**Chapter 10 Summary**

**10.1 THE INFORMATION SYSTEMS STEERING COMMITTEE**

In larger organizations recognizing the pivotal role of information systems in their success, an Information Systems Steering Committee is established to oversee these systems on behalf of top management. This committee, typically headed by the Chief Information Officer (CIO) or a senior IS manager, comprises members from various organizational segments, often managers or senior professionals who can advocate for their respective teams. The purpose of the steering committee is to ensure that investments in information systems benefit the organization, guiding decisions on development, reviewing major system plans, and setting policies for information system use.

**COMMITTEE RESPONSIBILITIES**

1. **Decision Making:** The steering committee makes strategic decisions regarding information system investments. It evaluates proposals, determines their feasibility, and allocates resources based on organizational needs and strategies.
2. **Policy Setting:** The committee establishes policies related to information system usage, including security policies. These policies guide the organization in ensuring effective and secure technology implementation.
3. **Budget Approval:** Major technology budget requests are subject to approval by the steering committee. By overseeing the budget, the committee ensures that financial resources are allocated wisely.
4. **Project Review:** Employees submit ideas for new information systems or improvements through a formal process. The committee reviews these proposals, conducts preliminary investigations, and assesses their feasibility through feasibility studies.
5. **Evaluation:** Feasibility studies are thoroughly evaluated by the committee, determining the practicality and alignment of the proposed systems with organizational goals. Most feasible suggestions progress to the implementation phase.

**YOUR ROLE AND OPPORTUNITIES**

1. **Committee Participation:** As your career advances, you might become a member of the IS steering committee. This role signifies trust in your abilities and offers a chance to engage with cross-functional managers at a strategic level.
2. **Subcommittee Involvement:** Prior to steering committee participation, you could be part of subcommittees for project reviews or other purposes. This involvement allows you to contribute beyond your immediate responsibilities, showcasing your capabilities for larger assignments.
3. **Networking and Support:** Familiarize yourself with the committee structure and know the representative from your department. This person can guide you when you have IS-related ideas, helping you present them effectively and gain support within the committee.

Understanding the functioning of the IS steering committee is essential for anyone aspiring to contribute significantly to their organization's technology-related decisions.

**10.2 SETTING PRIORITIES**

In the realm of information systems, there are invariably more feasible proposals than the budget can accommodate. Hence, the Information Systems Steering Committee plays a vital role in setting priorities, determining which proposals will move forward and which will not.

**TYPES OF INFORMATION SYSTEMS PROPOSALS**

1. **Mandatory Systems:** Systems mandated by new legislation or insisted upon by customers are given top priority, as their implementation is non-negotiable.
2. **Benefit-Driven Systems:** Systems that promise measurable benefits undergo financial analysis. By estimating costs and benefits, businesses calculate the expected Internal Rate of Return (IRR). If the IRR exceeds the organization's hurdle rate (the minimum acceptable rate of return), the system is deemed financially viable and gets funded.

**FINANCIAL ANALYSIS AND DISCOUNT RATE**

* Financial analysis involves evaluating costs and benefits over a specified time frame, accounting for the time value of money.
* Discount rates (typically 15-25% per year) are applied to future costs and benefits. Present Value (PV) calculations reflect the current value of future amounts, considering the uncertainty and investment opportunities.
* The Net Present Value (NPV) represents the project's true worth. A positive NPV indicates profitability.
* The Internal Rate of Return (IRR) represents the discount rate where the NPV is zero, indicating the project's financial break-even point.

**PRIORITIZATION METHODS**

1. **Consistency with Corporate Strategy:** Systems aligning with the organization's overall strategy are favored. For instance, a cost-focused strategy values systems reducing expenses, while a customer-focused strategy prioritizes service-enhancing systems.
2. **Balanced Portfolio:** Investments are balanced across four categories: transactional systems, informational systems, infrastructure enhancements, and strategic information systems. This portfolio approach mitigates risks associated with different types of projects.
3. **Infrastructure Considerations:** Proposals are evaluated based on how they fit into existing infrastructure, whether they extend it or necessitate modifications. Infrastructure investments are made to support future systems, ensuring readiness for upcoming challenges.

**YOUR ROLE AND STRATEGIC THINKING**

1. **Understanding Present Value Concepts:** Familiarity with financial concepts like NPV and IRR enhances your ability to present proposals convincingly, increasing their acceptance chances.
2. **Strategic Alignment:** Proposing systems consistent with the corporate strategy strengthens your case. Demonstrating the strategic value of your proposal is crucial.
3. **Advocacy for Underfunded Areas:** Highlighting areas that have been historically underfunded in the organization can garner attention and support for your proposals.
4. **Infrastructure Planning:** Acknowledge the existing technology infrastructure. Propose systems that either seamlessly integrate or provide necessary enhancements, showcasing your awareness of the organization's technical landscape.

Understanding these priority-setting methods is essential for effective decision-making within an organization. As you advance in your career, leveraging these strategies will not only enhance your proposals but also contribute significantly to your organization's information systems initiatives.

**10.3 MAKE OR BUY?**

In the realm of information systems, the decision to build custom software or purchase existing solutions is a critical one. This make-or-buy decision is influenced by several factors, primarily the nature of the application and the size of the organization.

**FACTORS INFLUENCING MAKE-OR-BUY DECISIONS:**

1. **Uniqueness of the Application:**
   * **Standard Applications:** Common applications like word processing have a large market, providing various choices for off-the-shelf solutions. Using standard software does not offer a competitive advantage.
   * **Unique Applications:** Custom software is necessary for unique applications where no pre-existing solutions meet specific requirements. Custom applications can provide a strategic advantage.
2. **Company Size:**
   * The benefits of an information system are directly proportional to the company size. Larger companies benefit more from optimized systems.
   * Development costs increase with complexity, but not at the same rate. Large companies can justify higher development costs due to significantly larger benefits.

**COST-BENEFIT ANALYSIS:**

* **Larger Organizations:** For significant benefits, large organizations may opt for custom software development despite higher costs. The benefits far outweigh the expenses.
* **Smaller Organizations:** Smaller companies might find it more economical to use commercial software, avoiding the high costs associated with custom development.

**OUTSOURCING AND OFFSHORING:**

* **Outsourcing:** Organizations can choose to outsource software development to specialized firms. This decision depends on cost, skill availability, and future usefulness of these skills.
* **Offshoring:** Offshoring, where development occurs in a different country with lower labor costs, can offer savings. However, it complicates project management due to geographical distances and potential cultural differences.

**CUSTOMIZED PACKAGES:**

* For applications with common needs but variations in requirements, organizations can purchase customized packages. These packages are tailored to specific needs, striking a balance between standard and fully custom solutions.

**MANUAL METHODS:**

* For exceptionally small businesses with rare needs, investing in an information system might not be justifiable. In such cases, manual methods or basic tools might suffice, avoiding the significant costs of system development.

**YOUR ROLE AND STRATEGIC THINKING:**

* When proposing a new system, consider the organization's size and the uniqueness of the application. Research existing commercial solutions and weigh their cost against the potential expense of custom development.
* Utilize this framework to justify your proposals. Demonstrating cost-effectiveness, especially for smaller organizations, can significantly influence decision-making.

Understanding the nuances of the make-or-buy decision empowers you to make informed recommendations, aligning technology solutions with organizational needs and financial considerations.

**10.4 SELECTING SOFTWARE**

In the process of selecting software for an organization, several steps are crucial to ensure the right choice is made. Here's a breakdown of the key stages involved in selecting software:

**1. ESTABLISH REQUIREMENTS:**

* **Verifiable and Clear:** Requirements should be stated clearly and in a way that can be demonstrated for conformance.
* **Complete and Consistent:** All necessary information should be included, and terminologies should be consistent.
* **Traceable and Viable:** Requirements should be traceable through development and testing, and feasible within technological, budget, and schedule constraints.
* **Necessary, not Optional:** Requirements must be essential for the system to meet its objectives.
* **Free of Technical Detail:** Define what needs to be done without specifying how developers should do it.

**2. DEVELOP A LIST OF POTENTIAL SUPPLIERS:**

* Create a long list of potential vendors using all available sources, without initial screening.

**3. REDUCE THE LONG LIST TO A SHORT LIST:**

* Screen vendors based on online research to confirm suitability.
* Send remaining vendors a Request for Information (RFI) detailing organizational requirements and constraints.
* Evaluate RFI responses to shortlist potential suppliers.

**4. REQUEST FOR PROPOSALS (RFP):**

* Write a detailed RFP outlining what the organization wishes to obtain from the software.
* Invite shortlisted vendors to respond to the RFP.

**5. RFP RESPONSE EVALUATION:**

* Conduct a functional evaluation, financial evaluation, and sometimes a benchmark test for the proposals.
* Functional evaluation involves scoring proposals based on must-have and desirable features.
* Financial evaluation compares different pricing models and costs over the system's lifecycle.
* Benchmark tests confirm system performance under realistic workloads.

**6. CHECK REFERENCES:**

* Contact references provided by vendors to gain insights into their experiences and satisfaction with the software.

**7. DEMONSTRATION:**

* Vendors demonstrate their systems, showcasing how the software functions and meets organizational needs.
* Allow vendors to present their product's strengths in achieving the organization's goals.

**8. NEGOTIATION:**

* Negotiate with the selected vendor on various aspects, including pricing, training, support, and additional services.
* Seek concessions and agreements that benefit the organization's requirements and budget.

Being part of a selection committee involves a significant time commitment and active involvement in these stages. Properly conducted software selection ensures that the chosen solution aligns with the organization's needs and delivers value.

**10.5 AFTER THE CONTRACT IS SIGNED**

After the contract is signed, the real work begins. Implementing a new system involves several stages, including customization, deployment, user training, and change management. Here's an overview of what happens after the contract is signed:

**1. CUSTOMIZATION:**

* **Tailoring the System:** The general-purpose package is customized to meet the specific needs of your company. This can involve configuring settings, modifying workflows, and integrating with existing systems.
* **Software Development (if necessary):** If the purchased software requires additional features or modules, custom development might be necessary to bridge the gaps in functionality.

**2. DEPLOYMENT:**

* **Installation:** The software is installed on the organization's servers or cloud-based infrastructure.
* **Testing:** Rigorous testing is conducted to ensure the software works as expected and is compatible with existing systems.
* **Rollout Plan:** A deployment plan is created, outlining how the software will be rolled out to different departments or teams.

**3. USER TRAINING:**

* **Training Programs:** Training sessions are organized to familiarize users with the new system. This can include on-site training, online tutorials, or workshops.
* **Training Materials:** User manuals, guides, and FAQs are created to assist users in learning the software at their own pace.
* **Support:** A support system is established to address user queries and issues during the transition period.

**4. CHANGE MANAGEMENT:**

* **Communication:** Clear communication is essential to inform employees about the upcoming changes, the benefits of the new system, and how it will improve their workflow.
* **User Engagement:** Involving users in the transition process, gathering feedback, and addressing concerns help in creating a positive attitude towards the new system.
* **Monitoring and Feedback:** The system's performance and user satisfaction are continuously monitored. Feedback is collected, and necessary adjustments are made to enhance user experience.

**5. ONGOING SUPPORT:**

* **Technical Support:** Continuous technical support is provided to resolve issues, troubleshoot problems, and ensure the smooth operation of the system.
* **Updates and Upgrades:** Regular updates, patches, and upgrades are applied to keep the software secure, efficient, and up-to-date with the latest features.

Implementing a new system requires collaboration between IT teams, end-users, and management. Effective project management, communication, and user engagement are crucial for a successful transition.