**SYSTEM STUDY**

1. Identification of The Need
2. Preliminary Investigation
3. Feasibility Study
4. Technical Feasibility
5. Economic Feasibility
6. Operational Feasibility
7. Behavioral Feasibility
8. Proposed System Functionality

System Analysis refers into the process of examining a situation with the intent of improving it through better procedures and methods. System Analysis is the process of planning a new System to either replace or complement an existing system. But before any planning is done the old system must be thoroughly understood and the requirements determined. System Analysis, is therefore, the process of gathering and interpreting facts, diagnosing problems and using the information to re-comment improvements in the System. Or in other words, System Analysis means a detailed explanation or description. Before computerized a system under consideration, it has to be analyzed. We need to study how it functions currently, what are the problems, and what are the requirements that the proposed system should meet.

System Analysis is conducted with the following objectives in mind:

1. Identify the customer’s need.

2. Evaluate the system concept for feasibility.

3. Perform economic and technical analysis.

4. Allocate functions to hardware, software people, database and other system elements.

5. Establish cost and schedule constraints.

6. Create a system definition that forms the foundation for all the subsequent engineering work.

**Identification of Customer’s Need**

Before proceeding further, it becomes very necessary to accumulate the valid and convincing requirements of the project and communicate the very same to various stakeholders of the project. This step is initiation of System Analysis. An overview of the client’s requirement has been done. The basic need of the client to opt for such kind of project is analyzed. As per current marketing scenario, an entire system was required to track day-to-day transactions. Client was following a Manual Process, which is not at all compatible with its current working conditions. It was not only time consuming, but also lacks accuracy. Security point of view the manual system was failed to hide the information from any unauthenticated staff or any outside person. Therefore, there was an urgent requirement of such Computerized System which can fulfill all of its current as well as future requirements. Furthermore, data handling was also posing a serious problem for them.

**Preliminary Investigation**

The client set is just a worker, who is regularly indulged in manual maintenance transactions, keeping regular records, maintaining the records of fine details of members. Following manual registers are maintained:

**Member’s Details Register:**

This Register is maintained in lieu to maintain the records of the various members of the gymming center. The document contains relevant information about the various members such as members’ id, Name, Address, Telephone number.

**Employee’s Details Register:**

This Register is maintained in lieu to maintain the records of the various employees of the gymming center. The document contains relevant information about the various employees such as employee’s id, Name, Address, Telephone number.

**Inventory Register:**

The register is used to record the details of the products (supplements, beverages and apparels supplied and required) such as its ID, Description, Quantity, Price, service date, time period for which it is under maintenance etc.

**Feasibility Study**

Depending on the results of the initial investigation, the survey is expanded to a more detailed feasibility study. Feasibility study is a test of system proposal according to its workability, impact on the organization, ability to meet user needs, and effective use of resources. The objective of the feasibility study is not to solve the problem but to acquire a sense of its scope. During the study, the problem definition is crystallized and aspects of the problem to be included in the system are determined. Consequently, costs and benefits are described with greater accuracy at this stage. It consists of the following:

1. **Statement of the problem:**

A carefully worded statement of the problem that led to analysis.

1. **Summary of finding and recommendations:**

A list of the major findings and recommendations of the study. It is ideal for the user who requires quick access to the results of the analysis of the system under study. Conclusion are stated, followed by a list of the recommendation and a justification for them.

1. **Details of findings:**

An outline of the methods and procedures under-taken by the existing system, followed by coverage of the objectives and procedures of the candidate system. Included are also discussions of output reports, file structures, and costs and benefits of the candidate system.

1. **Recommendations and conclusions:**

Specific recommendations regarding the candidate system, including personnel assignments, costs, project schedules, and target dates.

**Technical Feasibility**

Technical feasibility centers around the existing computer system (Hardware and Software etc) and to what extend it support the proposed addition. For example, if the current computer is operating at 80 percent capacity - an arbitrary ceiling - then running another application could overload the system or require additional Hardware. This involves financial considerations to accommodate technical enhancements. If the budgets is a serious constraint, then the project is judged not feasible. In this project, all the necessary cautions have been taken care to make it technically feasible. Using a key the display of text/object is very fast. Also, the tools, operating system and programming language used in this localization process is compatible with the existing one.

**Economic Feasibility**

Economic analysis is the most frequently used method for evaluating the effectiveness of the candidate system. More commonly known as cost/benefit analysis, the procedure is to be determining the benefits and savings that are expected from a candidate and compare them with costs. If benefits outweigh costs, then the decision is made to design and implement the system.

A systems financial benefit must exceed the cost of developing that system. i.e. a new system being developed should be a good investment for the organization. Economic feasibility considers the following:

* The cost to conduct a full system investigation.
* The cost of hardware and software for the class of application.
* The benefits in the form of reduced cost or fewer costly errors.
* The cost if nothing changes (i.e. The proposed system is not developed).

The proposed system is economically feasible because

* The system requires very less time factors.
* The system will provide fast and efficient automated environment instead of slow and error prone manual system, thus reducing both time and man power spent in running the system.
* The system will have GUI interface and very less user training is required to learn it.
* The system will provide service to view various information if required for some decision making

**Operational Feasibility**

This Application is very easy to operate as it is made user friendly with the help of very effective GUI tools. Main consideration is user’s easy access to all the functionality of the Application. Another main consideration is here is that whether user organization is trained enough to use the newer application. Here every functionality is as per previous operational strategy which is not expected to be cumbersome to the potential clients.

**Behavioral Feasibility**

People are inherently resistant to change, and computers have been known to facilitate change. An estimate should be made of how strong a reaction the user staff is likely to have toward the development of a computerized system. Therefore, it is understandable that the introduction of a candidate system requires special efforts to educate and train the staff. The software that is being developed is user friendly and easy to learn. In this way, the developed software is truly efficient and can work on any circumstances, tradition, locales. Behavioral study strives on ensuring that the equilibrium of the organization and status quo in the organization are nor disturbed and changes are readily accepted by the users.

**Proposed System Functionality**

The proposed system will be designed to support the following features: -

• The proposed system has a user friendly Interface for porting of data to server.

• The proposed system provides the facility to pull the data from the server using a key (such as id) and get the desired report.

• The proposed system provides the no replication of data