**5. Exercise #5: SDLC & Project Management**

Consider you have a small software agency that it's main business is transforming ideas into digital identities. Please come with a solution on how you would do the project discovery phase (gather business knowledge from the client) and translate that to your employees.

Considering the SDLC cycle and the information you have learned in the last presentation, please assign roles and tasks to your team of 5 people. (consider you have 5 employees, you may assign them any roles you desire)

**Team: 5 Employees** 1 Business Analyst

1 System Analyst

1 Infrastructure Analyst

1 Change Management Analyst

1 Project Manager

**Roles and Tasks:**

**Business Analyst:**

-assists in planning and design of the Information System

- is very active in analysing phase

- identifying the business value that the system will create

- developing ideas and suggestions for how the business processes can be improved

- designing the new process and policies in conjunctions with the system analyst

- represent the interests of the client

-make sure that the current business processes and the needs for the new system is well understood before moving into design phase

**System Anlayst:**

-develops ideas and suggestions for how information technology can improve business processes

-dessigns the new business processes

-work with business analyst

-design the new information system

-ensures that all information system standards are mantained

-experience in analysis, design, programming and some areas of business and economics.

**Infrastructure Analyst:**

-focuses on the technical issues: how the system will interact with the organization’s technical infrastructure

-ensuring that the new IS conforms the organizational standards

-identifying infrastructure changes needed to support the system

-experience in networking, DBA, hardware,software.

-represent the interests of the company

**Project Manager:**

-ensuring that the project is completed on time and within budget, and that the system meets the requirements desired by the project sponsor.

-managing the team members

-developing the project plan

-assigning resources

-point of contact with people outside the team

**Solution-gathering requirements process:**

This process consists in three main objectives: **understanding the actual system** (as-is system), **identifying improvements** and **developing the new system** (to-be system).

Given the complexity of the process and the importance of properly identifying the functional and non-functional requirements of the new system that is intended to be developed, it is likely that several methods will be needed to obtain the necessary information.

-First of all, **interviews** with the people involved in the project can be made. All those key people who are an important resource should be considered and its value is very important (stakeholders): project sponsor, managers from different levels of the organization (who manage the processes), employees, staff members (who perform the processes) or customers/suppliers, key business users. The analyst need to determine who in the organization can best provide important information about requirements.

-Also, if those affected by the new system are distributed in different geographic locations, an **electronic questionnaire** can be used with well formulated questions that help analysts obtain information about the current system and about possible improvements.

-It can also be used to **study the documentation**, if any, to understand the current system and structure of the organization, policies and procedures: paper reports, policy manuals, organiation chart, etc.

-It is also possible to practice the effective **observation** of the processes. Observing gives the analyst the opportunity to validate the reality of the situation as opposed to simply describing interviews

-In order to identify the necessary improvements and changes, as well as how the new system will be shown, **joint teams (working groups)** can be formed with the key persons involved in the project.

Transforming the system requirements, or its graphical representation for a better understanding, can be achieved through **user stoires**, **user scenarios**, **use-case diagrams**, **activity diagrams**.