

System Development Methods

CT046-3-2



A · P · U
ASIA PACIFIC UNIVERSITY
OF TECHNOLOGY & INNOVATION

System Deployment Approaches

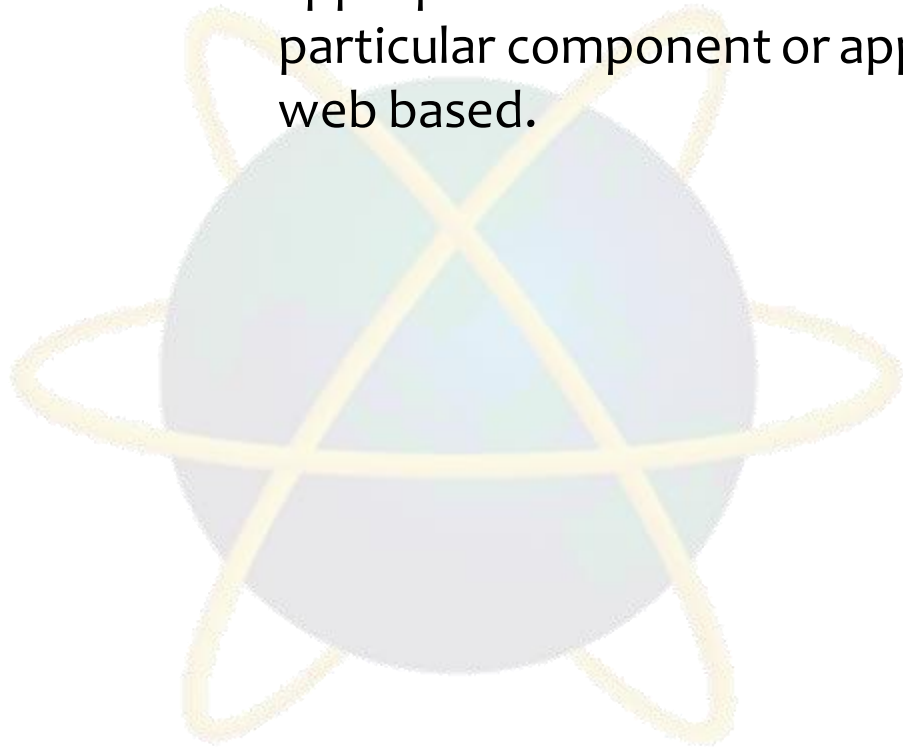
Topic & Structure of the lesson

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



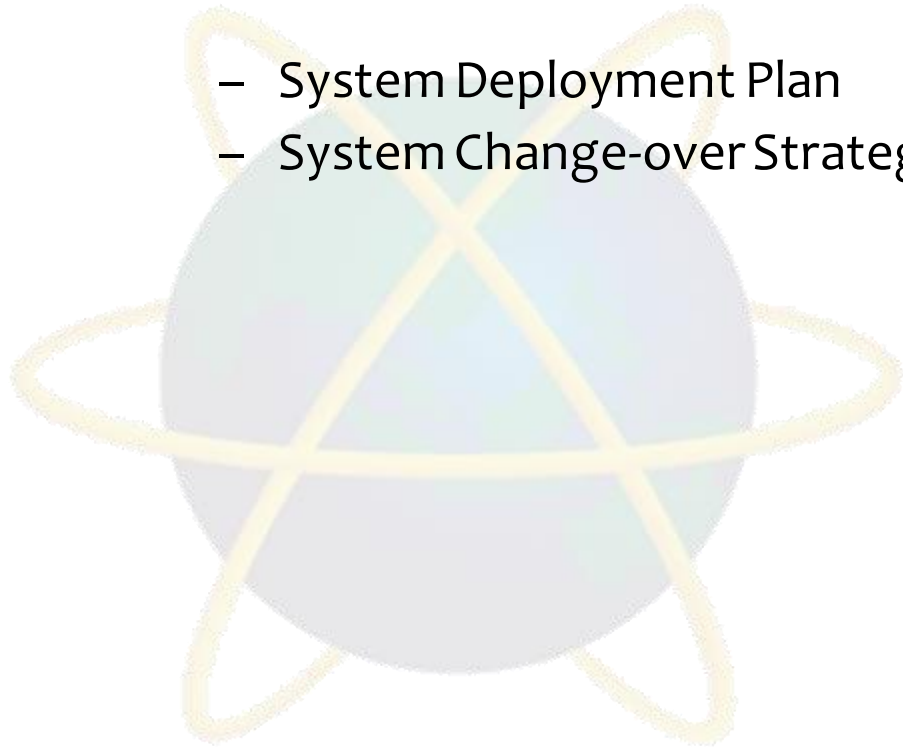
Learning Outcomes

- At the end of the module, you should be 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

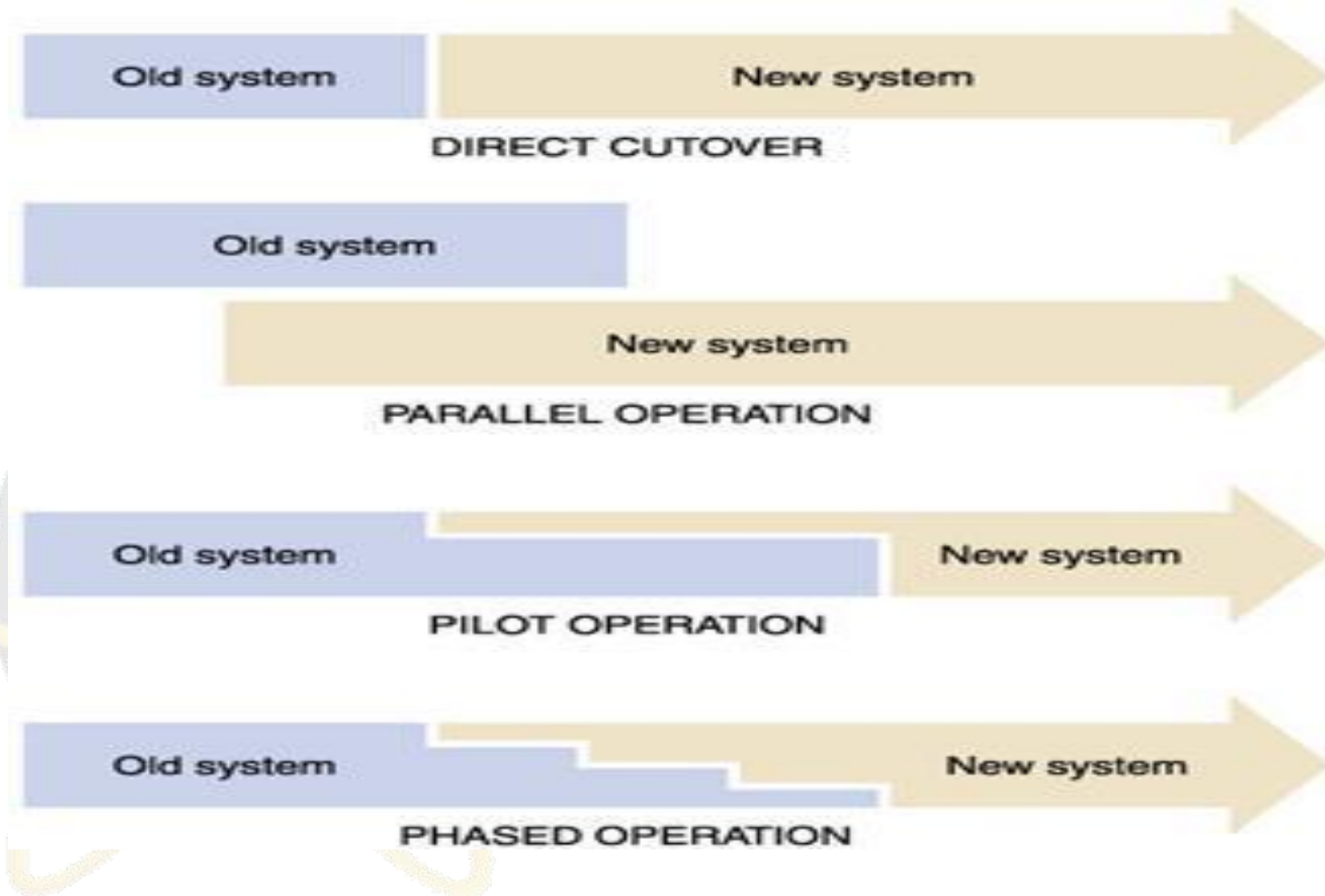
(Inform stakeholders of deployment event)

- 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?)



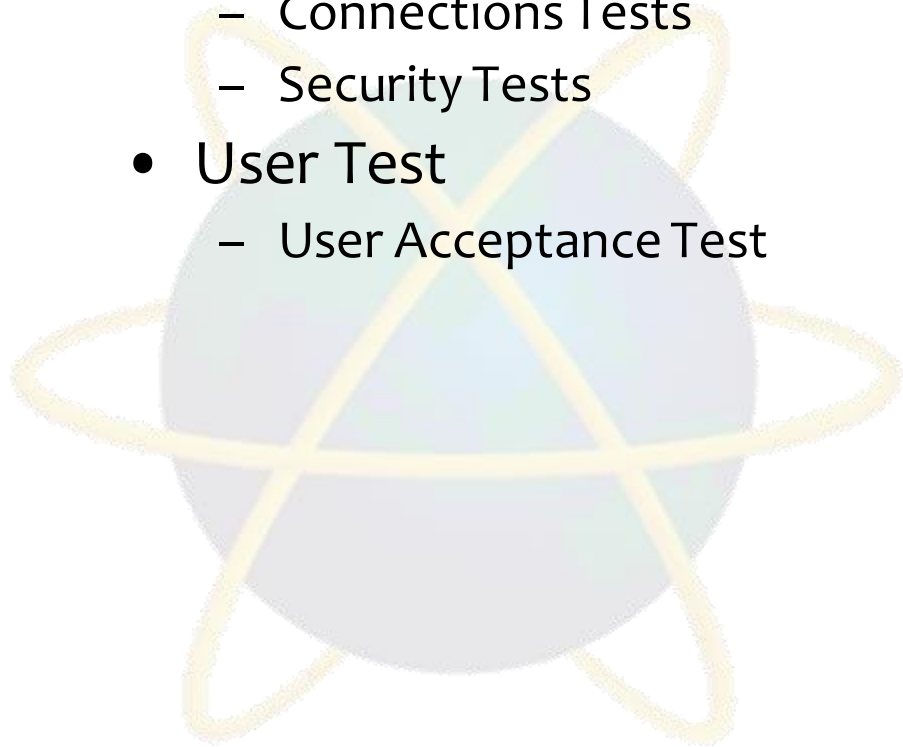
Integrating System Components

(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