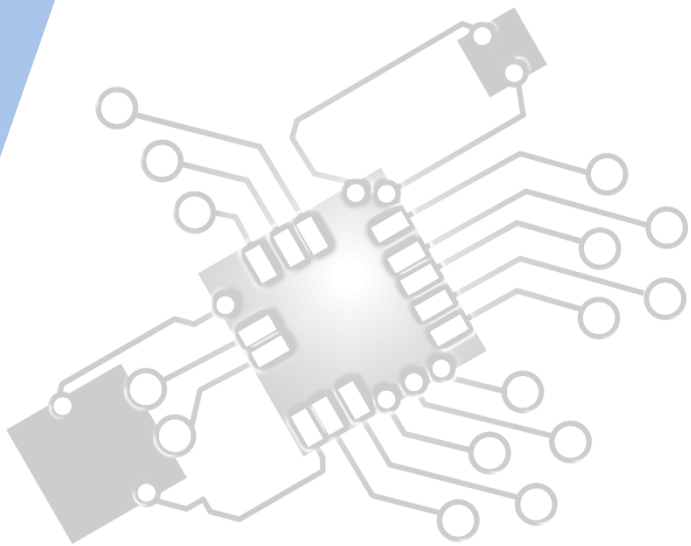
Planning & system installation

IB Computer Science



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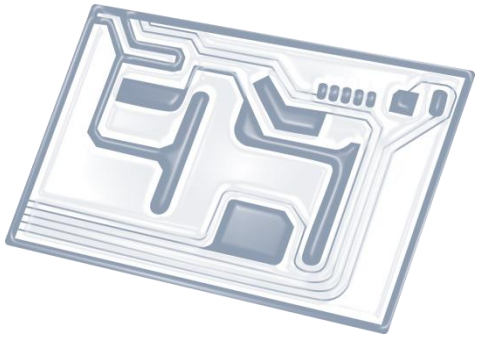
HL Topics 1-7, D1-4



1: System design

2: Computer Organisation

3: Networks

4: Computational thinking

5: Abstract data structures

6: Resource management

7: Control

D: OOP

HL & SL 1.1 Overview

Planning and system installation

1.1.1 Identify the context for which a new system is planned.

1.1.2 Describe the need for change management

1.1.3 Outline compatibility issues resulting from situations including legacy systems or business mergers.

1.1.4 Compare the implementation of systems using a client's hardware with hosting systems remotely

1.1.5 Evaluate alternative installation processes

1.1.6 Discuss problems that may arise as a part of data migration

1.1.7 Suggest various types of testing

User focus

1.1.8 Describe the importance of user documentation

1.1.9 Evaluate different methods of providing user documentation

1.1.10 Evaluate different methods of delivering user training

System backup

1.1.11 Identify a range of causes of data loss

1.1.12 Outline the consequences of data loss in a specified situation

1.1.13 Describe a range of methods that can be used to prevent data loss

Software deployment

1.1.14 Describe strategies for managing releases and updates

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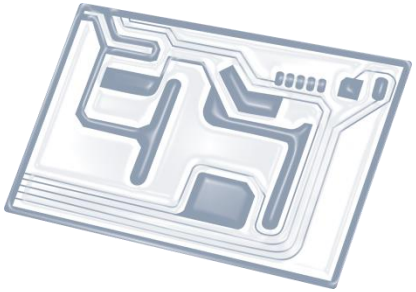
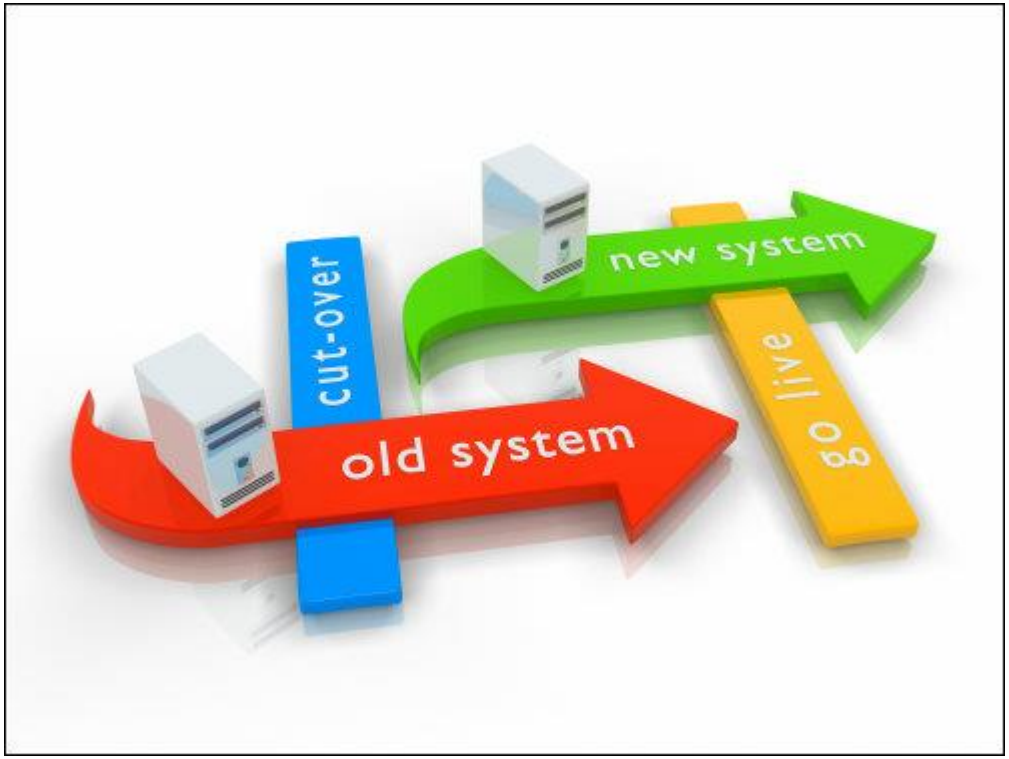


Topic 1.1.5

Evaluate **alternative** installation processes

4 types of installations

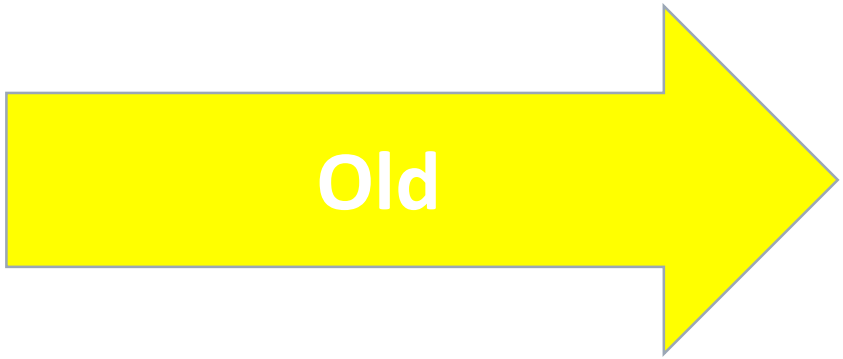
- Direct
- Parallel
- Pilot
- Phased



Direct

- The old system is stopped and the new system is started

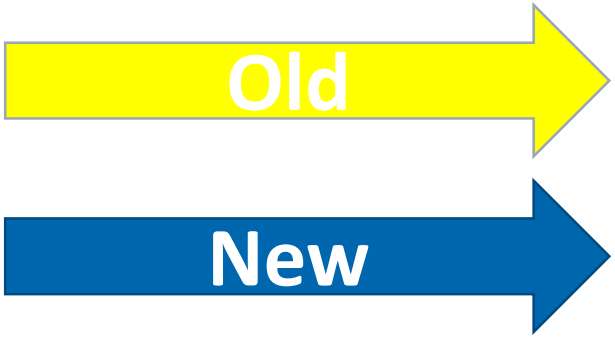
Advantages	Disadvantages
Minimal time and effort. New system is available immediately.	If the new system fails there is no backup.



Parallel

- The new system is started but the old system is kept running alongside. Data is input into both systems.

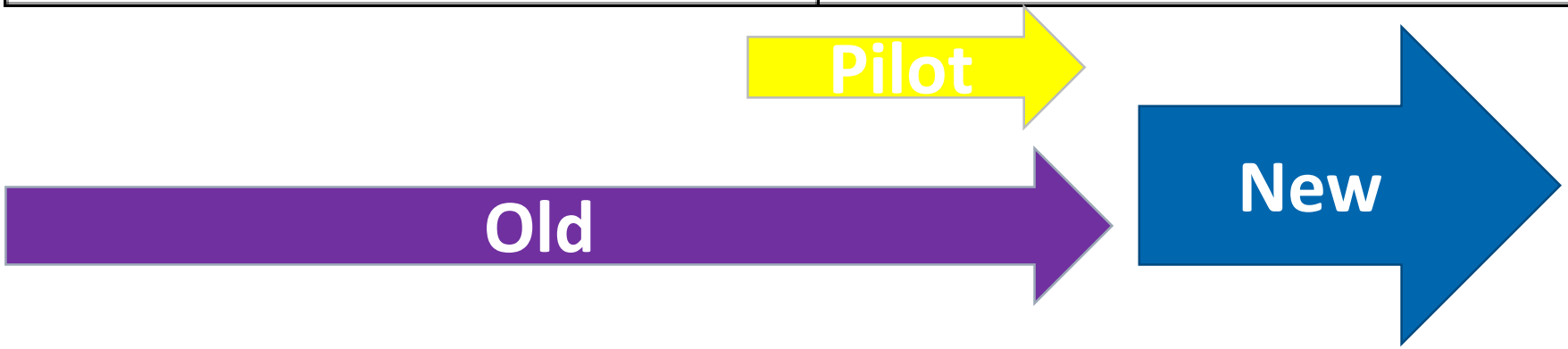
Advantages	Disadvantages
If new system fails the old system runs as a backup. The outputs form the two systems can be compared to see if the new one is running correctly.	Running two systems is costly in terms of time and money.



Pilot

- The new system is piloted (trialled) in a small part of the business. Once it is running correctly then the new system is implemented across the organisation.

Advantages	Disadvantages
All features can be fully trialled. If the new system fails only a small part of the organisation suffers. Staff who were part of the pilot study can train other staff.	For the section that is piloting if the system fails there is no backup.



Phased

- The new system is introduced in phases as parts of the old system are gradually replaced with the new system.

Advantages	Disadvantages
Allows people to get used to the new system. Training can be done in stages.	If the new part of the system fails there is no backup for that area.