**Project Planning:**

While preparing our new system, we weill apply the SDLC methodology to save time and money.

**What is SDLC?**

The system development life cycle (SDLC) is the process of determining how an informaiton system (IS) can support business needs, designing the system, building it, and delivering it to users.

**1- Planning Stage**

The planning phase in our system will proceed as follows:

Firstly, the project manager will set specific goals for the system, then he/she should form teams and make assignments to achieve all these goals. At this stage every detail important and critical for the functioning of the System must be defined.

A board of directors will be created in our current system. This board will draw up a roadmap by taking advantage of our old company experiance. Since we want to be the best company in oil analysis, we have to minimize the errors, therefore we must anticipate and prevent many errors that may occur in the future. We should use technological advantage and we must constantly make long-lasting plans and make decisions that minimize costs and time loss. The planning phase covers a period of a whole year.

**2- Analysis Stage**

Oil experts selected by the management will search for up-to-date data, at the same time, they will constantly examine the oil data uploaded to our system. They will also inform the management by preparing a detailed report that meets the needs and targets of our sytem from the data they obtain. The management will use this report when making a future decision about the company. We want our system to work faster and stable, so our experts shoud prepare their reports carefully. These experts should also identify improvement opportunities, and develop new concepts for the new system.

**3- Design**

Design is one of the most important factors for us. We have to be careful especially when designing the user interface. We will create a confusing yet elegant interface in the design of our website. Our customers shouldn’t get lost in the interface and shoud be able to find everything they’re looking for here. For all this to happen we must carefully select our web designers.

**4- Implementation**

In this phase, everything will be under the control of our developers here. Customers, officials administrators, developpers, etc. Users must have separate login permissions to the system. Since the proper functioning and safety of the system is very important to us, we must have the system audited by experts constantly. Also petroleum experts should do their analysis as carefully as before, then, these analyzes should be carefully loaded into the system and delivered to the right customer.

In the old system, it could take weeks for us to receive oil analysis requests from our customers and send them the analysis results. In the new system, the estimated period will be a maximum of 1 week.

**5. Maintenance and support phase:**

This phase comes right after the implementation phase. It is an important stage in terms of continuous development and support of the system even while it is running. The system is kept up-to-date by eliminating the deficiencies seen in the working system and making updates.