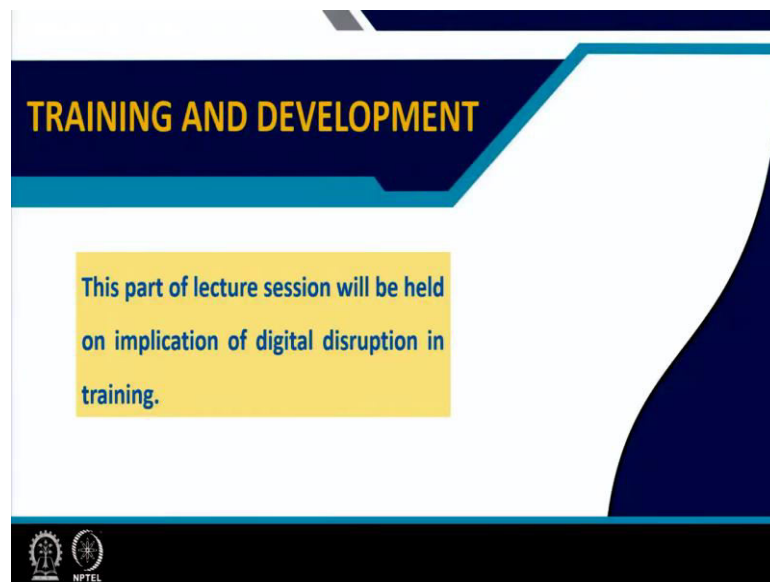


Training and Development
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Vinod Gupta School of Management
Indian Institute of Technology, Kharagpur

Module - 12
Lecture - 59
Implication of Digital Disruption in Training and Learning

Welcome to the module 12 of the lecture sessions on Training and Development. We are on the lecture 3 of this particular module and here we are going to discuss on the Implication of Digital Disruption in Training and Learning.

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So, this part of the lecture session will be held on implication of digital disruption in training.

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Introduction to Digital Disruption

Digital disruption has remarkable impact on employment and considerable implications for skills and employee training. As a result of that training providers, from early schooling through to tertiary education, need to adapt curriculum to the rapidly changing technological environment leading to digital disruption.

The slide features a blue header and footer with the NPTEL logo. The background is white with faint icons of gears, a hard hat, and a circuit board. A video inset in the bottom right shows a woman with glasses speaking. A small image of a starburst pattern is in the top right.

Now, what is digital disruption? Digital disruption has a remarkable impact on the employment and considerable implications for skills and employee training. As a result of that training providers, from early schooling through to tertiary education, need to adapt curriculum to the rapidly changing technological environment leading to digital disruption.

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Defining Digital Disruption

Generally, digital disruption happens after a digital innovation. It affects how the expectations and behaviour of customers evolve, causing organizations to shift how they create products and services. This shift in digital strategy can occur on an individual, organizational, industry or societal level..

Digital disruption is the change that occurs when new digital technologies and business models affect the value proposition of existing goods and services.


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Some Examples of Digital Disruption

- The digital camera business disrupted the industry of film photography and photo processing.
- The rise of electronic reading has redefined the print and publication industry.
- Amazon, Hulu and Netflix, caused a disruption within the media and entertainment industries by changing how content is accessed by customers and monetized by advertisers.
- On-demand services, like Uber, have disrupted more traditional services like taxis.

Some examples of digital disruptions. The digital camera business disrupted the industry of film photography and photo processing. The rise of electronic reading has redefined the print and publication industry. Amazon, Hulu and Netflix, caused a disruption within the media and entertainment industries by changing how content is accessed by customers and monetized by advertisers. On-demand services, like Uber, have disrupted more traditional services like taxis.

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Importance of Digital Disruption

- Digital disruption obtains competitive benefits to business. It has other importance, like :
 - Pursue initiatives that might cause a disruption, without getting afraid of the disruptor.
 - Consolidate data assets and use them to make decisions.
 - Brainstorm ideas for entirely unique products, services or channels.
 - Employ customer data in new, innovative ways.
 - Digital disruptions are more of an opportunity than a threat

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The importance of digital disruption. Digital disruption obtains competitive benefits to business. It has other importance, like: pursue initiatives that might cause a disruption, without getting afraid of the disruptor. Consolidate data assets and use them to make decisions. Brainstorm ideas for entirely unique products, services or channels. Employ customer data in new, innovative ways. Digital disruptions are more of an opportunity than a threat.

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Elements of Digital Disruption

Digital disruption has four distinct elements, each with the potential to change the businesses directions. They are:

- **Technology:** Includes things like invention, usage, design, etc.
- **Business:** Covers marketing, development, delivery pricing, etc.
- **Industry:** Involves customers, methods, processes, standards, etc.
- **Society:** Encompasses movements, culture, habits, and so on.

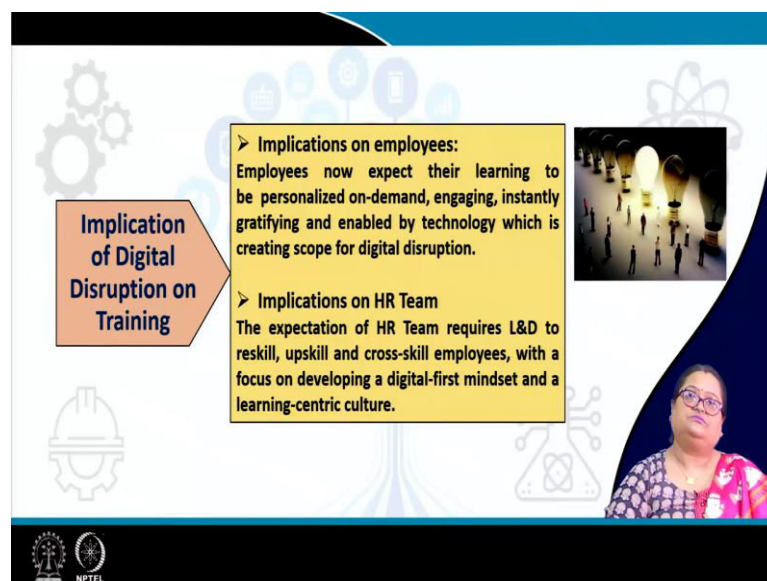
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Now, what are the elements of digital disruption? It is four distinct elements, each with the potential to change the business directions. They are; the first is technology: which includes things like invention, usage, design, etcetera. The business itself which covers marketing, development, delivery pricing.

Industry which involves the customers, methods, processes, standards. And society at large which encompasses movements, culture, habits and so on. Because the technology first will affect the business, the business is placed within the like ecosystem of the industry and the whole industry, how it is changing will affect generally affect the society. And the society will also give its feedback to the industry, industry to business and to the technology which will show like this digital disruption.

However, it is working is getting assimilated into the system or not. So, it is a like moving out from technology to society and again society giving feedback inwards to the technology also.

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The slide features a central yellow box with two bullet points. To the left is a blue arrow pointing right with the title. To the right is a small image of a modern interior with glowing spheres. At the bottom right is a video inset of a woman. The background is white with faint icons of gears, a lightbulb, and a person. The NPTEL logo is at the bottom left.

Implication of Digital Disruption on Training

- **Implications on employees:**
Employees now expect their learning to be personalized on-demand, engaging, instantly gratifying and enabled by technology which is creating scope for digital disruption.
- **Implications on HR Team**
The expectation of HR Team requires L&D to reskill, upskill and cross-skill employees, with a focus on developing a digital-first mindset and a learning-centric culture.

Now, what is the implication of digital disruption on training. The implication on the employees: employees now expect their learning to be personalized on-demand, engaging, instantly gratifying and enabling by technology which is creating scope for digital disruption.

What the implication of the HR team is that: the expectation of the HR team requires learning and development to reskill, upskill and cross-skill employees, with the focus on developing a digital-first mindset and a learning-centric culture.

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The slide features a central yellow box with two bullet points. To the left, an orange arrow points to the box with the text 'Implication of Digital Disruption on Training'. The background includes icons of gears, a hard hat, and an atom. A small video inset of a woman is in the bottom right corner. The NPTEL logo is at the bottom left.

Implication of Digital Disruption on Training

- **Implications on Organizations:**
In the digital age, however, the functions of organization specifically L&D, are demonstrating increasing importance. Training, learning and talent management along with L&D have become a strategic priority to the organizations.
- **Implications on learning competencies:**
The implications of the digital age for employees training and learning competencies remarkable. It helps to adapt modern learning systems, boosts up confidence, blending experiences as opposed to blended learning, crisis management and upskilling the training function.

The implication of organization is that in the digital age; however, the function of organizations specifically learning and development, are demonstrating increasing importance. Training, learning and talent management along with learning and development have become a strategic priority by the organizations.

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Implication of Digital Disruption on Training

> Implications on customer centric learning experience:

Organizations are investing in digital technologies and game elements into customer interactions. These can make learning centric experience with benefit like - demonstrable mindset change, accelerated learning, bridging the gap between theory and practice, hyper-personalization and exceptional return on investment for training.

The slide features a speaker in the bottom right corner and a glowing lightbulb icon in the top right. The background includes gear and atom symbols.

Implications on customer-centric learning experience: organizations are investing in digital technologies and game elements into customer interactions. These can make learning centric experience with benefits like - demonstrable mindset change, accelerated learning, bridging the gap between theory and practice, hyper-personalization and exceptional return on investment for training.

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Technological Disruption in Indian E-Learning

The following disruptive technologies have played an instrumental role in making online education:

Mobile-based Learning: Today, as operating smartphones comes naturally to both urban and rural India, learners accept, embrace and enjoy learning through their mobile phones.

MOOCs: A Massive Open Online Course (MOOC) is an online course aimed at unlimited participation and open access via the web. Ed-tech platforms like Coursera, edX and FutureLearn offer more than 5000 courses taught by educators across the world that anyone can access.

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Technological Disruption in Indian E-Learning

Interactive Classrooms: Interactive classrooms allow students to be engaged in their learning like never before, enabling a two-way conversation model between learner and the facilitator.

Use of AR/VR/MR in learning: AR (Augmented Reality), Virtual Reality (VR) and Mixed Reality (MR) are the cool kids in the digital learning space which ensure higher engagement levels and therefore, higher motivation levels to continue learning.

Cloud Storage: With all course material, textbooks, exam papers and assignments available online, students can save all of it to their cloud and access it from anywhere.

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Cloud storage: with all course material, textbooks, exam papers and assignments available online, students can save all of it to the cloud and access it from anywhere.

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Indian Efforts to Activate Digital Platform for Learning

Following are some efforts taken by Government of India for digital learning:

- Mechanisms developed to provide textbooks to all children at home.
- Online classes and e-learning to keep the learning process intact.
- Up-skilling teachers for leveraging e-learning resources.
- Use of mobiles to increase penetration and enable “anytime, anywhere” access.
- Re-aligning various interventions to manage the crisis, with specific emphasis on the learning process, safety & security of children

The slide features a blue header and footer. The footer contains the NPTEL logo and a small portrait of a woman in the bottom right corner. The background is white with faint icons of gears and a network diagram.

Now, what are the efforts taken by the Government of India for digital learning? Some of the efforts that have been taken by the government of India for digital learning are mechanisms developed to provide textbooks to all children at home. Online classes and e-learning to keep the learning process intact. Upskilling teachers for leveraging e-learning resources. Use of mobiles to increase penetration and enabling “anytime, anywhere” access.

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Future Plan of Shaping Indian E-Learning

Future plans include the following:

- Developing digital classrooms as an instructional modality - Integration of use of technology with the education system.
- Inclusion of virtual vocational training, virtual labs & skill development courses.
- Multi-mode access to education using web portals, mobile apps, TV channels, radio, podcasts etc. with coherent user experience.
- Developing quality e-content in local languages.
- Developing framework for enhancing learning within and outside the classroom, and for assessments in the era of digital education.
- Framing of Online/Digital Education Guidelines addressing the digital divide

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Now, what are the future plans for shaping Indian e-learning? It includes the following: like developing digital classrooms as an instructional - modality integration of use of technology with the education system. Inclusion of virtual vocational training, virtual labs and skill development courses. Multi-mode access to education using web portals, mobile apps, TV channels, radios, podcasts, etcetera with coherent user experience.

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Digital Disruption in Teachers' Training

- Real-time text to speech and text translation systems can be used to disseminate information seamlessly in the regional language,
- Biometric authentication: Mundane and support tasks of the teacher – attendance and other administrative tasks- can be taken over by AI.
- Chatbots: Integration of chatbots in the digital infrastructure could be transformational. They could be trained on subject matter and a good percentage of doubts of the students could be answered instantly.

DIGITAL DISRUPTION

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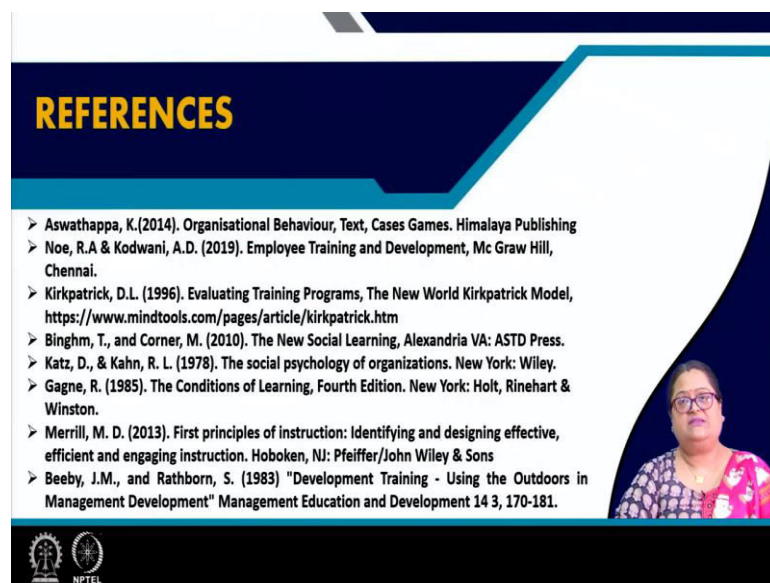
Digital Disruption in Teachers' Training

- Automated grading: Machine learning methods could be used for automated grading of assessments on a large scale platform such as DIKSHA, E-PATHSALA and SWAYAM.
- Personalization: When such content is in place on these e-learning platforms, personalized feedback and recommendations at a large scale could be possible.
- Supervised classification models to reduce drop-out rates: When AI systems provide personalized feedback, we can curb the all India drop-out rates in higher education.

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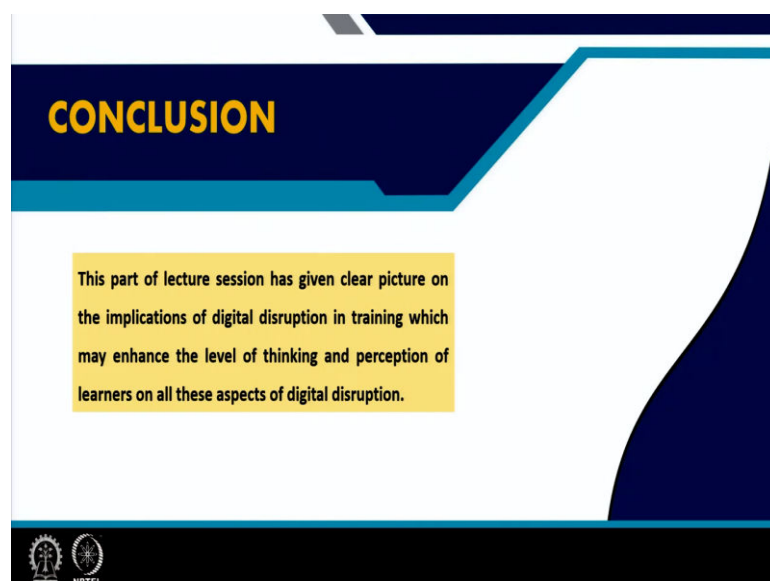
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These are the references that you have used for preparing the slides.

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CONCLUSION

This part of lecture session has given clear picture on the implications of digital disruption in training which may enhance the level of thinking and perception of learners on all these aspects of digital disruption.



So, we hope that this discussion on digital transformations and disruptions has helped us to understand their importance in training. And how they have helped the training situations, training and learning situations at the macro level in the Indian system. How Indian education scenario is changing with the help of the digital disruptions.

Will be meeting next with you with some more discussions on the like disruptions in organizations and the role of training and learning. How disruptions have affected training and learning and how it can be managed in an organization in the upcoming lectures. Stay tuned with us.

Till then thank you and bye.