**DANIEL NGEMI**

**21/07340**

**CAT 1 AND 2**

**ICT PROJECT MANAGEMENT**

*1. Differentiation;*

i. Software Program, vs. Quality Plan;

A Software Program refers to a set of instructions or code created by developers to carry out tasks or solve problems. It focuses on the aspects of what the software's meant to achieve such as algorithms, interfaces for users and data handling.

On the contrary a Quality Plan is a written document or series of documents that detail the standards, goals and procedures necessary to ensure that the software meets quality criteria. It includes testing methodologies, quality assurance practices and acceptance criteria in order to guarantee that the software is dependable meets user needs and aligns with standards.

ii. Fast Tracking vs. Crashing;

Fast Tracking is a method used in project management to shorten project durations by running tasks that were originally planned to be done one after another. While it can save time it raises the risk of errors and problems since tasks may overlap without feedback from preceding activities.

Crashing involves adding resources to project tasks in order to expedite their completion. This usually leads to project costs due, to increased resource usage. Is employed when time is crucial and meeting project deadlines are imperative.

*2. The start of a software project is crucial as it lays the foundation for the endeavor. Some key tasks, during this phase include;*

1. Checking Feasibility; Assessing if the project is doable in terms of technology, time, budget and resources.

2. Defining Scope; Setting boundaries and goals to understand what needs to be accomplished.

3. Identifying Stakeholders; Recognizing all parties involved or impacted by the project to comprehend their expectations and needs.

4. Developing a Project Charter; Creating a document that authorizes the project detailing its objectives, scope and stakeholders.

5. Forming the Project Team; Bringing together a team with skills and roles to execute the project tasks.

*3. Success Metrics, for Software Projects;*

Timely Completion; Finishing the project within the timeframe.

Budget Compliance; Completing the project without exceeding the allocated funds.

Quality and Performance Levels; Meeting or surpassing quality standards and performance targets.

Stakeholder Contentment; Meeting stakeholders. Requirements, including clients, users and team members.

*4. Challenges Encountered When Implementing an IT Project, in Baringo County;*

1. Infrastructure Limitations; There may be a lack of communication infrastructure in the area.

2. Skill Gaps; Local expertise is limited, necessitating training and capacity building efforts.

3. Language Barriers; It is important to adapt technology and training materials to suit the context.

4. Logistical Challenges; Managing resources, personnel and equipment in areas can pose difficulties.

5. Budget Constraints; Financial limitations could impact the projects scale and quality.

*5. Reasons for Shortening Project Durations;*

1. Market Demands; The need to bring products to market quickly due to pressures or market requirements.

2. Cost Efficiency; Shorter projects can result in reduced labor expenses.

3. Resource Limitations; Constraints on resources may require project timelines.

4. Stakeholder Expectations; Investors, clients or senior management may expect returns on their investments.

5. Technological Progression; Rapid advancements in technology project cycles to remain up, to date.

*6. Distinguishing Between Requirements Review and Rapid Participatory Approach;*

Requirements Review is a process where project requirements are assessed by stakeholders to ensure they are clear feasible and comprehensive. It follows an approach. Is typically carried out in stages throughout the project lifecycle. On the hand the Rapid Participatory Approach involves involvement of all project stakeholders, in the planning and development process. This method is more flexible and inclusive focusing on iterations and feedback to enhance requirements and solutions in time.

*7. Impact of Scope, Time and Cost on Project Management;*

The interplay among scope, time and cost forms what is commonly known as the project management triangle. Any changes made to one constraint will have repercussions on the others. For instance, expanding the project scope usually leads to increased time requirements and higher costs. Conversely reducing the timeline might escalate costs due to resource needs or necessitate trimming down the scope to meet deadlines. Effective project management entails striking a balance, between these constraints to accomplish project goals while upholding quality standards.