrance, a possible aspect, AI relies heavily on large datasets to function optimally. So HR data is often incomplete. It is inconsistent or poorly stored HR data actually hinders AI performance, leading to flawed outputs and biased decisions. So let's say because of the use of AI, we had a biased hiring recommendation. So this is a classic example of data quality and availability being manifested as a barrier, as a challenge. Then we have the problems with data security and privacy. We have touched upon that in the previous module. AI in HR processes vast amounts of sensitive personal data, so let's say something like employee demographics or performance metrics. You, as an individual

employee, do not want to disclose some of the performance metrics. Unfortunately, there can be situations or circumstances where your performance is being reported on a public platform within the organization—obviously—but many people have access to that. So many times it happens such that data security and privacy, specifically AI in HR processes, because it processes sensitive personal data, this privacy looms as a large problem. Ensuring that this data is stored, processed, and used in compliance with data protection is critical, and failure can lead to legal consequences.

And the fourth one, most critical one, I'll say, is the scalability issues. You know, scaling AI solutions from a small pilot project, Let's say full-scale HR operations across a large enterprise can be very complex. AI models might perform well in isolated cases but struggle to maintain accuracy and efficiency across larger and more diverse datasets. There is also a possibility that, you know, many times the integration when the scale is increased will also be a troublesome activity.

Another important challenge is the structural challenge—the organizational and structural challenge. We start with resistance to change. We have seen that there is an inherent inertia many people have when some level of technology is introduced to a particular system. So employees and HR teams may feel threatened by AI. Fearing job displacement or struggling to adapt to new technology. So overcoming resistance requires change management initiatives. Such as HR managers, the OD—or organizational design—and organizational change become quite relevant here. It requires proper communication and ensuring that AI is seen as a tool to augment rather than replace human roles. Another significant aspect would be the talent gap. Implementing and managing AI tools in HR requires a blend of HR and AI expertise—we don't deny that—which is currently lacking in many organizations. So recruiting or training staff who understand both HR and AI skills is essential. This is where this course acts as a bridge for both AI and HR professionals, which can actually be difficult but if done so, we can actually bridge the talent gap. Then we have the leadership bind and misalignment of goals. Please note, convincing leadership to invest in AI for HRM is often challenging. Mainly because of the high upfront cost. So basically, you will have to deal with many problems, especially with respect to the upfront cost.

We have categorically analyzed this in the previous module, and that was one of the reasons why many companies do shy away from actually bringing in AI or taking the help of AI. So this is a possible problem: leadership buy-in and goals. When you are looking into misunderstanding AI's capabilities without executive support, AI adoption stalls. So organizations need clear business cases and pilot projects to demonstrate the value of AI to leadership. Now, when you look into the concerns, mainly structural, we also have to see that there is a possibility of misalignment of goals. And this misalignment of goals is vital because AI tools need to align with HR-specific needs and goals. So if there is a disconnect, between what AI offers and what HR requires, AI implementation will fail. So misunderstanding AI's capabilities can lead to underutilization or ineffective deployments that don't solve HR's real problems. When you look into ethical concerns in AI-driven HRM, we have touched upon some of the concerns previously also.

The first and foremost one, without doubt, that emerges is the bias, which we have repeatedly addressed. When you look into AI systems, they are only as good as the data they are trained on—something which I repeatedly keep on telling because that needs to go into your mind. If training data reflects biases, let's say biases in terms of gender or in terms of race, AI models may perpetuate these biases—no doubt about it. Ensuring diversity and fairness in AI-driven decisions, particularly in recruitment, performance reviews, and promotions, will be a major concern with the bias. When you look into the issue of transparency and explainability, we see that many AI systems, especially those based on deep learning, operate as black boxes. And this means that the decision-making process is not easily understood. Communication is a problem. Comprehension is also a problem when it comes to decision-making, which is not so lucid and is treated as a black box. The problem is that in HR, where decisions affect careers and livelihoods, it's vital—it's critical—that AI decisions can be explained and justified to employees and managers. There's a possible impact on jobs that will arise. AI can automate many tasks traditionally done by HR professionals, leading to concerns about job security.

But striking a balance between automation and human oversight is key. Organizations need to ensure AI complements human work rather than replacing it. All concerns

regarding displacement—job displacement—must be mitigated here. Another significant factor would be the trust quotient—the trust element—employee trust and engagement. If employees feel that AI systems are overly intrusive or make biased or unfair decisions, trust in the HR process will erode. Building trust actually requires transparency. This is interconnected. Please note. It requires transparency about how AI systems work and how decisions are made. This is vital in fostering trust. Let's now look into the legal and compliance angle. When you look into legal matters, you have to start with regulatory compliance. Please note, ladies and gentlemen, AI must comply. With existing labor laws. Anti-discrimination laws.

And privacy regulations. We have just completed. A course on labor welfare and industrial relations on the NPTEL platform, so we have discussed, even with respect to India, categorically about the new labor courts, the developments, the initiatives, or the improvements happening in labor laws. So basically, you look into any territory, any region, any country, or any nation for that matter. AI must comply with specific labor laws, anti-discrimination laws, and privacy regulations. So navigating the complexities of regulation—let's say, in Europe, the GDPR—ensuring AI systems do not violate employee rights or privacy becomes vital.

Another critical aspect would be the liability issue. What do you mean by the liability issue? When AI makes a decision—let's say, for example, taking a hiring recommendation, as we have seen before. It can be difficult to assign accountability if something goes wrong. Who will be the accountable person?

Where will the buck stop? Who will be the person who can be treated as a person who is accountable? So please note, when you are looking into liability, organizations must decide whether AI providers... HR professionals or leadership are accountable for AI driven decisions. Another significant aspect would be the lack of clear guidelines.

You know, many countries lack specific legal frameworks for the use of AI in HR. And that is a bit simple in understanding because AI itself is evolving. And many countries have not prepared themselves towards this AI revolution. So they have not prepared certain legal frameworks or certain rules and regulations vis-a-vis AI specifically and AI

in HR, which creates uncertainty about the best practices. HR leaders must stay updated on evolving regulations and ensure that AI use is compliant with both current and emerging laws.

So when you are in a class of NPTEL or SWIM platform where you are looking into a class like AI in HRM, I need not emphasize it further that you are here to update yourself about what is happening in the industry. And that will make you stay above the particular understanding or particular evolution of particular understanding and evolution of AI in general. Now, let's look into some of the financial and investment barriers. The first and the foremost one which we have significantly discussed is the initial cost, high initial cost.

AI tools, especially those customized for HR needs, can be very expensive to even run, develop, or implement. You know, most of the case-based examples and the the software which we have taken in, or some of the tools which we have, you know, discussed in the previous modules, and those—the ones and the ones coming up—are all paid software or paid programs. So basically, I have tried to give you a detailed picture with respect to some of the trial versions, as I mentioned in those modules, but The problem is the high initial cost. So again, this comes up as a challenge. Please note, many organizations struggle with the high upfront investment required for AI, be it software, infrastructure, or even the training costs.

So many a time, what happens is that what is required for the organization—please do analyze, do a gap analysis, and based on your knowledge, specific requirements—if you are part of an organization, if you are part of a department in an organization, please make decisions in a prudent, practical, and pragmatic way so that you will not have to pay a lot in terms of the initial costs. Another significant financial barrier would be the uncertain ROI. When you talk about the return on investments, while AI promises long-term efficiency gains—no doubt about it—the actual return on investment can be unclear, especially in the early stages. So organizations need clear metrics to measure AI's impact on HR processes and justify continued investment.

And then you look into continuous investment as one of the significant barriers that is emerging as part of the finance. AI is not a one-time investment. So to remain effective, AI systems do require continuous updates, retraining, and new data input. So ongoing maintenance costs can deter organizations, especially smaller ones, from adopting AI in HRM. So these are some of the significant financial issues. Barriers with respect to AI in HRM. We have seen structural barriers. We have seen financial barriers. We have seen some of the inherent systemic barriers. But that said, How can we build AI literacy? How can we actually tame AI, if I may use the word? How can we adopt the best practices in AI? Or how can we adopt AI technology?

So this is where you look into AI literacy in a significant way. So let's look into building AI literacy in HR. It starts with education. It has its own aspect in investment. It has certain effects on collaboration. So we'll look into that in detail. But please note, If you do not have trained individuals, if you do not have the right person to execute the particular task, what is required in AI, whatever be the sophisticated technology you are having, whatever be the sophisticated systems you are having in place. you will not succeed because of the fact that you don't have the right professionals for that. So let's look into building AI in literacy in greater detail. Let's start with the education aspect. When you look into the education, needless to say, educate the HR professionals about AI, its potentials, its limitations also. So this includes training teams. to work with AI tools and ensuring cross-functional collaboration with IT and data experts. So the action could be to invest in AI training programs or collaborate with external experts to upskill HR teams.

Another significant aspect could be the collaboration and the human AI collaboration specifically. When you look into, let's say, It should augment human capabilities, not replace them. For example, AI can screen resumes, but final hiring decisions should be made by the human recruiters. Define clear roles for AI and humans in HR processes, ensuring that humans retain ultimate decision making authority or they are the last say or the final say in the entire scheme of things. There is again investment in AI training programs or partner with external experts to upskill the HR teams also, which also lands up as vital in terms of AI literacy. When you're talking about the human AI collaboration,

please note augmentation is one of the aspects. It is not about replacing. It is about augmenting. AI can analyze, assume, as I mentioned, but it should not be the final decision maker. There should be a clear role definition, clearly defined roles for AI and humans in HR so that there is autonomy with respect to human beings in terms of the decision making. And finally, there should be continuous evaluation, regularly evaluate the human AI collaboration and adjust roles to optimize the HR process. Now, let's look into the ethical AI implementation HRM. When you are looking into AI implementation, another significant discussion comes up that is the ethical AI implementation. So the ethics become significant aspect whenever you try to bring and not only in HRM, but also in all the fields.

When you are talking about AI, it is pertinent that the ethics also comes up in discussion. So basically, you have to ensure that AI implementation is there with fairness, transparency and accountability. So when you are looking into ensuring that, you know, AI tools are there, you have to also ensure that AI tools are designed and used ethically with the focus on fairness, transparency and accountability. So regularly audit the AI systems for buyers, if any. Ethical guidelines have to be established and involve diverse teams. You look into the input coming from diverse aspects of multiple perspectives and finally have a continuous improvement, continuously improve and refine ethical AI practices. And when you look into the pilot programs, please note that start with small controlled AI projects to test feasibility. Address issues and demonstrate value before scaling AI use across the HR functions. Conduct pilot projects that specifically target specific HR pain points. Let's say one could be employee attrition prediction and scale successful pilots. So basically, when you are looking into AI in HRM, see it involves a lot of. cost, upfront cost. So when you have a system which has a lot of upfront cost, it is natural that you run a pilot. Even in research, you do a pilot study.

Mainly because you tend to get an understanding that how it is going and whether it is actually doing what it is supposed to do or it is measuring what it is supposed to measure or it is executing what it is supposed to execute. So all these parameters can be easily understood if you are looking into a pilot program. So when you are looking into AI in HRM, which is also a cost intensive program, at least the initial upfront costs, I would

certainly suggest start small. target the pain points as i mentioned like employee you know attrition prediction that if your organization is having that as a pain point why not use that target that you know evaluate and adjust based on that and finally if you find success in that try to scale it so this is how A natural AI program can be organically developed within the organization. So please take note that since it has a large upfront cost, it has its own financial, ethical, structural considerations and challenges. Please note that it is always prudent. To go for pilot programs for AI in HRM. So I just wanted to introduce you to the challenges. As I mentioned, in challenges lie the opportunities which we'll deal with in the coming lectures. But please take note of those challenges. They are not one. They are many. They are there in the structure. They are there in the technical aspects. They are there in the financial and ethical aspects. So we have taken clear note of all the different categorizations and have discussed based on that. We'll see more details about the opportunities in the next class. Till then, take care. Bye-bye.

Thank you.