

Software Acquisition

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- Software Acquisition
- Make or Buy
- Bespoke or Package
- Software Packages
- Buying and licensing
- Customising (beware ownership if you use open source).
- *An estimation exercise.*
- Extras: Planning and delivery of estimation.

Software Acquisition is...

... the “process of obtaining software by whatever means ...”

“... also referred to as IT provision or IT procurement ...”

(Hall & Fernandez-Ramil, 2007, p131)

A simple Example

- Consider an IT Group that needs to provide a software application to solve a business problem.
 - Perhaps to improve the effectiveness and/or efficiency of a business process.

- Make or Buy?
- Bespoke or Package?

- What are the benefits of developing the application in-house?
- What are the drawbacks to developing the application in-house?
- What are the benefits of commissioning another business to develop the application?
- What are the drawbacks to commissioning another business to develop the application?

- Also known as Commercial off the Shelf (COTS) software.
- Examples: Accounting systems, Project Planning systems, Enterprise Resource Planning (ERP), Virtual Learning Environments.
- Selection process?
- Selection criteria?

Buy a Package

- Benefits?

- Drawbacks?

- What licensing agreements could be considered?
 - From the vendor's viewpoint.
 - From the customer's viewpoint.

- What skills are required to customise a software package to meet business needs?

- Where might these skills come from?

How much is made?

Research by Nelson, Seidmann & Richmond (1998) into IT departments found that approximately 80% of the software applications were made rather than bought.

- Is using Open Source software a cheap option?

- Nelson P., Seidmann A. & Richmond W., 1998. Software Acquisition: The Custom/Package and Insource/Outsource Dimensions, in *Advances in Computers*, (Ed: M.V. Zelkowitz) Academic Press, 1998, pp341-367.
- Hall, P. and Fernandez-Ramil, J., 2007. *Managing the Software Enterprise: Software Engineering and Information Systems in Context*. London: Thompson.

Seminar Task (1)

- Ven, K., Verelst, J. & Mannaert, H., 2008. Should You Adopt Open Source Software? *IEEE Software*, 24 (3), May/June 2008, pp54-59.
- What did you learn about:
 - a) Why should a business use Open Source Software?
 - b) Why should a business **not** use Open Source Software?
 - c) What skills would a business that intended using Open Source Software need in order to make effective use of Open Source Software?

- Nelson, P., Richmond, W. & Seidmann, A., 1996. Two Dimensions of Software Acquisition. *Comms. ACM*, 39 (7), July 1996, pp29-35.
- Explain the model used in this paper.
- **NOTE:** You do not need to understand their complex mathematics!