

Training and Development
Prof. Susmita Mukhopadhyay
Vinod Gupta School of Management
Indian Institute of Technology, Kharagpur

Module – 08: Technology Based Training Methods
Lecture - 40
Choosing a New Technology for Training

Welcome to the course on Training and Development. We are on Module 8 understanding technology based training. Today is the lecture 5 of this module, where we are going to know about Choose New Technology for Training or Choosing a New Technology for Training.

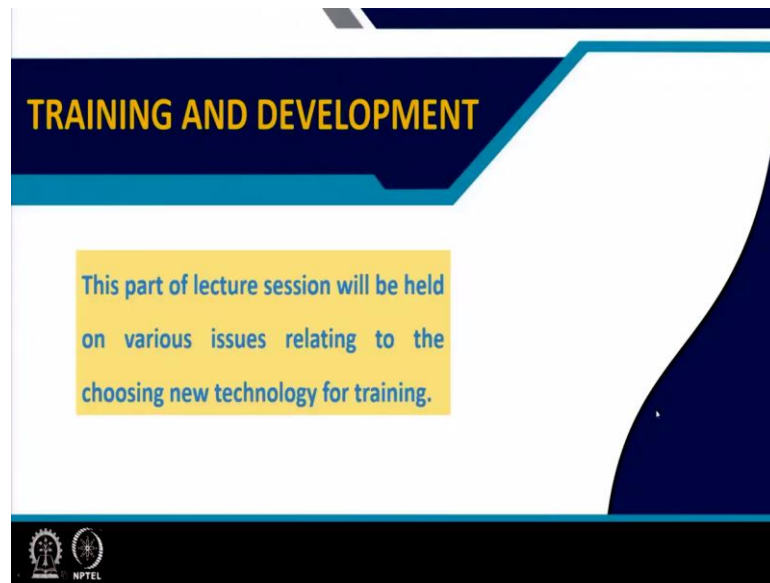
Till now in this module 8 we have understood about the difference of traditional training and technology based training, the difficulties of each of these, the benefits of each of these. We have understood computer based training. We have understood social media and training we have also seen how a learning management system can be developed and how it plays a very important part in human capital management.

In today's session we will understand some of the new technologies for training and like where it can be used how it can be used. Of course, along with its challenges because as days are advancing newer technologies are coming up. And maybe it is not possible to cover all the technologies in the short span of duration in the course over here.

But what you will try to do over here is at least give you some awareness of what could be the different technologies which are possible. Which we will expect that you will search for yourself more and learn try to find out what are the new technologies coming up and how you can use that for your own benefit in the in developing or learning maybe system learning management system in your own organization.

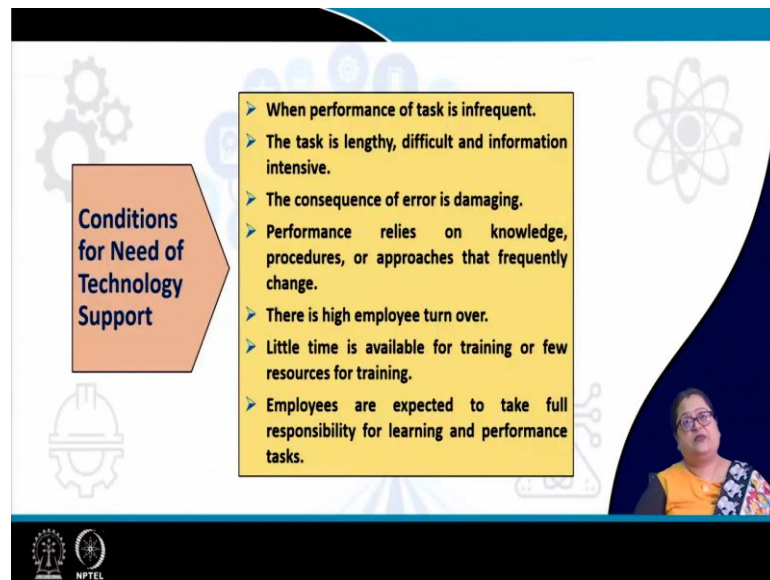
If you are working or you get to understand the benefits of the different technologies which are upcoming technologies. So, let us begin for the today's session.

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So, this part of the lecture session will be held on various issues related to choosing new technology for training.

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Now, what are the conditions for need of technology support? So, why we need for technology support? Is when performance of task is infrequent, when the task is lengthy difficult and information intensive. The consequence of error is damaging. Performance relies on knowledge procedures and approaches that frequently change. There is high

employee turnover. Little time is available for training or few resources for training. Employees are expected to take full responsibility for learning and performance tasks.

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Why New Technology is Needed for Training

- It saves money. – Employees that are properly trained spend less time troubleshooting and more time on productive and revenue-driving tasks.
- It saves time. – When employees are knowledgeable about the applications they use, they can work quickly and finish projects faster

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And why a new technology is needed for training? First it saves money. Employees that are properly trained spend less time troubleshooting and more time on productive and revenue driving tasks. It saves time. When employees are knowledgeable about the application, they use they can work quickly and finish the projects faster.

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Role of Technology in Training

- The role of technology is that advancements are constant. Incorporating technology into the learning environment not only creates a highly accessible course, but it also prepares the workforce for the next wave of technology, such as artificial intelligence, gamification and virtual reality.
- It helps to sharpen and refine employees development processes, and it can make delivery of training instruction and testing materials more efficient and less wasteful.

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The role of technology in training is that, it what we understand like that only thing which is constant is the advancements. So, in incorporating technology into the learning environments not only creates a highly accessible course but it also prepares the workforce for the next wave of technology, such as artificial intelligence, gamification, and virtual reality.

It helps to sharpen and refine employee's development processes and it can make delivery of training instructions and testing materials more efficient and less wasteful.

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The slide features a central yellow box with a black border containing a bulleted list. To the left of this box is an orange arrow pointing right with the text 'Impact of Technology in Training'. The background is white with various grey icons: gears, a hard hat, a circuit board, a stylized atom, and a tree of nodes. In the bottom right corner, there is a small video inset of a woman with glasses and a yellow top. The NPTEL logo is in the bottom left corner.

Impact of Technology in Training

- The use of technology driven training delivers benefits to employees and organizations. Technology offers ease of use, learning retention, dissemination of information, the ability to reinforce learning, employee training convenience and a reduced impact on productivity.

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Now, what is the impact of technology in training? The use of technology driven training delivers benefits to employees and organizations. Technology offers ease of use, learning retention, dissemination of information, the ability to reinforce learning, employee training convenience and a reduced impact on productivity.

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What Are New Technologies Used in Training

In addition to computer based training, there are some new technologies used in training which include:

- Mobile technology
- Video-based training
- Virtual environment and avatars
- HTML 5 and Responsive design
- Automation and adaptive learning
- Big data

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Now, what are the new technologies which are used in training are? Like in addition to computer based training there are some new technologies used in training which include, mobile technology, video based training, virtual environment and avatars, HTML 5 and responsive design, automation and adaptive learning and big data. We will visit each of these in details to form a preliminary idea on all these different technologies.

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What Are New Technologies Used in Training

- **Mobile technology**
A brief discussion has been made in previous lecture. However, the widespread adoption of mobile phones as well as other mobile devices such as tablets, e-readers, etc. is encouraging organizations to leverage mobile learning technologies for their workforce training.

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mobile phones as well as other mobile devices like tablets, e-readers etcetera. It is encouraging the organizations to leverage mobile learning technologies for their workforce training.

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What Are New Technologies Used in Training

- **Video-based training**

Video-based training has become a sudden upsurge in the online streaming space. Newer training technologies, tools, increased network bandwidth, and widespread access to the internet is enabling organizations to create an affordable and advanced video-based training programs,

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What Are New Technologies Used in Training

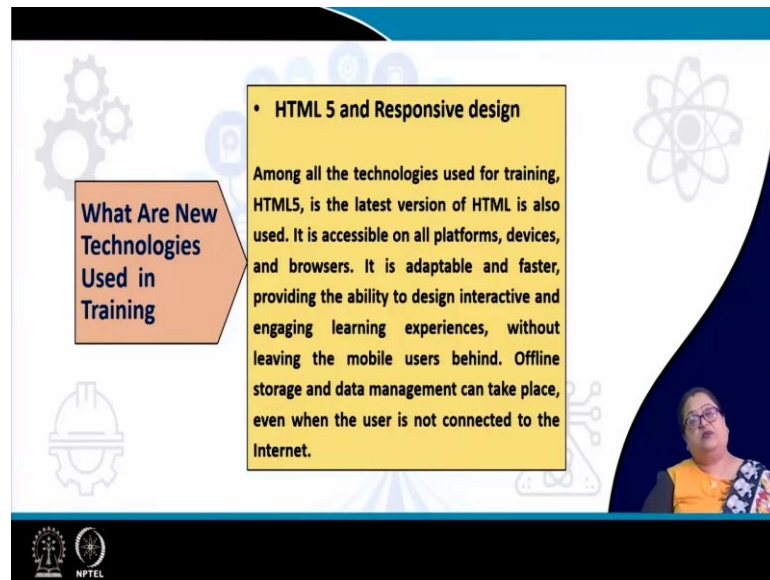
- **Virtual environment and avatars**

Organizations are using virtual training coach also called avatar, who engages with the learners like a real human being. The human looking avatars in the form of a cartoon, a 3D character instructing and engaging with learners to bring human touch with their e-learning process.

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The slide features a blue header and footer. The main content area is white with a blue curved border on the right. On the left, an orange arrow-shaped box contains the text 'What Are New Technologies Used in Training'. To its right, a yellow box contains a bullet point: '• HTML 5 and Responsive design'. Below the bullet point, a paragraph of text describes HTML5. The slide is decorated with faint icons of gears, a lightbulb, a hard hat, and an atom. A small video inset in the bottom right corner shows a woman with glasses and a colorful patterned top. The NPTEL logo is visible in the bottom left corner.

What Are New Technologies Used in Training

- **HTML 5 and Responsive design**

Among all the technologies used for training, HTML5, is the latest version of HTML is also used. It is accessible on all platforms, devices, and browsers. It is adaptable and faster, providing the ability to design interactive and engaging learning experiences, without leaving the mobile users behind. Offline storage and data management can take place, even when the user is not connected to the Internet.

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What Are New Technologies Used in Training

- **Automation and Adaptive learning**

The recent practice of using new technologies in training is that content providers and Learning Management System providers are using a vast number of automated solutions to create new courses and learning materials. These are reducing the cost and development time required in the conventional process.

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What Are New Technologies Used in Training

- **Big Data**

Organisation imparting trainings have more learning activities and data gathered to them. By using external big data analytics tools or the ones, which are built into a variety of Learning Management Systems, organizations are getting to know about their learners' usage patterns, behavior, training courses effectiveness. This is enabling them to create a customized and personalized training courses based on facts and insights

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What Are New Technologies Used in Training

How to Leverage Big Data & Analytics

- Gathering data and creating reports
- Observing some trends on data collected
- Prediction and analysing data to see any problem in training design and execution.
- Taking a look into the course and gain insight.

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Now, how to leverage big data and analytics? Gathering data and creating reports. Observing some trends on data collected. Prediction and analytics analyzing data to see any problem in training design and execution, taking a look into the course and gain certain insight.

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Role of Trainers in Choosing New Technology for Training

Getting employees used to new software and systems can be done, through a training. Here are some roles of trainers how to train employees on a new system or technology:

- Trainers need to know the software or system themselves prior to training.
- Utilizing services of subject matter experts.
- Trainers need to make training a priority to allocate time and resources.

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Now, what are the role of trainers in choosing new technology or training? Now, one of the challenging roles is of course to getting the employees used to new software and systems can be done through a training. So, here the role of the trainer is how to train employees on a new system or technology. Trainers need to know the software or system themselves prior to training. Utilizing services of subject matter experts' trainers need to make training a priority to allocate time and resources.

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The slide features a title in an orange arrow pointing right: "Role of Trainers in Choosing New Technology for Training". To the right of the arrow is a yellow box containing six bullet points. The background is white with faint icons of gears, a lightbulb, and an atom. A video inset in the bottom right shows a woman with glasses and a colorful patterned top. The NPTEL logo is in the bottom left corner.

- Conducting need analysis for requirement of technological skills of the employees.
- Setting clear and realistic deadlines and rollout appropriate methods.
- Use training incentives for employees to use new software attractive learning.
- Selecting an appropriate format for training.
- To consider that employees might also be in the field or remote, so it is to make sure that designing courses as they can consume.
- Making interactive demos including simulations.

It is very important to do a need analysis. So, conducting need analysis for requirement of technological skills of the employees. Setting clear and realistic deadlines and rollout appropriate methods. Use training incentives for employees to use new software attractive learning. Select an appropriate format for training.

To consider that employees might also be in the field or remote or it may or for that it should be made sure that designing courses as they can consume, that is very important. Like whenever you are introducing something new it should not appear as a threat to the employee which is beyond the demand which is beyond their capability to answer.

So, it is very important to design course accordingly to what is that they can like deliver to or consume. Making interactive demos quickly including the simulations.

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Role of Trainers in Choosing New Technology for Training

- To curate valuable content available - some of them could be used by trainees as a pre-work, stimulus for a reflection, implementation tool for which a trainer should be ready to search, choose, describe, validate and update his/her selection.
- Trainer should be also prepared to communicate with trainees in written and visual form.

Now, what are the role of trainers in choosing new technology for training? So, it is to curate valuable content available some of them could be used by trainees as a pre-work, stimulus for a reflection implementation tool for which a trainer should be ready to search, choose, describe, validate and update his or her selection. Trainers should always be prepared to communicate with trainees in written and visual form.

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Role of Trainers in Choosing New Technology for Training

- Trainer should understand how to effectively use the remote learning tools in the training function.
- Trainer should be ready to enter into the role of a Stimulator who understands the challenges of trainees, takes care of them with proper engagement and competencies.

The trainers should also understand how to effectively use the remote learning tools in the training functions. So, because if you are going for a hybrid mode then what is to be

delivered through this online mode and which one and what is to be delivered in the offline mode.

So, we have to keep a balance of that and we have to understand like how this technology based training again can be gelled well married well with the traditional process of training. Also, because each one has its advantage and if we are trying to blend both these two together then only, we can get the advantage, better advantage of the training process.

So, but in cases where that is not possible, we have to like only go for technology based training. So, we have to understand given the situation in which the trainee are the time constraints that they have or maybe other job constraints that they have. Then how effectively we can use this learning tools remote learning tools in the training function. So, that the training program does not appear burdensome to the people, but it appears to be an enjoyable experience that we need to take care of.

The trainer should be ready to enter into the role of a simulator who understand the challenges of trainees, take care of them with proper engagement and competency. So, while doing an exercise maybe solving a particular problem they may get stuck up. So, how to give your guidance so that or help them with the options of thinking differently which will help them to solve that real life like a simulated problem.

So, these are the role of our trainers in terms of becoming more supportive help hand holding support. So, that the person can overcome the difficulties that is been placed in front of him or her. As a process of making the person more self reliant on receiving the training.

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Choosing New Technology for Content Development

New technologies have important role on content development for training such as-

- Authoring, publishing and translation of learning materials.
- Streamline content delivery and maximize content reuse.
- Establish content ownership.
- Encourage anyone to review and contribute to content development across the globe.
- Reduce costs and increase translation efficiency.
- Provide user analytics on content and use insights to improve how users interact with and consume content.

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So, what are the new technologies for content development? What is that in that content development and how it needs to be like done properly? Because whenever we are talking of technology based training it there will be a huge like the focus should be very huge on developing a scientific content which we; which is suited for the like maybe the platform that you are using the technology that you are using also.

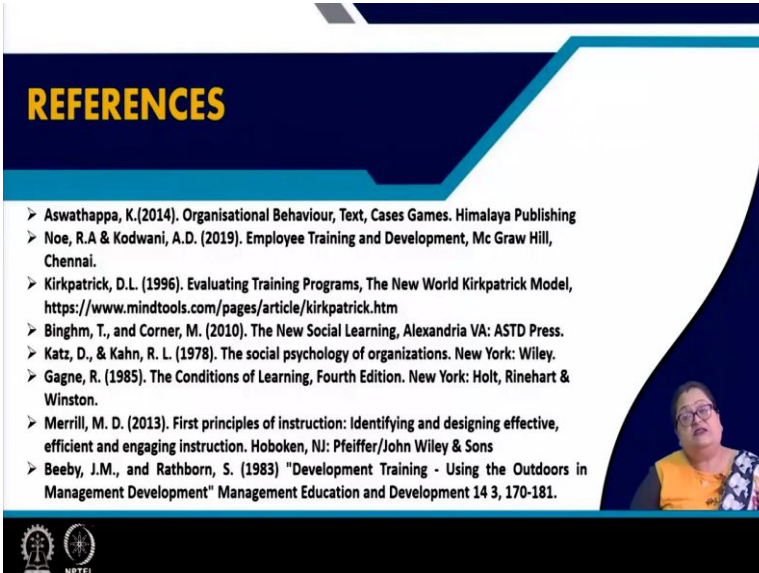
So, the new technologies that have important role in content development of training such, as authoring, publishing and translation of learning materials. Streaming content delivery and maximize the content reuse. Establish content ownership. Encourage anyone to review and contribute to the content development across the globe. Reduce cost and increase translation efficiency. Provide user analytics on content and use insights to improve how users interact with the interact with and consume the content.

So, as far content development is concerned it may sound to be easy, but like we are developing a particular content. But whenever we are developing the content for a particular medium it has its own challenges and those needs to be addressed properly. So, and also like there could be like IP related issues also like who owns the ownership of this content. Because ultimately if you are developing it a content for the in a web based training you may face some copyright issues also.

So, what are the; what are the content ownership like and what are the permissions do you give do you keep the permission of developing the content to yourself or you make it like everybody will contribute towards the content development as is done in wikis.


So, this is your choice and like the it is very important and you need to like do a lot of analysis and use your acumen of analytics to understand. Like what is the content how it can be improved and how it can be improved in the way like how the learners are interacting with the content. And like using it for their own learning growth and development.


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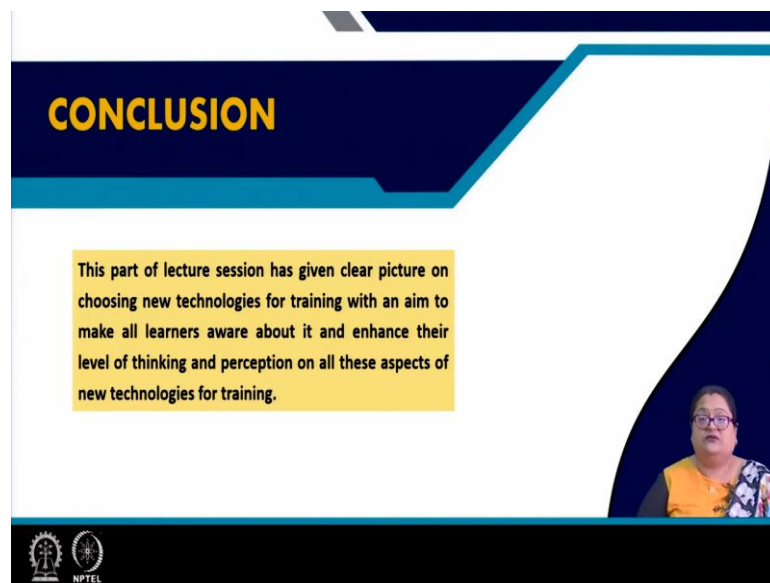
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So, these are the references that we have used for these slides.

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CONCLUSION

This part of lecture session has given clear picture on choosing new technologies for training with an aim to make all learners aware about it and enhance their level of thinking and perception on all these aspects of new technologies for training.

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And we hope like this part of the lecture session on choosing new technologies for training like is given, is delivered with an aim to make the all our learners aware about it and enhance their level of thinking and perception on all these aspects of new technology for training.

Thank you.