

Disruptive Technologies in Human Resource Management – An Overview

*** Dr. P. Barani Kumari & **A. Hemalatha**

* Assistant Professor, Head, and Research Guide, Department of Commerce, Sri Kanyaka Parameswari Arts & Science College for Women, 1, Audiappa Naicken St, Parry's, Chennai, Tamil Nadu – 600 001

** Research Scholar & Assistant Professor, Sri Kanyaka Parameswari Arts & Science College for Women, 1, Audiappa Naicken St, Parry's, Chennai, Tamil Nadu – 600 001

Introduction:

Are we harnessing today's state-of-art technologies to manage our workforce efficiently and effectively? If the answer is no, this is the right time to buckle up. These days, it is believed that technology can assist human being in automating and streamlining several processes and procedures in human resource management ranging from recruitment, orientation, training and development, employee benefits, employee engagement, retention, and attrition as well. Nowadays, almost all the practices of human resource management is positively impacted by the technology which in turn results in augmentation and enhancement of workforce capabilities. To attain a competitive edge in the industry an organization has to be up-to-date with the latest technological advancements that significantly influence the industry. In this article, latest disruptive technologies and practices that are revolutionizing the HR functioning are focused.

To start with the history of disruptive technology, the term disruptive technology was coined by Harvard Business School Professor Clayton M. Christensen in his book "The Innovator's Dilemma: The Revolutionary Book That Will Change the Way You Do Business". He defined disruptive technology as one that displaces an established technology and shakes up the industry or a ground-breaking product that creates a completely new industry. According to Christensen technology is basically divided into two categories, one is sustaining technologies and another one is disruptive technologies. According to his view, sustaining technology is something which does not destroy the existing technology, instead it works in such a way to improve and augment the already established technology. On the other hand, he described disruptive innovation as introduction of some new approaches and methods that have the potential to create a new industry or transform or even eliminate the existing one completely. The best known example for disruptive technologies are digital photography, MRI imaging, and digital banking and so on.

Remarkable Disruptive Technologies from the Past:

- E-mail transformed communication from hand written letters to digital letters and it seriously affected the entire postal system.
- The personal computer totally displaced the calculators, typewriters and also changed the way individuals functioned and communicated.
- Mobile phones highly disrupted the telecommunication industry and the android smart phones are nowadays even replacing the personal computers. To add on to this, laptops have replaced desktops. The laptop computers and smart technology has turned the workforce mobile and also enabled people to connect to corporate networks and link with each other from anywhere literally.

Trending Disruptive Enabler for HR: Technology is a great enabler—it has made it possible for humans to create more efficient operations and processes while providing invaluable data which can be used to push businesses forward. It's the turn for the Human resources departments now for getting their opportunity to be a part of technology boom as more and more digital platforms, operations, processes, and services are being unveiled and unleashed in the market each and every day. Here are the few more disruptive HR technology trends.

1. Artificial Intelligence: It is an undeniable fact that the scope and reach of Artificial Intelligence is massive these days, there has been an indecisive understanding on the technological jargons that AI encompasses under its banner. AI could be named an umbrella term for all those set of algorithms, methods and technologies that enables systems to perform tasks that demands natural intelligence. AI seems like just another tech buzzword, in the sphere of HR, the trend toward more AI-powered systems is taking a strong hold of companies these days, and that is undoubtedly expected to continue and progress in the upcoming years.

2. Robotic Process Automation (RPA): Many time-consuming and repetitive tasks will be compressed and executed by simple applications. This HR tech trend is currently being used in talent acquisition, employee onboarding and training, and performance management.

3. Blockchain: A Blockchain Technology is a growing list of records, called blocks that are connected using cryptography. A Blockchain technology is a decentralized digital ledger that is used to record transactions across systems so that any record within the blockchain system cannot be altered, without the modification or alteration of all subsequent blocks. While disruption from this technology is mostly associated with areas like capital markets and payments, its effects on HR will be profound. Instead of focusing on the complications and intricacies of the technology, HR functions should focus the

advantages of technology. Blockchain technology in HR has the potential to store and share data on prospective candidates completely safe and also allows payment to geographically diverse employees in the currency of their choice. The security, speed, and transparency of block-chain may be one of the most disruptive forces in HR in the forthcoming years.

4. IOT: The Internet of Things, or IOT, is not only becoming more perceptible in technology circles, but it is also a growing trend in HR. The concept of IOT actually is orbiting around the ability to collect real-time details and information through a series of connected devices and platforms. Employee wearables, like smart watches or trackers, may be combined with HR assisting tools to help us better understand how productive and efficient workers are the whole day, and their physical wellness can be tracked. IOT technology in HR may ultimately assist organisations create more personalized workplace for employees, which in turn may boost engagement and retention over time.

5. Cloud Migration Solutions: Cloud computing or cloud-based processes are not something brand new to the HR market, but many organizations have been depending on hybrid solutions or heritage systems to fulfill HR roles. In near future, a shift toward completely cloud-based operations is projected for more businesses, to be more specific in the realm of managing and analyzing personnel. One of the most promising and happening trends in 2018 is indeed the shift in migration strategies for HR departments embracing cloud-based processes, making the migration process much easier and cost-effective for companies taking the leap to digitalization. Cloud migration solutions offer several benefits to companies, including huge capacity, higher speed, and tightened security, all of which are driving this rising trend.

6. Automation: HR automation is the process of improving the efficiency of the HR department by actually freeing people from tedious monotonous manual tasks, and allowing them to concentrate on crucial and complex tasks like decision making and strategizing. For a very long period of time, the focus on human resource technology was to automate and incorporate human resource practices which meant online payroll, record-keeping, resume capture, interview and talent acquisition, evaluation or assessment, performance appraisals, compensation, etc.

7. Big Data Analytics: As we all know one of the benefits of improved technology is the collection of data across organizations and industries. When it relates to HR technology the data is nowadays not only being exclusively used to enhance workflow and business operations, but also providing predictive reporting along the way. Indeed HR departments can practice big data analytics for a handful of needs, such as recruitment, retention, training, and performance management. Data analytics are becoming far

more significant in the HR realm as organisations need to have an in-depth knowledge into the level of engagement and satisfaction of their employees.

8. Employee Self-Service: Though employee self-service is easy and simple to understand, the technology driving this latest trend is vital for the ongoing success of businesses around the world. Through self-service models equipped by technology platforms, companies can give employees better control over their benefits, compensation, and also job-related tasks from an HR point of view. This gives free time to HR professional to focus on other critical assignments, and employees have control over their needs as and when and how they want.

9. Virtual Reality and Gamification: organisations are expanding and extending their horizons in the training and development area to include new technologies like virtual reality, gamification, and online and remote courses, all empowered by the recent and latest technology innovations. This makes it really easier for employees to involve with learning and training requirements on their own schedule, in a way that suits their learning ability and style. Embracing the gamification trend is turning more common nowadays among HR departments as employee engagement remains at historically very low levels. Including gamification tools to routine and mundane processes has the potential to improve the final outcomes for HR departments in the territory of employee engagement, retention, recruiting and onboarding, and training and development.

10. Predictive Analytics: In the near future, companies will have to access an enormous and massive bank of data on people. HR staffs will require strong analytics skills to turn it all into valuable insights. Imagine if an organisation could instantly identify underperforming employees, recommend training, recognize flight risks and unintended absences, and work out who needs and deserve a promotion or transfer.

11. System and Tools Integration: Companies are identifying the need for more integrated systems and tools throughout their HR technology stack. This trend is driving firms to generate flexible solutions that can mesh with other platforms and processes, without a momentous burden of time or expense on the companies. In HR, integration is already taking place between performance management and career pathing applications and software, as well as training and development platforms and self-service tools. In the forthcoming year, more and more integration capabilities will be emerging in HR departments to help streamline operations even further.

Conclusion: To conclude, day by day the human resource management dimensions and facets are evolving rapidly and has transformed from an administrative one, into more of a strategic task where

HR experts are demanded more and more to create value to business and overall expecting the human resource to contribute to the business success. HR professionals have become responsible to instill innovative technology into the organizations. HR organizations are progressing and playing a dynamic role to ensure that the companies equipped with disruptive technologies can handle forthcoming innovation cycles. These upcoming progresses will free up the office spaces from the table stigma, and will encourage the organizations to redesign the workplace environment, which will be reflected in the overall employee experience and thus reduce the employee turnover. It is understood that the future of any human resource staff is being tightly tied to technological development and offers opportunity for innovators in and out the industry to adjust and adapt with new developments to create a better workplace and environment for employees.

References:

- Clayton M. Christensen (1997) "The Innovator's Dilemma: The Revolutionary Book That Will Change the Way You Do Business"
- Dr. Ahmed, Owais, (2018) "Artificial Intelligence in HR", International Journal of Research and Analytical reviews, Vol 5, Issue 4, www.ijrar.org.
- Dr. Jain, Surbhi (2018) "Human Resource Management and Artificial Intelligence", International Journal of management and Social Science Research (JJMSSR), Vol 7, No.3, March 2018.
- file:///C:/Users/user/Desktop/malaysia/MGI_Disruptive_technologies_Executive_summary_May2013.pdf
- Geetha, R., & Sree Reddy, Bhanu,D., (2018) "Recruitment through Artificial Intelligence: A conceptual Study" , International Journal of Mechanical Engineering and Technology (IJMET), Vol 9, Issue 7, July 2018, pp. 63-70.
- https://blogs.osc-ib.com/2014/08/ib-student-blogs/dp_busman_student/disruptive-technology-and-change/
- <https://hackinghr.io/blog/top-10-disruptive-hr-technology-trends-for-2019/>
- <https://www.aberdeen.com/hcm-essentials/top-10-technology-trends-set-to-disrupt-hr/>
- <https://www.linkedin.com/pulse/case-disruptive-innovation-human-resources-enrique-rubio-csm-cspo/>
- Jia, Qiong; Guo, Yue; Rong; Li, Yurong; and Chen, Yuwei, "A conceptual Artificial intelligence application framework in Human resource management"(2018) ICEB 2018 Proceedings. 91. <http://aisel.aisnet.org/iceb2018/91>
- Tandon, Lochan Sharma; Dr. Joshi, Parikshit; Rastogi, Richa Kinger(2017), "Understanding the scope of Artificial intelligence in Human Resource management Processes- A theoretical Perceptive",

International Journal of Business and Administration Research Review, Vol.1, Issue.19, July-Sept 2017. Page 62.