

SUBJECT

# INFORMATION SYSTEMS PROJECT MANAGEMENT

SESSION 7 TOPIC: Decision Making

## SESSION7

### Decision making

The dependency on information technology (IT) has increased progressively for organizations as a strategically important competitive advantage. If planned, developed, and managed properly, IT can bring about greater efficiency in organizational operations, better working environments, and effective decision-making processes.<sup>[1]</sup> Therefore, many organizations are trying to catch up the development gap with the industry by means of technology acquisition.<sup>2</sup> Technology acquisition process is essential in developing a good management information system for an organization. Many IT projects have failed because of poor design planning, false selection of the development, and a lack of follow up on key milestones addressed in the acquisition process. This research paper discusses proper steps and key factors in planning, acquiring, developing, and reviewing the IT acquisition.

#### **Decision Making Strategy in IT Acquisition**

The term 'acquisition' refers to all the stages from buying, introducing, applying, adopting, adapting, localizing, and developing through to diffusion.<sup>[2]</sup> The acquisition issue is multifaceted for various reasons including large variety of IT applications, rapid change in new technology, and involvement of several business entities in the organization. The set of processes for the build, lease, or buy decision must be identical for every instance or business opportunity that arises. The processes determine the strategic value and potential savings of the proposed project, as well as factors like business transformation versus drive for competitive advantage.<sup>[3]</sup>

The range of IT applications stipulates a variety of advance approaches. The application itself can be acquired by in-house development, buy, lease, outsource, or any combination of two. For example, a company website can be developed in-house with HTML, JAVA, or any other web programming languages. Some other alternatives would be implementing commercial web development packages, leasing a web application from application service providers (ASPs) with some monthly or yearly fees, or purchasing on-demand application from a

vendor.<sup>[4]</sup> If we look at larger applications such as enterprise-wide application, building such system would require more extensive integration with existing information systems such as corporate databases, intranets, enterprise resource planning (ERP), and other application programs.<sup>[5]</sup> Thus, implementing accurate IT application involves critical control process that need to be in place in order to support and protect company's best-interest.

For an organization, the major reason of acquiring IT applications is to effectively and efficiently support one or more business process.<sup>[6]</sup> Prior to the acquisition process, the detail requirements of the process should have already been identified clearly.<sup>[7]</sup> More importantly, the business objectives should be identified for the solution being sought and the management decision whether building, leasing, or buying the IT application should consider a value-versus-risk matrix to determine which options can be applied. Both IT auditors and corporate management should evaluate offerings over the long term and compare the "trickling" investment over time to the one-time cost of buying and implementing a system. Moreover, this technology acquisition process requires an extensive evaluation considering the system requirements, feasibility analysis, and risk management assessment. Therefore, the decision here is not as easy as to make, lease,-or-buy the solutions, but then supposed if we decide to buy, the next question should be, "how to create company's competitive advantages through such decision?" Decision making science requires that management understand the fundamentals of how IS acquisition decisions related to management information system (MIS) are made. What are the expectations and how they will be achieved? The value of using managerial sciences to approach this decision is to understand the motivation drivers that justify MIS and IT acquisition decision.<sup>[20]</sup>

### **IT Acquisition Process**

The acquisition process should involve the identification and analysis of alternative solutions that are each compared with the established business requirements. The decision

making to acquire a typical IT application primarily consists of the following stages: (see Appendix)

## **STAGE 1: IDENTIFYING, PLANNING, AND JUSTIFYING THE INFORMATION AND SYSTEM REQUIREMENTS**

One of the most essential assessments in decision making process is identifying the business objective after first knowing the problems being solved. The management should primarily identify the business processes involved in the organization. Information systems are usually developed as enablers of the business processes. The first phase of the acquisition process should align the business process with the company objectives and the business plan. Note that specific process may need to be prioritized to fully obtain the benefits of IT implementation. Moreover, each process should be carefully analyzed to ensure that it will have the certain functionality to meet the requirements of the business process and the users, as well as the benefits which can be justified with its cost.<sup>5</sup>

Another big challenge in the procuring information systems is to define the system requirements. System requirements describe the objectives of the system. They define the problem to be solved, business, and system goals, system process to be accomplished, user expectations, and the deliverables for the system. Furthermore, the requirements should incorporate information about system inputs, information being processed in the system, and the information expected out the system. Each of this information should be clearly defined so that later gaps in requirements and expectations are avoided. Information system requirements can be gathered through interviews, questionnaires, existing system derivation, benchmarking with related system, prototyping, and Rapid Application Development (RAD).<sup>7</sup>

The output of this step is a decision to go with specific application, timetable, budget, and system expectations. As Small Business Television (SBTV) Network Chief Operating Officer, Michael Kelley, explains, "Before we went and purchased anything, we developed a business plan with a three-year outlook on what we thought we needed for the business. During the planning process, we knew that we were going to have to make a change within a three-

year period. So that was an 'x' on the side of 'reasons not to buy, lease, or build in-house' because we new we might have to change our technology — probably in less than two years. As it turned out, it was about 14 months, and we had to make a lot of changes and reconfigurations."<sup>15</sup>

## **STAGE 2: RESTRUCTURING INFORMATION SYSTEM ARCHITECTURE**

With the regards of system analysis approach, an organization which is still in the progress of acquiring IT should remodel its information system (IS) architecture. IS architecture is the conceptualization of how the organization's information objectives are met by the capabilities of the specific applications.<sup>17</sup>This structural design however describes the flow of the information, data hierarchy, application functionality, technical feasibility, and organization architecture in the organization. The output from this phase should be a strategic planning level on how to develop specific application that meets the constrained defined by the IS architecture. Therefore, the application portfolio may be changed corresponding to this structure.

## **STAGE 3: IDENTIFYING A DEVELOPMENT ALTERNATIVE**

There are several options in procuring software solutions. Some available alternatives are: (1) Developing the system in-house, (2) Off-the self solutions (Purchasing commercially available solution), (3)Buying a custom made system for a vendor, (4) Leasing software from an application service provider (ASP) or lease through utility computing (contracted development), (5) Outsourcing a system from other companies (6) Participating in auction, e-marketplace, or a public exchange (consortium) ,(7)Use a combination of these listed options.

The consideration criteria and some critical factors upon various options will be discussed thoroughly later in the next section. While an organization is in the phase of deciding which alternative being selected, the management should carefully examine not only the advantages and disadvantages of each procuring option, but more importantly, the option must be best-fit with the organization business plan that has been documented in the previous steps. Any system development project, whether the system is built in-house or purchased elsewhere,

should support the company's business and IT strategy. The solution being sought associated with business requirements should align the business goals with IT strategy.

#### **STAGE 4: CONDUCTING A FEASIBILITY ANALYSIS**

As a part of the assessment in acquiring the solutions, a feasibility analysis is important to identify the constraints for each alternative from both technical and business perspective.

Feasibility analysis incorporates the following categories:

- **Economic feasibility** analysis provides cost-benefit justification with being regard to the expenses of a system, which include procurement, project-specific, start-up, and operational costs. Some cost examples are one-time and recurring cost, consultants, support staff, infrastructure, maintenance, training, and application software cost. This examination ensures that the solution won't exceed the budget limit as well as it increase the efficiency and better resource utilization.
- **Technical feasibility** assessment analyzes the technical reasonableness of the proposed solution. Technical feasibility evaluates whether the company has the infrastructure and resources including hardware, software, and network capability to support the application. Meanwhile, it also assesses the consistency of the proposed system in terms of the technical requirements with the company technical resource. Therefore, this assessment guarantees the reliability and capacity for the future growth.
- **Operational feasibility** evaluation reviews the extent of organizational changes required to accommodate the proposed system. The proposed system should solve the business problems and provide better opportunity for the business since the business process might be changed. Some alignments that may occur include business process, human resource management, and products or service offered.
- **Legal and contractual feasibility.** The proposed solution must pass any related legal or contractual obligations associated with. Corporate legal counsel should ensure that there are no illegal practices corresponding to the new system related with any preexisting regulations. Organization also may work with some experts from Computer Law Association

to make sure this analysis strictly enforced. Thus, the underlying theme will protect the company and the establishment of the remedy process should the vendor or contractor fail to perform as promised.

- **Political feasibility.** The nature of the organization most likely will be affected by the presence of the new system. Therefore, this feasibility analysis evaluates how the internal organization will accept the new system. It also incorporates the user expectancy regarding the new system and the corporate culture response toward the proposed solution.

Upon completion of the series of feasibility analyses, the risk analysis review most likely will be conducted. Risk analysis evaluate the security of proposed system, potential threats, vulnerabilities, impacts, as well as the feasibility of other controls can be used to minimize the identified threats.<sup>[6]</sup>

Finally, the company may perform some ergonomic requirements review to provide a work environment that is safe and efficient for the employee. Ergonomic check will make sure the design of the human interface components (i.e: monitor, keyboard, etc) is user friendly enough to accommodate all the requirements that make the users feel comfortable to work with.

## **STAGE 5: PERFORMING THE SELECTION PROCEDURE**

Selection procedure is the process of identifying the best match between the available options and the identified requirements. In this process, the company requests for a proposal from prospective providers, evaluates the proposal, and selects the best available alternative. There are various ways to solicit responses from providers. Some of the common methods comprise request for information (RFI), request for bid (RFB), and request for proposal (RFP). An RFI is used to seek information from vendors for a specific intention. RFI should act as a tool for determining the alternatives or associated alternatives for meeting the organization's needs. An RFB is designed to procure specific items or services and used where either multiple vendors are equally competent of meeting all of the technical and functional specifications or only one provider can meet them. Furthermore, an RFP specifies the minimal acceptable requirements, including functional, technical, and contractual aspects. This document offers

flexibility to respondents to further define the requested requirements. RFPs can be a lead to a purchase or continued negotiation.

All of these processes should be structurally proceeded to ensure the process would be completed neatly in a timely fashion. If done properly, this process turns out to be a purchasing decision for the selected application. Note that the entire process must be documented in a written letter before moving to the next step. This is an important issue to avoid a bid protest that may be filled from any other potential vendors. Management, IT auditor and also legal counsel must review every point in detail before the proposal evaluation process begins.

## **STAGE 6: PROPOSAL EVALUATION PROCESS**

Proposal evaluation is a crucial process in the software acquisition since one of more key stakeholders reviews submitted proposals using a list of objective selection criteria and decide the best match between the product features and functionality with the identified requirements.

Martin, et al (2000) identified six steps in selecting a software vendor with its application package.<sup>[8]</sup>

**1. Examining potential vendors' background.** Potential software application providers can be identified from software catalogs, lists provided by hardware vendors, technical and trade journals, or consultants experienced in the other companies, and Web searches. These preliminary evaluation criteria can be used to pre-eliminate the unqualified potential vendors based on the vendor track record, reputation, and some previous feedback.

**2. Determining the evaluation criteria.** One of the most difficult tasks in evaluating the vendor and a software package is to determine a set of detailed criteria for choosing the best vendor and package. These criteria can be identified from the RFP feedback sent by the vendors. Some areas that should be considered: characteristics, of the vendor, functional requirements of the system, technical requirements, total project costs, scalability of the solution, project time frame, quality of documentation provided, and vendor support package.

**3. Evaluating providers and their applications.** The objective of this evaluation is to determine the gaps between the company's needs and the capabilities of the vendors and their



application packages. Ranking the vendors on each weighted criteria and then multiply the ranks by the associated weight can be one method to evaluate the vendors and their solution packages.

**4. Selecting the provider and its solution.** Choosing the vendor and its software depends on the nature of the application. Negotiation can begin with vendors to determine how their packages might be modified to remove any discrepancies with the company’s IT needs. Furthermore, feedbacks from the users who will work with the system and the IT staff who will support the system have to be considered. In general, defined list of criteria for selecting a software application package are following:

<b>TABLE 1. Criteria for Selecting a Software Application Package to use</b>	
<ul style="list-style-type: none"> <li>· Usability and functionality</li> <li>· Cost-benefit analysis</li> <li>· Upgrade policy and cost</li> <li>· Vendor reputation</li> <li>· System flexibility and scalability</li> <li>· Manageability</li> <li>· Quality of documentation</li> <li>· Hardware and networking resources</li> <li>· Upgradeability</li> </ul>	<ul style="list-style-type: none"> <li>· Required training</li> <li>· System security</li> <li>· Maintenance and operational requirements</li> <li>· User easiness to learn</li> <li>· Performance measurement</li> <li>· Interoperability and data handling</li> <li>· Ease of integration</li> <li>· Reliability measurement</li> <li>· Compatibility with other applications</li> </ul>

**5. Negotiate a contract.** Once the vendor and its package selected, then the company can move to the contract negotiation, in which the company can specify the price of the software and the type of the support to be provided by the vendor. The contract must describe the detailed specifications, all the included services provided by the vendor, and other detail terms of the system. Contract is a legal document so the company should involve the experienced software purchasing specialists and legal assistance. Since the contract can be very tricky so these legal counsel should be involved from the beginning of selection process.

**6. Establishing a service level agreement (SLA).** SLA is formal agreement regarding the distribution of work between the organization and its vendor. Such agreement is created according to a set of agreed-upon objective, quality tests, and some what-if situations. Overall,

SLA defines: (1) company and vendor responsibilities, (2) framework for designing support services, (3) company privilege to have most of the control over their system.

### **STAGE 7: IMPLEMENTING THE SELECTED SOLUTION**

Upon completion of the contract negotiation, an acceptance plan should be agreed by both the company and the vendor so the new application can be ready to be installed or developed. No matter what options the company chooses, even when they decide to build their software in house, the company will most likely have to deal with some vendor (s) and/or certain software that has to be purchased from some supplier(s). During this process, the application is also tested and user reactions are evaluated. After the application or prototype of the application has passed user requirements, they can be deployed. Under this circumstance, the company management may deal with organizational issues such as conversion strategies, training, and resistant to change <sup>[9]</sup>

### **STAGE 8: REVIEWING AND MONITORING THE ACQUISITION PROCESS**

Software acquisition process is a continuing process that must be reviewed in ongoing basis. A purchased software solution should effectively and efficiently satisfy user requirements. Software maintenance and operation can be an issue due to rapid changes in IT technology. However, this process can involve external evaluation to make sure the procedures and processes in place and whether the acquisition was in compliance with institutional processes and operating procedures.

Standard project management techniques and tools are useful for this task. Operation, maintenance, and evaluation can be done in-house or outsourced. For medium-large applications, a company may create a project team to manage the process. Company also may collaborate with other business partners to monitor the development process; however, it may have some critical issue with IT failure, such as: application incompatibility between two entities, communication breakdown, etc. IT can be a place where these acquisition procedures are lacking; therefore, the development process must be managed properly. Ultimately, investing an

IT project may require streamlining of one or more business processes and excellent coordination between all the related entities.

### **Key Factors in Selecting Available Alternatives**

Some main alternatives exist in acquiring IT applications. Some major options are buy, lease, develop in-house, or outsourcing a system from any other companies. When does it make more sense to buy the applications? When does it make more sense to lease? Do we have to outsource our applications to other companies? The set of processes for the acquisition decision must be identical for every instance or business opportunity that arises. In the past anything that has been deemed strategic has been built in-house but the trend to outsource and buy more systems has grown. Below are some critical factors that should be evaluated prior to choose preferable IS procurement strategy, whether to buy, lease, build in-house, or outsource IT applications.

#### **1. Buying the Applications (Off-the-Shelf Solution)**

Purchasing commercially available solutions requires that the business adapt to the functionality of the system. Buying an existing package can be a cost effective and time saving strategy compared with in-house development. The business adaptation process obliges that the organization could also customize the software product and subsequently maintains those customizations within the processes that have been modified and changed. Most organizations are rarely fully satisfied by one software package. Therefore, it is sometimes necessary to acquire multiple packages to support even one business process. Note that when selecting a vendor package, organizations should consider the following key factors:

- |  |  |
|--|--|
| <ul style="list-style-type: none"><li>• Vendor stability</li><li>• System upgrades</li><li>• Customer support provided by vendor</li></ul> | <ul style="list-style-type: none"><li>• Hardware and software requirements</li><li>• Required customization of the base software</li></ul> |
|--|--|

A 'buy' option should be carefully considered to ensure all the critical features of the current and future needs are included in the package. Buying makes sense if an organization plan to keep something for a long time, but technology typically becomes outdated every two to three years. Irv Rothman, president and CEO of the \$8 billion-strong HP Financial Service said, "The reason a small-business customer never buys information-technology equipment is because there is an obsolescence curve. When you know something is going to become obsolete, why does a small-business customer want to be an owner of that equipment, instead of simply a user of that equipment?"<sup>[10]</sup> When the business is all about cutting-edge technology, buying can make good sense. Eventually, buying decision typically means picking up something inexpensive to do the job right now. Learning from SBTV's experience, the decision to buy was a need to look "asset strong" to outside investors. "Our technology platform and our content are our two most important assets," says Kelley, SBTV CEO. "We didn't want to look to an outside investor as not having built our assets."<sup>[7]</sup> The advantages and shortcomings of 'buy' option are summarized in Table2.

<b>TABLE 2. Advantages and Disadvantages of 'Buy' Option</b>	
<b>ADVANTAGES</b>	<b>DISADVANTAGES</b>
<ul style="list-style-type: none"> <li>· Shorter implementation time</li> <li>· Use of proven technology</li> <li>· Availability of outside technical expertise</li> <li>· Easier to define costs</li> <li>· Frequent software updates</li> <li>· The price is usually cheaper</li> <li>· Minimal IT personnel</li> </ul>	<ul style="list-style-type: none"> <li>· Incompatibility with company needs</li> <li>· Incompatibility between different applications</li> <li>· Limitation on the software customization</li> <li>· Have no control over software improvements</li> <li>· Long term reliance on vendor support</li> <li>· Specific hardware or software requirements</li> </ul>

**2. Leasing the Applications**

Lease option can result in substantial cost and time savings compared to buy option or in-house development. Leasing can be a good choice for small-medium enterprise that can not afford large investment in IT applications. Moreover, many common features that are needed by most organizations are usually incorporated in the leased package even though it may not always exactly include all the required features. Also, regarding a shortage of IT personnel, many companies choose to lease instead of develop software in-house. Leasing can help you decrease the total cost of ownership of technology assets. It allows you to track, standardize and regularly upgrade your practice's technology.<sup>[11]</sup> Large companies may also prefer to choose this option since to evaluate the potential IT solutions before investing a heavy installment, especially in the long run. Therefore, leasing requires another kind of management skill, too, which is: Lifecycle management. Whereas buying typically means picking up something inexpensive to do the job right now, leasing means that a business is looking at the bigger picture, planning for future upgrades and evolving needs.<sup>10</sup>When controlling cash flow is critical and you don't have time to worry about your equipment, leasing can be a great option. Other vendors concur that built-in protections against obsolescence can encourage leasing. "Even companies that do not have any cash flow issues often take advantage of technology refresh terms built into a lease," says Richard McCormack, vice president of product marketing for Fujitsu Computer Systems.<sup>[12]</sup> Ultimately, leasing can be considered a risk-management tool. Kendall, HP's managing director for Financial Services, remarks "When you enter into a lease, the ability to progress from one generation of technology to the next, to expand your technology solution, to rid yourself of obsolete equipment is far easier and far smoother, because of the way a lease is structured for small and medium businesses."<sup>7</sup>The advantages and disadvantages of 'lease' option are summarized in Table 3.

<b>TABLE 3. Advantages and Disadvantages of 'Lease' Option</b>	
<b>ADVANTAGES</b>	<b>DISADVANTAGES</b>

<ul style="list-style-type: none"> <li>· Shorter time implementation</li> <li>· Cost saving (cheaper than buy option)</li> <li>· Ease to maintain cash flow</li> <li>· Required only minimum IT staff</li> <li>· Less risky to anticipate technology updates</li> <li>· Having most of the required features</li> </ul>	<ul style="list-style-type: none"> <li>· May not exactly fit with company needs</li> <li>· Limitation on the software customization</li> <li>· Have no control over software improvements</li> <li>· Specific hardware or software requirements</li> <li>· Include an interest component that a cash purchase would not include</li> </ul>
---	--

### 3. Developing the applications in-house

Another strategy of IT acquisition is to build the application in-house. This option works well for the organization that has the resources and time to develop the IT applications by its own. This approach may be time consuming and somehow costly, but the company may have a system that meet all the organization objective requirements. Its overriding advantage was the freedom to create a system that would closely fit the company's business processes. In contrast to other solutions, it would be relatively inexpensive; however, it would take more time (maybe significantly more) to implement. If successful, the outcome could lead to another revenue stream from royalties for software sales.<sup>[13]</sup> When a "buy/lease" option is evaluated, the result can be measured as a percentage fit to the user requirement – say 80 or 90%. Users make the assumption – which often turns out to be false – that an in-house solution will give a 100% fit. But in the real world, there are a host of issues that get in the way of the dream of getting a software system with a 100% fit to our needs.<sup>[14]</sup> There are two major ways to develop the system in-house.<sup>4</sup> First, building the application from the scratch is one of the approaches to match the specific application with the requirements. Another way of building the in-house application is using the standard components or features that have been included in some commercial packages (i.e. Java, Visual Basic, C++) or using available packaged software that

can be customized. However, the second approach offers greater flexibility, cost and time saving rather than building the software from the base.<sup>7</sup>

The advantages and limitations of 'in-house development' option are summarized in Table 4.

<b>TABLE 4. Advantages and Disadvantages of 'In-house development' Option</b>	
<b>ADVANTAGES</b>	<b>DISADVANTAGES</b>
<ul style="list-style-type: none"> <li>· Best fit with the company requirements</li> <li>· Have control over software improvements</li> <li>· Have all of the required features</li> <li>· Main core competencies and maintain level of quality service</li> <li>· Make a distinction with other companies</li> </ul>	<ul style="list-style-type: none"> <li>· Required more IT personnel</li> <li>· High overhead cost</li> <li>· Time consuming</li> <li>· Problem with usability of the system</li> <li>· High switching cost</li> <li>· Difficult to update to newer technology</li> </ul>

#### **4. Outsourcing the applications**

One of the recent trendsetters in IT acquisition strategy is outsourcing. As defined by Griffiths, outsourcing is a strategic use of outside resources to perform activities traditionally handled by internal staff and resources.<sup>[15]</sup> Laudon and Laudon define it as the process turning over an organization computer center, telecommunication network or application development to external vendors. However, in general, the reasons boiled down to one factor. It is less costly for the purchasing company to turn outside rather than do the work in house.<sup>[16]</sup> This strategy does not have to the expertise and it is less costly to buy the expertise than build it. Perhaps it does not have time to pull off a project. However, it can take advantage of the economy of scale that the provider has and which the purchasing company does not. As a matter of fact, the organization turns to outsourcing to save money.<sup>[17]</sup> Decisions as to what and whether to outsource should be tied to an identification and understanding of an organization's core competencies and its critical success factors.<sup>[18]</sup> If a task is both a core competency and a critical success factor, it should not be considered outsourcing. Such projects are at the heart of the company. Success or failure of such functions is directly tied to success or failure of the company as a whole. In general, such functions are critical to an organization's day-to-day operations, ability to competitively differentiate itself, ability to deliver value to customers and partners, and ability to innovate<sup>17</sup>

Some different types of outsourcing relationships are partnership, service provider, and vendor. Strategic partnerships might even establish some form of mutual ownership or revenue sharing. A service provider relationship is established when an ASP operate MIS applications and contracts are flexible to respond to changing needs of the organization. Most of ASPs develop custom software applications for the line of business. Meanwhile, vendor or transaction partnerships are more typical outsourcing arrangements where a company simply contracts with a vendor to provide the service or product. The vendor usually provides hardware, telecommunication, backup, and managed applications for the company. In this term of partnership, contracts usually escalate fess based on levels of usage of line item services.<sup>[19]</sup> As an example of successful outsourcing strategy, CIO Magazine (1999) discusses how Kodak used a multiple vendors to handle data center operations, telecommunications, and desktop support applications. However, by using vendors to provide basic IT resource management services within a year, Kodak's IT capital costs dropped 95%, PC support cost dropped 10%, and mainframe costs dropped by 15%. In selecting outsourcing partner, Kodak uses reputation as a means of gauging the ability of its outsourcers as equal criteria for selection, equal to lower costs and greater efficiency of operations.<sup>[20]</sup>

Outsourcing can be utilized to exploit the lower cost base of external service providers, which allows for reduction in operating costs.<sup>[21]</sup> Having access to work with IT expertise would be another benefit of outsourcing; thus, it reduces the risk of technology obsolescence and overtaking competitors on the technological front.<sup>[22]</sup> Furthermore, it allows a company to focus on its core business and reduce its workload. Some limitations of this strategy include the risk of loosing the organizational core competencies, reduction in the quality of service received by a client, and also some risk of the rise of unexpected expenses. The advantages and shortcomings of the 'outsourcing' option are summarized in Table 5.<sup>[23]</sup>

<b>TABLE 5. Advantages and Disadvantages of Outsourcing</b>	
<b>ADVANTAGES</b>	<b>DISADVANTAGES</b>
<ul style="list-style-type: none"> <li>· Cost Reduction</li> <li>· Access to word class specialist providers</li> </ul>	<ul style="list-style-type: none"> <li>· Loss of organizational competencies</li> <li>· Reduction in quality of services</li> <li>· Cost escalation from unforeseen expenses</li> </ul>



<ul style="list-style-type: none"> <li>· Improved focus on core business</li> <li>· Subcontracting of workload</li> <li>· Better risk management</li> </ul>	
---	--

[^TOP](#)

**Factors for Success and Failures in IT Acquisition**

While the business context in which technology acquisition is utilized may vary, resulting in a vast combination of variables that influences outcomes, there are some common characteristics and traits in acquisition process that may indicate its inclination toward success or failure. These commonalities, termed key factors, are briefly outlined in the Table 6 below:

<b>TABLE 6. Factors for Success and Failures in IT Acquisition</b>	
<b>Factors of Success</b>	<b>Factors of Failure</b>
<ul style="list-style-type: none"> <li>· Understanding of company objectives</li> <li>· Strategic vision and plan</li> <li>· Executive and management level support</li> <li>· Comprehensive financial justification</li> <li>· Use of external expertise in decision process</li> <li>· Open communication with users</li> <li>· Careful selection of the vendor</li> <li>· Ongoing management of the acquisition</li> <li>· Periodical performance review</li> </ul>	<ul style="list-style-type: none"> <li>· Short term benefits motivation</li> <li>· Unqualified service providers (vendors)</li> <li>· Domination of service providers in decision making</li> <li>· Lack of management capability</li> <li>· Failure in IS Acquisition planning</li> <li>· Cultural issue (Resistant to change)</li> <li>· Lack of defined process and change management</li> </ul>

**Appendix**  
**Figure 1. Information Technology Acquisition Process**





