

# **System Development Methods**

## **CT046-3-2**



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ASIA PACIFIC UNIVERSITY  
OF TECHNOLOGY & INNOVATION

# **System Deployment Approaches**

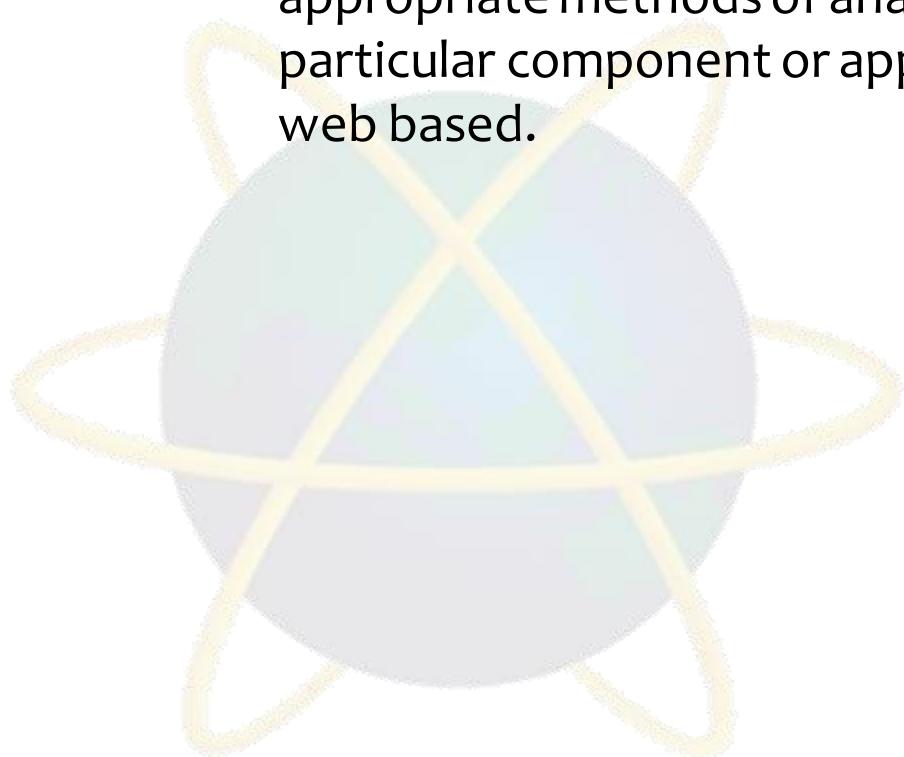
# Topic & Structure of the lesson

- System Deployment Strategies
  - Overview
  - Sub-Phases
  - Common Changeover Techniques



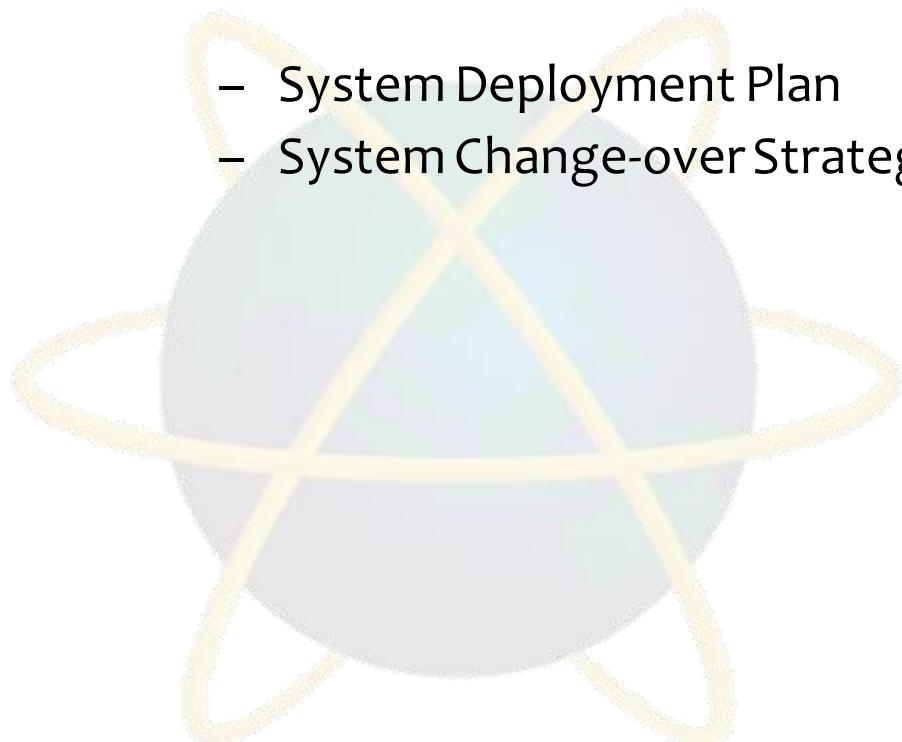
# Learning Outcomes

- At the end of the module, you should able to:
  - Explain the purpose, structure and scope of modern Information System Development Methodologies and select and justify appropriate methods of analysis, design and implementation for a particular component or application, be it traditional, multimedia or web based.



# Key Terms you must be able to use

- If you have mastered this topic, you should be able to use the following terms correctly in your assignments and exams:
  - System Deployment Plan
  - System Change-over Strategy



# System Deployment

- Activities that make a software system available for use
- System is ready to be delivered to owner / customer
- System fully tested and fully functional.
  - Production site / pre-deployment test
  - To conduct ‘Post-deployment’ test (on-site testing)
- Owner / customer are informed about the deployment
  - aka; product release / launching.

# System Deployment Plan

- Determining Deployment Options
  - Where will the system / software will be delivered?
- Packaging Software / Systems
  - What and how the components will be delivered to the users?
- Deployment Scheduling
  - Inform stakeholders of deployment event, who and when?
- System change-over strategies
  - How the old system will be replaced with new?
- Integrating System Components
  - Installing equipment / connecting servers, etc
- Post-Deployment (On-Site) Testing
- Provide Training to users (if needed)



# Determining Deployment Options

## (Where will the system be delivered?)

- Upload to Web Server / Web Host
  - Website / web applications
  - Software patches / plug-ins, etc
- Upload to Web Store
  - Mobile applications, games
- Create digital medium - DVD
  - Off-shelf applications
  - Console games
- Install in customer's local servers
  - Customized Business Systems / applications
  - Security Systems
  - Database

# Packaging Software / Systems

## (Operations to prepare a system for assembly and transfer to the customer site)



- Converting / securing source codes
- Preparing SETUP or INSTALL files
- Compress files
- Burn to installation disks
  - OR prepare to upload to server
- Prepare User Manual
- Prepare Technical Manual

# Deployment Scheduling

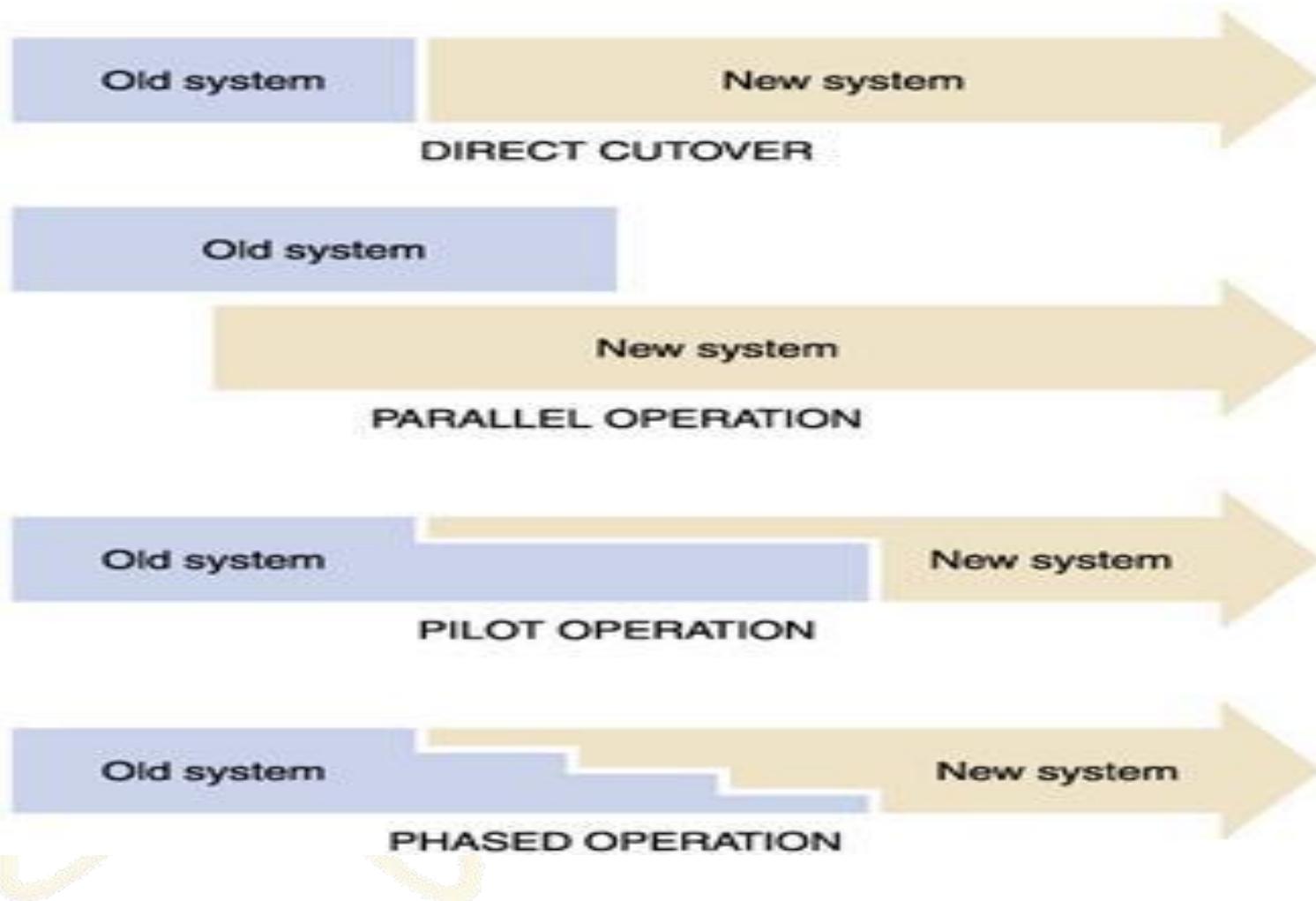
## (Inform stakeholders of deployment event)



- For cloud-based system
  - Plan to backup old system files in cloud
  - Plan upload / update new system to cloud (date, duration)
  - Plan ‘fall-back’ time
- For local system installation at user’s place
  - Identify all stakeholders involved in deployment
  - Inform relevant users of installation date and time
  - Ask to backup all ‘old’ files
  - Standby system support personnel
  - Instruct local servers to be ‘off-line for maintenance’
  - Plan ‘Fall-Back’ time

# System Change-over Strategies

## (How the old system will be replaced with new?)



# Integrating System Components

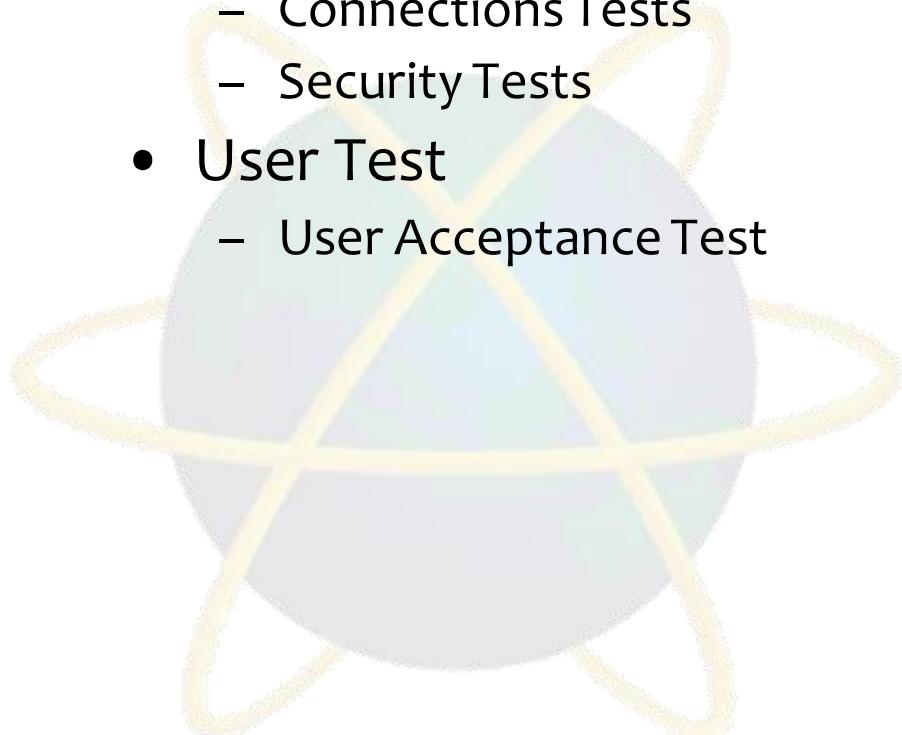
## (Installing equipment / connecting servers, etc)



- Connecting sub systems to main systems
- Connecting database
- Connecting new system to other local system (legacy systems)
- Installing security components
  - Firewall
  - User profiles (administrator access)

# Post Deployment (On-Site) Test

- Running test to spot new problems after deployment
- Develop Test
  - Technical Tests
  - Connections Tests
  - Security Tests
- User Test
  - User Acceptance Test



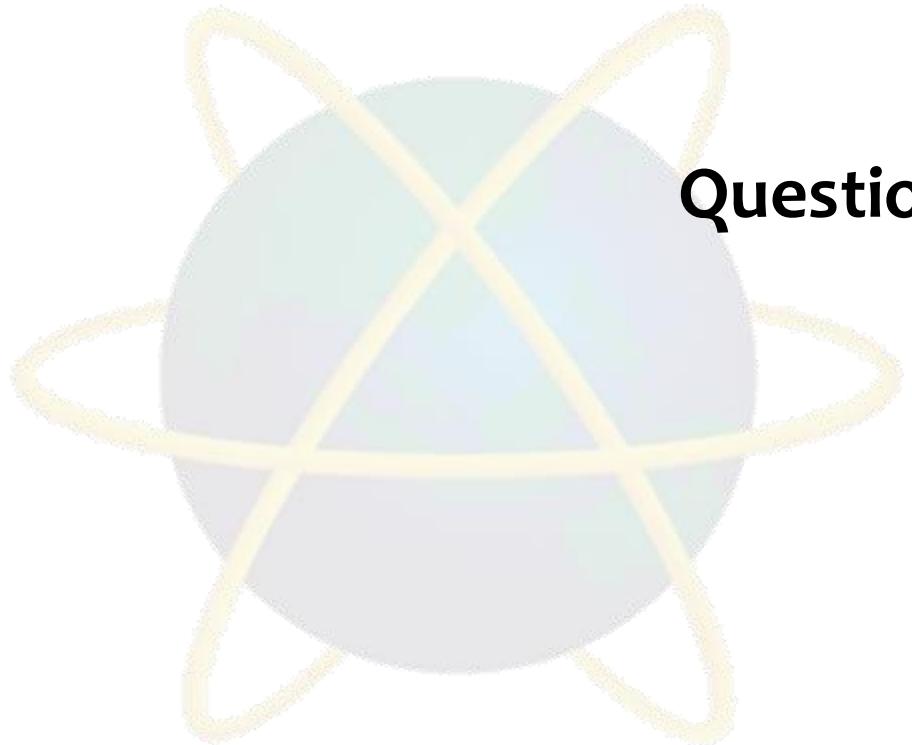
# User Training

- Applicable for large / complicated systems.
- Training Administrators
  - Content Management
  - Maintenance of the system
- Training End-Users
  - Common User functions
- Training Technical Support
  - Fixing common problems

# Other Activities of System Deployment

- License Activation
  - EULA (End User License Agreement)
  - Corporate License
- Connecting new system to backup machines
  - Connecting to Disaster Recovery Centre (DR)





# Question & Answer

# Tutorial

- What are the common problems that you would face during System Deployment.
- Discuss how is deploying Websites and Web Applications different?
- APU want to deploy new Websapace-3 to replace current Webspace-2. Explain how it will be done following the below change-over methods;
  - Direct Changeover
  - Parallel Changeover
  - Pilot Changeover
  - Phased Changeover