

Maximizing the Cost Effectiveness of IT

A. Basic idea of ERP

I. ERP stands for Enterprise Resource Planning

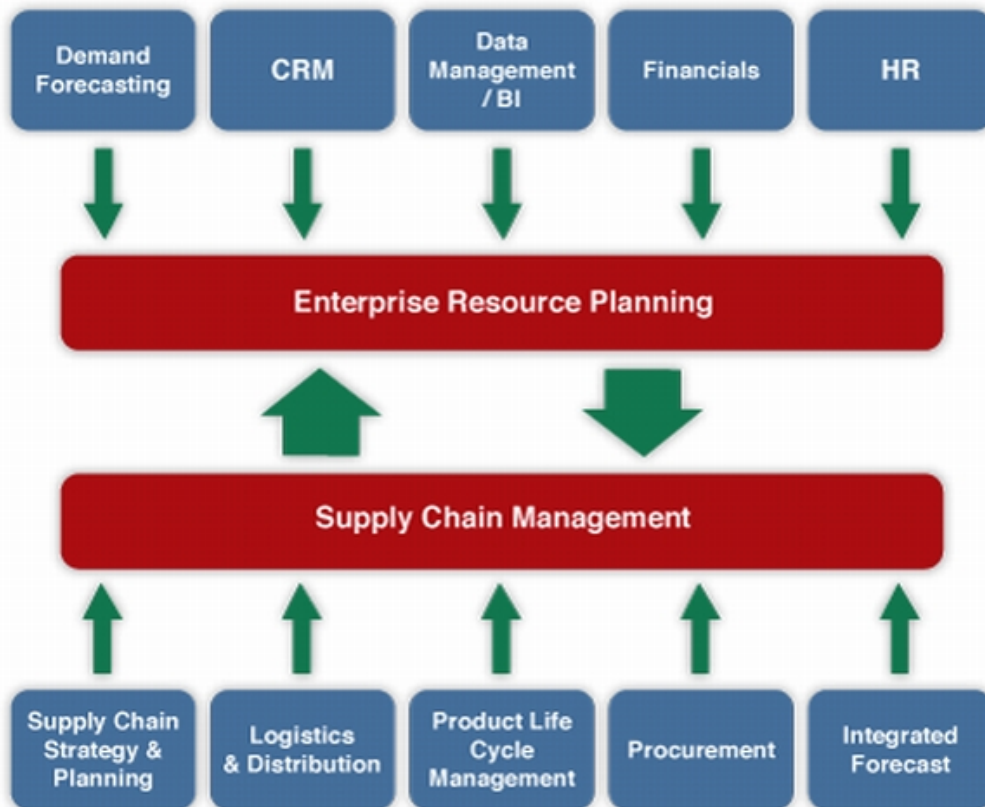
1. It is a term usually used in conjunction with ERP software or an ERP system which is intended to manage all the information and functions of a business or company from shared data stores.
2. The term "Enterprise resource planning" originally derived from manufacturing resource planning (MRP II) that followed material requirements planning (MRP).
3. MRP evolved into ERP when "routings" became a major part of the software architecture and a company's capacity planning activity also became a part of the standard software activity.



ERP Overview



ERP Modules



Another View of the relationship between ERP & SCM

B. IT Service Management (ITSM) and ERP (Enterprise Resource Planning)

I. What is ITSM?

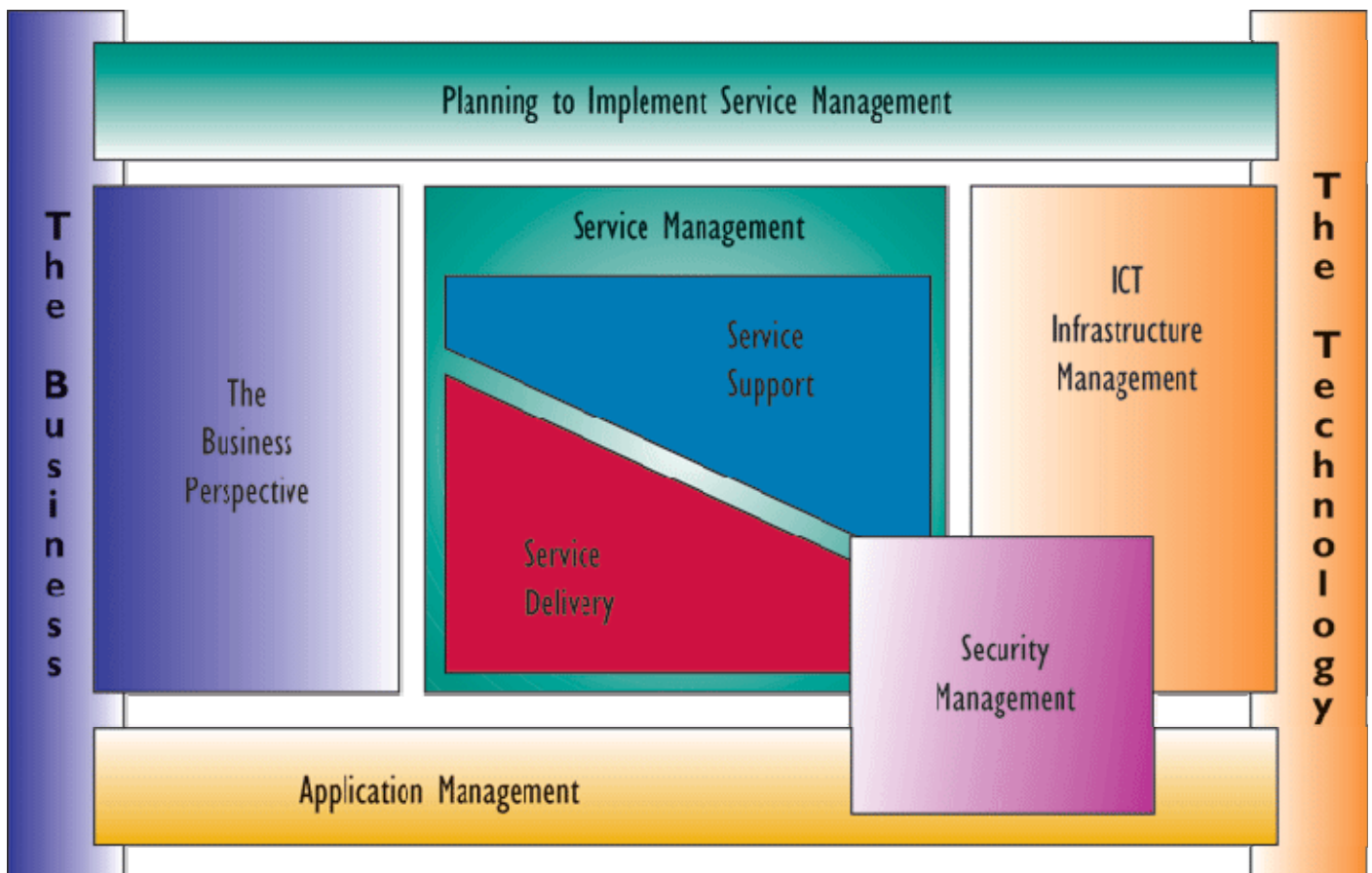
Information Technology Service Management is a generic term to describe the basic management and operation of IT services on behalf of an enterprise.

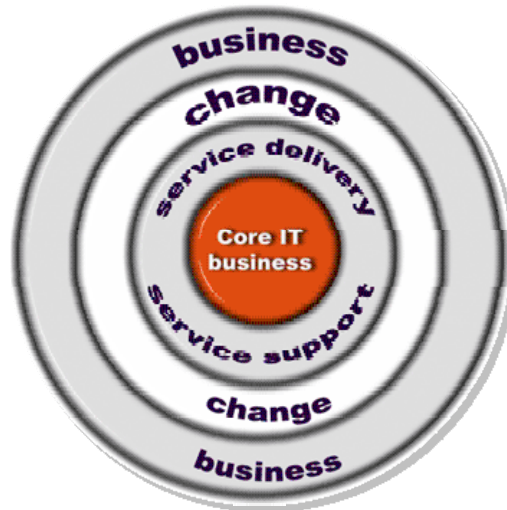
1. Providers of IT services can no longer afford to focus on technology and their internal organization, they now have to consider the quality of the services they provide and focus on the relationship with customers.
2. ITSM is process-focused and in this sense has ties and common interests with process improvement movement (e.g., TQM, Six Sigma, Business Process Management, CMMI) frameworks and methodologies.

II. ITSM can be seen as analogous to an enterprise resource planning (ERP) discipline for IT - although its historical roots in IT operations may limit its applicability across other major IT activities, such as IT portfolio management and software engineering.

C. How IT is measured (Metrics) on an enterprise's value drivers

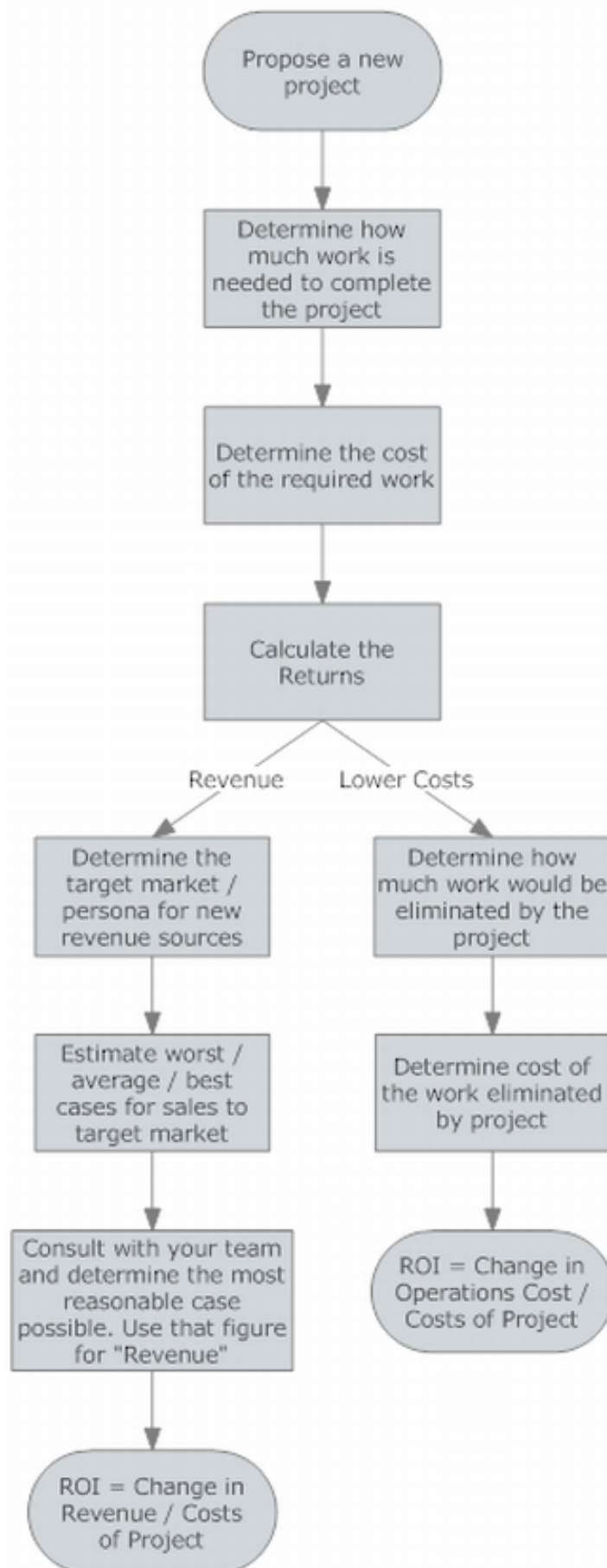
- I. The following two diagrams show the relationship between business's core value and the technology (i.e. I.T.) from different point of view.





- D. Apply ROI (Return On Investment) and TCO (Total Cost of Ownership) to measure the cost effectiveness throughout the project and service delivery process.
- I. ROI is the ratio of money gained or lost (whether realized or unrealized) on an investment relative to the amount of money invested.
 1. The amount of money gained or lost may be referred to as interest, profit/loss, gain/loss, or net income/loss.
 2. The money invested may be referred to as the asset, capital, principal, or the cost basis of the investment. ROI is usually expressed as a percentage rather than a fraction.
 3. In short, "the gains outweighed the costs" is its core concept.
 4. The equation is: $ROI = (\text{Benefits} - \text{costs})/\text{costs}$

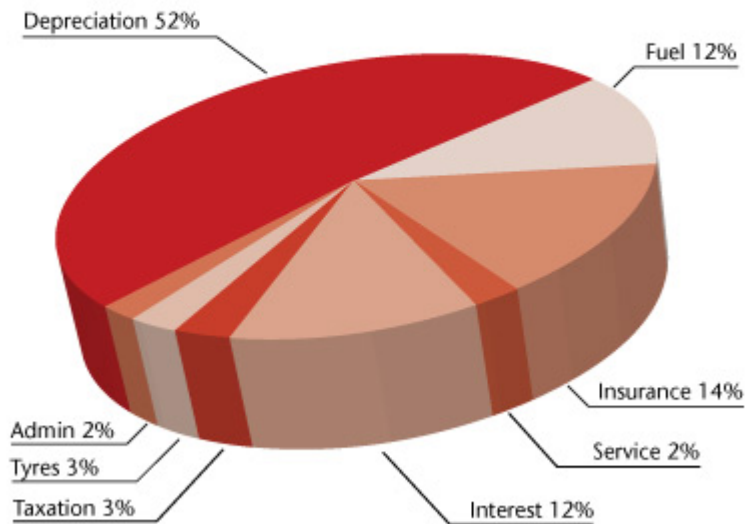
How to Calculate ROI



- II. TCO is a financial estimate. Its purpose is to help consumers and enterprise managers determine direct and indirect costs of a product or system.
 - 1. It is a management accounting concept that can be used in full cost accounting or even Ecological economics where it includes social costs.

What is Total Cost of Ownership?

Example of Toyota Avensis TCO



Source:TCO tool 2006

- E. Apply appropriate software tools to carry out the process or tasks.
This is a hands-on session, both using software and traditional “hands-on”.