

INFORMATION SYSTEMS STRATEGIC PLANNING WORKBOOK

Version 2.1

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PREFACE

This workbook is a part of a larger new venture planning tools development program. Its primary objective is to assist in the development of new business without large development staffs.

The tools consist of a series of workbooks designed to provide a checklist of key issues that need to be addressed during the development of most business concepts. We believe that the process of venture development is an active one. While much of the workbooks focus on data collection, analysis and planning, we believe, that most activities should be dedicated to "hands on work" with the product, the process, and the potential customers. We hope that these tools will act to focus activities on "what must be done". The philosophy expressed in this workbook reflects that of the authors and not of the organizations or corporations involved.

We intend that this workbook and all others in the series will be "evergreen". New versions of the workbooks are expected to be published periodically, reflecting constructive comments by users. This workbook reflects the efforts of many individuals who have provided ideas and comments.

This particular workbook on Information Systems has been developed as part of a graduate course in the College of Information Science and Technology at Drexel University. The comments by the students have help guide the development of the workbook.

Gene Lieb

SITUATIONAL ANALYSIS

Chapter 1 Overall Organizational Strategic Objectives

1.1 What is the organization?

The Information Systems group that this plan covers is within a larger organization for which it serves. There may be a hierarchy of organizations involved. Start with the largest and the ultimate source of funding and describe the organization and the parts for which IS is responsible.

1.2 What does the organization do?

Most organizations have customers who provide funds, clients for whom it provides value, and products that it makes and provides to the market. Describe these elements focusing on the services and products that it delivers and the nature of its markets.

1.3 How does the organization make money?

All organizations require funds to operate in general, and the IS function in particular. What are the sources of funds for the organization? For commercial firms, those funds usually come from the sale of products and services. However, for other organizations funding might come from the government, or from other sources.

1.4 What gives and will give the organization competitive advantage?

All firms have competitors in one form or other. Even non-profit organizations have competitors. The ability of a firm to compete successfully against the competition is defined as its competitive advantages. These may be efficiency, special knowledge, customer loyalty, productivity, size, intellectual properties, etc. Indicate the most meaningful present and future basis of competitive advantage.

1.5 What are the core competencies of the organization?

The core competencies are the intersection between those things we do well and those things that produces competitive advantage. These are the skills that generate competitive advantage. Focus on both IS and other key core competencies of the organization.

1.6 What will the organization look like in 5, 10 years?

Will it be doing the same things in the future? What products and services will the organization provide? How will they be produced? Who will be their customers and clients? What will they produce? How will it market its services and communicate with its employees?

1.7 What are the Business Objectives 5 and 10 year out?

The future business history is a way of relating future events and objectives to the present activities. The goal is to establish a path between the present and the future. We start this analysis by laying out the organization's objectives.

	<u>Present</u>	<u>1 to 2 yr.</u>	<u>3 to 5 yr.</u>	<u>5 to 10 yr.</u>
Overall Organization Objectives				
Sub-Organizations:				

1.8 How does IS fit into the larger organization?

What specific IS functions exist within the larger organization? Focus on the relationships and responsibilities of these various IS functions and the role of IS in the overall organization.

Chapter 2 IS Objectives and Competitive Advantages

2.1 What is the IS organization that you are going to prepare the strategic plan for?

Specifically which IS organization or function will this plan be about. It is critical that the plan covers an organization not a project. At a minimum the IS function needs to involve a number of projects or separate functions. However, it does not have to include all of the IS functions in the organization. Furthermore, the IS group may be assigned to only a part or division of the larger organization or firm. For example, you may consider a functional group such as Research and Development or Marketing or Manufacturing. You could consider the IS function within a strategic business unit or product group. However, once again, the IS function must have sufficient scope to exist beyond a single project or initiative.

2.2 How does it fit into the larger organization?

Only for small businesses and organizations is there only a single information systems function. Typically, there are several IS functions involved. Describe how the IS organization in your plan relates to the total IS function in the larger organization. What other organizations exist and how does this organization relate to those. The purpose of these questions is to set the scope of the plan and put it into a context with the other organizations.

2.3 What does this IS organization do?

Explain specifically what are the responsibilities of this organization. Who are its customers and stakeholders? What does it deliver? What are its products and services? Be very specific in describing its function. Differentiate between what it does and what it manages. Consider the stakeholders to be a broad range of those individuals that are not only served but whose function are effected by the performance of this organization.

2.4 What is the mission of this IS organization?

The mission of the IS organization are captured in terms of its "functional imperatives." These are things that must happen or must not be allowed to happen. Be very specific and quantitative. These are things that this IS group has been created for. However, make sure that the functional imperatives are doable. These are the management objectives that the organization is committed to do. For example, truly 24/7 performance is normally not doable since some downtime is needed for maintenance.

2.5 What is the vision of the IS organization?

The vision of the IS organization is summarized by the sources of competitive advantage. Competitive advantages are derived from doing things that reduce costs or provide improved revenue through new customers, products, or increased sales to existing customers to the firm. Note here that value is obtained for the firm in the terms of its objectives. The only competitive advantages for the firm are those that it intends to use. Capabilities that it will not use have no value.

<u>Potential Competitive Advantage</u>	<u>Source of Value (i.e. Cost Reduction, New Customers, New Services)</u>

2.6 What are the core competencies and capabilities required to create these potential competitive advantages?

For each of the potential competitive advantages indicate the critical skills and capabilities that are going to be necessary to establish and maintain the competitive advantages.

<u>Potential Competitive Advantage</u>	<u>Core Competencies</u>	<u>Capabilities</u>

REQUIREMENTS

Chapter 3 Customer Satisfaction and Total Quality

3.1 Who are the clients (customers)?

Indicate the people and functions that the IS organization serves directly. These are its customers and clients. While corporate and organizational management are its ultimate bosses, the value of the organization is usually obtained through satisfying its clients and customers.

3.2 What do they expect from the IS organization?

The traditional goal of Total Quality Management is "Meeting or exceeding reasonable customer's expectations." Or more simply: "Delighting the Customer." In order to capture this concept we need to understand what the customer expect of the IS organization. Indicate for each type of customer, what are the areas of expectation whether reasonable or not. These should be defined as quantitatively as possible. Think in terms of time or maximum acceptable failure rate. For example, 95% of all returned calls within 2 hours.

3.3 What should they expect?

However, it is important that we differentiate between what customers expect and what they should expect. This may be greater performance or less depending on what is feasible. Here we focus not only on what we wish to do, but what they should expect of us even if that is a stretch.

3.4 What are the measures of those expectations?

Usually this is done both by tracking actual performance internally and by customer satisfaction studies. It is critical here to differentiate between performance as it is measured internally and the perception of the customer. These may be radically different. From a Total Quality perspective, perception is everything. In general, we rely more heavily on customer satisfaction in terms of surveys and complaints than we do internal measurements

3.5 What can you do about dissatisfaction?

Simply measuring dissatisfaction is insufficient. What mechanisms will you establish to do something about problems? Measuring things that you can do nothing about helps very little. Focus on the issues that are critical and how you will change resources and policies to make things happen.

3.6 How will you quantify dissatisfaction?

What do we mean specifically by dissatisfaction? How will you measure levels of dissatisfaction? There are several things to consider including the number of dissatisfied clients, the degree of dissatisfaction with each type of infraction, the perceived importance of the infraction. How will you "standardize" the level of dissatisfaction? What will you use as a basis of comparison?

3.7 How will you measure the response in the customer satisfaction survey?

Measuring the response to a question is not straightforward. Measuring performance or satisfaction is traditionally done on a 5 or 10 point scale. We tend to measure agreement or disagreement with a statement or alternatively, measure satisfaction with a function. For the more specific attributes or infractions agreement with statements is usually preferred. Satisfaction scales are usually considered too vague to allow implementation.

Importance scales are more complex. Typically we prefer to use some type of "trade-off" approach which requires the respondent to provide some partial value to each possibility. Constant sum scales (distribution of 100 points) for example, are typically used. However, these are limited to a fairly small list of attributes. Ranking scales are also used. Least preferred is the rating scale (10 point scale) since this is not a trade-off between attributes and tend to give items equal and high importance ratings.

3.8 How will you sample the clients?

Sampling involves both determining how many individuals you need and how to select them. Self-selection produces problems in that you normally get a non-representative sample. The results tend to either under or overestimate dissatisfaction. This is the basic problem with attempts at obtaining a census of clients. Those who actually participate are either strong supporters or strong critics. This eliminates the majority of the customers who do not fit in either camp.

The level of sampling determines the "precision" of the estimates. In general the standard error around a measure of percent dissatisfied is equal to:

$$\text{Standard Error} = \sqrt{P \cdot (1-P)/N}$$

Where **P** is the percent dissatisfied and **N** is the size of the sample.

Chapter 4 Requirements, Data and Security

4.1 How large a system must be controlled by this organization?

The IS organization is responsible for a number of functions. The size of the function will depend on the number of clients, customers, computers, networks, contacts, and calls, as well as data. How big are these responsibilities. Focus on sheer size! Be specific to the responsibilities of the organization.

4.2 How much and what kind of data will be stored and transferred in the systems included in the IS organization?

Data and information are key to the information system. Indicate the kinds of data and storage for the key information systems that the organization is responsible for. These may be internal information or that for its clients. If the organization is responsible for the systems, computers and networks, it is responsible for the data that it stores or transmits.

	<u>Data Form</u>	<u>Storage Form</u>
System 1 Data		
System 2 Data		
System 3 Data		

4.3 How fast will that data and systems grow?

The expected growth of data and systems dictate the infrastructure requirements. Estimate the size of clients, systems, and data for the next 10 years. Only the "order of magnitude" estimates are needed for the longer term estimates (3 to 10 years out).

	<u>Present</u>	<u>1 to 2 yr.</u>	<u>3 to 5 yr.</u>	<u>5 to 10 yr.</u>
Clients				
Computers & Networks				
System 1 Data				
System 2 Data				
System 3 Data				

4.4 Who is responsible for the control of that data?

Control of the data exists both within the functional organization and within IS. In this regard there needs to be a specific individual assigned for that responsibility. With individual accountability for data control, we get into the "Tragedy of the Commons," where if everyone is responsible, no one is.

	<u>IS Responsibility</u>	<u>Organizational Responsibility</u>
System 1 Data		
System 2 Data		
System 3 Data		

4.5 What are the threats to the data that it must be protected from?

Data security must start by the identification and evaluation of threats. Indicate each potential type of threat involved and its likelihood. Include both intentional and unintentional threats. For example a fire may represent an intentional threat, while the entry of a hacker is intentional. Remember usually more damage is done by accident than that done on purpose. Include both physical threats as well as electronic. The key here is to have the data available to those who should have it and not to those who should not. Data integrity as well as exclusivity must be considered.

<u>Threat</u>	<u>Likelihood (% within the next 3 yr.)</u>

4.6 What is the damage if security fails?

Damage for a threat may be just in the data, direct financial losses, legal and financial exposure, and embarrassment. Each of these has different implications and costs. Include not only the source of the damage, but the expected size or costs.

<u>Threat</u>	<u>Type of Damage</u>	<u>Size & Cost</u>

4.7 What must be done to protect the data in terms of security, data integrity, backup and recovery?

These are the means, methods and procedures that will be used to protect the data. Note that some methods themselves produce other threats. For example, encryption is likely to threaten data integrity or multiple levels of password protection threaten the security of the passwords themselves. Include also protection of the data by backup and recovery. Please note the need for off-site requirements.

4.8 What are the key systems' capacity initiatives?

This is a summary of the major changes in capacity that are anticipated into the future. This is a focus on the infrastructure requirements. These include major changes in data storage, system requirements or bandwidth that will be necessary in the future. Consider here new security requirements as well.

STRATEGY

Chapter 5 IS Technology Strategy

5.1 What are the technology sources of competitive advantage?

<p>Technology can be the wellspring of competitive advantage by the organization. Identify the information (IS) technology sources of competitive advantage. Think in terms of applications rather than of technology performance capabilities alone.</p>

<u>IS Technology</u>	<u>Specific Use</u>	<u>Organizational Value</u>

5.2 Which technologies do you need to improve in order to maintain the organization's functional imperatives?

While improving the competitiveness of the organization is important, maintaining the IS functional imperatives are critical. However, meeting functional imperatives with increasing demands is difficult and requires improvement of the infrastructure and software support. These are technological issues. Identify the technologies and infrastructure that needs improvement and how IS will plans to accomplishes this over the next 1- 10 years.

5.3 How do you expect technology to change the organization's business model?

Technology has been the wellspring of business change over the history of man. Indicate how technology (computation, EDI, and e:commerce) within this organization's responsibility will change the way the business makes money. This is referred to as the change in the IS organization's business model. How will the way the firm delivers its products and services change? How will it produce and market its products differently due to these technologies?

5.4 What are the technological threats to the firm?

Where technology can offer opportunities, it also may offer threats if existing or new competitors adopt a technology, which gives them competitive advantage. Indicate what IS technology threats.

5.5 What technology driven operational capabilities will be needed over the next 10 years?

Technology/Business/IS Practice	Condition	Already	1-2 yrs	3-5 yrs	5-10 yrs	Never	Not Appropriate
1. e-Commerce EDI (order tracking)	Fully operable to > 85% of Major Customers	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³	<input type="checkbox"/> ⁴	<input type="checkbox"/> ⁵	<input type="checkbox"/> ⁰
2. Mobile Computing	Available to > 85% professionals	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³	<input type="checkbox"/> ⁴	<input type="checkbox"/> ⁵	<input type="checkbox"/> ⁰
3. Integrated E-Mail and Voice Mail	Available to > 85% professionals	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³	<input type="checkbox"/> ⁴	<input type="checkbox"/> ⁵	<input type="checkbox"/> ⁰
4. Common Use of Multi-media Hypertext	Used by > 50% professionals	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³	<input type="checkbox"/> ⁴	<input type="checkbox"/> ⁵	<input type="checkbox"/> ⁰
5. Teleconferencing	Used by > 25% professionals	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³	<input type="checkbox"/> ⁴	<input type="checkbox"/> ⁵	<input type="checkbox"/> ⁰
6. Dictation	Used by > 25% professionals	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³	<input type="checkbox"/> ⁴	<input type="checkbox"/> ⁵	<input type="checkbox"/> ⁰
7. e-Commerce (Sales on Line)	Makes up 15% of total sales responses	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³	<input type="checkbox"/> ⁴	<input type="checkbox"/> ⁵	<input type="checkbox"/> ⁰
8. Intranet/Extranets	Fully operable to > 85% of personnel & customers	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³	<input type="checkbox"/> ⁴	<input type="checkbox"/> ⁵	<input type="checkbox"/> ⁰
9. In-house Video Production	Used by > 15% of organization	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³	<input type="checkbox"/> ⁴	<input type="checkbox"/> ⁵	<input type="checkbox"/> ⁰
10. e-Commerce (On-Line Purchasing)	Makes up > 25% of items purchased	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³	<input type="checkbox"/> ⁴	<input type="checkbox"/> ⁵	<input type="checkbox"/> ⁰
11. Electronic Surveys	Makes up > 50% of internal surveys	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³	<input type="checkbox"/> ⁴	<input type="checkbox"/> ⁵	<input type="checkbox"/> ⁰
12. Business Strategy Decision Support Systems	Used by > 35% of organization	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³	<input type="checkbox"/> ⁴	<input type="checkbox"/> ⁵	<input type="checkbox"/> ⁰
13. Language Translation	Available to > 85% professionals	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³	<input type="checkbox"/> ⁴	<input type="checkbox"/> ⁵	<input type="checkbox"/> ⁰
14. Formal Asynchronous Distance Learning	Used by > 25% professionals	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³	<input type="checkbox"/> ⁴	<input type="checkbox"/> ⁵	<input type="checkbox"/> ⁰
15. High Speed Distance Modems	Used by > 50% professionals	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³	<input type="checkbox"/> ⁴	<input type="checkbox"/> ⁵	<input type="checkbox"/> ⁰
16. Single Operating System	For all major systems	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³	<input type="checkbox"/> ⁴	<input type="checkbox"/> ⁵	<input type="checkbox"/> ⁰
17. Enterprisewide (Global) Data Systems	For all major business units	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³	<input type="checkbox"/> ⁴	<input type="checkbox"/> ⁵	<input type="checkbox"/> ⁰
18. Large Scale Data Warehousing	Capturing > 50% of customer/manufacturing data	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³	<input type="checkbox"/> ⁴	<input type="checkbox"/> ⁵	<input type="checkbox"/> ⁰
19. Data Mining Practiced	Used by > 15% of organization	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³	<input type="checkbox"/> ⁴	<input type="checkbox"/> ⁵	<input type="checkbox"/> ⁰
20. Centralized Document Archives	Makes up > 85% of correspondence and reports	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³	<input type="checkbox"/> ⁴	<input type="checkbox"/> ⁵	<input type="checkbox"/> ⁰
21. Searchable Multi-media Databases	Used by > 50% professionals	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³	<input type="checkbox"/> ⁴	<input type="checkbox"/> ⁵	<input type="checkbox"/> ⁰
22. OOP Language as Standard	For > 85% of standard developed systems	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³	<input type="checkbox"/> ⁴	<input type="checkbox"/> ⁵	<input type="checkbox"/> ⁰
23. OCR Systems beyond Inventory	Used by > 25% of organization	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³	<input type="checkbox"/> ⁴	<input type="checkbox"/> ⁵	<input type="checkbox"/> ⁰
24. Standardized CASE Tools	For > 85% of standard developed systems	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³	<input type="checkbox"/> ⁴	<input type="checkbox"/> ⁵	<input type="checkbox"/> ⁰
25. Virtual Reality (3-D) Systems	Available to > 25% professionals	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³	<input type="checkbox"/> ⁴	<input type="checkbox"/> ⁵	<input type="checkbox"/> ⁰

	<u>Present</u>	<u>1 to 2 yr.</u>	<u>3 to 5 yr.</u>	<u>5 to 10 yr.</u>
Clients				
Computers & Networks				
Data				
Capabilities				
Activities				
Milestones				

5.6 Which technology areas is your organization going to pioneer, be an early adopter or an early follower and Why?

It is typically infeasible and undesirable for a firm to try to pioneer all relevant IS technologies. Each of the various technology strategies (pioneering, early adoption, early follower, or late follower) has advantages and disadvantages. What is in the interest of the firm, depends on balancing its ability and value to capitalize of the competitive advantages of being an early utilizer of technology against the risks and costs of being an explorer. Indicate for the key IS technology what strategy your organization will adopt.

5.7 What are the new technology initiatives?

New technology is a source of competitive advantage but usually represents major investments for the firm. Describe what new major technology initiatives are planned. Indicate how they will produce correspondingly major improvements in the capability to meet functional imperatives and provide major competitive advantages.

Chapter 6 Systems Development Methodology and Organization

6.1 How much control must IS have over the projects and data and why?

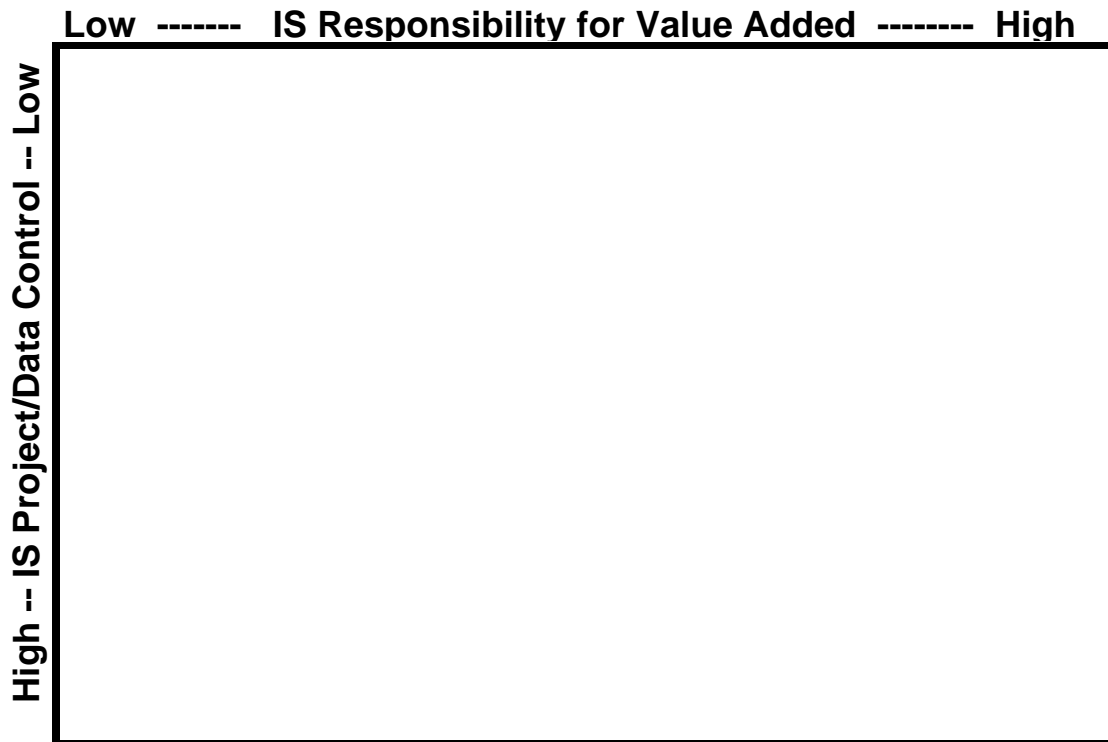
IS, traditionally, tries to maintain control over all projects and data that is associated with key organization information systems. Key exceptions have been research & development and manufacturing and production. However, even here IS tries maintain control in areas that it is directly involved. However, how much control is needed? What types of control are desirable and functional?

6.2 Who is responsible for the value-added by the projects?

Traditionally, IS has taken a "hands-off" attitude toward the value and functionality of systems it develops unless they are for internal use. The traditional "water-fall" procedure is based on obtaining "requirements" from clients. It is then the responsibility of the clients that those requirements translate into actual value added. However, that approach leads to ineffective systems. The prototyping process on the other hand shares value-added responsibility between the developers, IS, and users. Determine for the projects that will be undertaken who actually holds value-added responsibility.

6.3 What process do you recommend that will assure efficient and effective development?

The process of project development should allow appropriate responsibilities and control. These processes may include the traditional "water fall," prototyping, process reengineering, or delegated development products. Think of the projects on the following grid. Each project needs different levels of responsibility and control. Identify how you intend to do each of these types of projects. Identify what is the "default" process that the organization is generally going to follow.



6.4 How will you assure the integrity of the process?

A major problem with organizations is maintaining its procedures. This is referred to as the integrity of the process. Without following the process, a chaotic environment will evolve, making control of projects and data difficult if not impossible. How will you assure the integrity of the process? Who will be responsible and how will you monitor progress?

6.5 What exceptions do you plan for and how will the organization handle these exceptions?

There are exceptions to all plans and processes. How will you identify these exceptions and handle them?

6.6 How should the IS staff be organized to meet its mission?

How is the function going to be organized? Here we are interested in organizational control and responsibility. How centralized or decentralized is it going to be? If a mixture of control is to be used, such as in a matrix organization, who has the ultimate control? Who evaluates the personnel and has the power of promotion and firing?

6.7 How will you divide up the functions of the organization?

A key tool for planning is dividing the function into components. For the total organization the parts are referred to as Strategic Planning Units or businesses and are often considered independent profit and loss centers. For functional organizations, it is more typical to divide the function into operational groups or assigned groups to specific businesses. Planning is then done by considering the organization as a portfolio of these activities and groups. For this organization what is the portfolio of activities?

6.8 What will be the responsibility of each group?

Identify the responsibility and accountability for each of the key groups. Focus on the functional imperatives! What must each group do? How are they interrelated?

6.9 How do you intend to maintain the core competencies?

Key skills change and must be renewed. How is the organization going to maintain its competitive edge? What internal training and skill development programs are going to be undertaken?

6.10 How are you going to handle turnover or the graying of the IS?

Most organizations, particularly information systems over the past few years, suffer from an imbalance in the age of the staff. Some organizations are extremely young with a high turn-over in technical personnel. In other cases, the organization is aging. This may be by design or in most cases by budgetary constraints. What is the age distribution within the organization and how will you compensate for it?

6.11 What are the new organization initiatives?

Describe what changes in the organization and project management policies are planned. Indicate how these changes will improve productivity and effectiveness. Estimate the costs and timing for these changes.

Chapter 7 Project Selection and Risk

7.1 What process will you use to review projects before acceptance?

Most IS organizations take on specific projects as part of the ongoing operations. By accepting projects, the IS organization makes a commitment to accomplish them. However, before acceptance there are key conditions that the organization should review. At a minimum, feasibility, doability, difficulty, and system and data compatibility need to be considered. In addition, depending on the responsibility and funding procedures, IS needs to consider the value of the project and its interrelationship with other programs.

7.2 What rules or policies will you use to accept new projects or additions to existing projects?

The projects that are being undertaken should be thought of as a portfolio. How do this portfolio relate to the functional imperatives and potential competitive advantages? How do the projects fit into the technology and development strategy? What rules and policies will be used to influence the development of projects and their selection?

7.3 How are those rules to be established?

How are you going to get buy-in from the larger organization on the rules and policies? What should be the standard of value for the process? What does the organization intend to accomplish with the selection rules? How does it know?

7.4 What organizational structure will you establish to review and select projects?

What role will the management of the business units play in project selection? Who will make the selection? What type of review process will be in-place to determine if the process is working effectively? How are you going to get upper management not to interfere in the process?

7.5 How are you going to tell a client that you don't want to do his project because it doesn't meet your criteria?

Most IS organizations rely on good relations with clients to maintain funding. It is critical, therefore, to handle the rejection of a project carefully. Note in this process, that the aim is to help evolve the project from one that is ill-defined, not doable, or of little final value to one that is valuable to the firm. Here the IS organization needs to engage the potential client rather than sending him off.

7.6 What are the new project selection initiatives?

Describe what new selection procedures are being considered. Indicate why they are necessary and how they will improve long term effectiveness of Information Systems.

RESOURCE REQUIREMENTS

Chapter 8 Resource Requests

8.1 How are the workflow requirements broken down?

How is the work organized for budgetary purposes? How are the activities accounted for? Usually this is based either on activity or on funding. Choose the most appropriate for the organization.

8.2 What are the manpower resource requirements for each?

IS is generally a highly labor intensive process. As such, the major internal costs, other than infrastructure, is usually manpower. What is the allocation of labor activities to each of the functions? Include management and support requirements.

8.3 What are the costs of those resources?

The cost of labor includes direct salary as well as taxes, benefits and support. These support costs can be as high as the salary itself or even higher. For IS functions, with no other information available, a factor of 2 can be applied to the salary plus cash benefits such as bonuses, to obtain an overall cost of labor.

8.4 What are the long-term new investment requirements?

IS investment include infrastructure, new equipment such as PCs, servers, etc. and major software. Minor software packages are usually included in the manpower costs as expenses.

8.5 What is the cost for full installation of equipment and major software?

Equipment and major software need to be installed. This results in additional costs. In some cases, these costs are minor. However, major system replacement as well as infrastructure changes usually have a very high installation costs. This is particularly the case when additional programming is required. In some cases, such as SAP installation, modification of the software programs may cost more than the package itself.

8.6 What is the depreciation on that investment?

In most cases, there is a depreciation schedule for investments. Indicate how major investments will be depreciated and what are their expected life spans.

8.7 What is the return on that investment?

Return on investment can be estimated either as a standard average ratio, ROI , as the Net Present Value on the investment, or the Internal Rate of Return. In any event, the estimate should be based on cost reduction or increased sales. In many cases, this is not feasible if the investment is targeted to meet the functional imperatives of the organization. As such, the return is on the total IS function. If this is the case, indicate the value that is being obtained by meeting the functional imperatives.

8.8 What outside (outsourced) costs must be included?

The IS organization is often responsible for outsourced functions as well as those that it handles internally. This is reasonable, since the "make-or-buy" decision should be independent of whose budget it is under. Include in the outsourced budget, however, all costs including management costs that are imposed by the contractual agreement.

8.9 What are the burden requirements?

Most large organizations impose costs on their groups, to cover central services such as rent, human resources, accounting, management, etc. These costs are passed down to all functional groups often on a manpower or percent of budget basis. These costs are referred to as the "burden."

8.10 What is the externally set budget limit?

Even though there has been much talk of "zero base budgeting," most IS organizations have an externally set limit usually based on a previous years budget. While that limit may be "soft" and open to some negotiation, it is still real. What determines that limit? Is that limit restricting the ability of this organization in meeting its functional imperatives?

8.11 How much will the new initiatives cost?

The new initiative represent proposed projects. Indicate what these will cost. If internal resources will be used for these initiatives indicate under which organizational budget they will be covered. Outsourcing initiatives need to be covered in more detail. However, since these involve extensive negotiation and terms, these costs are usually handled under a separate document. If this is the case, make note of it in this section.

THE REPORT

Chapter 9 Executive Summary

9.1 What is this plan and why should the executive read it?

The first paragraph of the executive summary identifies what the plan is and what are the key conclusions. The purpose of this "introductory" paragraph is to capsule the essence of the document. Consider it to be both an abstract and identifying statement.

9.2 What are the most important initiatives?

Describe the most important IS initiatives in the plan. It may be necessary to combine various initiatives into programs to give a concise description of the proposed programs.

9.3 Why are these initiatives important to the firm?

Indicate what the firm will get out of these initiatives. Indicate both the improvements in the ability to meet functional imperatives as well as improvements in competitive advantage. If feasible, indicate the potential financial gains.

9.4 How much will these initiatives and the rest of IS function cost the firm?

Indicating costs in the executive summary is sometimes viewed as a political question. To some extent security concerns limits the inclusion of actual costs. However, if the costs are not viewed as controversial or if the goal of the plan is to provide a venue for discussion of value of IS it is often useful to include the overall costs of new initiatives.

9.5 Why is IS important and how will it give the firm competitive advantage?

The final paragraph should summarize the key issues in the plan. Basically this involves connecting the IS activities and new initiatives with the company mission and vision.

9.6 Has all IS jargon been eliminated from the executive summary?

IS jargon is a killer of communications with upper management. Senior executives are unfamiliar with IS terminology and should not be expected to appreciate fine distinctions. Remove all jargon unless critical as a descriptor of newly acquired technology. However, when such terms are used (and only rarely as an exception) a description must be included.

9.7 Is the executive summary as concise as is feasible?

The likelihood of senior executives reading the summary is inversely proportional to its length. It is, therefore, critical that the executive summary is as short as possible without losing key items. Remove all unnecessary description. Use bullet lists if necessary to reduce the verbiage. However, be careful not to make it cryptic and difficult to read. Maintain a smooth narrative to maintain interest.