Overview IT6423– IT and Business Value and IT Sourcing Strategies- LM1

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Being successful in this course requires you to understand that the primary reason that organizations invest in any IT application, system or service is that they expect the investment to provide some business value, e.g. through increased efficiency of their operations, decreasing cost, providing new products or services, etc. This clearly raises the question how an IT investment provides business value, especially in light of the fact that there are many horror stories in the press about IT investments gone badly. One foci of this module focuses is on this question: How does IT provide business value and how can the value be measured? To systematically acquire and integrate IT systems within the organization requires that we answer such a question.

The second focal point of this module is on sources of IT systems and assets for the organization. Over the past ten years we have witnessed true exponential growth in the capabilities and applications of IT systems and their base technology as well. This growth reminds us of Moore's Law, which is an observation by Gordon Moore, first made in 1965 and has continued to make that the computing power of a fixed-size (and often fixed-cost) computer chip doubles every 12 to 30 months. Although Moore's Law is formulated for the raw technology base of number of electronic components in a volume of chip, it has often been generalized to describe exponential growth in areas based on raw computing technology, e.g., IT. A primary area of IT that has had tremendous growth recently is the number and variety of sources of IT systems and applications. Ten years ago organizations sourced their IT systems in a variant of only two ways: a) they <u>made</u> the IT system by procuring components and programming it or b) they <u>bought</u> the IT system from a supplier, who provided it "turn-key" to the buyer at a price. If the number of unique sourcing techniques follows the current observations of Moore's Law (a doubling every 30 months), then we should have 2^4 or 16 distinguishable approaches to source IT. I have not made a concerted effort to identify and count sourcing approaches, but I know it is more than 8 (make, buy, lease, subscribe, steal, cloud, community, BYOD/IT (sometimes called shadow IT), and borrow) or 2^3, representing a doubling every 40 months. The second focus of this module is thus on the question: What are the different strategies and approaches to sourcing an IT system and which one(s) should be used when? Similar to the question about the value of an IT system, how it might be sourced must be answered to systematically acquire and integrate IT systems within the organization.

This Learning Module covers two areas of the first course learning objective and the course's second learning objective as well, namely:

1. Define and discuss major concepts, tools, techniques, and methods important to managing organizations and acquiring and integration of their information technology, including:
    1. Adding value through IT
    2. IT sourcing strategies
2. Recommend a particular IT sourcing strategy for a given situation.

Money is important, especially in relationship to IT

To me, a simple observation makes this Learning Module of utmost importance to the IT6423 course, your MSIT degree and your career in IT as well: Under capitalism (the political-economic system in the US), financial performance gives us the most fundamental of measures for any organization. The primary equation of financial performance is Profit = Revenue – Costs. Profit must be greater than or at the least (e.g., a non-profit organization) equal to zero and therefore Revenue must be greater than or at the least equal to Costs. As we will see when we read about the Value Chain Model, IT has many opportunities to contribute value to the organization and thereby enhance its Revenue and Profit; similarly, IT has many opportunities to contribute to organizational efficiency and thereby reduce its Costs and thus enhance the organization's Profit. IT professionals must be able to "follow the money" in IT[1] and this learning module covers the fundamentals of that.

There are two main topics covered in readings you will need to complete for this module. First, there are readings about the ways and models in which IT applications and systems can provide value to a firm; some of these touch on financial analysis and a more detailed introduction to finance is included in IT 6413 - IT Service Delivery. (Applying the details of finance is necessary because IT projects will have to be justified to higher level management, and the language that CEOs, CFOs, etc. speak is finance.) The second topic is on sourcing strategies and approaches for IT systems and applications, which have grown greatly in number and complexity over the past ten years. The specific readings are linked from the LM1 Readings Readme file.

Readings for this module:

- Articles on how IT contributes to value in businesses (Links in LM1 Readings Readme file and A1)
- Articles on IT system sourcing strategies and approaches (Links in LM1 Readings Readme file and A1)
- Selected readings on the web for deeper understanding
- A1 Assignment page (Link in LM1)

Module Objectives- LM1 IT Value and Sourcing Strategies

The content and learning activities in this module will help you achieve course level objectives 1 and 2 as listed in the syllabus. Specifically, upon completion of this module, you will be able to:

- Discuss how IT delivers value to the business
- Identify IT sourcing strategies and analyze their advantages and disadvantages

Task List- Actions/Deliverables for this Module:

- Read as per above
- Research what you read

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[1] For an interesting X-Y data plot of following economic-development grant money, see
https://www.frbatlanta.org/community-development/data-and-tools/following-the-money.aspx

- Download the Assignment Folder A1 file and edit in your responses within the file (leaving all questions and formatting intact). Please save as a pdf file and also upload your PowerPoint file in A1.
- Please cite all references and indicate which method used at the end of the file.
- Deliverable: Upload your response pdf file using the A1 Assignment Folder in D2L
- Deliverable: Make entries on the Module 1 Discussion