1. Overview

While most organisations recognise the need for and the importance of IT planning, they do not always succeed in their efforts. A survey by Lederer and Sethi (1998) of 163 firms in the United States reported that only half of the firms were satisfied with their planning processes.

Most firms in the survey reported that while their IT plans generated ideas for new projects, only 24 percent of the planned projects had actually been initiated. Considering that a typical planning process takes 3.73 years to complete at an average cost of US$163,000, this is not a desired outcome!

Similar results have been reported by studies in the United Kingdom (Flynn and Goleniewska, 1993), Singapore (Teo, Ang and Pavri, 1997), and Taiwan (Tang and Tang, 1996). Yet another result from all these studies is the consistent nature of problems with the planning process. The top five problems are listed below.

<table>
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<th>Challenges of IT Planning</th>
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<td>1. Obtain top management support.</td>
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<td>2. Planning is expensive.</td>
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<td>3. It is difficult to show benefits.</td>
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<td>4. Success depends on the team leader.</td>
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<td>5. Outputs require further analysis.</td>
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In examining the top three reasons for dissatisfaction, firms are hard-pressed to justify the expense of time and money on their IT planning process. Planning requires too many resources, and management commitment is not easy to obtain. So, even if the final plan is a good one, it may not have support for implementation.

Yet, in some cases, the IT function has been very successful in creating a partnership with the business organisation. The example in the link below shows how partnerships between the business function and the IT group led to a successful planning process.
ITMG

In 1990, a Singaporean company realised that its IT function was not keeping pace with business needs. The deliverables were late and often did not meet the requirements of the subsidiaries' requesting systems. The company established a worldwide managers' conference — the Information Technology Management Group (ITMG) — to

- provide a clear link between IT investment and business objectives
- establish a framework for prioritising IT investment
- provide a sound basis for delivering IT solutions
- achieve global consensus on IT strategies for the future

The ITMG comprised senior IT and business managers from all subsidiaries. It used the company's global strategic imperatives as its starting point and determined tier regional business objectives. The resulting list of 40 common worldwide objectives was then prioritised, and IT applications were designed for each objective. With the help of two consulting groups, the firm was able to show clear benefits of their planning process and gain top management support.

Objectives: IT Planning Challenges

Upon completion of this topic, you should be able to

- explain the process benefits that are obtained from having formalised the planning process
- explain the output benefits that are obtained from having formalised the planning process

2. Process Benefits

Process benefits are those obtained purely from having formalised the planning process. The benefits that the firm gains from its planning exercises are many and extend from employee motivation factors to management factors.

Process Benefits from Planning Process

Uncover current data and information trends

Planning can be a challenging task, requiring participants to think strategically and beyond the realms of their functional areas. As part of their planning exercises, participants may be called upon to anticipate the future, forecasting the information and IS that the organisation may need.

While it may be impossible to reliably forecast the type of information called for in the future, the exercise can be worthwhile in uncovering current data and
Information trends. Such trends may call attention to the need to broaden database definitions. The system, having been built around data rather than processes, will exhibit greater stability in the long term. Further, while brainstorming about the future, unexpected creativity may result in a suggested system opportunity.

**Highlight managerial skills and potential of IS management**

A problem that the IS function has faced over time is the manner in which IS personnel are viewed by the rest of the organisation. Participating in planning exercises alongside other line or business managers may highlight the managerial skills and potential of IS management.

**Provide a forum for greater organisational input**

Planning may provide a forum for greater organisational input. Traditionally, organisations that appoint a planning committee tend to apply top-down focus in their planning and development efforts. Alternatively, organisations with formalised planning procedures are likely to experience a broader base of input into the planning process, including the opportunity for more input from lower-level management. Lower-level managers are apt to possess greater familiarity with the day-to-day functions of the company and may be in a more suitable position to suggest candidates for IT exploitation.

**Motivate employees**

Drawing from a broader input base may motivate employees to contribute more actively to the firm. Employee motivation has been shown to be a problem area for IS. Too often, employees feel as though a system has been "thrust" upon them without their input. As a result, they feel little or no motivation to propel the system towards successful implementation.

However, when IS staff are involved with IS development from the beginning, employee ownership increases and, as a result, they are more likely to realise the usefulness of a system.

Overall, employee involvement benefits the organisation in compiling a more complete assessment of current IT capabilities. An equally important benefit is an increase in employee morale.

**Create Partnering and Co-ordination throughout the firm**

One unexpected benefit derived from IS planning exercises is that of partnering and co-ordination throughout the firm. Historically, research has shown that the IS function tends to have a less than optimal reputation within many organisations. This reputation has been built over time, as projects have come in late and over budget.

Working together on planning exercises helps to develop a sense of partnership between IS and line management. Besides reaching a better appreciation of each other's concerns, participants also build trust and respect for one another. Partnering fosters a deeper commitment towards projects and allows for breakthroughs and communication of strategic ideas.

Over time, IS and line managers who view each other as partners are better able to anticipate the strategic needs of one another and respond to those needs as they arise.
In addition to the achievement of process benefits, planning exercises may also result in output benefits. As the name would suggest, output benefits are those that the organisation enjoys as a result of planning exercises.

1. The first, and most obvious, output of IS planning is the resulting portfolio of IS applications, deemed by the planning participants as serving the strategic goals of the firm. Note, in particular, that this output is phrased as a portfolio of applications rather than a single application.

   In reviewing the organisation's strategic mission and direction and ensuring that the firm's IS plan is properly aligned with the business plan, applications given the highest priority are those that provide direct justification to supporting the goals and objectives promoted through the organisation's mission and strategy objectives.

2. In general, however, data has a longer shelf life than applications. Another output of planning focuses around the firm's databases — its customer or vendor databases in particular. These are examined with an eye towards ensuring that all data is being stored in a secure and logical structure. One planning outcome might be the expression of the need to set up a warehouse from existing data or the possibility of mining existing data in order to provide better service or products to customers.

3. Other outputs of planning extend far beyond addressing systems and processing. However, in establishing guidelines for the organisation as it invests in new and emerging technology, planning provides a vehicle through which the firm may
   - adopt an information architecture
   - establish a set of IS policies
   - formulate an overarching IS mission statement

   Although these may sound distanced from one another at first glance, they are actually intricately intertwined with one another.

   An organisation's information architecture, in particular, determines the manner in which the company configures all of its hardware, software and technology. Decisions stemming from this category of output are likely to include the following.

   - The choice of a particular operating system platform, such as opting to use a Unix mainframe for web applications
   - The choice of LAN configuration, such as the decision to shift vendor databases from their current position on the mainframe to a client-server network

4. Closely related to these decisions are those pertaining to the organisation's IS policies. In particular, these decisions guide the organisation in any hardware and software acquisitions and updates. The IS function may decide that, based on the planner's recommendations, they will identify low-cost vendors or emphasise certain brands of off-the-shelf software for firm-wide use. The
policies would also include standards. Standards become even more important when you consider the availability of computing in today's organisations.

Standards Examples

1. **User-created applications**: They can only be run against a copy of data downloaded onto a user's personal machine.
2. **System backups**: All work is to be backed up on at least a weekly basis, while mission critical data is to be backed up on a daily basis.
3. **User program backups**: This is the responsibility of the individual rather than an IS function.
4. **Databases**: Databases are to be normalised to third normal form, whether to allow first access to a database record or to lock out all parties to a duplicate record request in order to prevent the occurrence of deadly embrace.
5. **Data formats**: Customer identification numbers should be stored as single-precision integers.

Prior to the advent of the PC, users submitted a request for an application or maintenance request. The IS function prioritised the request, assigned it a job number and placed it in a queue.

Today's users are often more sophisticated. Rather than wait for the IS function to develop an application, a user may have enough knowledge and ability to create an application of their own. Dealing with systems created by end users can be a potential nightmare for IS management. Setting standards may allow IS management to post recommendations concerning user-created applications or to limit their responsibility for providing support.

In this way, IS management is setting guidelines for the organisation as a whole, making users aware that the IS function is there to provide support while limiting its liability at the same time.

5. One of the most important output benefits, though, is that of setting a direction for IS within the company. Ideally, IS planning should align the organisation's IS strategy with the firm's business strategy. This aids in setting a path for future IT investments and acquisition decisions. In this sense, IS management has a clear sense of the direction in which the organisation is heading.

Although today's technology environment and, by extension, today's business environment are changing rapidly, establishing a firm sense of direction through promoting an IT mission reduces the amount of crisis management in which IS is likely to engage.

### 4. Self-Assessment

Now, try the self-assessment questions to test your understanding of the topic. Click the following link to open the Self-Assessment in a new window.

[Self-Assessment](#)
Q1. What is the most important outcome of IS planning?
   1. It is to deal with organisational power and political issues.
   2. It is to suggest a path for future IT investments and directions.
   3. It is to enable the organisation to deal with technological changes.
   4. It is to control the spread of end-user application development.

Q2. The initiatives that are most likely to receive organisational support are
   1. backed as essential to the firm.
   2. tightly linked to the IS plan.
   3. tightly linked to the strategic plan.
   4. initiatives that competitors are deploying.

Q3. Why is there a need to develop and examine a portfolio of potential applications?
   1. It is because there are multiple paths to achieving an organisation's strategy.
   2. It is because competitors often develop applications as a portfolio.
   3. It is because numerous suggested changes require that a developer work on more than one project at a time.
   4. It is because the IS function needs to constantly demonstrate the value that IT adds to the organisation.

5. Summary

This topic covered the following main points:
   - It is imperative for an organisation to create partnership between the business functions and the IT groups. This relationship can be strengthened by clearly demonstrating the benefits that emerge from the planning process.
   - There are two types of benefits associated with IT planning
     - process benefits
     - output benefit

References