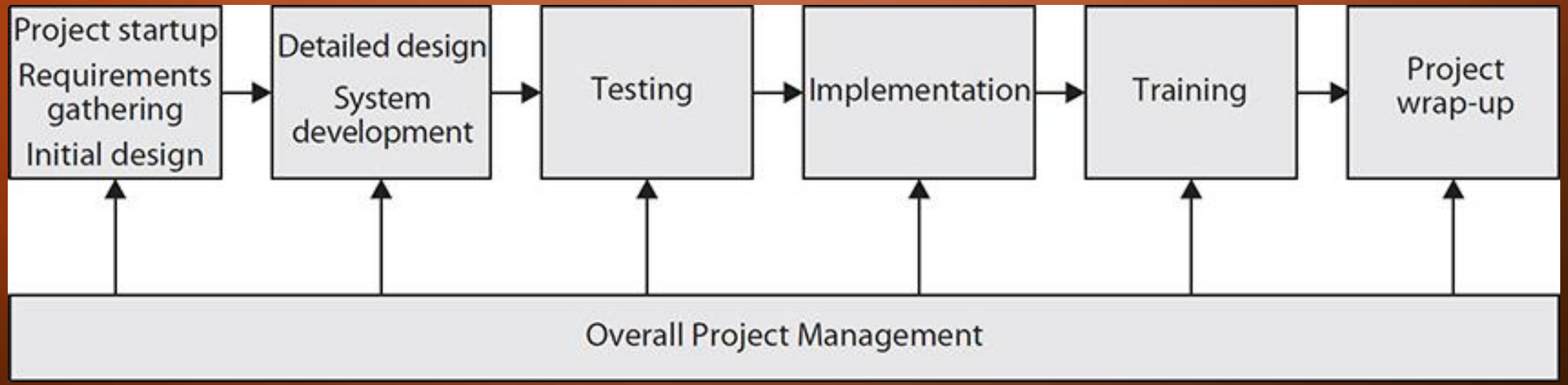
MODULE 6D: AUDITING PROJECTS

BACKGROUND

- Proper project management techniques are essential elements in the success of any company endeavor. These techniques help to ensure that pertinent requirements are gathered and tested, project resources are used efficiently, and all elements of the system are tested properly. Without such techniques, it is likely that the system being developed won't work or won't perform as expected by key stakeholders. This leads to rework and extra costs to the company (and can sometimes lead to people losing their jobs).
- Good project management does not ensure success, but it improves the chances of success.

SEVEN MAJOR PARTS OF A PROJECT AUDIT



PROJECT AUDITING ESSENTIALS

- **High-Level Goals of a Project Audit**
  - Project audits are performed to identify risks to the success of company projects. This chapter deals specifically with IT projects (such as software development, infrastructure deployment, and business application implementation), but the concepts could apply to any sort of project.

HIGH-LEVEL GOALS OF A PROJECT AUDIT

- Ensure that all appropriate stakeholders are involved in the development of requirements and testing of the system and that frequent and effective communication occurs with all stakeholders. Failure to gather customer requirements and to obtain ongoing customer involvement and buy-in lead to software, systems, and processes being developed or procured that do not align with business needs.
- Ensure that project issues, budgets, milestones, and so on are recorded, baselined, and tracked. Without these mechanisms, projects are more likely to go over budget and over schedule with unresolved issues.
- Ensure that effective testing encompasses all system requirements. Inadequate testing leads to unstable, low-quality systems that fail to meet customer requirements.
- Ensure that appropriate documentation is developed and maintained. Incomplete or out-of-date technical and user documentation could increase cost and cycle time to maintain the software, increase support and training costs, and limit the system's usefulness to the customer.
- Ensure that adequate training is provided to end users upon implementation. Inadequate training leads to systems, processes, and software that go unused or that are used improperly.

BASIC APPROACHES TO PROJECT AUDITING

- Short Term Approach - auditors choose a point in the project to perform their audit, and then they review the project as of that point in time and make a judgment based on what has happened and what is planned.
  - Difficult for the auditors to audit what's already happened, unless you have a DeLorean
  - Hard to evaluate phases that haven't begun yet too, unless you have a DeLorean
- Long Term Approach - Each audit evaluates the processes within the current phase while simultaneously assessing and providing input on plans for future phases. This is an effective means of auditing projects and leads to a more collaborative approach with audit customers
  - Audits over a long period are difficult to schedule

SYSTEM DESIGN AND DEVELOPMENT

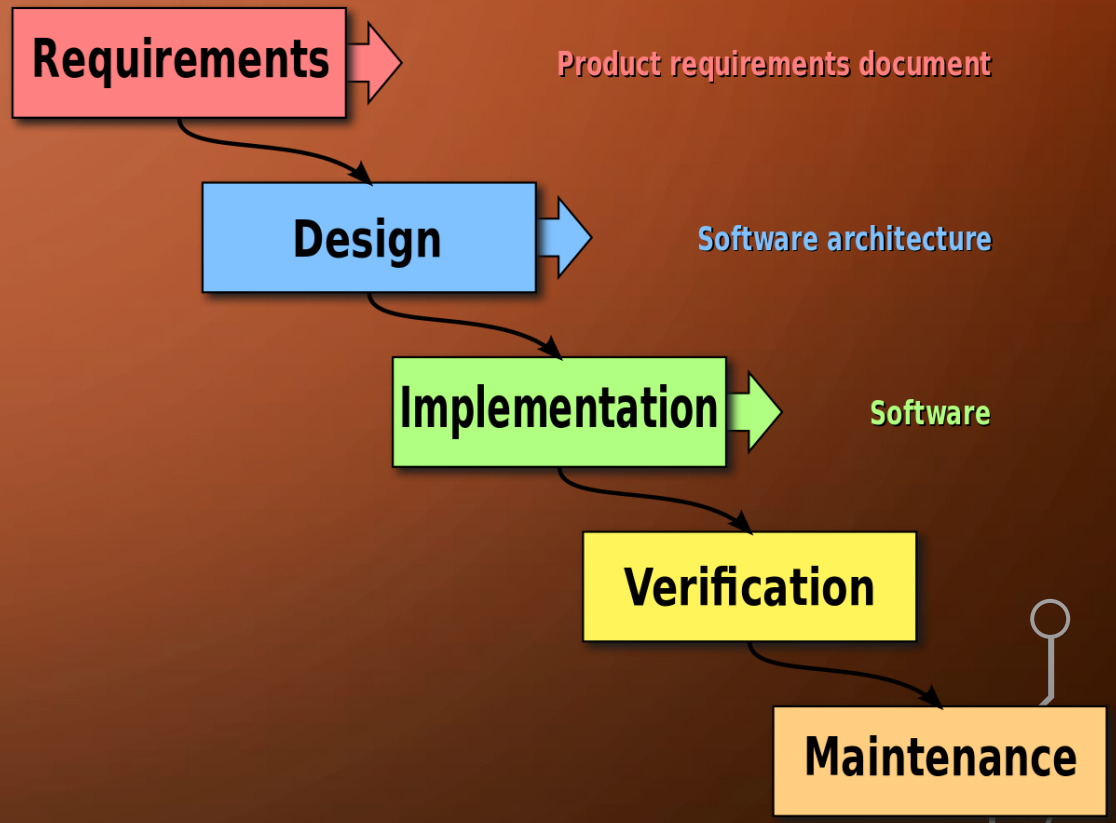
- If you're going to be auditing a software development project, it's important to understand what software development methodology is being used by the project team, as that will inform how you go about conducting your audit of that project.

- Two Basic Models – Waterfall, Agile

https://bigwater.consulting/2019/04/08/software-development-life-cycle-sdlc/

WATERFALL METHOD

- This is the more “traditional” of the two methodologies, where each phase of the software development life cycle (e.g., requirements gathering, design, construction, testing, implementation) is performed in sequence. For example, if the project is following a pure waterfall methodology, all requirements will be gathered before moving to the design phase, and once the design phase has begun, the requirements gathering phase will be closed out, never to be reopened.
- This methodology works well in cases where there is a clear picture from the beginning of what the final deliverable should look like. For example, it tends to be appropriate for the implementation of large enterprise financial systems. But it is generally not the methodology of choice when speed is the key to success.



AGILE METHOD

- The agile methodology was essentially created because of perceived disadvantages with the waterfall methodology. While the waterfall methodology works well in some scenarios, it has a tendency to be slow and rigid. In contrast, the agile methodology is built to be fast and flexible. It follows an iterative process, where each phase of the life cycle is executed multiple times in a series of “sprints.” Small capabilities will be implemented quickly, and then the project team will start to work on the next small set of changes.