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Emerging from the realms of science fiction, artificial intelligence (AI) today is a reality. Its potential impact on humanity is the subject of a heated debate across the world . On either side of the divide, leaders from politics, business, science and academia are sharing their perspectives on how it is going to shape the future. Even as this debate rages on, we are witnessing how AI is becoming an intrinsic part of our lives. Most of us have grown used to ecommerce applications providing us with personalized product recommendations. News sites, advertising platforms and other entertainment channels push content of our preference to our devices. Not many of us pay much heed to the fact that this is all driven by advancements in AI, machine learning (ML), analytics, etc. We are now seeing a similar trend in the world of human capital management (HCM) with a significant rise in the adoption of Al. As we mentioned in the previous issue, this edition of 'Harmony' delves deeper into the application of Al and ML in HCM. We will see how some of the leading HCM products are trying to incorporate these capabilities to make them an integral part of the product instead of merely offering these as add-on tools. Welcome to the fourth edition of our HCM journal 'HARMONY'.

Current trend of AI and ML adoption in HCM products

- 1. Workday Workday HCM is one of the leading HCM products available in the market. Workday talks about building ML architecture with transactions and analytics in one system to become a system of insights for its customers. Provided below are some key developments that demonstrate Workday's commitment to leverage AI and ML:
 - Launch of the Workday Prism Analytics platform, which allows customers to pool together data from Workday and other sources to analyze and visualize them to assist in decision-making with a suite of tools and algorithms
 - Workday is aiming to deliver rich Al,
- 2. Oracle HCM Cloud Oracle Fusion HCM Cloud applications are a new generation of cloud-based human capital management applications from Oracle. Oracle started investing in AI capabilities

ML and analytics capabilities to its customers through Workday People Analytics which will be available by the end of 2019 as an add-on for Workday HCM customers and part of Prism Analytics

- Workday People Analytics will dynamically generate HR analytics to highlight issues such as organizational composition, diversity, hiring, retention and attrition, talent gaps, and performance
- Workday recently acquired Rallyteam, which specializes in providing talent management solutions and uses machine learning to understand workers better

actions needed on their channel of choice

» Optimized promotion process: A "self-driving" promotion process below and below and below and below below and

- Rallyteam matches interests, skills and connections of employees with relevant jobs, projects and tasks with an aim to optimize the existing workforce to meet business needs
- Workday is further leveraging the knowledge of Rallyteam to deliver newer Al capabilities in other Workday products
- Workday has also acquired Adaptive Insights, which is a cloud-based business planning software company. Adaptive Insights' workplace planning tools enable planning across finance, HR and lines of business. This includes headcount planning, restructuring scenarios and skills-based planning

manager and HR team to make it faster and easier for employees to become engaged, productive contributors to the team

Oracle/c new Eucien Human Canital

as part of Oracle HCM Cloud early on in the form of predictive analytics. Here are some recent developments in this area:

- Oracle has announced the addition of several new AI capabilities and user experience enhancements at Oracle HCM World 2018. Some of the key capabilities included in the product are:
 - Candidate recruiting: New Al and chatbot capabilities enable candidates to search for jobs and get questions answered directly through channels like Facebook Messenger. These also automatically alert candidates to updates and
- 3. SAP SuccessFactors Owned by SAP, SuccessFactors is another major player providing cloud-based HCM software and talent management solutions. The focus of SuccessFactors has been to move from self-service to an intelligent service approach. It believes that the future of HR is "no HR", underlining the evolution of HR from an administrative to a strategic function. Here are some highlights of what is happening at SuccessFactors:
 - SuccessFactors sees machine learning at the forefront of new age HCM solutions. It already uses ML, predictive
- 4. UltiPro UltiPro from US-based Ultimate Software is a leading cloud-based HCM solution for businesses. Ultimate Software has also been working on leveraging AI and ML capabilities in their HCM product. Here are some recent developments:
 - Ultimate Software has developed an Al platform called Xander. Xander is a portfolio of advanced Al technologies built on NLP and ML
- 5. ADP Automatic Data Processing, Inc., commonly known as ADP, is a leading provider of human resource management (HRM) software and services. Some key recent developments in this area:
 - ADP has recently announced ADP DataCloud as the next generation HRM platform
 - ADP already uses data analytics for insights from information on

helps employees reach their objectives and succeed in their current positions through proactive alerts

- » Hiring and onboarding the right employees: Advanced machine learning capabilities help reduce the time taken to fill open positions by highlighting best-fit candidates and proactively identifying and inviting suitable candidates and employees to apply
- » Smart onboarding: New onboarding features enhance collaboration between new hire,

insights, natural language processing (NLP), and data analysis to improve employee engagement

- As part of its 'Business Beyond Bias' initiative, SuccessFactors leveraged Machine Learning solution that analyzes the language of the hiring process from writing job postings to analyzing resumes to eliminate bias
- SuccessFactors is also working to embed ML with conversational language capabilities across the SuccessFactors suite, to deliver exceptional learning experiences to employees
- Xander enables Ultimate's solutions to automatically understand, predict and prescribe personalized actions from all relevant HCM data, including textbased feedback
- Xander can analyze structured data elements along with employee sentiment in real time to deliver insights that help leaders improve organizational outcomes

more than 30 million employees at companies using its solutions

- ADP is leveraging robotic process automation (RPA) solutions for its HR and payroll processing services for its customers
- At its annual Datathon event in 2018, ADP collaborated with its partners and innovators to ideate on how best their existing datasets could be leveraged to predict future patterns

- Oracle's new Fusion Human Capital Management application now embeds predictive analytics models automatically generated by Oracle Data Mining. These enrich dashboards and managers' portals with predictions such as the likelihood of an employee leaving the organization or the likely future performance of the employee
- In addition, Oracle has also launched Oracle Adaptive Intelligent Apps (Oracle AI Apps), a suite of pre-built AI and data-driven capabilities, for the entire enterprise across HCM, customer experience (CX), enterprise resource planning (ERP), and manufacturing
- SuccessFactors now offers integration with SniperAl for a more effective and productive recruitment process.
 SniperAl is a game-changing Al solution for recruitment. It uses machine learning to match CVs and job specifications at high speed and with remarkable accuracy
- Al bots can be built on top of SuccessFactors for easy access to data for HR and management. Under its new partnership with Slack, SAP SuccessFactors is making significant investments in technology using Al chat bots
- Xander's ML technology is embedded within UltiPro. It is continuously updating itself and 'getting smarter' with experience
- These prescriptive analytics drive powerful, experience-based recommendations to drive an improved employee experience, retention, and better business performance
- Some areas where ADP is looking to explore data-led innovation:
 - Talent optimization: Correlating educational qualification to career outcomes
 - » User experience: 401(k)
 benchmarking to simplify
 employee accounts management
 - » Business impact: Digitalized career coaching to reach specific long and short-term career objectives

Conclusion

Leading HCM product players have started incorporating AI in their products even as awareness grows amongst corporate and HR leaders that AI can improve operations and provide a better experience to their employees. The future pace of adoption of AI in HCM will depend on the nature and needs of each industry and organization. In our study, we have discovered certain areas in which AI is advancing rapidly



 Predictive analytics – Several leading HCM solutions have long been using embedded analytics anytime and anywhere. This eliminates the need for workers to wait for HR to respond to their queries, thus enhancing employee experience adoption of AI and ML. Leading products have started using new technologies to design optimum courses in addition to tracking online training patterns, compliance and effectiveness of training courses. Some HCM products have started leveraging ML to identify the right internal candidates for job openings based on their skills, competencies and behavioral aspects

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as part of their processes to assist users in decision-making. This focus has increased significantly over the past few years. Lately, there has been a shift towards predictive analytics to help customers remain ahead of the curve. Predictive analytics can be useful in flagging issues related to issues such as future attrition and performance. This is one tool that most of the HCM products are leveraging and extending to more and more functions



• Chatbots/virtual assistants – Chatbots have immense potential in improving

operational efficiencies for the organization and enhancing end-user experience. They can perform most repetitive tasks in an error-free manner, thereby increasing productivity. Chatbots can also be deployed to answer employees' queries and provide them the right information,



• **Recruiting** – Recruiting is one area where we are observing widespread adoption of AI and

ML across different products. Attracting and hiring the right candidate is a key challenge for most HR organizations. Al and chatbots have proved to be useful in reducing hire time and ensuring that candidates get all the assistance they need while applying for a job. Machine learning is also playing a significant role in identifying the right candidate for the job based not only on the profile but also on behavioral aspects. ML can also help eliminate bias from the process, be it recruiting or performance management



• Learning and talent management – Learning and talent management is another area that is seeing increased



• AI platforms – In most organizations, HCM applications are merely a part of the larger

ecosystem that is dominated by enterprise applications. However, many organizations are actively working on creating an AI strategy with the objective of deploying common solutions across multiple functional areas for greater business benefits. Product vendors acknowledge this need and are working on easy-todeploy AI platforms and solutions that provide customers the ability to gather data from a large number of applications

Look out for our next issue where we discuss how organizations can prepare for this change with the help of technology enablers and process transformation.

For more information contact askus@infosys.com

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