



NPTEL ONLINE CERTIFICATION COURSES

TRAINING AND DEVELOPMENT

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Module 8:

Lecture 01 : Technology Based Training: Concept, Types and Importance

TRAINING AND DEVELOPMENT

This part of lecture session will be held on concept, importance of technology based training.



Introduction

Traditionally, interaction-skills training relied on peer-to-peer role playing or passive learning through videos. Technology-based training, in contrast, facilitates self-directed learning with rich media sources and abundant learner-assessment and remediation options.



Technology Based Training

**Environmental
Factors
Influencing**

Technology-based training has been caused by multiple environmental factors including:

- Globalization
- Economic Pressure
- Work-life Concern
- Technological Advancement

Technology Based Training

Environmental Factors Influencing

- **Globalization**

For highly decentralized organizations with employees dispersed around the globe, the variable training costs can become prohibitively expensive. Even if an organization has a bottomless training budget, centralized, classroom training is not an efficient means of delivering timely training to a global workforce

Technology Based Training

Environmental Factors Influencing

- **Economic Pressure**

Companies face tremendous economic pressures to cut costs and increase shareholder value. The result is that human resource professionals are being asked to do more with less. In the training field this translates into maintaining, or often increasing, a firm's employee development activities while at the same time reducing training expenditures

Technology Based Training

Environmental Factors Influencing

- **Work-life Concern**

One of the employment trends anticipated to have the greatest impact on the workplace is the increased demand for flexible work schedules from employees. Possible causes of this trend include generational differences and the growing number of employees who have childcare and/or elder care responsibilities.

Technology Based Training

**Environmental
Factors
Influencing**

- **Technological Advancement**

Companies are now to rethink traditional approaches of training and development, to position technology-based training as a viable alternative to classroom-based instruction based on the recent advances in computing power and connectivity have probably done the most .

Technology Based Training

**Influence of
Technology**

- Employees have greater control over when and where they receive training
- Employees have greater access to knowledge and expert systems
- The use of avatars, virtual reality, and simulations make training “real”
- Employees can choose the media they like best

Technology Based Training

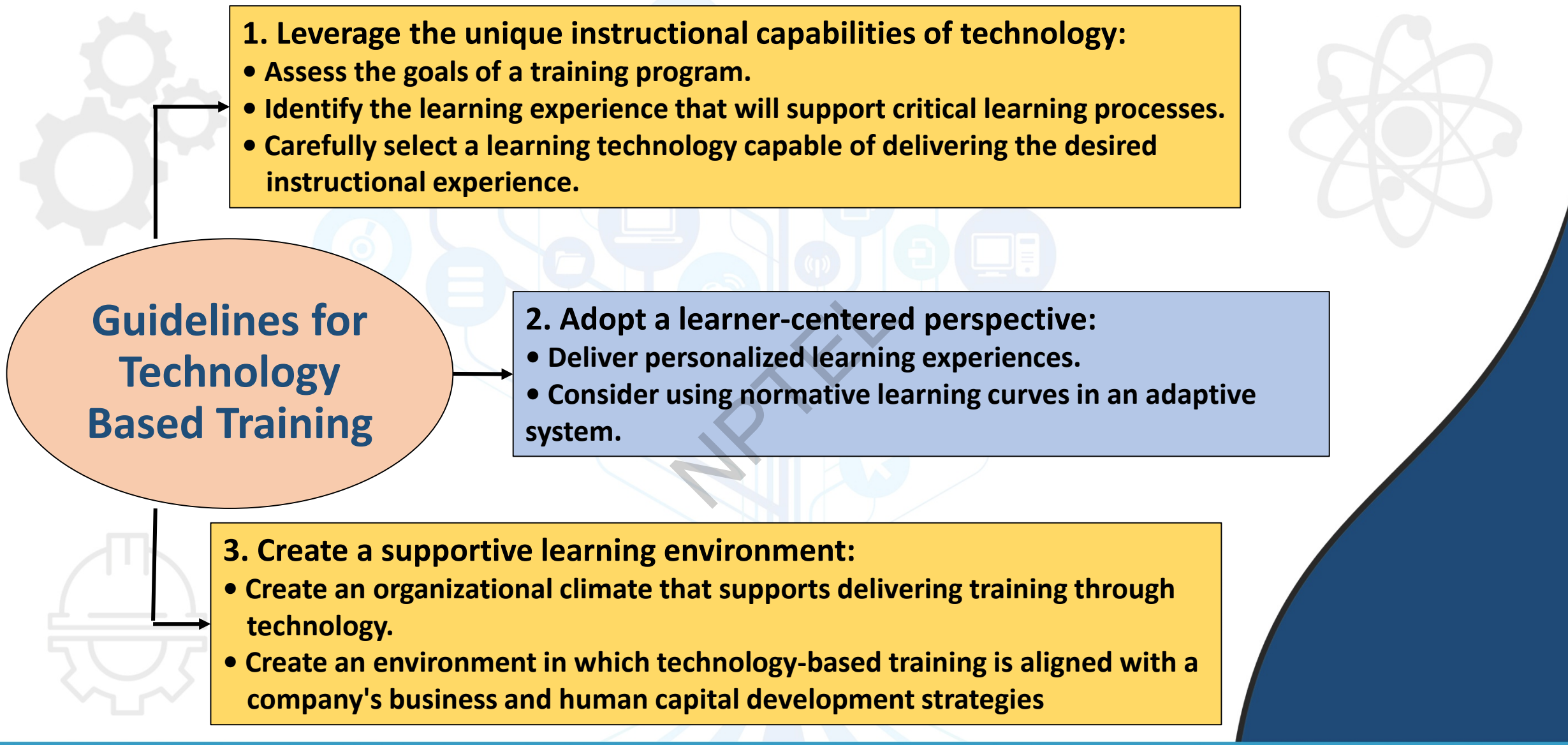
Influence of Technology

- The administration of training can be conducted electronically
- Training accomplishments can be easily monitored
- Training can be easily delivered to trainees



Objectives of Technology Based Training

- To explain how new technologies are influencing training
- To evaluate a Web-based training site
- To explain how learning and transfer of training are enhanced by using new training technologies
- To explain the strengths and limitations of e-learning, mobile technology training methods (such as iPads), and simulations
- To explain the different types of social media and the conditions conducive to their use for training
- To describe to a manager the various types of distance learning



Guidelines for Technology Based Training

1. Leverage the unique instructional capabilities of technology:

- Assess the goals of a training program.
- Identify the learning experience that will support critical learning processes.
- Carefully select a learning technology capable of delivering the desired instructional experience.

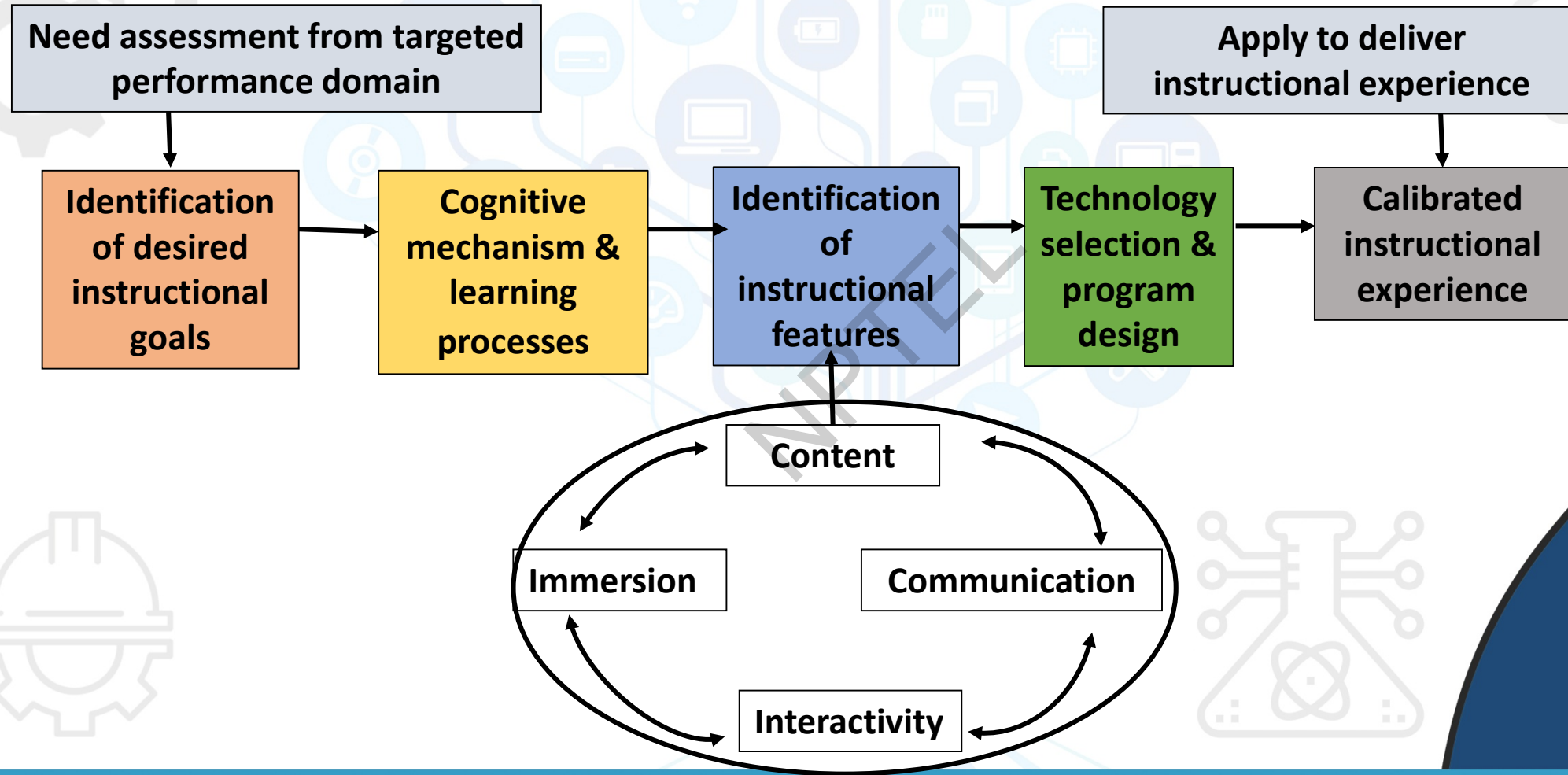
2. Adopt a learner-centered perspective:

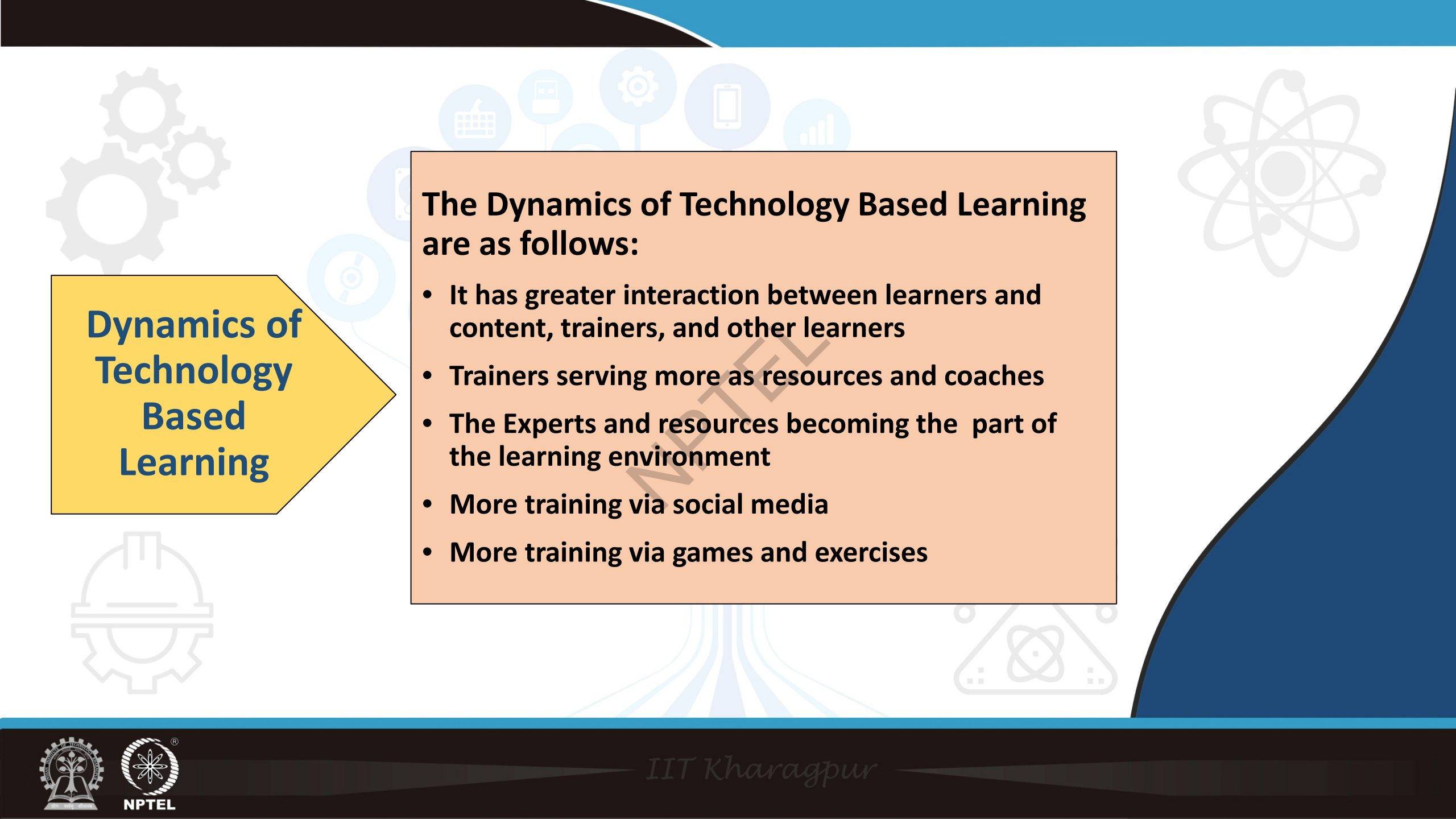
- Deliver personalized learning experiences.
- Consider using normative learning curves in an adaptive system.

3. Create a supportive learning environment:

- Create an organizational climate that supports delivering training through technology.
- Create an environment in which technology-based training is aligned with a company's business and human capital development strategies

Framework for Technology Based Training Design





Dynamics of Technology Based Learning

The Dynamics of Technology Based Learning are as follows:

- It has greater interaction between learners and content, trainers, and other learners
- Trainers serving more as resources and coaches
- The Experts and resources becoming the part of the learning environment
- More training via social media
- More training via games and exercises



Features of Technology Based Training

Basic Features are as follows:

- **Content**—content may include text, video, graphics, and sound
- **Collaboration and sharing**—collaboration and sharing can help reinforce content
- **Links to resources**—access to other training methods and electronic performance support
- **Learner control**—learners can control what, when, how, and with whom they learn
- **Delivery**—delivery may include internet, intranet, distance learning, and CD-ROM
- **Administration**—online administration of enrollment, monitoring, and trainee progress

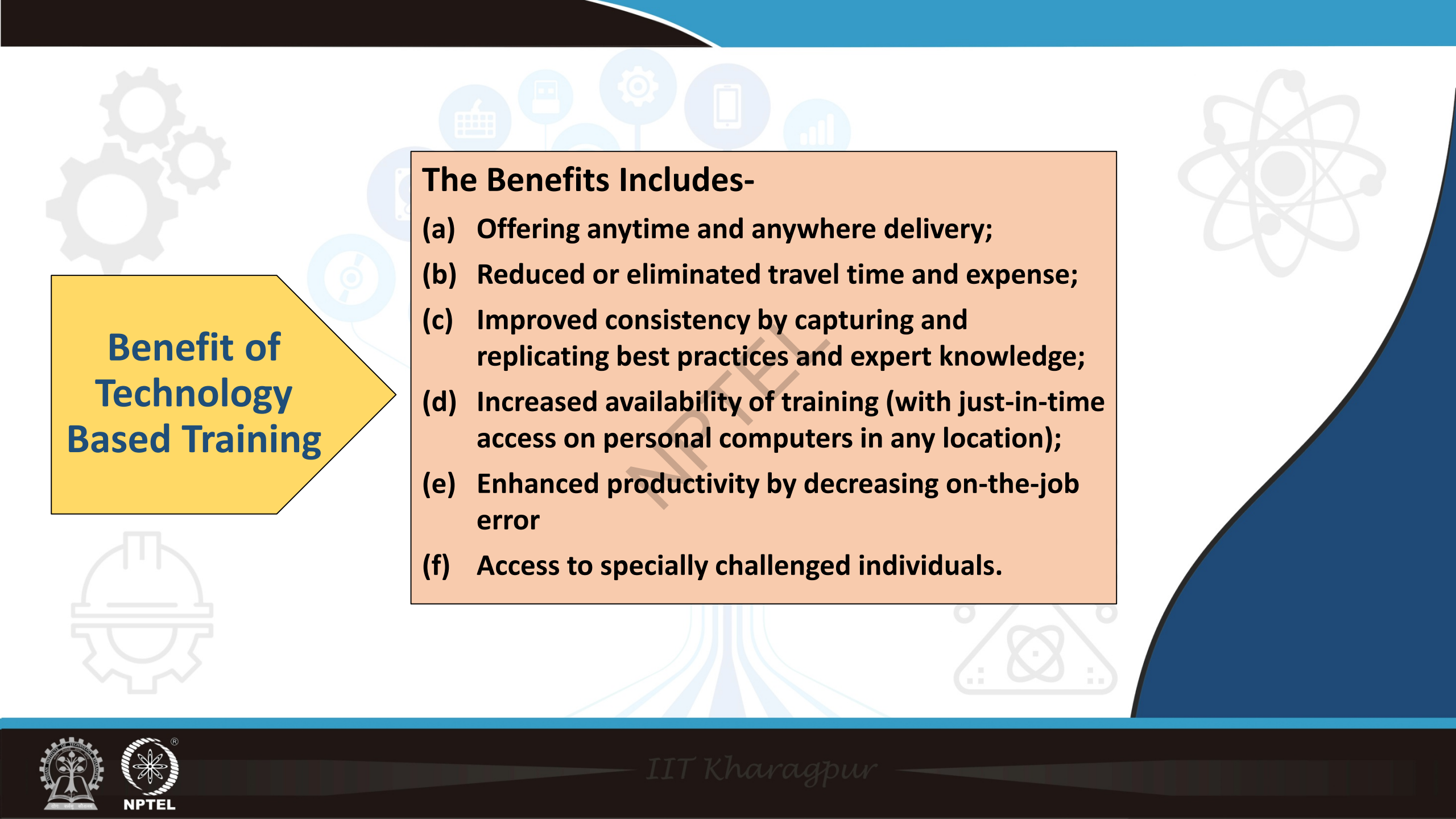
Effectiveness of Technology Based Training

- It is more effective than face-to-face for declarative knowledge
- Technology based and classroom are equally effective for procedural knowledge
- Learners are equally satisfied with online and classroom instruction
- It is better than classroom when there's learner control, practice, and feedback

Effectiveness of Technology Based Training

- It is better than classroom for long courses
- Technology based and classroom are equally effective when similar methods are used
- Trainees who benefit most are those who devote more time
- Technology based learning is not effective for learners with low technology self-efficacy





Benefit of Technology Based Training

The Benefits Includes-

- (a) Offering anytime and anywhere delivery;**
- (b) Reduced or eliminated travel time and expense;**
- (c) Improved consistency by capturing and replicating best practices and expert knowledge;**
- (d) Increased availability of training (with just-in-time access on personal computers in any location);**
- (e) Enhanced productivity by decreasing on-the-job error**
- (f) Access to specially challenged individuals.**

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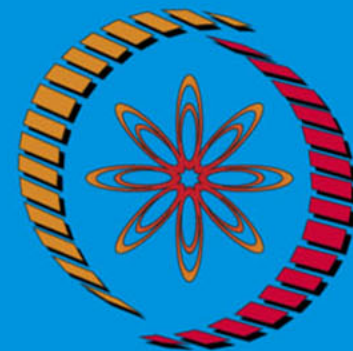
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CONCLUSION

This part of lecture session has given clear picture on the concept, purpose, influence and benefits of technology based training with an aim to make aware all learners about it and enhance their level of thinking and perception on all these aspects of technology based training.





**THANK
YOU !**



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Module 8:

Lecture 02 : Computer Based Training



TRAINING AND DEVELOPMENT

This part of lecture session will be held
on the computer based training.



Technologies Used in Training

E-learning, Online Learning, Computer Based Training, Web Based Training:
Training is delivered using a computer or the web, or CD's, DVD's and or videos.

Webcasts/Webinars:
Live web-based delivery of instruction to trainees in dispersed location.

Podcasts:
Web-based delivery of audio and video files.

Mobile Learning:
Delivery of training through hand held mobile devices such as smartphones or tablet computers



Technologies Used in Training

Blended Learning:

Training is delivered using a combined technology and face-to-face instructional delivery approach such as class room and web-based technology

Wikis:

Websites that allow many users to create, edit, update content and share knowledge.

Distance Learning:

Training delivery to trainees in other locations online, or through webcasts or virtual classroom.

Social Media:

Online and mobile technology used to create interactive communications allowing the creation and exchange of user generated content.



Technologies Used in Training

Blogs:

A webpage where an author posts entries and readers can comment

Chat Rooms and Discussion Board:

An electronic room or message board on which learners communicate between learners at the same or different times.

Massive Open Online Courses:

Learning is designed to enroll large number of learners (Massive) with free and accessible to anyone with an internet connection



Computer Based Training

It is referred to instruction and delivery of training conducted using a computer through internet or through the web.

These training methods can

- Include and integrate text,
- interaction using simulations, and games, and videos, and
- collaboration using blogs, wikis and social network and
- hyper links to additional resources.



Technological Learning Environment

Technology Delivery Mechanism
(Online, iPad, Simulation)
• Content

Trainer/Instructor

Learner

Learner

Learner

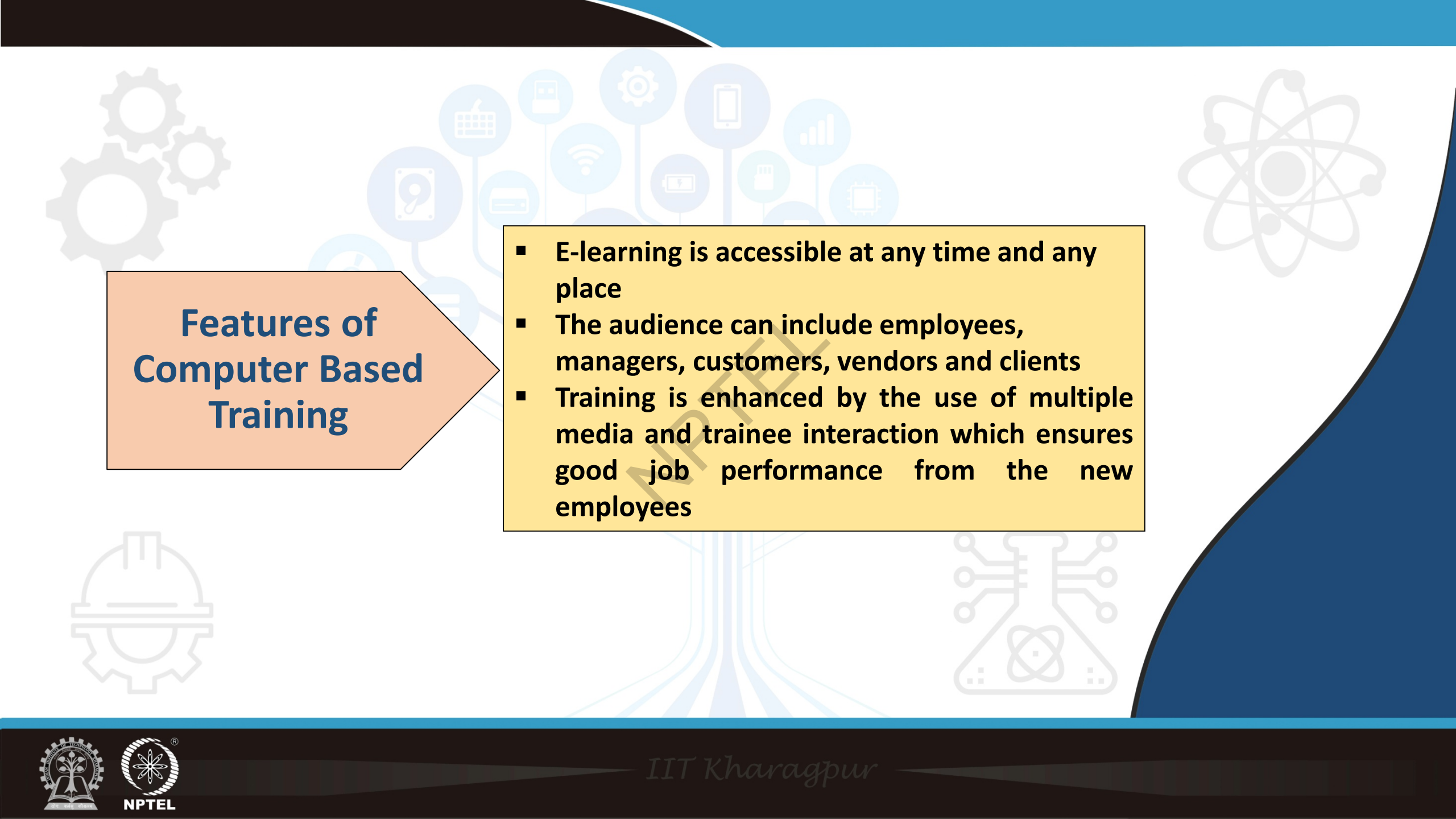
Experts

Resource Materials
Web Sites



Features of Computer Based Training

- This is designed to let the trainee move through the program at his or her own pace and repeat sections of the program if necessary
- Immediate feedback on the trainee's work
- Tracking of progress can determine if there is a need to adjust or change training
- Provides options for all types of learners (visual or hands-on)
- It is more affordable than traditional styles of training



Features of Computer Based Training

- E-learning is accessible at any time and any place
- The audience can include employees, managers, customers, vendors and clients
- Training is enhanced by the use of multiple media and trainee interaction which ensures good job performance from the new employees

Some Problems of Computer Based Training

- Inadequate funding - although costs have decreased significantly, an extensive capital investment is still required.
- Inadequate software - after long journey of CBT, the curricula for this medium are still in their infancy.
- Inadequate planning and preparation - sufficient planning and preparation are frequently not carried out, which leads to available computers not being fully utilized
- Unrealistic expectations - many educators have unrealistic expectations of CBT, and then become discouraged when outlandish promises are not met

Objectives of Online Learning, E-learning and Web Based Training

Online, E-learning initiatives are adopted to address the following issues:

- Management of people across geographic borders
- Management of remote and mobile employees
- Digital collaboration issues
- Reductions in management development resources
- Limited management time for training and development
- Management's low comfort level in accessing and searching online HR resources



Components of Online Learning, E-learning and Web Based Training

- **Content development:** Learning and instructional theories, instructional design, curriculum development
- **Multimedia component:** Text, graphics, audio streaming, video streaming, graphical user interface, Compression technology.
- **Internet tools:** Communication tools, asynchronous like email, listservs, newsgroups, etc
- **Computer and Storage device:** Computer platform including -Unix, DOS, Windows, Macintosh operating system
Servers, hard devices, CD-ROM, etc



Components of Online Learning, E-learning and Web Based Training

- **Connections and Service Providers**
 - (a) Modems
 - (b) Dial-in (e.g., standard telephone line, ISDN, etc.) and dedicated (e.g., 56kbps, DSL, digital cable modem, T1, E1 lines, etc.) services (<http://whatis.com/dsl.htm>)
 - (c) Mobile technology (e.g., connected wireless, wireless LAN, wireless WAN, wireless PAN or personal area network) (Polivka, 2001).
 - (d) Gateway Service Provider, Internet Service Providers, etc.



Components of Online Learning, E-learning and Web Based Training

- **Authoring and Management Programs**
 - (a) Programming languages (e.g., HTML - Hypertext Markup Language, VRML - Virtual Reality Modeling Language, XML – Extensible markup Language, XSL - Extensible Style Sheet language, XHTML – Extensible Hypertext Markup Language, WML-Wireless Markup language, Java, Java scripting, etc.)
 - (b) HTML Converters and Editors, etc.
 - (c) Learning Management Systems
 - (d) Authoring Tools and Systems (easier to use than programming languages)



Components of Online Learning, E-learning and Web Based Training

- **Servers and Networks**

- (a) HTTP servers, HTTPD software, Web site, URL - Uniform Resource Locator, etc.
- (b) Wireless Application Protocol (WAP)
- (c) Common Gateway Interface (CGI)—a way of interacting with the http or Web servers. CGI enables such things as image maps and fill-out forms to be run.



Components of Online Learning, E-learning and Web Based Training

- **Browsers and Other Applications**

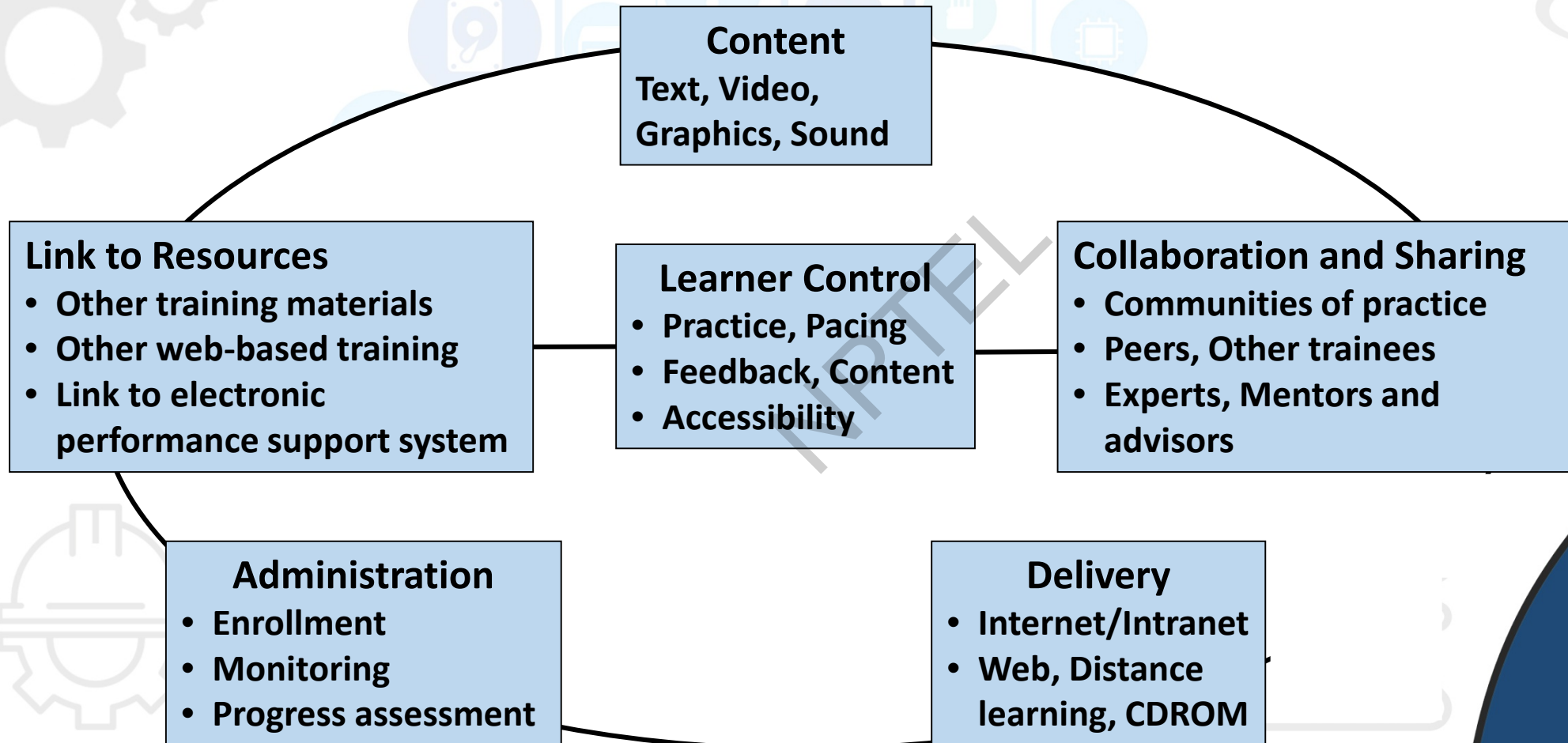
- (a) Text-based browser, Graphical browser, VRML browser, etc.
- (b) Links (e.g., Hypertext links, Hypermedia links, 3-D links, imagemaps, etc.)
- (c) Applications that can be added to Web browsers such as plug-ins.



Features of Online Learning, E-learning and Web Based Training

- Online program that uses video may make it an interactive experience for trainees.
- Trainees watch the video and have the opportunity to answer question using keyboard or touchpad.
- Interactive video is valuable to help trainees learn technical or interpersonal skills.
- Online learning can also give opportunity to collaborate with other learners through discussion board, wikis, and blogs.

Potential Features of E-Learning



Advantages of Online Learning, E-learning and Web Based Training

- It supports the company's business strategy and objectives
- It is accessible at any time any place
- Audience may be employees, managers, vendors, customers and clients
- Can be delivered to dispersed employees
- Can be delivered faster and larger employees in shorter time period
- Paper work can be eliminated .
- Can link learners to other content, experts and peers

Advantages of Online Learning, E-learning and Web Based Training

- Providing links to resources such as webinars, videos, articles related to learning new content
- Determining future training needs and issues based on feedback using tagging capabilities
- Reinforcing and sustaining learning, coaching and mentoring
- Linking learners before, during and after the formal training event

Effectiveness of Online Learning, E-learning and Web Based Training

- Online instruction is more effective than face-to-face.
- Learners are equally satisfied with web based and class room instructions.
- Web-based instruction appears to be more effective than classrooms : -
 - when learners are provided with control over content, sequence and pace.
 - In long course, and
 - When learners are able to practice the contents and receive feedback.

Effectiveness of Online Learning, E-learning and Web Based Training

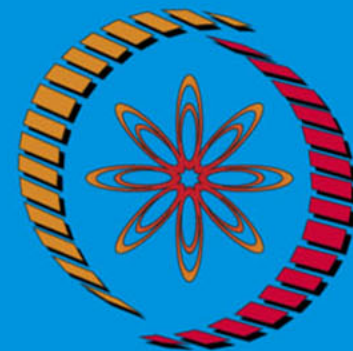
- Web-based instruction and class room instruction are equally effective when similar instructional methods are used
- The employees who get the most from online learning take more time to complete the training compare to those who complete more of the available practice opportunities.
- E-learning is not effective for all learners, specially those with low computer self-efficacy.

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Module 8:

Lecture 03 : Social Media



TRAINING AND DEVELOPMENT

This part of lecture session will be held on social media and its various other aspects.



Different Forms of Social Media

- Networking Sites (Facebook, LinkedIn)
- Microblogs (Twitter)
- Blogs
- Wikis (Wikipedia)
- Shared Media (YouTube)



Different Forms of Social Media

■ Blogs

It refers to a webpage where an author posts entries and readers often can comment.

There are different types of blogs such as,

- Personal blogs used by persons
- Company blogs used for marketing and branding,
- Topic blogs used for focusing a topic
- Media blogs like Video blogs, Mobile device blog



Different Forms of Social Media

- **Wikis (Wikipedia)**

Refers to a website that allows many users to create, edit, update content and share knowledge.

- **A microblog**

Refers to software tools such as twitter that enable communication in short bursts of text, links and multimedia



Social Media Usefulness

- Providing links to resources
- Determining training needs with tagging
- Reinforcing and sustaining learning
- Being used as Coaching and mentoring tool
- Linking learners before, during and after a formal training event
- Engaging younger employees
- Providing content before a face-to-face learning event.



Factors in Deciding to Use Social Media for Training

- Are there social media already in use in the company,
- Does social networking fit to the company's learning strategy,
- Are there employees geographically dispersed,
- Does the learning strategy support on-job learning,
- Is there a need to foster collaboration
- Are there a significant number of employees from millennial generation

Factors in Deciding to Use Social Media for Training

- Are employees comfortable to use social networking
- Is business required substantial teamwork
- Does knowledge need to be shared quickly
- Does the company value innovation
- Does the culture of the company support decentralized decision making



Why Blended Learning

- Because of Limitations of online learning related to technology such as -
 - Insufficient bandwidth
 - Lack of high speed web connections
- Preference of trainees for face-to-face contact with trainers, other learners and employees.
- Many companies are moving to a hybrid, or blended learning approach



What is Blended Learning

Blended learning is an approach to education that combines online educational materials and opportunities for interaction online with traditional place-based classroom methods. It requires the physical presence of both teacher and student, with some elements of student control over time, place, path, or pace.

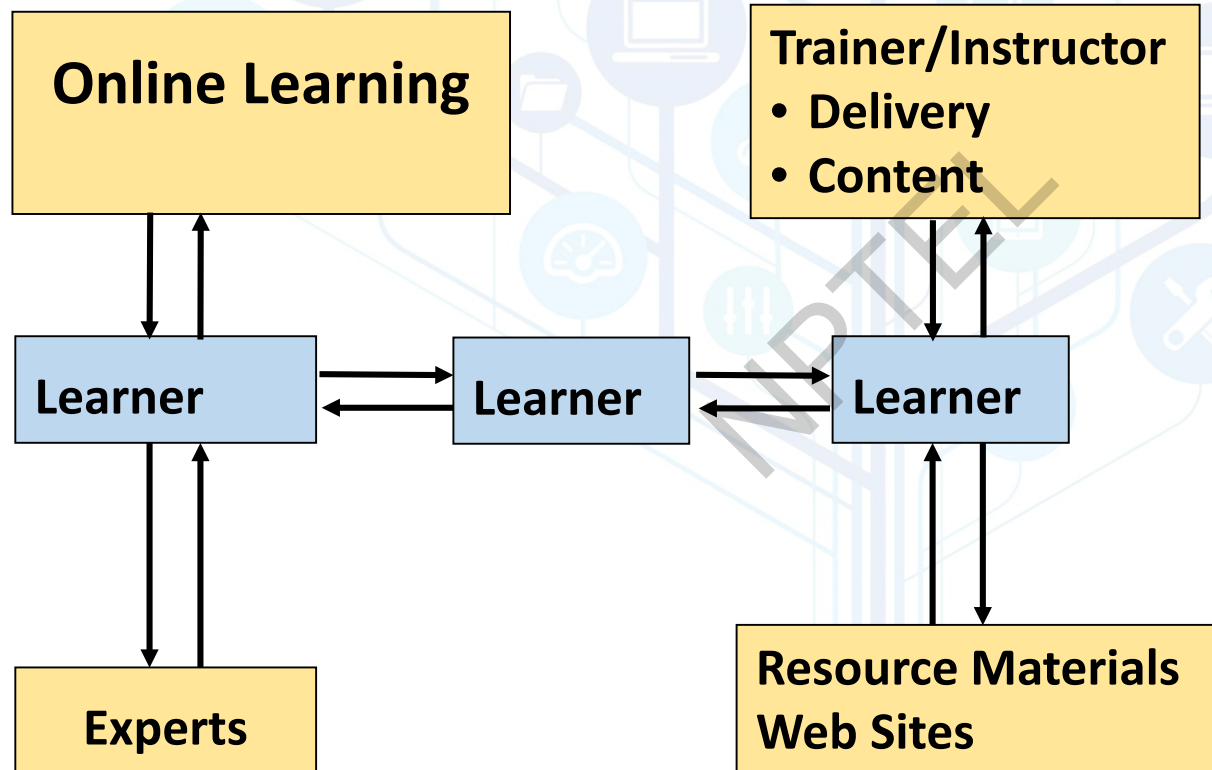
Some Blended Learning Methods

- **Face to face:** Traditional supplemented with technology
- **Rotation:** Learners can go from one to another activity as directed by instructor or online in a self-directed manner.
- **Flex:** The learners control their learning path choosing what they want to learn interchangeably

Some Blended Learning Methods

- **Gamification:** it is to let learners play to experience the material on their own time.
- **Online lab:** It is taken place with little or no instruction from instructor before, during or after a training.
- **Self-blended:** it is supplemental content either in the form of webinars, white papers, industry blogs or video tutorials.

Blended Learning Environment



What is Mobile Technology

Mobile technology consists of the following:

- **Wireless transmission system such as Wi-Fi and Bluetooth that allow transmission of data without need of physical connection between devices or between device and internet connection.**

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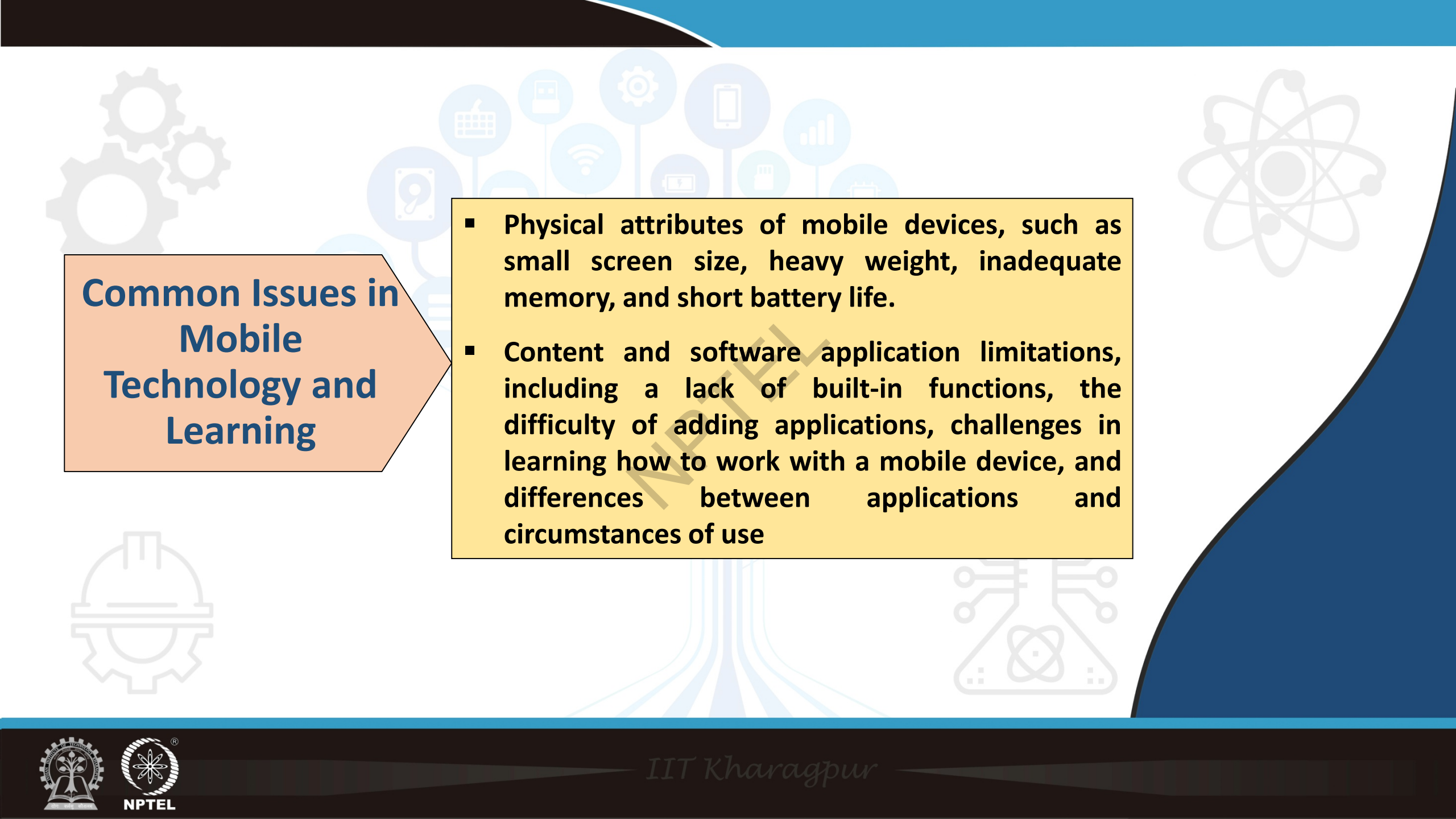
What is Mobile Technology

Mobile technology consists of the following:

- **Mobile devices such as smartphones, tablet computers, iPods, iPads, GPS (Global positioning system) devices, and RFID (radio frequency identification) chips.**
- **Software applications related to processing audio files, word processing, spreadsheets, Internet, e-mail and instant messaging.**

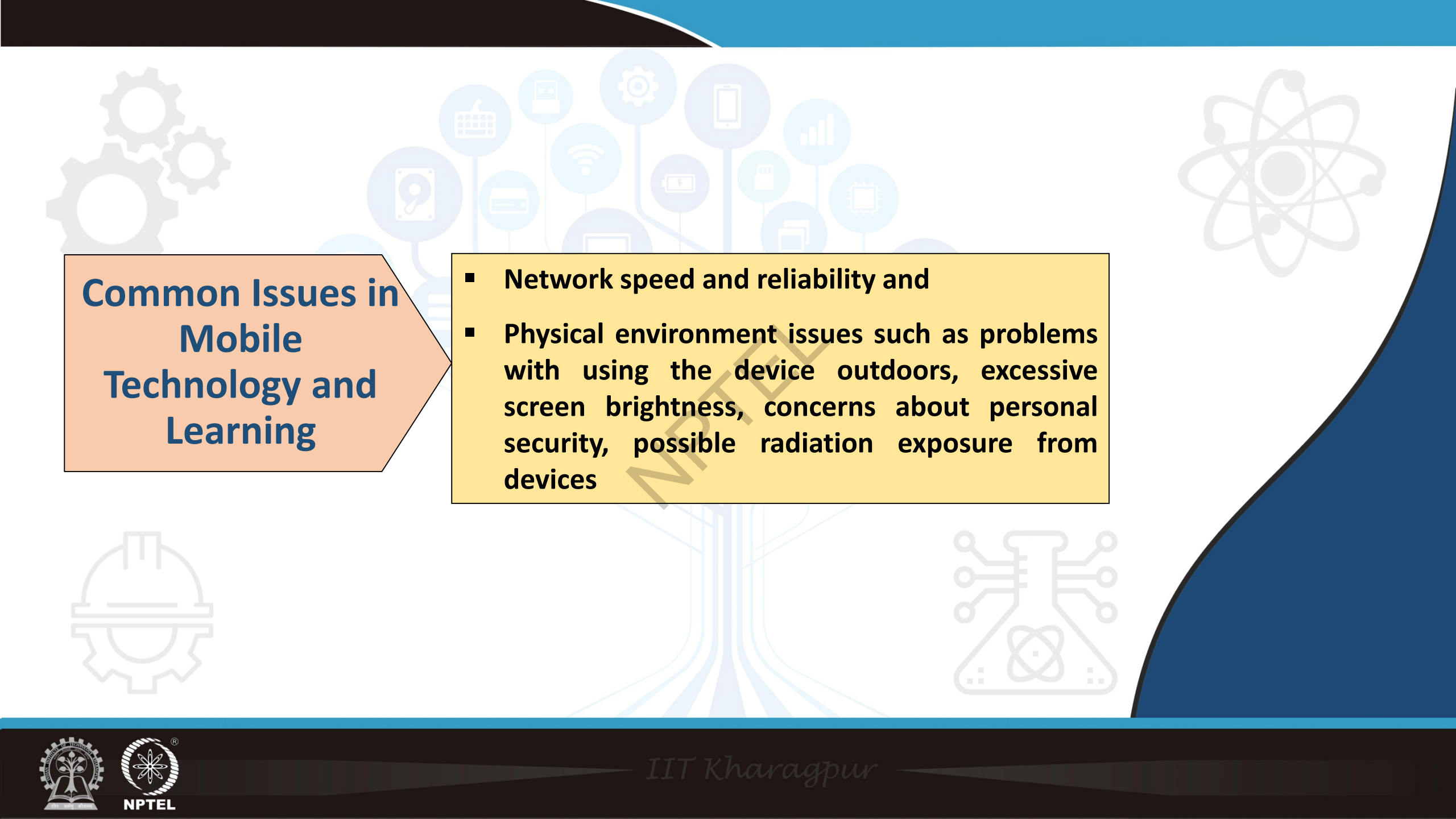
Use of Mobile Technology and Learning

- Mobile learning refers to use of electronic devices to learn across contexts.
- Mobile learning connects individuals with media, educators, peers, and experts.
- Helps to accessing information quickly
- It has communication and content collaboration
- A variety of ways to learn, and
- Situated learning including contextual and informal learning



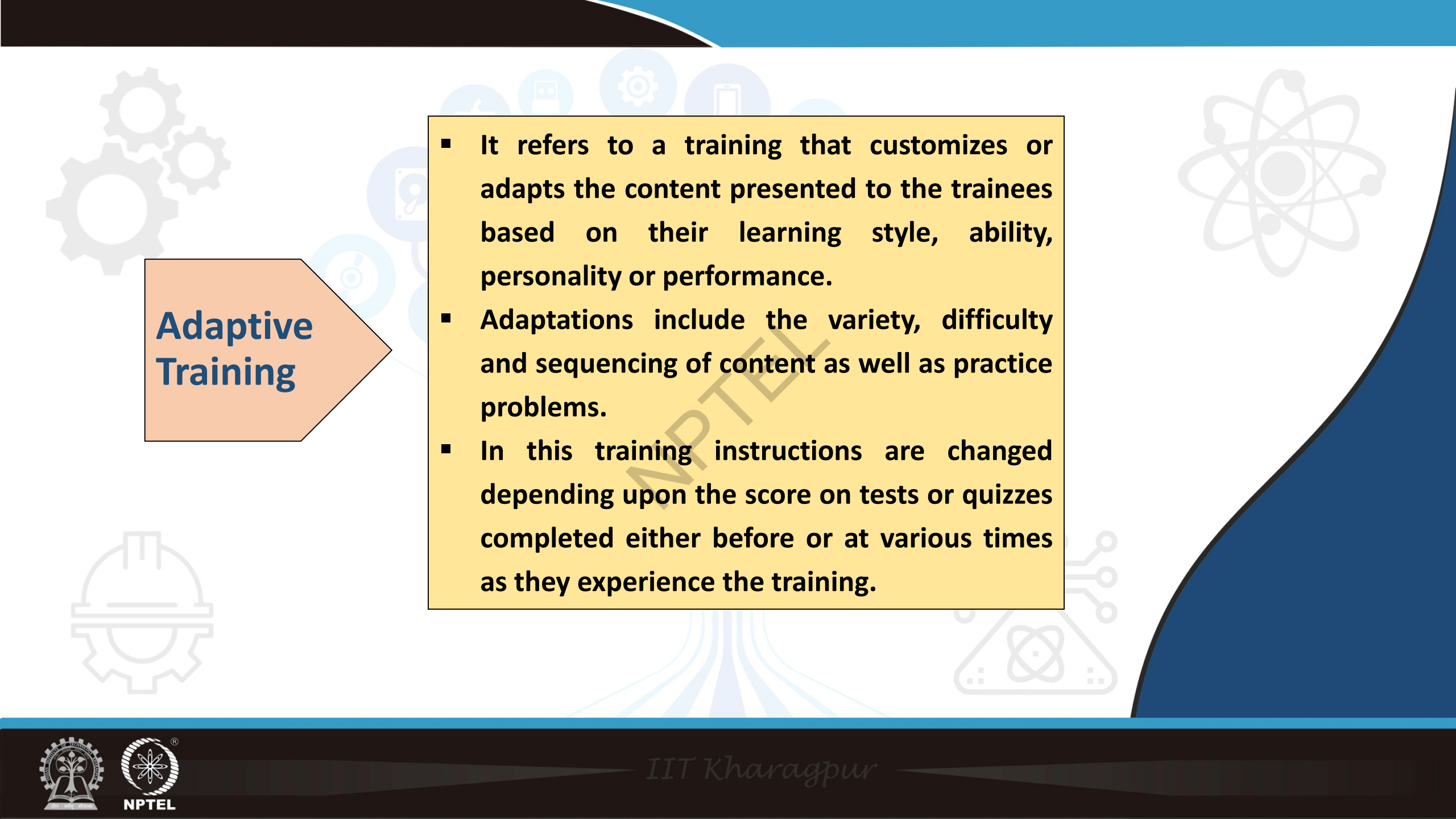
Common Issues in Mobile Technology and Learning

- Physical attributes of mobile devices, such as small screen size, heavy weight, inadequate memory, and short battery life.
- Content and software application limitations, including a lack of built-in functions, the difficulty of adding applications, challenges in learning how to work with a mobile device, and differences between applications and circumstances of use



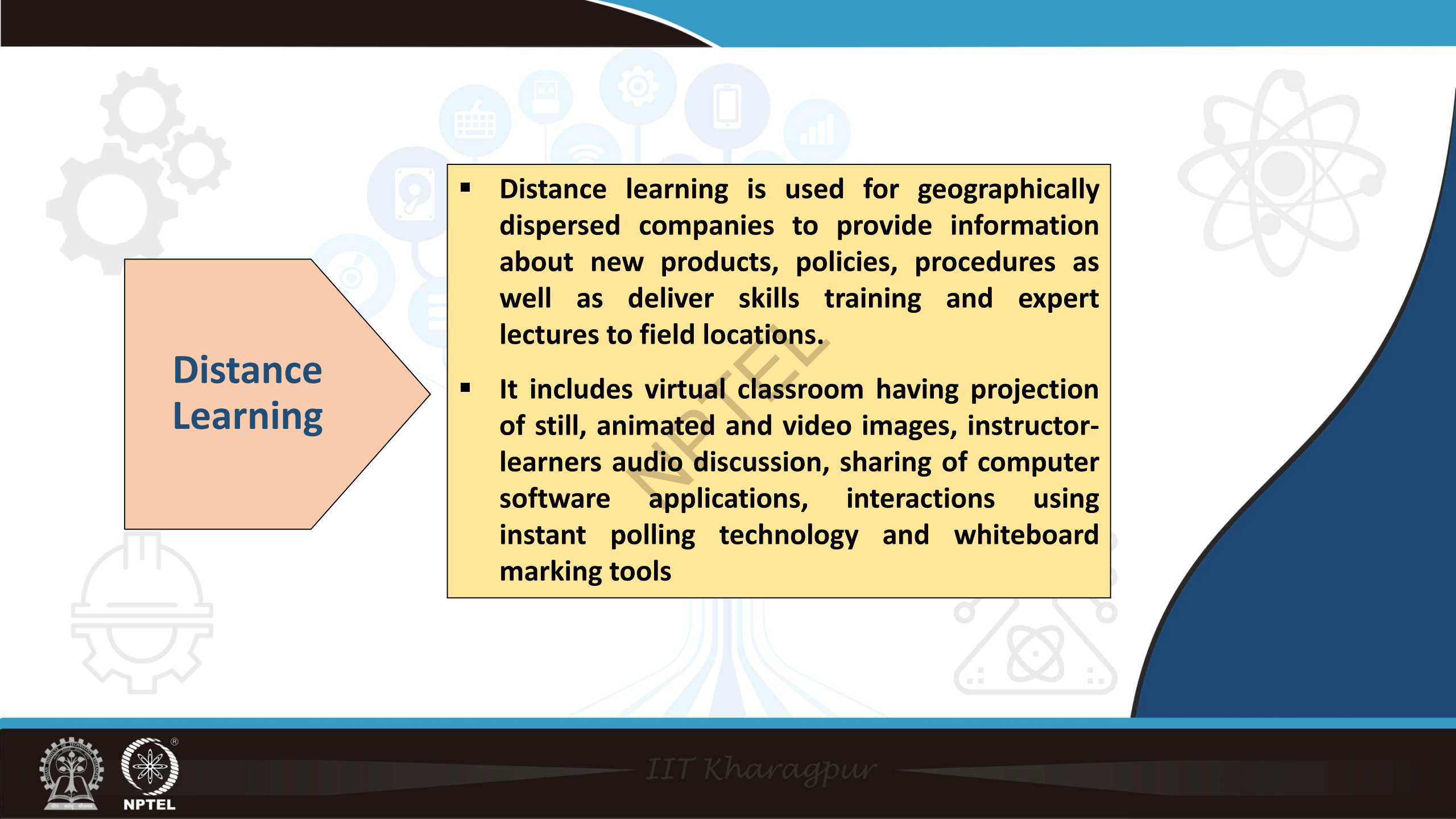
Common Issues in Mobile Technology and Learning

- Network speed and reliability and
- Physical environment issues such as problems with using the device outdoors, excessive screen brightness, concerns about personal security, possible radiation exposure from devices



Adaptive Training

- It refers to a training that customizes or adapts the content presented to the trainees based on their learning style, ability, personality or performance.
- Adaptations include the variety, difficulty and sequencing of content as well as practice problems.
- In this training instructions are changed depending upon the score on tests or quizzes completed either before or at various times as they experience the training.



Distance Learning

- Distance learning is used for geographically dispersed companies to provide information about new products, policies, procedures as well as deliver skills training and expert lectures to field locations.
- It includes virtual classroom having projection of still, animated and video images, instructor-learners audio discussion, sharing of computer software applications, interactions using instant polling technology and whiteboard marking tools

Important Features of Distance Learning

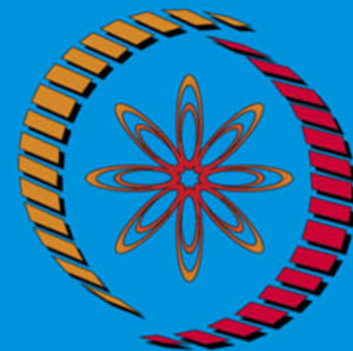
- Distance learning features two way communications between people and it currently involves two types of technology:
 - Teleconferencing refers to synchronous exchange of audio, video and or text between two or more individuals or groups at two more locations.
 - Individualized , personal computer based training involves, multimedia training methods, such a web-based training.

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CONCLUSION

This part of lecture session has given clear picture on the social media and its various other aspects with an aim to make aware all learners about it and enhance their level of thinking and perception on all these aspects of social media.



**THANK
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Module 8:

Lecture 04 : Learning Management System (LMS)

TRAINING AND DEVELOPMENT

This part of lecture session will be held on Learning Management Systems and related issues.



Concept of Learning Management System

- It is a technology platform that can be used to automate administration, development and delivery of all training programmes of a company.
- It can provide employees, managers and trainers with the ability to manage, deliver and track learning activities

Defining the Learning Management System

- A Learning Management System (LMS) can be defined as a holistic, end-to-end software solution for the planning, execution, documentation, tracking, and reporting of knowledge or skill-based courses and training programs

Features of Learning Management System

- Trainee management and reporting
- Training event and resource management
- Online course delivery infrastructure
- Authoring tools
- Skills assessment
- Professional development and management
- Knowledge bases
- Personalization
- Link to human capital management systems

Use of Learning Management System

- For organizational knowledge management in terms of resources, documents and skills of the employees.
- Employee training and on boarding is the most common use cases for LMS in corporate environment.
- Helps training new employees by providing access to training materials across various devices.
- For the training of extended enterprises including customer, partner and training members.
- For employee retention and developing job skills

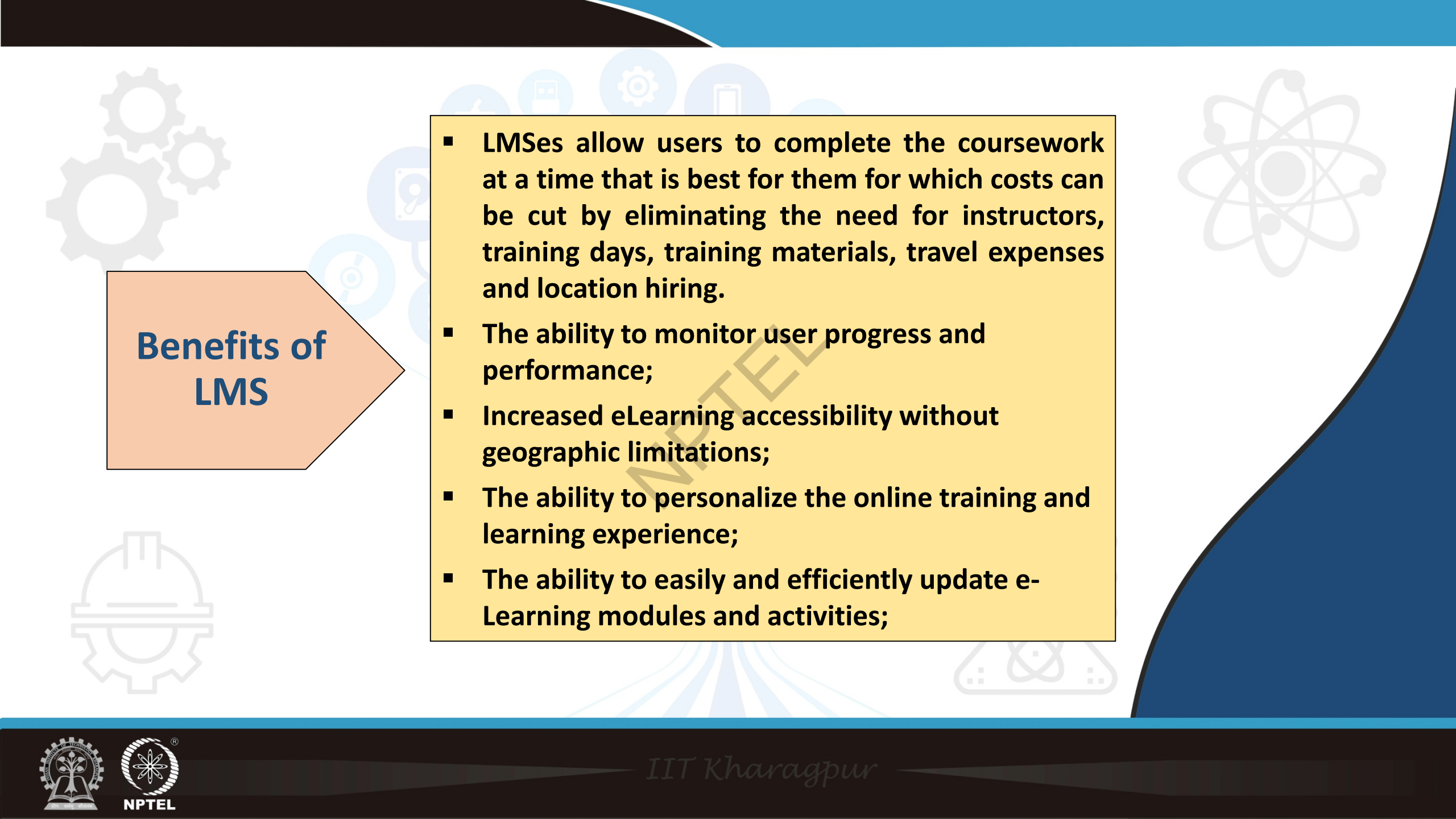
Effectiveness of Learning Management System

- It can help a company reduce travel and other cost relating to training.
- Reduces time for training programme completion.
- Increases employees' accessibility to training across the business.
- Provides administrative capability to track program completion and course enrollment.
- Allows company to track all learning activities in the business

Various Forms of LMS Deployment

The different types of LMS deployment options are:

- **Cloud-based:** Hosted on the cloud and follow a software as a service business model.
- **Self-hosted:** Requires software to be downloaded by the user with a pay for updates.
- **Desktop application:** LMS are installed on the users' desktop but application may be accessible on multiple devices
- **Mobile application:** Supports mobile learning and accessible wherever and whenever through mobile devices.



Benefits of LMS

- LMSes allow users to complete the coursework at a time that is best for them for which costs can be cut by eliminating the need for instructors, training days, training materials, travel expenses and location hiring.
- The ability to monitor user progress and performance;
- Increased eLearning accessibility without geographic limitations;
- The ability to personalize the online training and learning experience;
- The ability to easily and efficiently update e-Learning modules and activities;

Benefits of LMS

- The ability to easily ensure online training and learning materials are being distributed effectively; and
- The use of automation that allows users to forget about tedious, repetitive tasks -- such as user enrollment and certification distribution -- and focus on more important activities.
- It allows an organization to safely organize and store all big data in one location.

LMS and Human Capital Management

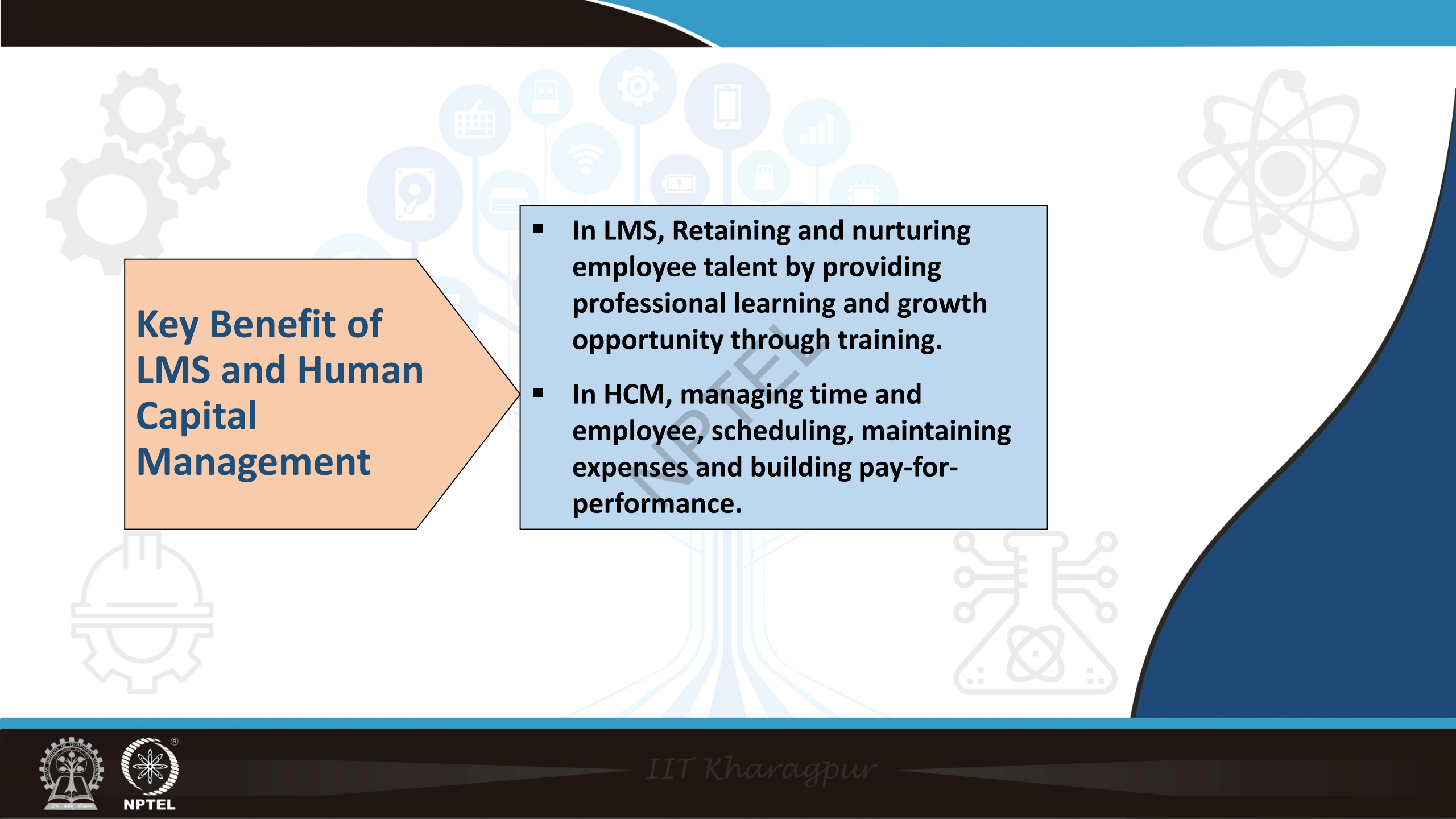
- Human capital management (HCM) is a comprehensive set of solutions and practices used to manage all human resources (HR) processes, including recruiting, managing, developing, reporting and training employees.
- HCM spans the life cycle of an employee from the time they are recruited to the time they leave the company and is comprised of all aspects of their work experience, including learning and development.

LMS and Human Capital Management (HCM) Relation

- **Learning Management Systems (LMSs) are designed for learning administrators to create and deliver formal training to workforces.**
- **While the LMS delivers formalized learning, and the HCM connects learning to recruiting and performance management.**
- **In LMS there are six elements of the learner experience that enable learning: planning, discovering, consuming, experimenting, connecting, and performing. While, in HCM there are only two key administrative functions: creating and managing and analyzing workforce.**

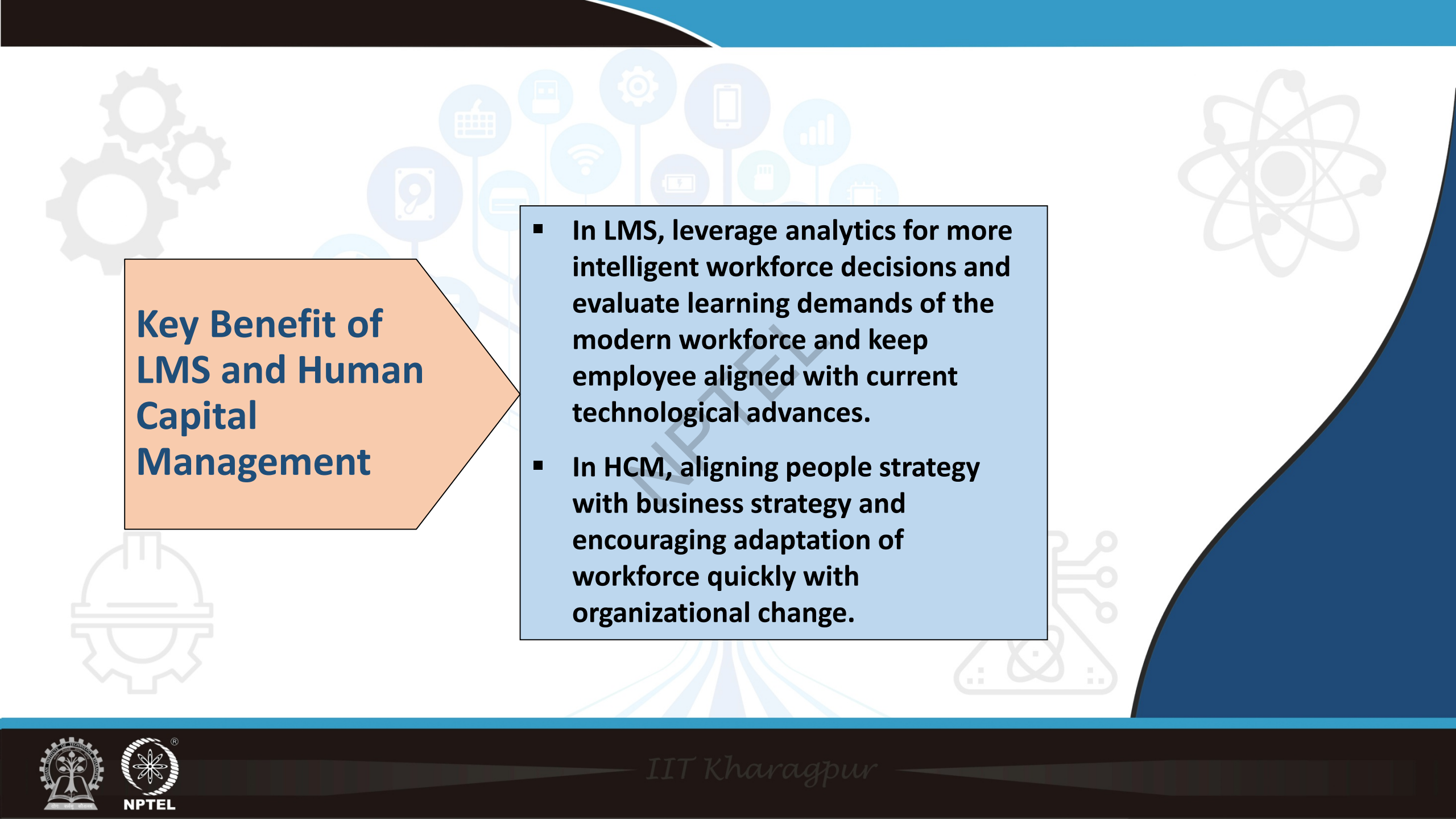
LMS and Human Capital Management Relation

- In LMS, learning, integration and communication are critical to leveraging employee knowledge. Accordingly, in HCM, managers must switch from being drivers of people to being drivers of learning.
- In HCM, accounting for human capital should focus on matters of individual and organizational competence, and that the development of human capital is, in essence, an exercise in competence development, which involves training and learning.



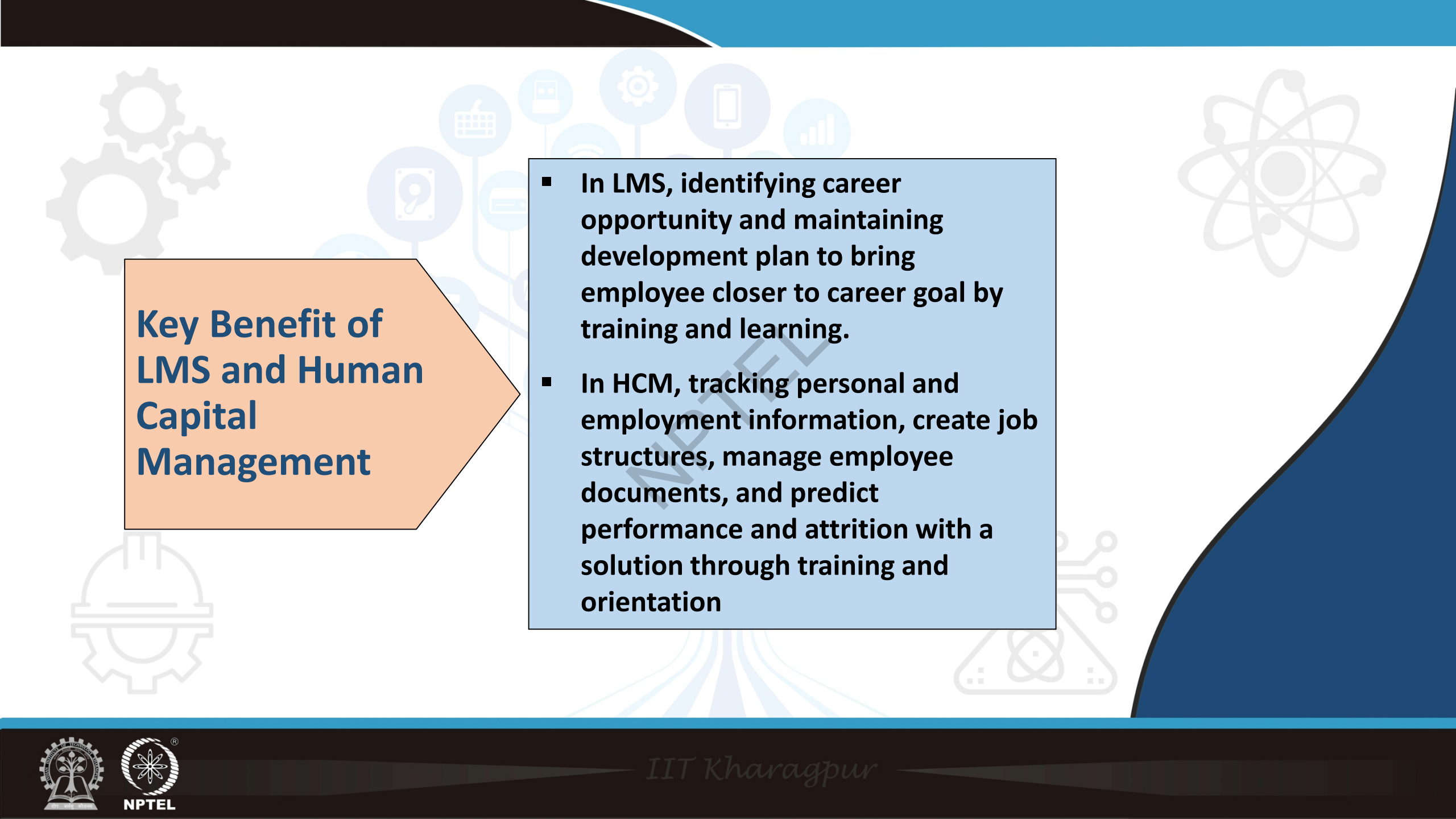
Key Benefit of LMS and Human Capital Management

- In LMS, Retaining and nurturing employee talent by providing professional learning and growth opportunity through training.
- In HCM, managing time and employee, scheduling, maintaining expenses and building pay-for-performance.



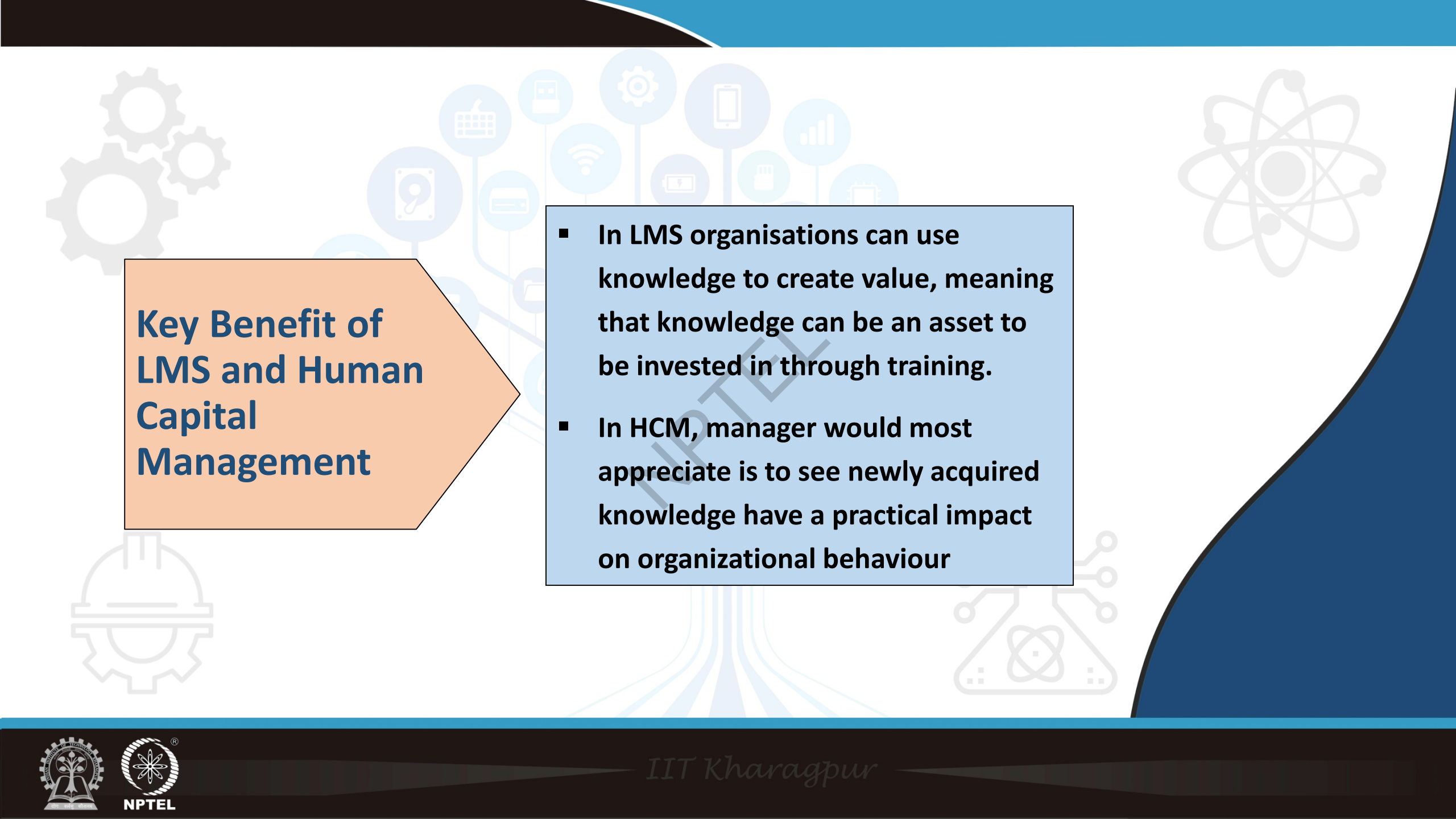
Key Benefit of LMS and Human Capital Management

- In LMS, leverage analytics for more intelligent workforce decisions and evaluate learning demands of the modern workforce and keep employee aligned with current technological advances.
- In HCM, aligning people strategy with business strategy and encouraging adaptation of workforce quickly with organizational change.



Key Benefit of LMS and Human Capital Management

- In LMS, identifying career opportunity and maintaining development plan to bring employee closer to career goal by training and learning.
- In HCM, tracking personal and employment information, create job structures, manage employee documents, and predict performance and attrition with a solution through training and orientation



Key Benefit of LMS and Human Capital Management

- In LMS organisations can use knowledge to create value, meaning that knowledge can be an asset to be invested in through training.
- In HCM, manager would most appreciate is to see newly acquired knowledge have a practical impact on organizational behaviour

Challenges of LMS and Human Capital Management

- In LMS there are some expert vendors offering services along with their products which sometime lead to monopoly.
- In HCM, there are poor performance management and usage of workforce analysis and reporting.

Challenges of LMS and Human Capital Management

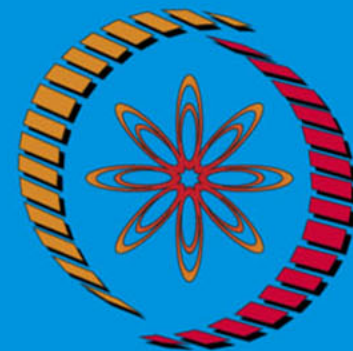
- In LMS, security process to safeguard privacy of each user are sometimes not strictly maintained which cause threat to LMS.
- In HCM, complex processes and difficult software frustrate employees who expect the same easy-to-use tools for human capital management technology.

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CONCLUSION

This part of lecture session has given clear picture on learning management systems and its comparison with human capital management which may enhance the level of thinking and perception of learners on all these aspects of learning management system.



**THANK
YOU !**



NPTEL ONLINE CERTIFICATION COURSES

TRAINING AND DEVELOPMENT

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Module 8:

Lecture 05 : Choosing a New Technology for Training

TRAINING AND DEVELOPMENT

This part of lecture session will be held on various issues relating to the choosing new technology for training.



Conditions for Need of Technology Support

- When performance of task is infrequent.
- The task is lengthy, difficult and information intensive.
- The consequence of error is damaging.
- Performance relies on knowledge, procedures, or approaches that frequently change.
- There is high employee turn over.
- Little time is available for training or few resources for training.
- Employees are expected to take full responsibility for learning and performance tasks.

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

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.

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.

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

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.

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,

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.

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.

What Are New Technologies Used in Training

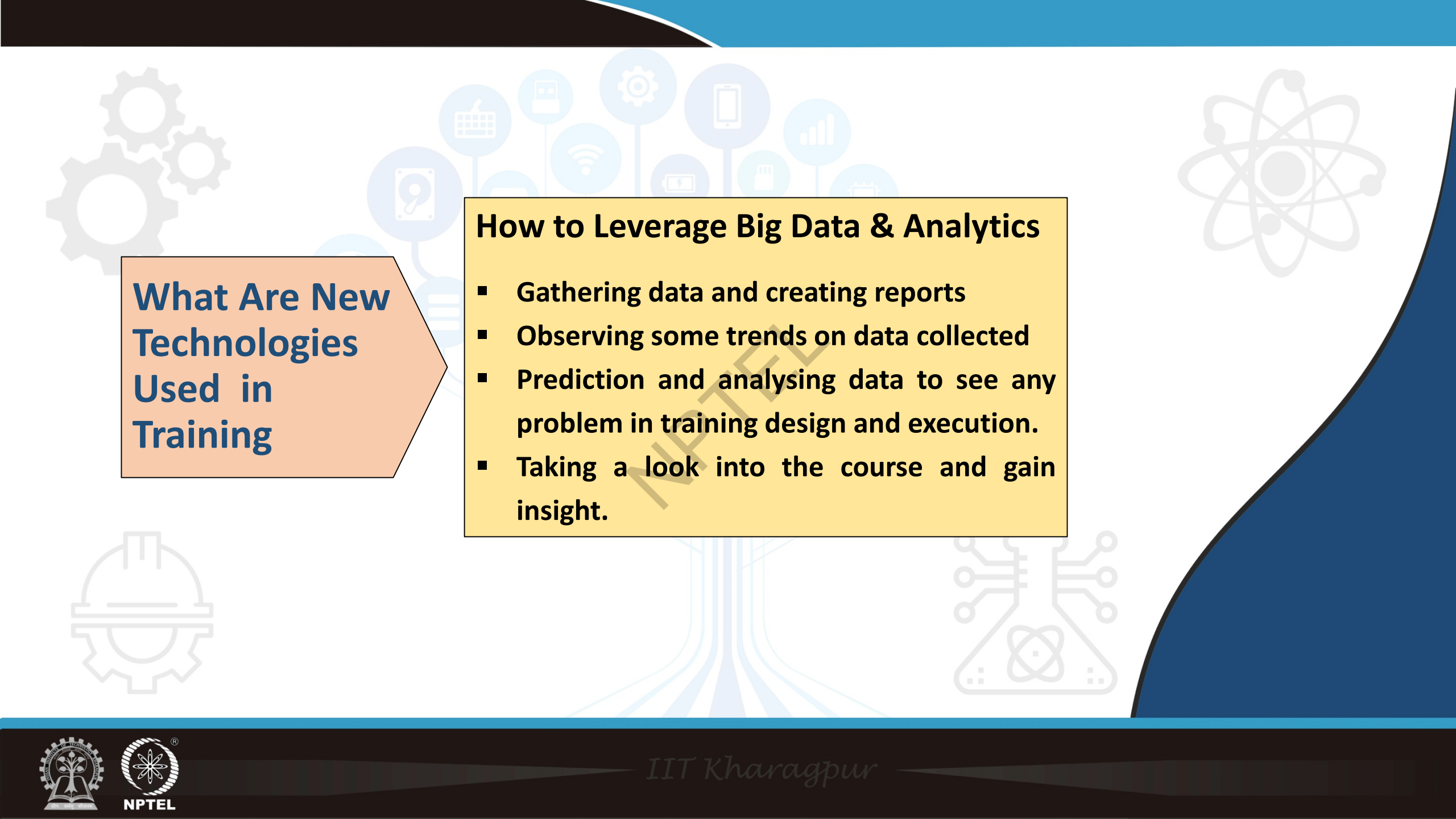
- **Automation and Adaptive learning**

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.

What Are New Technologies Used in Training

- **Big Data**

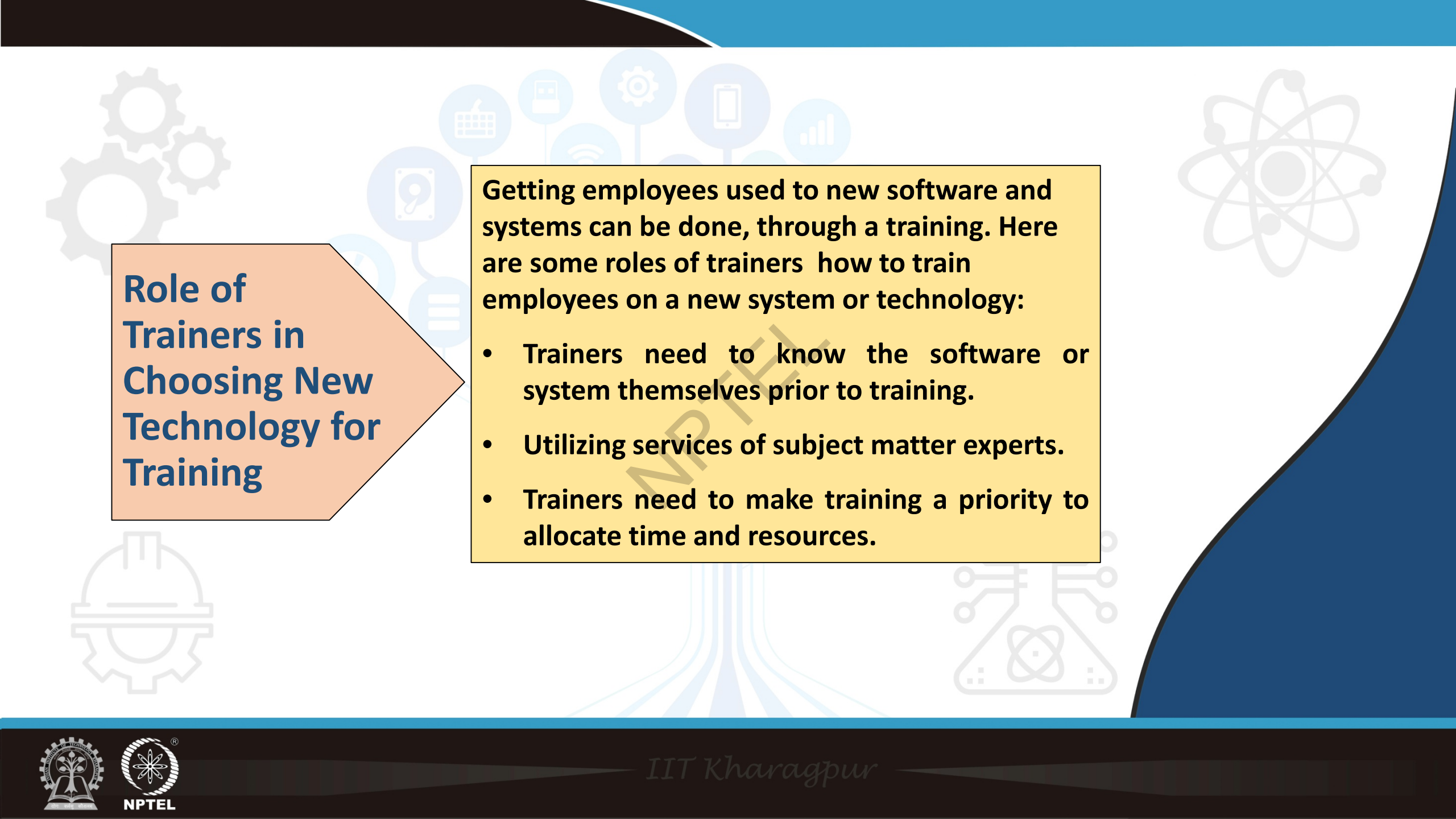
Organisations imparting trainings have more learning activities and data gathered to them. By using external big data analytics tools or the ones, which are built into a variety of Learning Management Systems, organizations are getting to know about their learners' usage patterns, behavior, training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



What Are New Technologies Used in Training

How to Leverage Big Data & Analytics

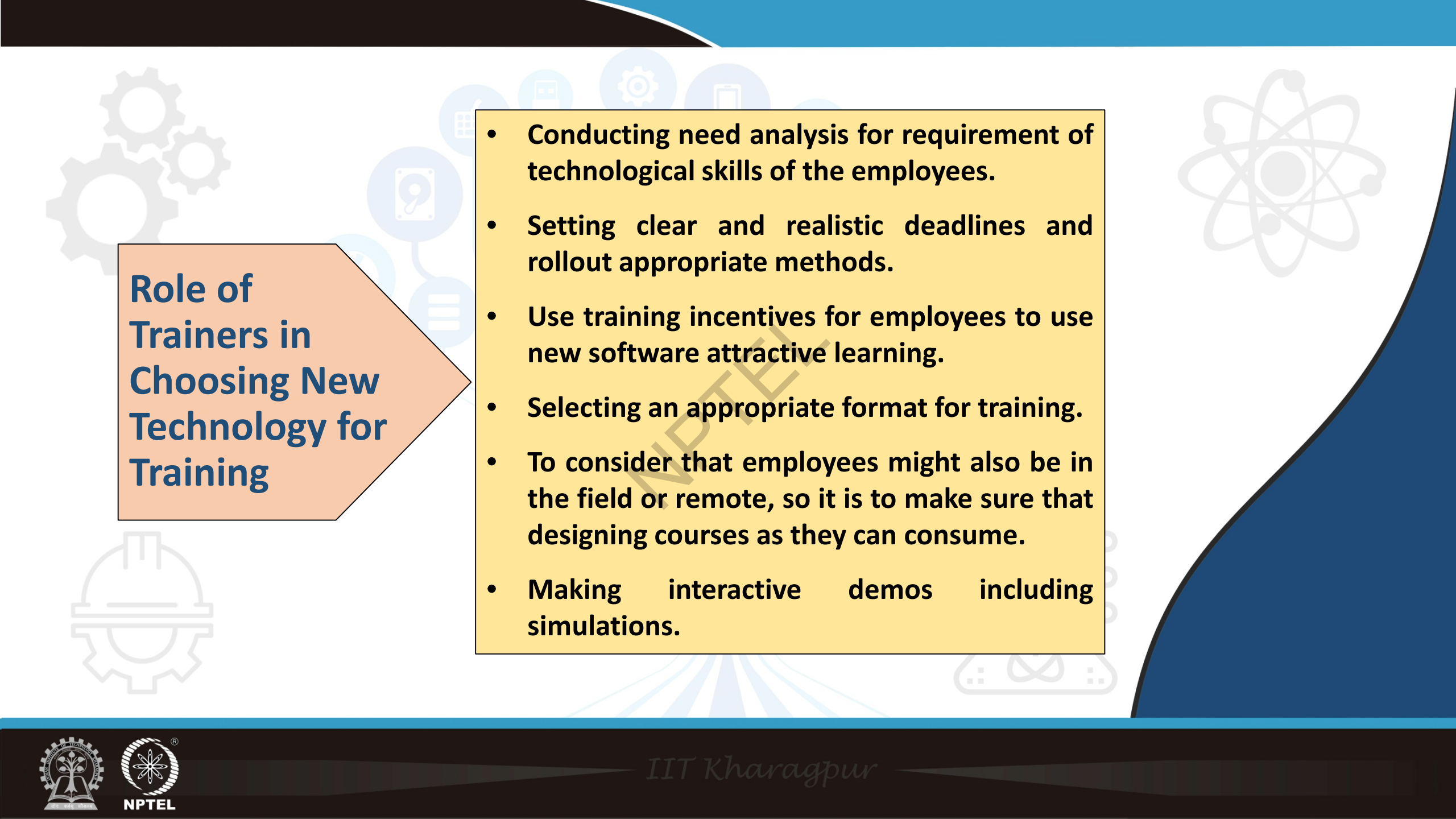
- Gathering data and creating reports
- Observing some trends on data collected
- Prediction and analysing data to see any problem in training design and execution.
- Taking a look into the course and gain insight.



Role of Trainers in Choosing New Technology for Training

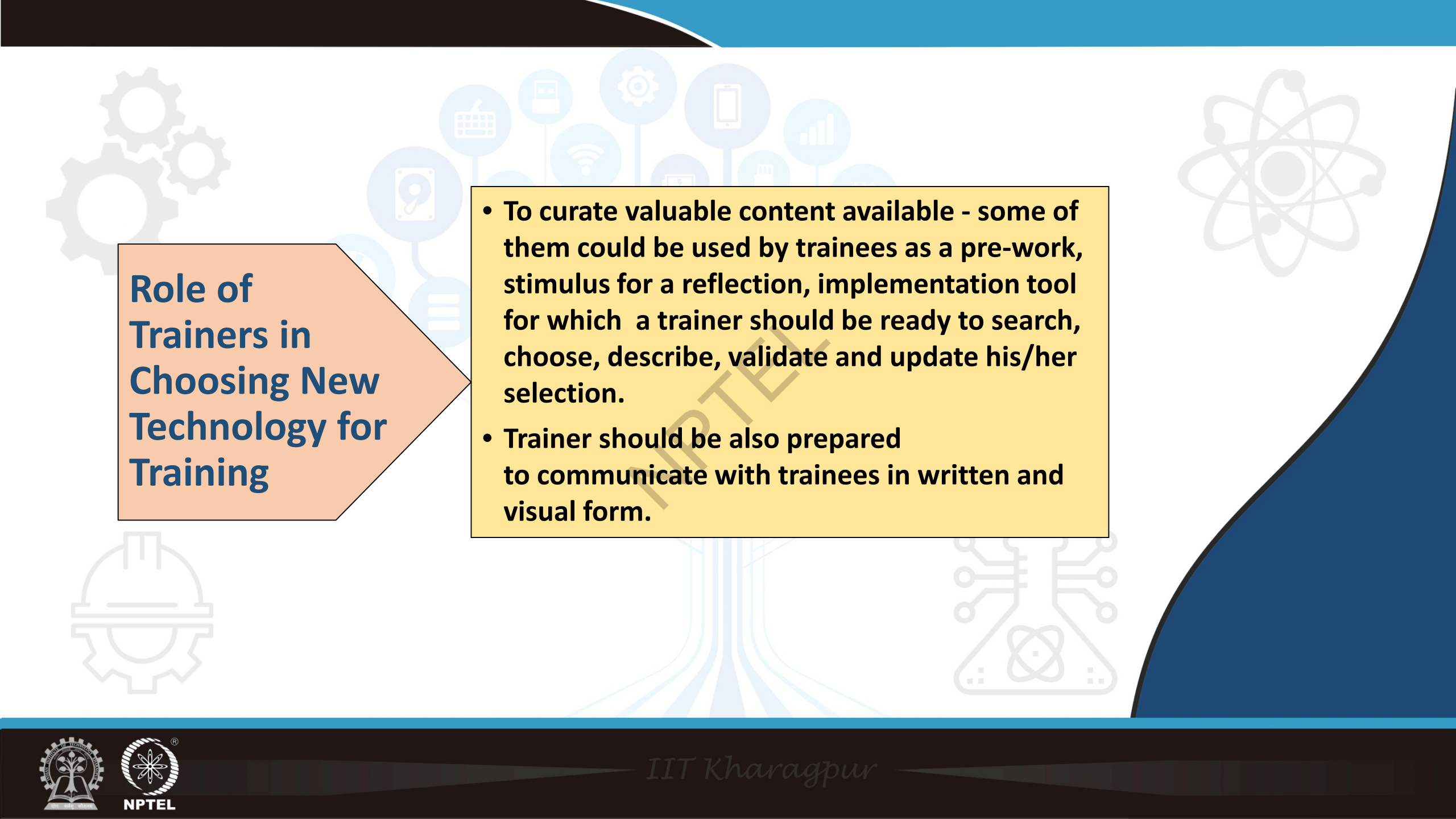
Getting employees used to new software and systems can be done, through a training. Here are some roles of trainers how to train employees on a new system or technology:

- 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.



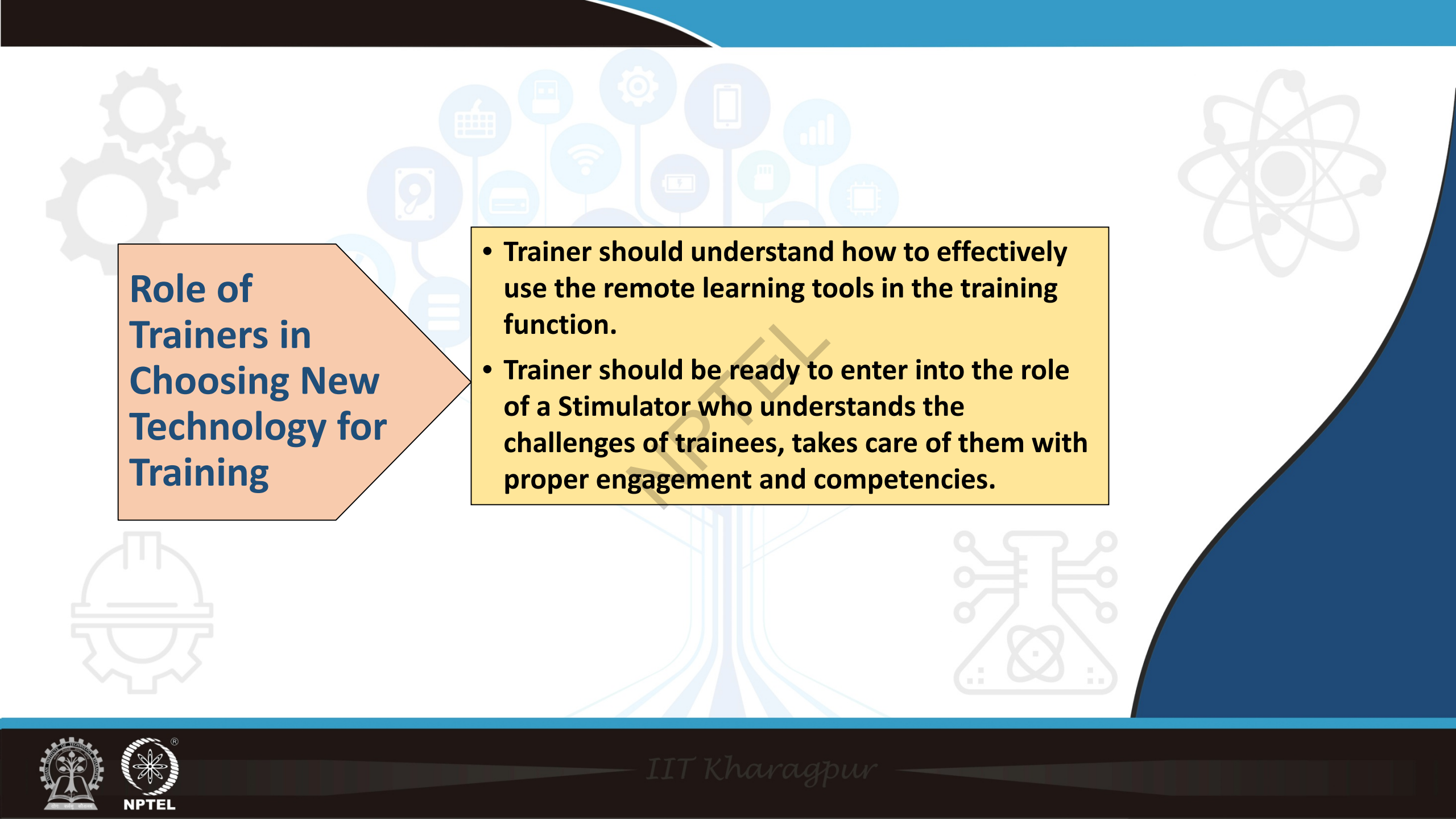
Role of Trainers in Choosing New Technology for Training

- 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.



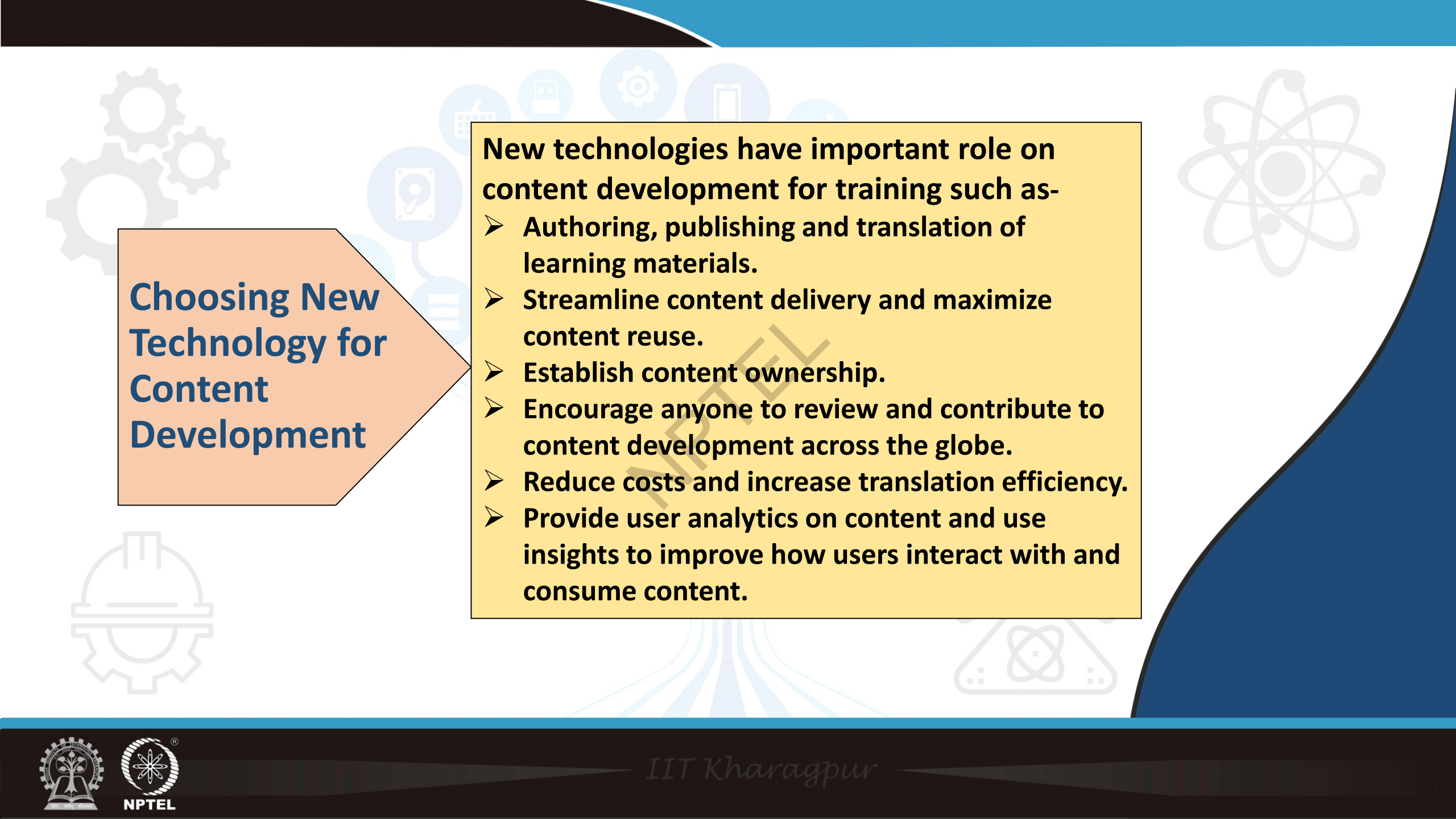
Role of Trainers in Choosing New Technology for Training

- 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.



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.



Choosing New Technology for Content Development

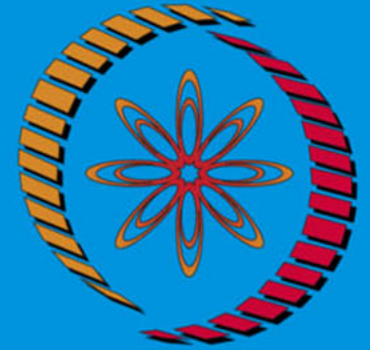
- New technologies have important role on content development for training such as-**
- **Authoring, publishing and translation of learning materials.**
 - **Streamline content delivery and maximize content reuse.**
 - **Establish content ownership.**
 - **Encourage anyone to review and contribute to 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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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.



**THANK
YOU !**