

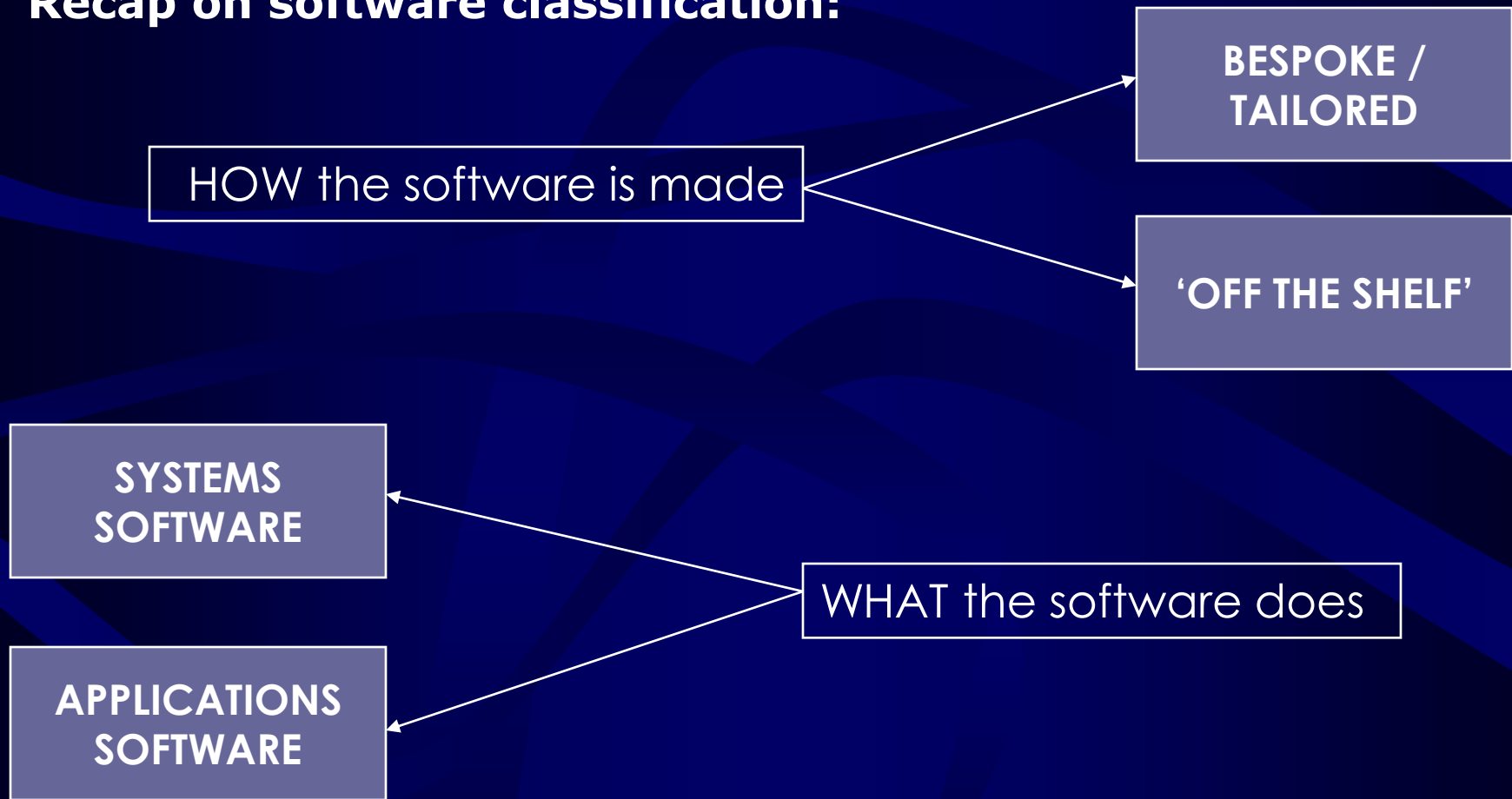
A2 ICT

Module 5

14.2 – Software

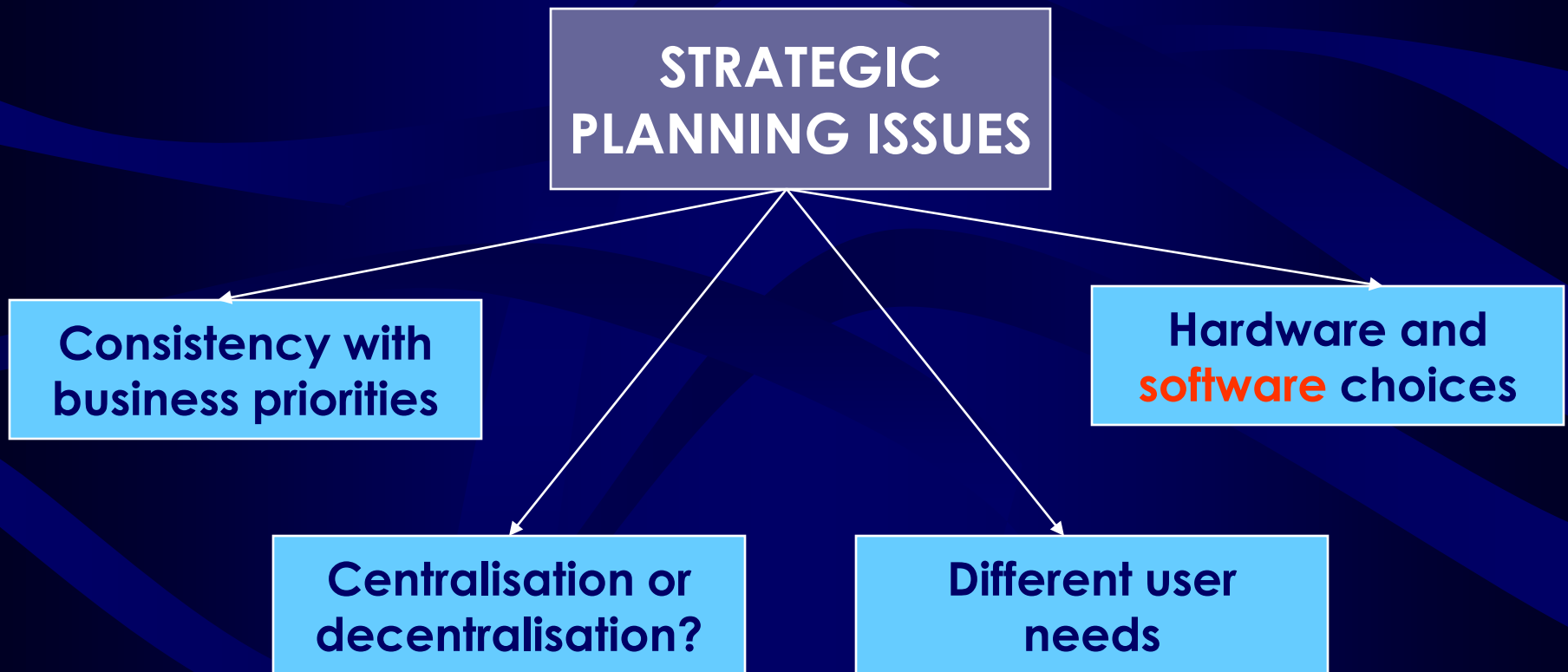
14.2 - Software

Recap on software classification:



14.2 - Software

Recap on strategic elements of information systems policy:



14.2 - Software

**CHOOSING
SOFTWARE**

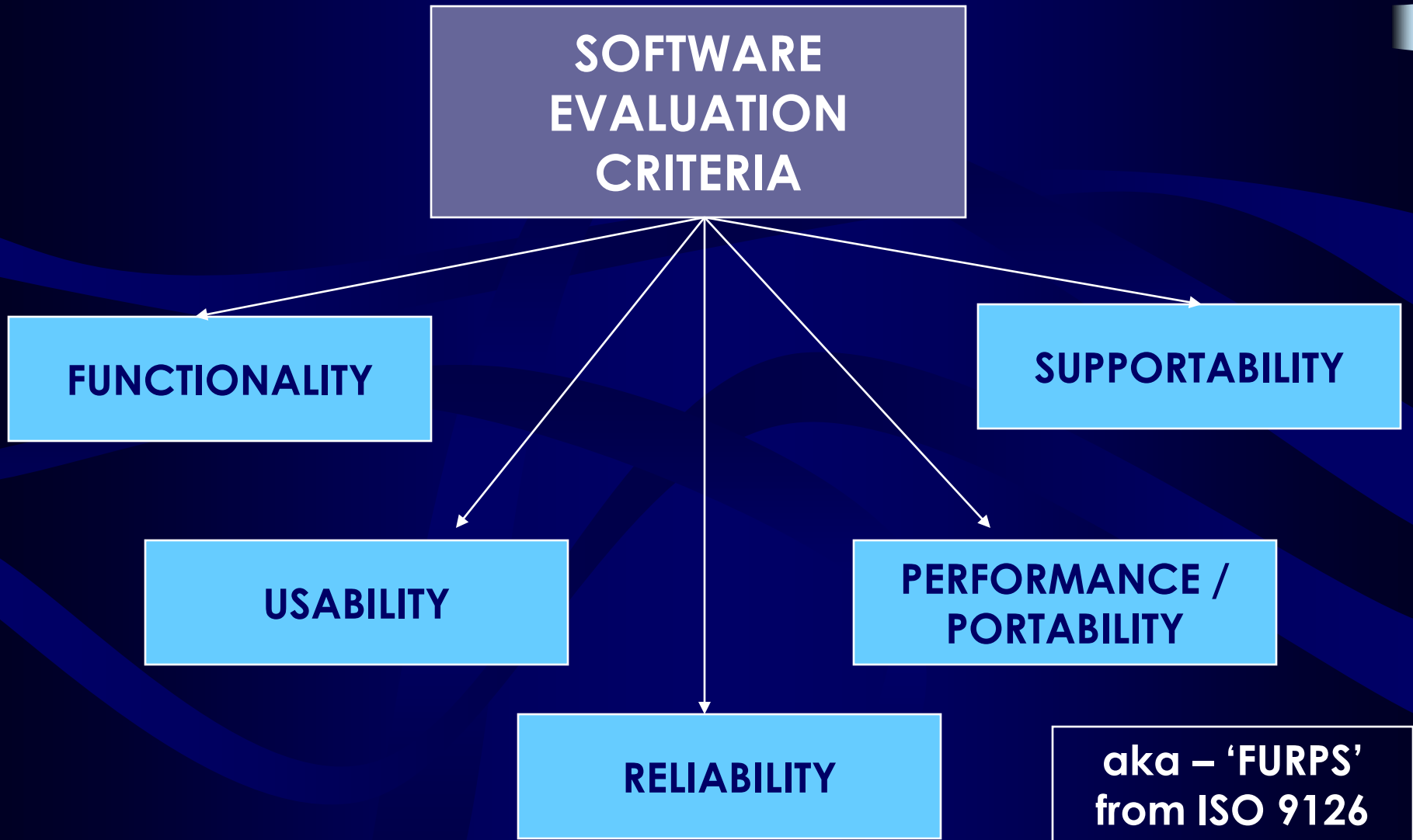
Software Evaluation

Choosing software is crucial to an organisation and therefore choosing the right software will greatly enhance productivity and user satisfaction.

It is therefore important for an organisation to set out in their information management policy the role the software they use should undertake.

The organisation should choose (a) suitable person / people who has / have the necessary qualifications to select the appropriate software for the tasks outlined in the policy.

14.2 - Software



14.2 - Software

FUNCTIONALITY

FUNCTIONALITY refers to 'a set of attributes characterising what the software does to fulfil the user's functional needs'.

Feature Set

A set of functions that software can perform – matched to the user's needs.

Accuracy

Is the software as accurate as the user needs it to be?

Interoperability

Ability to interact with specified systems that already exist in the organisation.

Security

Ability to prevent unauthorised access.

14.2 - Software

USABILITY

The attributes of software which measure how much effort a user has to put into using the software and its functions.

Understandability

Can the user understand what the software can do and how to do it quite quickly?

Learnability

How much effort does the user have to put into learning it? How much training?

Operability

How much does the user have to do to control the functions within the program?

Human Factors

HCI - aesthetics / consistency of interface.

Documentation

Amount and accessibility.

14.2 - Software

RELIABILITY

How does software perform over a period of time?

Maturity

This measure is of how often the software fails / frequency of failure.

Recoverability

How well can the software recover itself and any data after a failure?

Fault Tolerance

Ability to maintain a specified level of performance in case of software faults or of infringement of its specified interface. Fail safe capability.

Frequency / Severity of Failure

The measure of how predictable failure is.

14.2 - Software

PERFORMANCE

How does the software perform when measured against the computer and other resources it is using?

Time Behaviour

How quickly / well does the software respond to a request for an action from the user? How much of the computer's processing time is it using and how long are the throughput rates taking?

Resource Behaviour

How much of a given computer resource is the software using at any time? How efficiently is the software using / relinquishing this resource when it is no longer needed?

14.2 - Software

PORTABILITY

This section lists measures of how easy it is to transfer the software / data from one platform to another.

Adaptability

How easily does the software / data adapt to different specified environments?

Installability

How much effort is needed to install the software?

Conformance

Does the software adhere to standards and conventions relating to portability?

Replaceability

How much better is the software at the tasks performed by the software this is to replace (either software from another company or an upgrade by the same company)?

14.2 - Software

SUPPORTABILITY

This section relates to how well the software is supported and how easily it can be maintained.

Analysability

Can problems be diagnosed easily by the software or the user / technician?

Changeability

How much effort is needed to modify or remove faults that have arisen?

Stability / Adaptability

Is the software going to remain stable when modifications have been made?

Localisability

How easy is it to make a language/cultural adaptation to the software?

Configurability / Testability

How easy is the software to reconfigure / test when modifications are complete?