The Amalgam Of Machine Learning

Today, learning happens in a much broader and a more social plane. A true learning organisation is one wherein employees can share their learning experiences and add their own content. Personalization, collaborative learning, virtual reality, augmented reality are some pathways that a L&D practitioner will have to venture into.

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The world is evolving rapidly. Learning & Development (L&D) professionals risk being left behind unless they adapt their skills to ensure continued relevance and impact in this environment. Artificial Intelligence (AI) and Machine Learning (ML) are buzzwords of the day, and are seemingly used interchangeably. Though the two are related, there are differences in the context in which they are used and at times prove to be overlapping.

Artificial Intelligence (AI) is the broader concept of machines being able to carry out tasks in a manner that we would attribute to "smart". Machine Learning (ML), on the other hand, is the present day application of AI based on the concept that we should make available data to the machines and allow them to learn by themselves. Machine learning is all about mimicking human decisions, making processes, and carrying out tasks in a seemingly human way of doing things. AI-based devices are designed to act intelligently and, are often classified among one of the two fundamental groups - applied or general. Applied AI is far more common in systems such as those designed to intelligently trade stocks and shares, or manage an autonomous vehicle. Generalized AI devices, which is in theory, can handle any task, are less common, but is where some of the most exciting advancements are taking place today. Though a subset of AI, Machine learning is the most cutting-edge technology present.

"Machines are the invention that humanity will ever need to make." - Nick Bostrom

For a long time, learning professionals believed that their roles were all about development. Now, development is just one of three talent pillars of focus along with attraction and retention. Today’s learning professionals carry a more holistic approach to managing talent. And, that forms the reason behind Chief Learning Officers becoming Chief Talent Officers. The nine new pathways, critical to the success of learning and development function by 2030, must be traveled by every talent officer before they make their learning choices for their organisation.

9 Pathways for the Learning Experiences of 2020

PATHWAY 1 - Understanding Neuroscience: The Brain not Culture is vital for Learning

The development of neural networks has been the key to teaching computers to think and understand the world in the way we do, and, at the same time, retain the innate advantages they hold over us, such as speed, accuracy and lack of bias. L&D practitioners now have access to a thorough understanding of the scientific principles behind learning and memory, specifically:

- The biological processes involved in learning
- Flow the brain works and processes information
- How to identify and improve the drivers that optimize brain performance
- How to determine the unique neuro-design and learning potential of the people
- Personal motivation and social and emotional learning

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- How a person’s neuro-design impacts health and safety in the workplace
- How a person’s neuro-design impact their sense of purpose and engagement

The main purpose of focusing on these specialized topics is to provide predictive analyses for the learning potential so that the L&D function can optimize talent in organizations. It involves an accurate understanding of the mechanisms of learning and assessing the drivers that impact brain performance.

Having an appreciation of brain physiology is also connected to enhancing brain effectiveness. Therefore, a working knowledge of neuroscience will be an essential part of the professional knowledge of L&D in future.

PATHWAY 2 - Moving from LMS to Talent Development Platforms

High-performing companies are setting the opportunity to promote a new culture of learning that spends the traditional models and transforms the very manner in which employees learn. Learning Management Systems (LMS) are closed systems by design, and, only permit the top brass to input information and courses for employee learning. Thus, an LMS does not give everyone the opportunity to teach skills, add content from external sources, and, seek education in a wide variety of skills. A talent development platform, on the other hand, is open-ended and permits everyone within the organisation to add content, share expertise, and seek knowledge in assorted areas, while learning in the most convenient ways possible, even on a palm-held device.

Businesses are discovering that their competitors are working from home, and therefore, it is best that they ramp up quickly. With an open talent development platform, employees may already be learning those skills and starting knowledge. This is one way in which the learning mindset can shift from Push to Pull. Today, learning happens in a much broader and a more social plane. A true learning organisation is one wherein employees can share their learning experiences and add their own content. And, it is crucial to make all the learning available on mobile devices, so that the people can be engaged whenever and wherever they find it convenient.

By creating a single centralised hub, the learning experience can be truly leveraged. Recommendations about great content in specific areas can be received from co-workers and
people may refer to Millennials and Gen Z as the 'selfie generation,' but, when it comes to their workplace mentality, it is more about self-development. This empowered generation is also one that is extremely visual, and video is a great way to demonstrate skills and processes.

In 2018, we can expect to witness the effect of YouTube over L&D even harder than the past years. Individuals are looking for very short, targeted instructional videos that teach one specific task or skill at a time. From employees looking for technical or sales training, visual learning will turn internal subject matter experts into community leaders such as YouTube stars. Interactive videos are also becoming increasingly popular with machine learners. Content such as interactive videos, user-generated presentations, quizzes, timelines and more will make learning as mobile as its learners.

PATHWAY 1
TV LEARNING
Josh Berish Principal, Bersin by Deloitte, says, "Imagine the corporate training page that reads 'Mandatory courses to complete this week.' 'Recommended based on your current role,' and interesting categories like 'Programmes to prepare you for promotion' or 'Tips and techniques for your current role.' All including much more sophisticated recommendations based on prior learning experience and job role of the individual, and what other peers in the company are taking.

It is not too long before the L&D Manager starts imaging a series of channels based on leading content from well-known vendors (i.e., Saha, Pluralsight, General Assembly, Lynda.com, TED, and a hundred others). These three-party courses, which would typically be hard to find, and would perhaps be buried in the traditional course catalog, would supply to new channels that can be easily found and easily engaged. Each channel would have a specific focus, and users could choose which channel to follow and which courses to take.

PATHWAY 2
PERSONALIZATION
A connected and personalized teaching a student in a one-to-one relationship to tech-enabled social learning, personalized learning has been around for ages in some form or other. Without the revolution of technology, personalized learning has grown in potential. The problem with personalized learning today is that there is a gap between the expectations of what it promises to deliver and what it truly delivers.

Personalization is a particularly critical issue in enterprise learning solutions that have been corporate-centric, focused on mandatory courses rather than engagement, which has resulted in low employee engagement. Workers need to see the value in what they learn and how it relates to their role to move to a colleague or to the World Wide Web to satisfy their on-demand learning needs.

A combination of visual and continuous learning can carry significant importance to the millennials since it indicates that they are valued, and provides them with an opportunity to move into newer areas, discovering new talents. While recommendations by L&D Manager based on an individual's role and the old ways of creating a personalized experience, newer ways such as recommendations from friends, colleagues, managers, and system recommendations are derived on the basis of data received about the user, have been successful in meeting the personalization goals.

PATHWAY 3
GAME MAKING
In the past year, we saw the emergence of learning experience designers, instead of instructional or learning designers. The people behind these terms often found in the fields of user experience and game design as well as learning design. Experienced designers place the learner in the learning design Think of it as an opportunity to broaden the creativity and positions gaming in an ideal space. It is an opportunity to support learning, and to enable people to leverage people's natural skills for learning. Empowering, engaging, offering the right tools to students, empowering, and empowering, empowering to the learners' needs.

PATHWAY 4
HUMAN CAPITAL
Institute for Human Capital

PATHWAY 5
PATHWAY 6
PATHWAY 7
Virtual Reality (VR) and Augmented Reality (AR) are powerful tools that can be used to enhance learning experiences. VR allows users to experience the world in a fully artificial digital environment, while AR overlays visual objects in the real-world environment. Mixed Reality (MR) combines the two, offering a seamless blend of virtual and real-world elements.
Professional development and continuous learning carry significant importance to the millennials since it indicates that they are valued, and provides them with an opportunity to move into newer areas, discovering new talents. While recommendations by an L&D Manager based on an employee’s role were the old ways of creating a personalised experience, newer ways such as social recommendations from friends, colleagues, or managers, and system recommendations derived on the basis of data received about the user, have been successful in meeting the personalisation goals.

Today, a training course is likely to be a sophisticated, self-managed online programme, and when we add more factors to ensure that the learning is effective when students are encouraged to think and talk together — to share ideas, discuss problems — and solve problems — the methodology of a tutor. So “collaborative learning” is an umbrella phrase covering a range of approaches involving inputs from students and tutors. The tutor seeks to create an environment where learners are able to work collaboratively with opportunities to share emerging ideas and understandings. The aim is to stimulate the development of autonomy, motivation, and the pursuit of goals by engendering meaningful communication and co-operative efforts. The model works really well where the learning can be integrated into working life because students value the input and recognize the importance of the issues and topics covered. It is about shared responsibility and ownership of educational materials that inspire, engage and challenge learners.

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Corporate behemoths are implementing technology solutions to help smother their recruitment process, but most of them are still content with “Recruitment Process Outsourcing” (RPO). If 300 lives in an AI & ML enabled right can be trusted with auto-pilot why not tap into the power of RPA (Robotic Process Automation)? Artificial Intelligence & Machine Learning coming into the hiring space implies the predictive algorithms and machine learning are here to stay further emerging as tools to identify the best candidates. Companies are using AI & ML to assess a candidate’s qualifications, depending on research to investigate everything from word choice and micro-features to psycho-graphics. Data is crucial here. AI & ML’s strength is the capacity to go over such information, inspect various factors, and discover patterns that humans might not see. Simply put, this is what’s called “supervised” learning: HR administrators and information researchers together may set up change factors that ought to be weighted in - light of characteristics of high performers.

References:

Josh Bersin

Group discussion and team collaboration are key elements of powerful training interventions. More organisations are looking for ways to extend this sort of group collaboration beyond the classroom, especially when learning programmes are delivered remotely or extend over a period of time. Learning cohorts can keep up the interaction using tools such as Spark, Teamio, and Yammer. These tools keep channels open for ongoing conversation. In which participants respond to question prompts by the facilitator, plan the next step on an action-learning project, discuss pre-work, or develop case studies.

Lot of the important steps in the learning journey are:• Aggregating: This refers to searching and collecting information from multiple sources.
• Filtering: This means sifting through mountains of data and zeroing in on the most relevant piece of information that will serve learner needs exactly.
• Organising: This means charting the content to impart logic and structure. This helps in learning by enhancing comprehension.
• Contextualising: This refers to enabling the value of the content by addressing your own contexts, title, a brief explanatory note or an overview, more information, and/or tags.
• Sharing: Sharing does not merely mean putting up a blog post or organising a training session to educate the audience. Content Curation is effective when the resources are shared with the right group of learners, just when they are searching for the information, and in channels that they can readily access.

Group knowledge is a well-kept secret. If your organisation has an internal knowledge base, you need to ensure that it remains up-to-date. But how do you ensure that your employees are not only using it but also contributing to it? One way to do this is by encouraging them to share their knowledge with others. This not only helps in keeping the information up-to-date but also ensures that it remains relevant. It also helps in building a culture of learning and collaboration within the organisation.

Companies are now looking at AI and ML to help them in their recruitment process. However, there are a few things they need to keep in mind. First, they need to have a clear understanding of what they want to achieve with AI and ML. Second, they need to ensure that the technology is being used in a responsible way. Finally, they need to be aware of the potential risks associated with the use of AI and ML in recruitment.