Introduction

What is planning?
What is a plan?
Why engage in planning?
The planning questions
Planning Issues

What is Planning?
Planning is a formalised procedure to produce an articulated result in the form of an integrated system of decisions

- Detail road map from goals to accomplishment

What is a plan?
The articulated result (i.e. output of the planning process) in the form of an integrated system of decisions

Why engage in planning?
Minimise Risk
- Co-ordinate activities
- Future taken into account
- Scenarios
- Elaborate and operationalise existing strategies

Planning Issues

- Clearly defined business plans so IT can be aligned
- Support and commitment from top management
- A favorable culture
- Politics and self interest to be “put aside”
### The Planning Questions

- Where are we?
- Where do we want to go?
- How do we get there?
- When will it be done?
- Who will do it?
- How much will it cost and what are the benefits?

### New economy paradigms

- Advent of the Internet
  - Reshaped and altered world economy
- Web based business applications
  - Enabled companies to capture the advantages quickly and easily
- E-business
  - Global and borderless

### The planning horizon

- Strategic plans
- Tactical plans
- Operational plans

### Strategic plans

- Convert strategies into plans
- Allocate resources of all types on a year-by-year basis
- Should be detailed enough to be tracked over its life time through the comparison of planned vs. actual performance

### Tactical plans

- Generally cover the current year in detail and the following year in less detail
- Used to measure managers’ performances
  - Sometime called measurement plans
- Contain more details than strategic plans
- Guide for short-range activities

### Operational plans

- Detail and direction to firm’s very near-term activities on a day-by-day or week-by-week basis
- Used by first line managers and non managerial employees to carry out their responsibilities
- Contain more detailed control elements
A planning model for IT managers

• Planning vary across industries
• IT industry
  – Application considerations
  – System operations
  – Resource plans
  – People plans
  – Administrative actions
  – Technology planning

Application considerations

• Complete set of applications a firm needs to conduct its automated business functions
• The plan for dealing with applications include:
  – Selection of projects to be implemented
  – Scheduling
  – Control
  – Evaluation
  – Resources required

System operations

• Running a firm’s applications according to defined processes
• Essentials for managing computer operation
  – Service level agreements
  – Problem management
  – Capacity planning, and
  – Network planning and management

Resource planning

• Resources:
  – Equipment
  – Space
  – People
  – Finances
• Plan describes critical dependencies on available resources throughout the planning period

People plans

• The most crucial element
  – Staffing
  – Training
  – Retirement
  – People management
  – Performance planning
  – Assessment

Financial plans

• Summarizes cost s of:
  – Equipment
  – Space
  – People
• Financial plan approved
• Budget
Administrative actions

• Assist in the planning process
• Establish planning ground rules
• Obtaining the cooperation of managers
• Coordination among units
  – Steering committees
• Managers and administrative personnel responsible for implementing the plan

Technology planning

• IT organization has continuous responsibility to monitor advances in technology
  – Programming managers track programming technology
  – System support personnel must maintain a current awareness of their technology
  – All experts assess technology for possible use in the firm

Strategic Directions

• organizational strategic directions can relate to:
  – organizational structures
  – inter-organizational relationships
  – product directions
  – marketing concepts
  – technological directions
  – costs
  – processes

Hierarchy of Strategies

• organizational strategies (plus visions and missions) - e.g.
  – to be the industry leader
  – to dominate the Australian market
  – to lead the world in technical innovations
  – to win the America’s Cup (vision statement)

Business systems planning

• Developed my IBM
• Concentrates on a firm’s data resources
• Identifies the key activities of the firm and data that support these activities
• Very detailed and consuming
• Best in centralised environments
• Decentralisation and internetworking, complicate the task
The integrated approach

• All mentioned plans are important, however
  – Each of planning tools offer advantage under
certain circumstances, and
  – Disadvantage under other conditions

• The integrated approach is a necessity

ERP Software

ERP
(Enterprise Resource Planning)

• ERP - integrated system solutions to standard
business process issues
• Collectively the major vendors are known as the
  J-BOPS
    – J.D. Edwards
    – Baan
    – Oracle
    – PeopleSoft
    – SAP

• An outgrowth of the MRP II (manufacturing
requirements planning) packages of the 1970s and
1980s
  – inventory management
  – scheduling system

ERP “Incentives”

• Y2K was a bonanza for the J-BOPS - many
  companies purchased and installed ERP because the
packages were Y2K compliant

• e-commerce and the Internet are the next challenge
  – middle managers are comfortable with ERP
  – senior managers less so as it is still difficult to pull
focused and directly usable information out of the
implemented packages
• at the largest companies, ERP deployments take an average of ~ 23 months

• the total costs up to $500M

• SAP
  – there are more than 25000 SAP installations worldwide
  – the package is available in 24 languages including Japanese

ERP Benefits
• integrated systems (standardised information)
• the reengineering of business practices
• the reengineering of the corporate culture

ERP - Functional Areas
• ERP solutions are best adapted to areas of functionality where
  – industry-wide standards are reasonably well-established
  – functional requirements are likely to be stable in the long-term
  – the organization does not have idiosyncratic requirements of its own

• these areas include
  – payroll
  – general ledger
  – financial accounting
  – inventory management

Factors to consider when adopting ERP
• total costs (purchase, implementation, training, maintenance, support)
  – the functional fit with organizational processes
  – the level of integration desired/achievable
  – complexity and user friendliness of the system (training)
  – speed of implementation
  – ability to support multiple sites and workstations

• level of technology dependence
• upgrades
• level of customization required
• level of support required/available
• quality of the vendor
• the effects on the organizational knowledge base
Implementing ERP Software

• The organization must be “matched” to the software
• Requirements include
  – Training and retraining
  – Education
  – Process redesign (the physical components need to be brought in line with the package)
  – Some level of organizational restructure may (will) be necessary

ERP Implementation - the existing organization

• Implementation planning must allow for user resistance as part of a very complex program of training and education
• Numerous problems can arise when the package conflicts with the existing culture
  – The previous information flow was slow (there was no great pressure on the supply chain)

ERP Implementation Failures

• Some major failures
  – Unisource Worldwide Inc (paper products - $7Bpa) wrote off $168M
  – FoxMeyer Drug Inc (drug distributor - $5B) went bankrupt and filed a $500M lawsuit against SAP
  – Dell Computer Corp abandoned a SAP implementation half-way through
  – Dow Chemical spent $500M on SAP R/2 (mainframe-based version) and then scrapped it and started again with SAP R/3

Customisation

• Customising the ERP package is an alternative strategy - if the ERP system fits better with the previous systems, then implementation will be quicker
• Customisation is possible because most ERP systems are modular designs - it is also possible to buy some components and not others
• Configuration tables allow modules to be tailored to requirements to a limited extent
• Customising the operating software is the next step up in both adaptation and risk
Customisation Risks

- with customisations, purchasers can fall behind in upgrades
- with Peoplesoft, if a company falls two or three releases behind, it loses vendor support
- vendors are aiming to achieve industry-standard best practice with their software ("companies-in-a-box")
- the aim is to help customers reduce their requirement for customisation

Post-ERP Implementation

- three phases following installation of an ERP package were identified in a Deloitte Consulting survey (~100 firms)
- the survey showed that, for almost every company surveyed, it was quite a long time before benefits started rolling in

Post-ERP Phases

- 1 3-9 month productivity decline
- 2 6-18 month period involving skills development, structural changes, process integration and add-on technologies
- 3 1-2 years where synergy of people, processes and technology peaks
- i.e. a company has to hang on through purchase, implementation, and the first two post-ERP phases to start achieving benefits - many companies do not appreciate this at day 1!

ERP Competition

- there is intense competition in the "midmarket" for smaller firms' (revenue $2M-$250M) custom
- traditional ERP suppliers are looking to provide "small" solutions to counter the perception their s/w requires radical organizational change
  - the preferred option is to develop less costly pre-packaged versions able to be implemented in weeks not months

Legacy Systems

- the term is used in the sense of something handed down from a previous generation (generations of programming languages, operating systems, hardware etc.)
- legacy systems constitute a problem which highlights a number of other issues discussed throughout the course
  - IT economics
  - IT infrastructure
  - systems provisioning issues
  - outsourcing and ERP as solutions

Maintenance and Support

- providing support for legacy systems is not an attractive IT option
- maintaining an appropriate skill level is a key requirement for internal or outsourced IT units