2.0 Introduction

This chapter explains the concept of outsourcing and describes the desirable outsourcing contract it's divided into two sections.

The first section is about outsourcing definition, types of outsourcing**,** specific areas of outsourcing, reason, benefits of outsourcing software development, the advantages and disadvantages of outsourcing software development, risk of outsourcing, Effectiveness and Efficiency.

The second section defines and describes the contract, the reason for renegotiation , the criteria for selection outscoring software development, the organization needs , how to find a trusted partner, what are the important the cost or the benefits , The security of outsourcing.

2.1 .0 Definitions:

Outsourcing: is the transference of the product tasks or job from internal product to an external entity (such as subcontractor). Most recently the concept means the elimination of native staff in favor of overseas staff (offshore outsourcing), where salaries are lower in despite the fact that the majority of outsourcing that occurs within country boundaries (Lois & labrianidis, 2008).

In business, outsourcing is the contracting with an outer third –party for a business process to a third-party. The term **"outsourcing"** became popular in the United States near the turn of the 21st century. Outsourcing sometimes involves transferring employees and assets from one firm to another, but not always. Outsourcing is also used to describe the practice of handing over control of public services to for-profit corporations (wikipedia2, 2014).

Outsourcing includes both foreign and domestic contracting, and sometimes includes **off shoring** or relocating a business function to another country. Financial savings from lower international labor rates is a big motivation for outsourcing/off shoring (T&TIntrnational, 2013).

The contracting or subcontracting of noncore activities to free up cash, personnel, time, and facilities for activities in which a company holds competitive advantage. Companies having strengths in other areas may contract out data processing, legal, manufacturing, marketing, payroll accounting, or other aspects of their businesses to concentrate on what they do best and thus reduce average unit cost. Outsourcing is often an integral part of downsizing or reengineering, also called contracting out (Businessdictionary2, 2014) .

2.1.1 The types of outsourcing

Companies handling government contracts, personal information, or development that's competitive in nature, this becomes a serious consideration when weighing outsourcing options (Benson, 2004).

Since the majority of the information maintained by these projects is top-secret in nature, the government requires its consultancy vendors to meet radically new strict security guidelines. These policies increase the costs associated with the contracts, but ultimately still costs less than hiring government workers in USA (Ciampa, 2009).

1- in-country outsourcing:

The opposite of outsourcing is called insourcing, which entails bringing processes handled by third-party firms in-house, and is sometimes accomplished via vertical integration. However, a business can provide a contract service to another business without necessarily in-sourcing that business process (http://en.wikipedia.org, 2014).

In-sourcing, can typically be much more cost effective to the company. The biggest advantage to this type of outsourcing is with respect to its hands-off approach. Corporate management typically will decide to outsource project when it's determined what all the necessary goals, cost, and timeline will be. Responsible and reputable outsourcing vendor will meet with the company's program manager regularly (Deeb, October 2010).

2- offshore outsourcing:

Off shoring: can be defined as relocation of business process (including production / manufacturing) to overseas lower – cost location.

Offshore outsourcing is the practices of hiring an external organization to perform some or all business function in a country other than the one where the product will be sold or consumed (Lois & labrianidis, 2008).

3- Near-shore outsourcing: a new term to describe outsourcing work in countries which culturally and geographically are close to the outsourced company's country of origin. The examples are Canada for the USA and Ireland for the UK (Schmidt, 2013). It easier for the two parties to interact face to face occasionally, (Malcolm & Bronwyn, 2013), A number of factors will be involved in the establishment of a near shoring approach. Along with relatively close geographic proximity, factors such as the respective time zones of the two parties may be important. (Malcolm & Bronwyn, 2013).

Language and culture may also have some impact when it comes to near shoring. This is particularly true when it comes to outsourcing functions such as customer service and support. Since language differences can be a barrier to the communication process, a company may choose to outsource the function to a locality in that neighboring country where the language used by the majority of the company's customers is also spoken by those who will provide the customer service and assistance. Doing so minimizes the possibility of customers becoming upset with the inability to communicate effectively with a service representative and choosing to end the business relationship and go with the services provided by a competitor (Malcolm & Bronwyn, 2013) .

As with any type of outsourcing, the idea behind this strategy is to reduce operational costs while still retaining at an acceptable level of service. Near shoring is often practical when the approach will allow the customer to operate efficiently with a smaller in-house staff, while still providing the perception by customers that all the contacts taking place are being performed in-house. Assuming that the savings generated by near shoring are sufficient to offset the costs and allow the company to still operate at the same or higher level of efficiency, this type of business tool is well worth consideration (Malcolm & Bronwyn, 2013).

2.1.1.1 The difference between Outsourcing and off shoring:

Though outsourcing and off shoring may simultaneously take place, the two are different in terms of location and worker selection. When off shoring occurs, a business moves all or some of its activities to another country. Outsourcing, on the other hand, is the process of utilizing third party workers for traditionally in-house business tasks; this may take place either inside or outside the company's home country. Both are typically done to save business money (Schmidt, 2013).

Outsourcing is a common practice that businesses use to cut expenses, gain access to employees with a special skill set, and obtain other benefits. Unlike off shoring, outsourcing does not need to take place in a separate country to occur.

Businesses that remain in their countries of origin may seek out local third party workers, resulting in outsourcing. Outsourcing can, however, take place outside of the company's country of origin as well.

Off shoring sometimes refers as a subset of outsourcing. When the costs of running a company are cheaper in another country, the company may choose to move their activities or offices abroad in order to reduce expenses. , if the company opts to shift duties to a third party to further reduce costs outsourcing and off shoring are not occurring simultaneously, But if a company activities are still handled by in-house employees, the two practices are both being used, and while this many instances of off-shoring do involve outsourcing (Schmidt, 2013)

The location of these practices is another difference between outsourcing and off shoring. Outsourcing does not require that the third party being hired to complete a job, be from another country. Many instances of outsourcing are done within a country, such as when a printing company may employ a third party shipping business to transport its goods, rather than using its own staff. Outsourcing within a country's borders can be just as cost effective and popular as doing so internationally. Off shoring, on the other hand, always takes place outside the business's country of origin (Schmidt, 2013).

Many people assume that outsourcing and off shoring are limited to the information technology, or IT, industry. While offshore IT outsourcing is a frequent practice of many businesses, the activities are not limited to this field. Other common types of outsourcing and off shoring include knowledge process outsourcing, business process outsourcing, and offshore software development, just to name a few. Nearly any type of business has the potential for using such strategies (Schmidt, 2013).

2.1.2 The Specific areas of Outsourcing:

The organization must ensure that they can identify their reasons for outsourcing, and specify costs and benefits before they can evaluate their options effectively .The satisfaction of end users and increased operating efficiencies are generally desired IT outcomes.

Specific areas to look at include:

1. Customer satisfaction
2. Agency end user satisfaction
3. Increased collection of user fees
4. Quality of service
5. Reduced work-in-progress
6. Staff reductions
7. Responsiveness
8. Expectations management
9. Reduced operational expenses

   (Barry Bales, June 1998)

2.1.3 The reason of outsourcing:

Software outsourcing remains a critical component of the development process in most corporations. There are many different reasons for and against outsourcing. In the developed countries the primary reason for a company to express interest in outsourcing is typically for the cost solutions. In any business, generic departmental demands can often be outsourced to various corporations that specialize in exclusively those categories. This allows the organization to focus primarily on their business goals, rather than having to micro- manage certain departments. A human resources department, for example, can often be outsourced by a local company provider. This is known as Human Resource outsourcing or HRO for short. (Deeb, October 2010).

For organizations whose corporate focus is primarily not in software development, outsourcing becomes a very viable solution. In most situations, a software department can be completely outsourced for a simple reoccurring fee with no additional costs. This type of outsourcing has on retainer numerous developers for an otherwise dedicated time, or until which point the contract is cancelled. In addition to the return on investment, speed to market, and improved quality in product are also some of the major considerations.

Some of the reasons that companies decide to outsource include:

1- Risk diversification , Mitigate risk
2- Faster time to market
3- Obtain new ideas/thinking
4- Rapid expansion of capacity
5- Focus on core competencies
6- Growth with less investment
7- Infuse the company with new technology
8- Leverage the company's assets and capabilities
9- Improved return on investment
10- Better cast flow
11- Reduced cost

(David G. Meeker, 2011)

For each outsourcing contract it is important to identify the reasons for outsourcing so that these may be reflected in the development of the service requirement and in the tender evaluation process. **The main reasons included**:

12- Unavailability of service in-house
13- Focusing on core services

14- Achieving defined service levels

15- Making up for staff shortages

16- Improving service output

17- Access to skills

18- Access to information

19- Facilitating organizational changes

20- Flexibility in service delivery

21- Converting fixed costs into variable costs

22- Improving service quality

23- IT legacy system support

24- Policy changes

A more detailed discussion of some of the main reasons adopted by departments is given below (Effciencyn, March 2008):

- **Focusing on core services .**Successful outsourcing allows the civil service to focus in-house resources on tackling priorities. In general these priorities will be policy formulation, regulatory control and statutory service delivery functions. When a department concentrates on carrying out its priorities, it can use its financial, human and management resources more effectively and efficiently. Outsourcing of some non-core functions provides departments with the flexibility to redirect and focus their resources on activities critical to their mission. Nonetheless, priorities may differ from time to time and from department to department and no function should be treated as automatically immune from regular consideration as to its potential for outsourcing. Departments should be cautious of being restricted by definitions of “core” services.
- **Access to skills.** Departments may experience a shortage of skilled and experienced staff brought about by the change in the business operation landscape, retirements, resignations, caps on recruitment or an inability to recruit

into the civil service. Existing staff may not always have the necessary skills to keep pace with rapidly evolving technology. In general, departments will source core function skills through recruitment and use outsourcing to access skills that they find difficult to recruit and retain. When a department is contemplating providing new services, outsourcing can ease the process of building the skills and resources required to respond to these new initiatives. In some cases, outsourcing to an external service provider may be the only practical way to access the skills necessary to properly deliver services. Departments may also benefit from having their staff work with the service provider's specialists. To ensure a department's interests are well served, contract managers will need to keep their own knowledge up-to-date.

- **Reduction in costs .**Budget realities have an impact on deciding which functions are to be performed in-house and which to be outsourced. In many cases outsourcing can reduce both capital and recurrent costs. The 2006 Outsourcing Survey results reflected that average savings of about 27% perineum had been achieved for non-works services that were originally delivered in-house.

In the study which title of Outsourcing and its Role on Performance Service Firms in Sudan showed that Outsourcing had a significant influence on the Sudanese service firms financial performance, but not for the non-financial one. This study did not found any convincing evidence to support the mediation effect of outsourcing between internal capabilities and non-financial performance. Furthermore, the research results indicated that government regulations and information technology are significantly moderating the relationship between outsourcing and firm performance dimensions (MUSA, 2011).

- **Flexibility in service delivery.** Maintaining the level of equipment and staff necessary to cover peak loads can leave a department with under-utilized resources during off-peak periods. Conversely, a department may only be able to maintain resources at a level just sufficient to meet normal demand, leading to poorer customer service at peak periods. Outsourcing of functions that are subject to peaks and troughs in usage can provide a department with the flexibility to respond rapidly to changing demands.
- **Improving service quality.** An era of increasing specialization and rapid

  Advances in technology, many departments find it necessary to keep pace with the best practice in the private sector. There are also indications that the public is becoming more demanding, with many expecting the public sector to match private sector service standards. In the public sector, outsourcing can be an effective tool to improve the quality of services. Private sector service providers are not bound by government procedures and practices. They may have more flexible, innovative and effective ways of delivering services and ensuring the services reach the people they are meant for. Examples of this might include offering longer or more flexible service hours built around end users' requirements and providing access to services via technology (Effciencyn, March 2008).
- **Access to technology.** Departments also look to outsourcing to keep up with the accelerating changes in technology. Service providers often have more funds or expertise to acquire and maintain new computing/telecommunications resources than Government departments. They are also able to implement new technology better and more quickly because market competition drives them to maximize their return on technology investment with continuous technology refreshment (Effciencyn, March 2008).

2.1.4 Benefits of the software development outsourcing:

As the organization evaluation of choices and decisions in outsourcing different components of operations, will be needed to consider the advantages of outsourcing. When done for the right reasons, outsourcing will actually help the company grow and save money. There are other advantages of outsourcing that go beyond money.

A study which conducted by Deloitte (2012) in Global Outsourcing and in sourcing Survey Executive indicated the most of respondents agreed that the real causes of outsourcing are that reduce operation cost and improve quality service (LLP, February 2012) .

2.1.4 .1 The top six advantages of outsourcing:

1. Cost :

Cost is the main reason that most companies take into consideration when outsourcing a project. . Education level in Computing Sciences is of word-class quality so a pool of talented programmers for the specific project can accessed (ABTO, 2013). Software engineers outside of the developed countries are compensated much less than their counterparts in developed countries. The average salary for a software engineer in India is $10,000 per year while the salary for the same of price in USA is $25,000. The saving in salary can be passed on to the client. Those salaries in India are rapidly rising. Maybe in a few years the cost benefit of outsourcing will not be so obvious. However, there are many other important advantages to outsourcing that one should consider (Mark, 2013). Outsourcing eludes the need to hire individuals in-house; hence recruitment and operational costs can be minimized to a great extent. This is one of the prime advantages of offshore outsourcing (SolutionsFlatworld, The Advantages and Disadvantages of Outsourcing, 2013) .There some more cost advantages of using offshore development resource: you don’t need to purchase and maintain necessary equipment for your new employees and also can save money on their training. The operational expense savings can be enormous and can really help small- and medium-sized companies stay competitive among the larger enterprises (ABTO, 2013).

- **Reduced Overhead :**

  Overhead costs of performing a particular back-office function are extremely high. Consider outsourcing those functions which can be moved easily. Example: Growth has resulted in an increased need for office space. The current location is very expensive and there is no room to expand. Outsource some simple operations in order to reduce the need for office space. For example: outbound telemarketing or data entry (Bucki, 2014)

- **Cost And Efficiency Savings:**

  Another advantage of outsourcing is that, back-office functions are complicated in nature, but the organization size prevents performing it at a consistent and reasonable cost. Example: A small doctor's office that wants to accept a variety of insurance plans. One part-time person could not keep up with all the different providers and rules. Outsource to a firm specializing in medical billing (Bucki, 2014).

- **Operational Control**

  Operations whose costs are running out of control must be considered for outsourcing. Departments that may have evolved over time into uncontrolled and poorly managed areas are prime motivators for outsourcing. In addition, an outsourcing company can bring better management skills to your company than what would otherwise be available. **Example:** An information technology department that has too many projects, not enough people and a budget that far exceeds their contribution to the organization. A contracted outsourcing agreement will force management to prioritize their requests and bring control back to that area (Bucki, About.com Operations / Technology, 2014).

2. **Time-efficient project accomplishment:**

   Company might not have enough specialists with necessary skills to complete a particular project within the deadlines. Hiring more skilled personnel (time staff/contractors) and management is expensive and extra manpower may be unnecessary after the project is completed. In this situation it is very convenient to use IT outsourcing (ABTO, 2013). There are many outsourcing companies with many different specializations. The right company could provide the skills and manpower necessary to meet any strict deadlines (Mark, 2013). With software development outsourcing development process can be extended to 24 hours a day; all the required shifts will be covered. This is a situation when time-difference is working for you and may be really beneficial (ABTO, 2013).

3. **Necessary skills and Swiftness and Expertise:**

   An outsourcing company could provide its partners with specific skills it lacks but which are vital to accomplish separate project sections critical for the business process. For example, client needs some piece of software coded in a particular technology but doesn't have qualified specialists in this domain. There is no point in searching and employing extra personnel which may be time-consuming. Hiring an outsourcing company may be the best solution (ABTO, 2013). The outsourcing company could provide these skills to the client. However, an outside the companies' skill set should be bear in mind, in case of outsourcing a project

This could pose problems with standards and maintenance later on (Mark, 2013).Most of the times tasks are outsourced to vendors who specialize in their field. The outsourced vendors also have specific equipment and technical expertise, most of the times better than the ones at the outsourcing organization. Effectively the tasks can be completed faster and with better quality output (SolutionsFlatworld, The Advantages and Disadvantages of Outsourcing, 2013) .

Outsourcing will allow operations that have seasonal or cyclical demands to bring in additional resources when need them and release them when done. **Example:** An accounting department that is short-handed during tax season and auditing periods. Outsourcing these functions can provide the additional resources for a fixed period of time at a consistent cost

4. Company's Stuff Gets More Time and Developing Staff:

Company's personnel can concentrate on high-level tasks including requirements elaboration, project management and design. This also provides a possibility for the company's personnel professional development such as attending trainings, seminars, self-education which is also a good thing for your team (ABTO, 2013) .

Because the offshore company will now be doing the 'grunt work', this leaves more time for individuals within the company to concentrate on 'higher' tasks, such as gathering requirements, design and management. The smart individual will find herself leading others, rather than general maintenance and development work (Mark, 2013).

A large project needs to undertake that requires skills the staff does not possess. On-site outsourcing of the project will bring people with the skills needed in the company. So the staff can work alongside of them to acquire the new skill set. Example: A company needs to embark on a replacement/upgrade project on a variety of custom built equipment. The engineers do not have the skills required to design new and upgraded equipment. Outsourcing this project and requiring the outsourced engineers to work on-site will allow the companies engineers to acquire a new skill set.

5. **Focus On Core Activities:**

In rapid growth periods, the back-office operations of a company will expand also. This expansion may start to consume resources (human and financial) at the expense of the core activities that have made your company successful. Outsourcing those activities will allow refocusing on those business activities that are important without sacrificing quality or service in the back-office. **Example:** A company lands a large contract that will significantly increase the volume of purchasing in a very short period of time; Outsource purchasing (Bucki, About.com Operations / Technology, 2014). Outsourcing the supporting processes gives the organization more time to strengthen their core business process (SolutionsFlatworld, The Advantages and Disadvantages of Outsourcing, 2013) .

6. **Continuity & Risk Management & Risk-sharing:**

Periods of high employee turnover will add uncertainty and inconsistency to the operations. Outsourcing will provided a level of continuity to the company while reducing the risk that a substandard level of operation would bring to the company. **Example:** The human resource manager is on an extended medical leave and the two administrative assistants leave for new jobs in a very short period of time. Outsourcing the human resource function would reduce the risk and allow the company to keep operating (Bucki, About.com Operations / Technology, 2014).

One of the most crucial factors determining the outcome of a campaign is risk-analysis. Outsourcing certain components of your business process helps the organization to shift certain responsibilities to the outsourced vendor. Since the outsourced vendor is a specialist, they plan your risk-mitigating factors better (SolutionsFlatworld, The Advantages and Disadvantages of Outsourcing, 2013) .

2.1.5 The Disadvantages of outsourcing software development:

Advantages and disadvantages of outsourcing should be kept in mind in evaluating outsourcing choices, by Looking at each one of the outsourcing disadvantages listed below to decide what impact that item would have on business. If the outsourcing disadvantages outweigh the advantages, then outsourcing operations should be avoided.

1. **Testing Difficulties.** It turns out rather complicated to test outsourced project in comparison to the in-house one. Still testing is an inalienable part of the software development process and if a problem occurs you need to communicate your vendor. But the difficulty is that, unfortunately, he can’t see the machine on which the problem happened so that makes solving and fixing more time-consuming (ABTO, 2013).

   When testing a piece of software that was developed offshore in-house (and certainly should) and find a problem, this needs to be communicated to the offshore vendor. This could cause problems as the offshore vendor might not be able to reproduce the problem. It could be easily fixed if only they could see the machine that it happened on. Or maybe the problem isn't properly communicated.

The 'Entering the testing phase' page will help you have a smoother testing phase (Mark, 2013)

2. **Face-to-face Meetings are Less Accessible.** If an outsourcing vendor is distant it could be complicated and time-consuming to come and meet him very often. Time difference also may be a considerable obstacle in efficient communication. Still nowadays it’s not the major problem with a possibility of videoconferences, Skype calls and other means of telecommunication allowing reaching any place in the world (ABTO, 2013).
3. **Constant Management Necessary.** Absolutely vital for an outsourced project to succeed is a highly competent and dedicated manager who will constantly communicate with the vendor and control the development process step by step. This person should have a clear understanding of the project requirements and standards and make sure that the vendor also does (ABTO, 2013).

The management constant needs are the first reason why outsourced projects fail. So there in a need for a good manager, a leader who is in constant communication with the offshore vendor. The leader needs to understand the requirements, and each and every day makes sure that the offshore vendor also understands the requirements. The client should make sure that standards are being met by viewing code, looking at latest builds, viewing the bug tracker, viewing language resource files, etc. A lack of constant management generally means the project will get out of control (Mark, 2013).

4. **Cultural Differences.** It might be challenging sometimes because of troubles in mutual understanding and business ethics differences. Try to learn as much as possible about the vendor’s country – culture, business traditions, legislation and choose the one suiting you best. For example, outsourcing to Ukraine might be a

good choice while its culture is very close to European especially the Western parts (ABTO, 2013).

5. **Bad Company Morale**. Hiring an offshore vendor might affect company morale negatively. People might think that their jobs are threatened. Employees should be informed of this change and assured that their jobs aren't at risk. You can encourage personnel by announcing that now they can concentrate on higher level work.

   Offshore outsourcing advocates state that it saves costs due to affordable workforce, helps avoid capital expenditures and allows access a pool of talented programmers with miscellaneous skills vital for your specific project. It is considered to be a great way to do business more profitably (ABTO, 2013).

   Choosing to outsource a project instead of developing in house could affect company morale. Employees could feel that their jobs are threatened. If jobs are at risk, then the employees should know as soon as possible to reduce the spread of bad morale. Likewise, if jobs are not threatened, then the employees should be told of the change, and that not only are their jobs safe, but the employees will be given the chance to do a higher level of work (Mark, 2013).

6. **The critics will give their own arguments** – including lower quality of the software developed, rare face-to-face meetings, cultural differences and poor political situation in many offshore vendors' countries.

   Anyway the decision is up to the organization. If the organization decide to utilize IT outsourcing, get as much information as possible about the vendor and its country, the organization should make a careful analysis of company's portfolio, ask vendor's customers for recommendations, demand resumes of the development team members (ABTO, 2013).

7. Increase in frustration

- An increase in frustration in the company could arise for a number of reasons:

  - **Time difference:** Usually, there is about a half day difference between client and offshore vendor. This makes communication very difficult. A question could be asked on Monday, answered on Tuesday, a response requested on Wednesday, and a reply on Thursday. To solve this problem, schedule weekly meetings. If a difficult problem arises - schedule an extra meeting to discuss. Any decent offshore vendor should understand the need for good, timely communication and be willing to meet on your schedule (Mark, 2013).

  - **'This isn't what I need!!'** - If the customer is only shown the product at the end of the development cycle, chances are this is what you will hear! Generally, customers are not very good at describing exactly what they need. Sometimes, it is because they do not know themselves what they need. The earlier you can show the developing system to the customer, the better. Only then will you discover that maybe the requirements weren't clearly communicated.

  Be warned that the offshore vendor is easily made a scapegoat. Disgruntled employees will jump at the chance to blame the offshore company for any mistake made. The employee should be reminded that nobody is perfect. If a mistake is made by the offshore company you could empower the employee to find out the reason for the mistake, and ask him/her to strive to solve the problem by working with the leader and the offshore company (Mark, 2013).

8. Synchronizing the deliverables:

In case if the organization do not choose a right partner for outsourcing, some of the common problem areas include stretched delivery time frames, sub-standard quality output and inappropriate categorization of responsibilities. At times it is easier to regulate these factors inside an organization rather than with an outsourced partner (SolutionsFlatworld, 2013).

9. Lack of customer focus:

An outsourced vendor may be catering to the expertise-needs of multiple organizations at a time. In such situations vendors may lack complete focus on your organization's tasks (SolutionsFlatworld,2013).

10. Loss Of Managerial Control

Whether the organization sign a contract to another company perform the function of an entire department or single task, the organization are turning the management and control of that function over to another company. True, the organization will have a contract, but the managerial control will belong to another company. The outsourcing company will not be driven by the same standards and mission that drives company.

11. Hidden Costs

When the organization is sign a contract with the outsourcing company that will cover the details of the service that they will be providing. Anything not covered in the contract will be the basis for you to pay additional charges. Additionally, you will experience legal fees to retain a lawyer to review the contacts you will sign. Remember, this is the outsourcing company's business. They have done this before and they are the ones that write the contract. Therefore, the organization should be focus on the disadvantage when negotiations start (http://operationstech.about.com, 2014).

Although outsourcing most of the times is cost-effective at times the hidden costs involved in signing a contract while signing a contract across international boundaries may pose a serious threat (SolutionsFlatworld,2013).

12. Threat to Security and Confidentiality

The life-blood of any business is the information that keeps it running. If the organization has payroll, medical records or any other confidential information that will be transmitted to the outsourcing company, there is a risk that the confidentiality may be compromised. Evaluate the outsourcing company carefully to make sure your data is protected and the contract has a penalty clause if an incident occurs (http://operationstech.about.com, 2014).

When an organization outsources HR, Payroll and Recruitment services, it involves a risk if exposing confidential company information to a third-party (SolutionsFlatworld, The Advantages and Disadvantages of Outsourcing, 2013) .

13. The Quality Problems :

A. Quality Problems

The outsourcing company will be motivated by profit. Since the contract will fix the price, the only way for them to increase profit will be to decrease expenses. As long as they meet the conditions of the contract, you will pay. In addition, you will lose the ability to rapidly respond to changes in the business environment. The contract will be very specific and you will pay extra for changes (http://operationstech.about.com, 2014).

B. **Low quality:** If the offshore company produces low quality code or architecture, this will definitely increase frustration within the company. This needs to be solved by having all people who will be responsible for maintaining the code/architecture involved early on in the project. Code reviews need to be done frequently. If frequent meetings/code reviews/reviews with customers are not done, then the chances are you will receive a product that does not meet requirements, is poorly written, is not maintainable (or only by the same offshore vendor - fees will increase for sure), and is not scalable to your liking (Mark, 2013)

C. **Lower Quality.** While the workforce around the globe can be highly competent sometimes they may lack skills and education. So a special attention should be paid to choosing the finest employees. You may require detailed resumes of the specialists, samples of accomplished work, recommendations from the previous customers, company's portfolio. The main issue is to get as much information as possible (ABTO, 2013).

14. Bad Publicity

The word "outsourcing" brings to mind different things to different people. If you live in a community that has an outsourcing company and they employ your friends and neighbors, outsourcing is good. If your friends and neighbors lost their jobs because they were shipped across the state, across the country or across the world, outsourcing will bring bad publicity. If you outsource part of your operations, morale may suffer in the remaining work force (http://operationstech.about.com, 2014).

2.1.6 The risk of outsourcing:

A generalization of outsourcing risks leads to the overall process of its good management which assumes an initial comprehensive cost-benefit analysis. This analysis should provide decision-supporting information to justify the expectations that the vendor will perform satisfactory well and fast enough, and in the same time maintaining service quality levels and meeting legislative requirements. This makes the process of evaluating vendors critical regarding the selection of the most appropriate and potentially successful candidate .Outsourcing of specific business processes, like IT services, reduces the organization's capability for creative organizational development. Thus, it might face a reduced competence to innovate through synergetic interactions. Besides, from its distance position the vendor could have a limited potential to acknowledge some specific needs of the outsourcer (Matilda Alexandrova, 2009).

In order to protect their interests, each partner has to provide legal and technical experts to participate in the processes of contract negotiation. If there is a lack of enough expertise to guarantee performance standards, legal requirements, and payment terms, the contract provisions might favor one of the sides on the expense of the other. A risk emerges also in situations when the vendor (or the outsourcer) urges the execution of the service before the contract is signed under the promise for “taking care of the details later” – this allows for a possible deviation in the pricing that is initially not strictly negotiated (Matilda Alexandrova, 2009).

Two other general types of risks originate from economic and political uncertainty in the vendor country. Economic risk reflects potential turbulence in inflation and exchange rates, a possibility of restriction in profits repatriation, taxation policy changes, etc. Political risk includes issues related to political instability, emergence of regional or international conflicts, a likelihood of changes in labor market regulations, environmental laws, regulation of international business and trade, etc. In general, governments are capable to influence the extent and the form of foreign involvement through different forms of international Outsourcing. They could impose various obstacles and barriers but in the same time could provide investment incentives by using a range of tax and fiscal instruments and subsidies (Matilda Alexandrova, 2009).

Other two kinds of risks may arise in relation to business environmental reasons (e.g. Changes in the broader business landscape) and behavioral reasons (e.g. unpredictable actions of the vendor). Any benefits derived from utilizing inexpensive but skilled labor of the vendors must outweigh the costs incurring with outsourcing transaction and sharing of control associated with such partnerships. In an extreme case, the realization of such risks can lead to ruining of the whole business agenda, substantial loss of control over important business processes, disruption of operations, and loss of functional focus (Matilda Alexandrova, 2009).

The organization need to focus on the core business processes of the organization to avoid the desire of high risk capital investments in new technologies this is primary motivation to saving the cost.

Poor communication and lack of proper governance are frequently cited reasons for outsourcing failures (David G. Meeker, 2011).

A study which conducted by Deloitte (2012) in Global Outsourcing and in sourcing Survey Executive indicated the most of respondents agreed that communication with users is most important factor (LLP, February 2012).

Table 1: shows the SWOT analysis was produced by Amar Gupta to explained the Strengths, Weaknesses, Opportunities and Threats of outsourcing soft ware development (Gupta)

Table 1: SWOT analysis of the pros and cons of outsourcing

Strengths	Creates a greater focus on core business processes Cheaper labor Cut in operation costs Lower training costs Access to better technology Contractual obligation secures liability and security of work contract
Weaknesses	Employees may feel threatened their jobs will be in jeopardy Loss of control Security issues Standard of quality control may need to be reformatted Risks or concerns involving ethical performance
Opportunities	Access to specialized skills Improved quality of service Increase domain expertise (for KPO) Ample opportunities for SMEs
Threats	Staff turnovers Company knowledge and protection Social responsibility Non retention of talent

1. **Cost-Reduction Expectations**

The biggest risk with offshore outsourcing has nothing to do with outsourcing - it involves the expectations the internal organization has about how much the savings from offshore will be. Unfortunately, many executives assume that labor arbitrage will yield savings comparable to person-to-person comparison (e.g., a full-time equivalent in India will cost 40% less) without regard for the hidden costs and differences in operating models. In reality, most IT organizations save 15%-25% during the first year; by the third year, cost savings often reach 35%-40% as companies "go up the learning curve" for offshore outsourcing and modify operations to align to an offshore model (Davison, 2003).

2. **Data Security/Protection**

IT organizations evaluating any kind of outsourcing question whether vendors have sufficiently robust security practices and if vendors can meet the security requirements they have internally. While most IT organizations find offshore vendor security practices impressive (often exceeding internal practices), the risk of security breaks or intellectual property protection is inherently raised when working in international business. Privacy concerns must be completely addressed. Although these issues rarely pose major impediments to outsourcing, the requirements must be documented and the methods and integration with vendors defined (Davison, 2003).

Uncertainty about information confidentiality: This is a problem of a growing concern. The first thing that provider tends to assure a client in is the secure handling of essential information about client's core business process. Unfortunately providing a total security is difficult task. A simple example: a developer sends files with the source code to his private mailbox on the Yahoo server to work on them at home. Such a security breach can ruin an entire contract, and still it is difficult to foresee and prevent (OlegIshenko, 2005).

3. **Lack of proximity to staff:**

In a case of an in-house development, the developers' team has constant and easy access to all the employees involved in the future use of the software. In a case of OSD, especially offshore OSD it is necessary to prepare detailed technical requirements and constantly adjust them to any change. This creates an excessive managerial and technical overhead and decreases quality of the future product (OlegIshenko, 2005).

4. **Loss of Business Knowledge:**

Most IT organizations have business knowledge that resides within the developers of applications. In some cases, this expertise may be a proprietary or competitive advantage. Companies must carefully assess business knowledge and determine if moving it either outside the company or to an offshore location will compromise company practices (Davison, 2003).

5. **Vendor Failure to Deliver**

A common oversight for IT organizations is a contingency plan - what happens if the vendor, all best intentions and contracts aside, simply fails to deliver. Although such failures are exceptions, they do occur, even with the superb quality methodologies of offshore vendors. When considering outsourcing, IT organizations should assess the implications of vendor failure (i.e., does failure have significant business performance implications?). High risk or exposure might deter the organization from outsourcing, it might shift the outsourcing strategy (e.g., from a single vendor to multiple vendors), or it might drive the company toward outsourcing (if the vendor has specific skills to reduce risks). The results of risk analysis vary between companies; it is the process of risk analysis that is paramount (Davison, 2003).

6. Scope Creep

There is no such thing as a fixed-price contract. All outsourcing contracts contain baselines and assumptions. If the actual work varies from estimates, the client will pay the difference. This simple fact has become a major obstacle for IT organizations that are surprised that the price was not "fixed" or that the vendor expects to be paid for incremental scope changes. Most projects change by 10%-15% during the development cycle (Davison, 2003).

7. Government Oversight/Regulation

Utilities, financial services institutions, and healthcare organizations, among others, face various degrees of government oversight. These IT organizations must ensure that the offshore vendor is sensitive to industry-specific requirements and the vendor's ability to: comply with government regulations; and provide sufficient "transparency" showing that it does comply and is thus accountable during audits. The issue of transparency is recently more significant.

8. Culture

Cultural has to do with the fact that different people give different meanings to a situation based on their cultural background and that is give these meaning." Conflicts can arise from team members coming from different cultures – both national culture and organizational culture. National or local culture encompasses an ethnic group's norms, values, spoken language and styles of communication .Organizational culture encompasses the working unit's norms and values, and includes the culture of systems development. Culture can have a huge effect on how people interpret a certain situation, and how they react to it. Hence, having shared (or overlapping) frames of reference is a precondition for people to Succeed in communication and collaboration. It's present as soon as team members cannot interact face-to-face. This may be due to cultural (Pär J Ågerfalk1, 2010).

Differences in culture can lead to lack of trust among teams, especially when accompanied by fear of job security resulting from the addition of remote teams in low labor cost locations. Cultural differences also inhibit shared understanding of goals, requirements, and tasks, resulting in rework and delay (Noll, Beecham, & Richardson, 2009).

Differences in language proficiency among distributed team members create barriers to effective communication: different sites may interpret communication in different ways, influenced by their native language and culture; team members with more proficient language skills may lack confidence in their remote counterparts' understanding of communication; less proficient team member may feel inhibited from asking for clarifications due to fear of looking stupid, resulting in incorrect (Noll, Beecham, & Richardson, 2009) .

9. Turnover of Key Personnel

Rapid growth among outsourcing vendors has created a dynamic labor market, especially in Bangalore, India. Key personnel are usually in demand for new, high-profile projects, or even at risk of being recruited by other offshore vendors. While offshore vendors will often quote overall turnover statistics that appear relatively low, the more important statistic to manage is the turnover of key personnel on an account. Common turnover levels are in the 15%-20% range, and creating contractual terms around those levels is a reasonable request. Indeed, META Group has seen recent contracts that place a "liability" on the vendor for any personnel that must be replaced. The impact of high turnover has an indirect cost on the IT organization, which must increase time spend on knowledge transfer and training new individuals (Davison, 2003).

10. Knowledge Transfer

The time and effort to transfer knowledge to the vendor is a cost rarely accounted for by IT organizations. Indeed, we observe that most IT organizations experience a 20% decline in productivity during the first year of an agreement, largely due to time spent transferring both technical and business knowledge to the vendor. Many offshore vendors are deploying video conferencing (avoiding travel) and classroom settings (creating one-to-many transfer) to improve the efficacy of knowledge transfer. In addition, employee turnover often places a burden on the IT organization to provide additional information for new team members (Davison, 2003).

11. Increased complexity of management:

Outsourcing is considered to be a solution to decrease complexity of management of the IT functions. But often management of OSD project suffers from a lack of control, namely the futility of implementing tightly controlled operations in such projects (OlegIshenko, 2005).

12. Finally, the lack of control over the outsourced resources:

A situation when provider has to develop a software that will be used over a heterogeneous IT infrastructure of a client composed of a variety of devises, legacy systems, which cannot be replaced or upgraded by the contractor's will. This creates specific technical challenges that can reduce outcome of an OSD contract (OlegIshenko, 2005).

2.1.7 *Effectiveness and Efficiency*

Obtaining value for money should be key objective in every outsourcing project:-

Given this extensive use of outsourcing it is imperative that organization focus on ensuring that their outsourcing projects achieve value for money. The quality of service goes hand-in-hand with cost. In some cases improving quality may mean greater cost; reducing cost may mean compromising quality. Balancing the trade-off between cost and quality is what is meant by achieving value for money.

Value for money comes from the effective, efficient and economic use of resources.

Effectiveness is sometimes expressed as “doing the right thing”. It is a measure of the extent to which objectives have been achieved.

Efficiency is sometimes expressed as “doing things right”. It is a comparison of the output achieved with the resources used to produce it.

Economy is concerned with minimizing the cost of resources used for an activity, having regard to appropriate quality (Effciencyn, March 2008).

2.2.1 *The contract:*

Outsourcing contracts can be complex affairs, but a good outsourcing contract will examine service level agreements, penalties and rewards, timeframes and measurements, regular reviews, and exit strategies (computerweekly.com, 2014).

A study which conducted by Deloitte (2012) in Global Outsourcing and in sourcing Survey Executive indicated the most of respondents agreed that the contract and team work affect on success of outsourcing (LLP, February 2012).

1) **The using of outsourcing contracts:**

Outsourcing itself can cover any or all IT system operations, with some organizations choosing to outsource their whole IT requirements. In these cases, they tend to work closely with an outsourcing service provider, at home or abroad.

The sorts of operations that are often outsourced include the running of desktop and server applications, business processes, backup and recovery, customer services and billing (computerweekly.com, 2014).

2) The ways in which starting outsourcing contracts

It is a good idea to clearly define the scope of the outsourced operations beforehand, to have a good idea what exactly the service provider is doing, and what is left to your business.

Striking the right outsourcing deal also comes down to having the right legal agreements at the core of a contract, so it is worth getting the right advice.

The contract itself should be clear, fair and well negotiated from the start. It should define the full extent of the services that are to be delivered and for which the service provider will be responsible. These are called service levels and service level agreements (computerweekly.com, 2014).

3) The service level of agreements

Service levels are formally agreed targets which the service provider must meet, and the list can be as long or short as the user organization requires. They should be based on detailed schedules, with the point being that neither side can be in any doubt as to what is required of the service provider. Setting these service levels so that both parties can benefit are fundamental to business process outsourcing contracts.

As well as describing the deliverables and expectations of the service provider, good contracts will also describe the reporting methods for service level measurement. These could cover factors such as how and when targets are met. They could also include potential penalties or benefits if requirements are or aren't met (computerweekly.com, 2014).

4) The penalties or the benefits can apply:

Service levels can have penalties or benefits attached to them. The most common forms of penalties are service credits, and liquidated damages, (also referred to as liquidated and ascertained damages). Liquidated damages are calculated in relation to the customer's estimated potential loss. They might refer to a specific breach of contract, such as late performance. In terms of rewards, benefit sharing is often used to reward the service provider for delivering real business value to the customer. Percentage uplift is another term used to describe a clearly defined improvement on a service benchmark, for which there can be a financial reward (computerweekly.com, 2014).

5) The terminate or end a contract:

It is vital to have a well thought out termination or exit strategy from the outset, and also to have options to continue after the end of the contract's term. Termination conditions cause frequent disputes, particularly if there is a transition and handover period between two service providers. Options to consider are break clauses which allow either party to end the agreement early. You might like to form contingency plans in case either party gets acquired. Finally, you might want the option of partially terminating the contract (computerweekly.com, 2014).

2.2.2 The reason for renegotiation

Common reasons given for renegotiation are:

1. dissatisfaction with pricing
2. business change
3. unsatisfactory service performance

Our own experience is that the success or failure of an outsourcing arrangement is often determined by:

1. the quality of the customers' planning and preparation for the outsourcing
2. the ability of the contract to handle change
3. the customers' dedication to post-contract management

These two lists are not in conflict. For example, (whether through a failure of forecasting or an over-optimistic timetable for transformation) Sound planning and preparation are needed to ensure that service definitions are clear, volume assumptions are tested and pricing is inclusive.

2.2.3 The criteria for selection outscoring software development:

(Do you want the project done better, faster, or cheaper? The staffing decision is based upon the best use of agency resources, according to its needs and priorities.) (Bales, et al., June 1998)**.**

Prioritization and determination of success criteria is:

As the organization is able to identify a complete and comparable set of costs and benefits regarding resource choices, resource limitations, in-house skill sets and knowledge, and expected performance and outcome measures are important factors that must be analyzed in making the outsourcing decision. Establishing and analyzing quantitative and qualitative criteria provides a bottom-line total that indicates which staffing decision is most effective and states the reasoning used in reaching that decision. Outsourcing can be an efficient and effective alternative to using in-house resources, but a full determination of costs and benefits is required to make that decision. Successful decisions are dependent on having a clear understanding of all the options available (Bales, et al., June 1998).

A thorough understanding of both IT and business processes within the organization is necessary before making the decision regarding whether to outsource.

Successful projects result from strong in-house knowledge and understanding of organization requirements, processes, and service and performance measures. Assigning costs and benefits requires that IT management understand the organization mission, and how the proposed effort will support that mission. Choosing either external or internal resources is simply a question of determining what available option best enables the organization to accomplish its business objectives. Business objectives will differ based on whether you are evaluating *global, sectional,* or *transitional* outsourcing (Bales, et al., June 1998).

The organization is need to consider that the main concern of outsourcing vendors in organization is to meet as high as possible standards with the lowest possible prices achieving global competitiveness.

In pursue of such a strategic goal, outsourcing activities are feasible when allocated in countries providing favorable economic and social conditions. This respect, are identified worldwide as attractive outsourcing destinations because of the effective combination of a cost-solution and high quality service (Matilda Alexandrova, 2009).Ultimately, the price level and quality of service appear to be key factors in gaining competitive advantages (Matilda Alexandrova, 2009).

The study about outsourcing in educational hospital pharmacy, that saving money in staff cost and purchase of drugs and improve the satisfaction of the department officials have concluded that is the result of outsourcing support services (Masoud Ferdosi, 2011).

A study which conducted by Deloitte (2012) in Global Outsourcing and in sourcing Survey Executive indicated the most of respondents satisfied on outsourcing (LLP, February 2012).

2.2.4 Identifying Organization Needs:

The first step in the decision-making process is to identify organization needs. These needs set the framework and priorities for IT projects and activities.

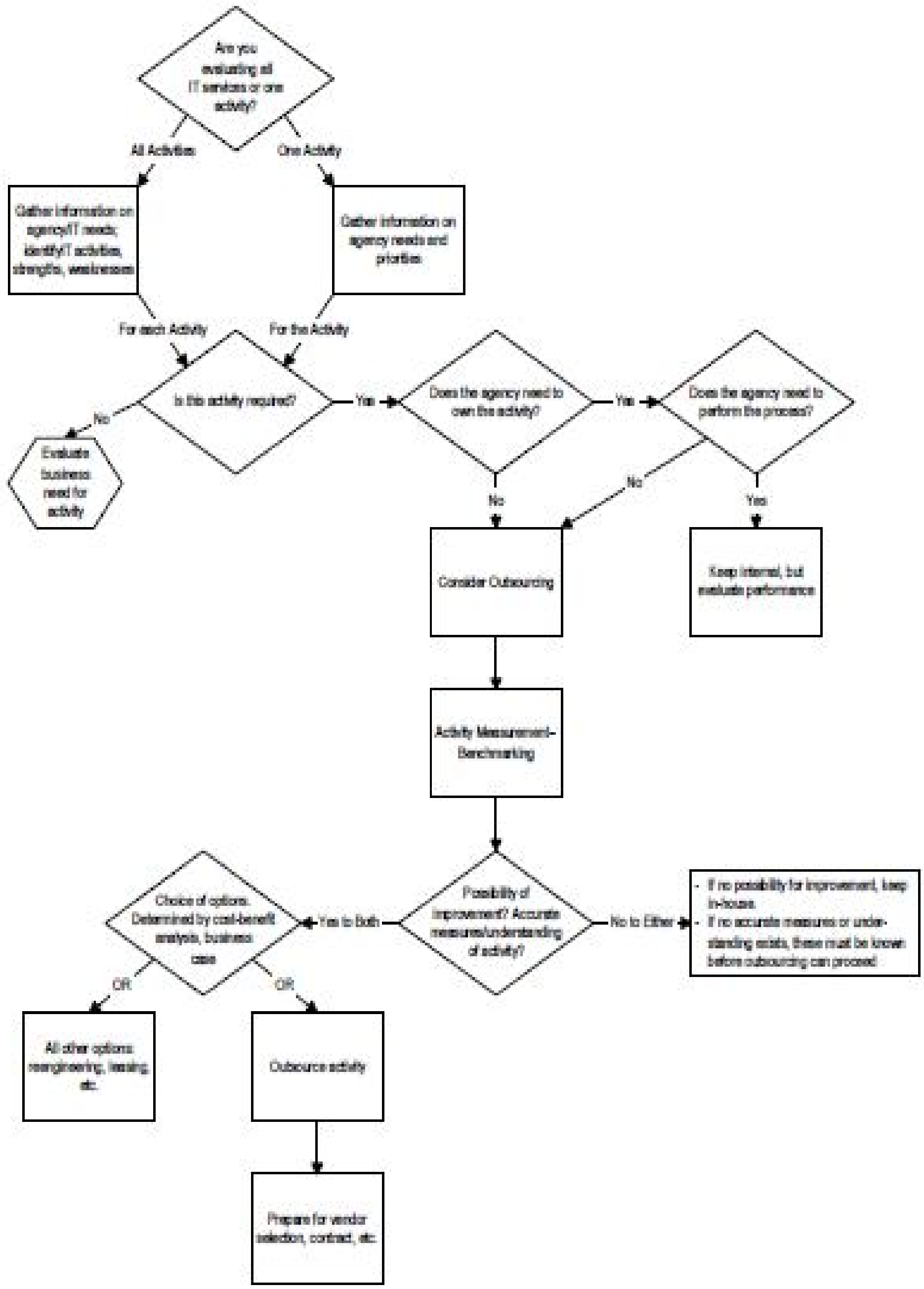
- Address the strategic interests and goals of an organization. The organization strategic plan, the information resources strategic plan, and the organization performance measures should all be considered in the process of identifying organization needs and directions. The goals of the organization serve as a basis for determining project success. Core competencies, by and large, should not be outsourced. Depending upon organization resources and weaknesses, however, this may change if the organization determines that resources or knowledge from an external source would supplement the organization's available resources.

• Specify the service to be provided and identify the reasons to consider outsourcing. Considerations include cost savings, enhanced service levels, the transition to a different technology platform, the need for increased technical knowledge and skills not present in the organization, or insufficient staff resources to accomplish specific tasks. These rationales should be recognized as costs or benefits according to the organization's decisions about its business needs.

• Pace the decision process in a neutral framework. While outsourcing can be encouraged for non-IT reasons, the justification regarding the use of internal or external resources should be framed solely in business case terms. A sound analysis of options will be a strong support for IT management recommendations and decisions (Bales, et al., June 1998)**.**

Decision Flowchart to identify whether or not outsourcing is appropriate, Figure 1 illustrates the Analysis process that helps to ascertain if outsourcing is an option, or if In-house staff represents the best use of organization resources.

Figure 1. Outsourcing Decision Flowchart



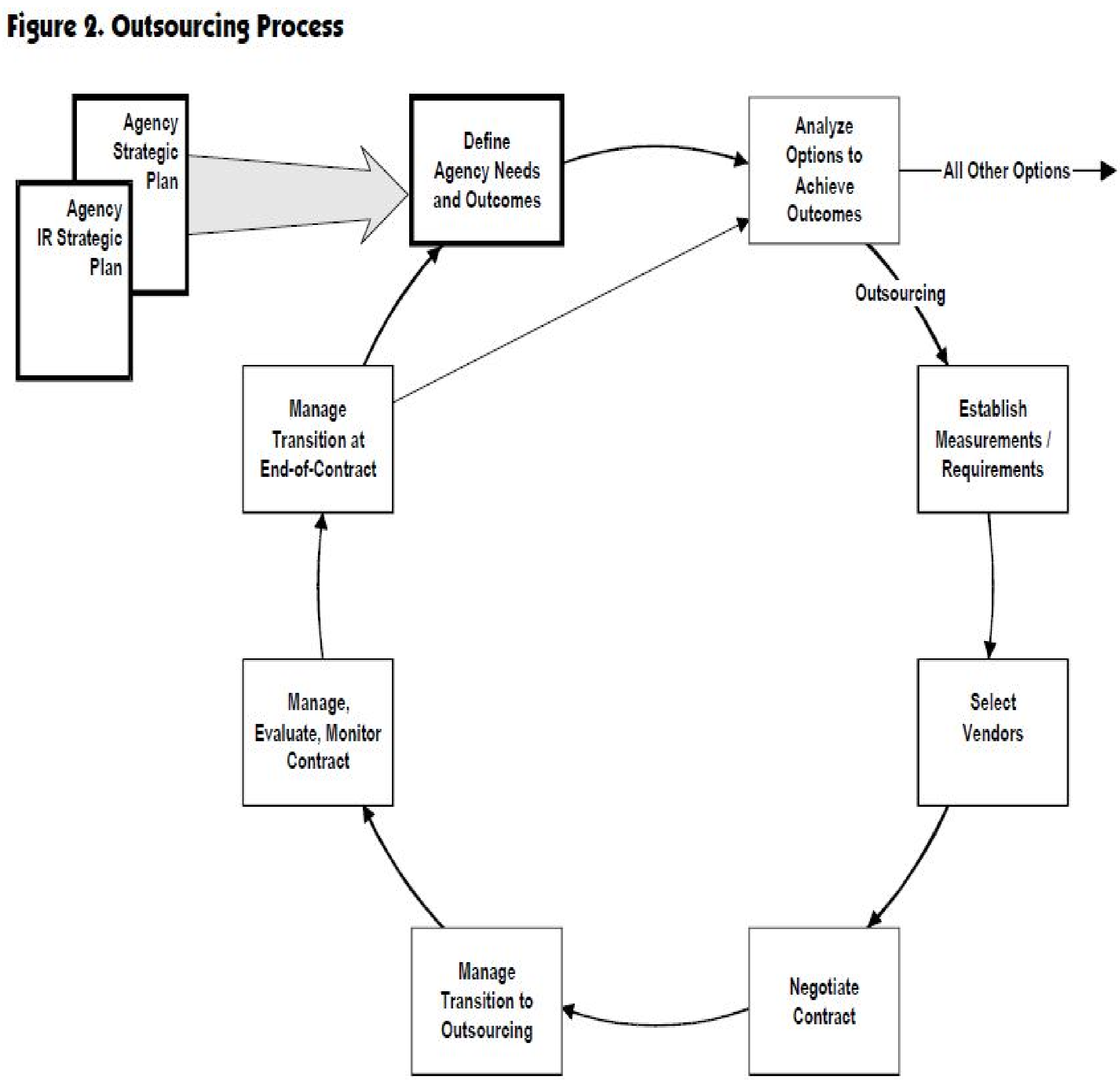


Figure 2 outsourcing process

Figure 2 illustrates the steps in the outsourcing process.

2.2.5 The trusted partners:

To succeed an outsourcing project, the organization must ensure and trust the partner and confident that the partner can handle the software portion of it products professionally. That trust must also work both ways. The outsourcing partner will need to provide clear product direction, a set of expectations and desired outcomes.

1- They won't be able to develop the product the organization need when unable to provide them all with the details. If the organizations feel the need to hide specifications or technologies even after signing a non-disclosure agreement, the partners won't have the information they need to deliver the best application possible. Look for concrete **"trust factors"** when evaluating an outsourcing partner (http://www.macadamian.com/, 2007).

2- Competence: The organization must be able to trust the partner abilities. And never think of all the project and contract possibilities that could arise during development. When unexpected events occur, the organization need to be confident that the partner will "do the right thing" when required (http://www.macadamian.com/, 2007).

3- Experience: One way to assess the competence of a prospective outsourcing partner is to ask for references, and then check them out. Has the partner worked with reputable companies? Do they have experience relevant to the organization product or industry? Will they let the organization speak to past clients? Getting answers to these questions can build the organization confidence and help it assess what happened when others put their trust in the prospective partner (http://www.macadamian.com/, 2007).

4- Openness: It's important to be aware of the policies and processes of an outsourcing partner from the get-go. A good outsourcing partner will make their processes open to you and will give you a transparent view of how they work, how contracts are structured, how they handle problems, and how they plan to communicate with you. And you should be able to collaborate easily and frequently with your partner. If you feel that a prospective partner isn't being up front with you about its processes, your "trust flags" should go up(http://www.macadamian.com/, 2007).

While trust can truly only be built and demonstrated through interactions over a period of time, if the organization ask some of these questions, it should be able to get a sense of the trustworthiness of the company in question. The organization should look for partners and project managers who listen, ask good questions, and demonstrate an understanding of the organization needs right out of the gate (http://www.macadamian.com/, 2007).

Lack of trust can derail a project, If the organization have doubts about trusting outsource partner, maybe you've got the wrong partner or perhaps developing in house is a better option for you (http://www.macadamian.com/, 2007).

2.2.6 The important the cost or the benefits:

Outsourcing is more importance on the business benefits than the quantities cost savings; successful outsourcing companies like to say customer come for the price and stay for the quality (Meyer & Zurich, January 2006).

The improvement of service quality is identified to be another important benefit of International outsourcing. Contemporary product standards can be put in the outsourcing contract in a more precise way. The managers of the outsourcer companies could search for the best quality vendors that show outstanding performance indicators, have higher flexibility in their business processes. For example, when using a service provider whose focus is service, outsourcers see substantial improvement in flexibility, response, and performance, especially when a competition between potential vendors occurs (Matilda Alexandrova, 2009).

2.2.7 The security of outsourcing

In the early days of hardware and software development, there was little need for Outsourcing. Most projects were in-house, and highly specialized. With timely progress, platforms became more common and companies began focusing more on productivity software. This encouraged the requirements for software development to change. As hardware began to improve, processing capability increased and the level and quality of software it could support also grew. As such competition between software companies with similar products became quite fierce (Deeb, October 2010).

The outsourcing can be handled in one of two ways, both typically with different cost structures. Some companies prefer to outsource in a more minimal manner by bringing in outside contractual help locally into the organization. This is generally regarded as a more favorable choice when a company needs to add a specialization into an already existing in-house software development team. With security concerns increasingly

Mounting in today's web-enabled society, this method can also be more idealistic. For companies handling government contracts, personal information, or development that's competitive in nature, this becomes a serious consideration when weighing outsourcing options (Deeb, October 2010).

Security has become a significant issue of outsourcing in recent years, particularly with the Government that military and economic information of government the majority of the information maintained by these projects is top-secret in nature, While much of the government's software development remains in-house, growing number of its projects have been outsourced.

The government requires a consultancy vendor to meet radically new strict security guidelines. These policies   the costs associated with the contracts, but ultimately still costs less than hiring government workers In many cases, the costs associated with improving security and supporting a secured pipeline to and from the company often outweigh the cost benefits of outsourcing in the first place (Deeb, October 2010).