

The System/Software Development Life Cycle (SDLC)

By Eddie R. Williams

The SDLC is the foundation of all good, effective and efficient, development methodologies¹

What is the SDLC?

The SDLC is a system and software development life cycle approach for the development of systems, software, applications, and can also be used or modified for use in delivering infrastructure projects and programs. The SDLC is a model for the life cycle development and management of a system, product, software or application. SDLC is an acronym that is defined as the **system development life cycle**, although the software development life cycle can be defined within or outside of the System Development Life Cycle. That is sometimes why SDLC is identified and defined also as a software/application development life cycle (SDLC/ALM).

For the SDLC, an appropriate development methodology is determined/selected to be used for the project or program. The methodology may be traditional or Agile, or a combination of both.²

Where does the SDLC begin?

The System/Software Development Life Cycle starts with the analysis and definition phases/processes, where the function of the system, product, software or application is determined. In determining a solution, the SDLC is determined to be the approach for the solution and an appropriate development methodology is selected to be used for the project or program.

How is the SDLC Used?

It sets the stage for a product/system's implementation (the solution) through the development life cycle whether it is performed iteratively, sequentially or in parallel.

¹ For more information on this concept, visit <http://itprofessionalfacilitator.com/itpro/configuration-management-plan/systemsoftware-development-life-cycle-sdlc-plan/>

² Agile vs. Traditional: <http://itprofessionalfacilitator.com/itpro/project-program-management-articles/it-project-management-development-methodologies-agile-vs-traditional/>

Its Value

- It contains all the necessary (and essential) high level processes for the development of a system or product
- A proven and consistent best practice, and successfully known, development process
- Provides proven results that can bring to a company the benefits and value required and expected

Recommendation

Use the SDLC as a guideline for the selection of an appropriate Agile or Traditional methodology and to ensure that all required development processes and activities are identified.

About the Author



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Eddie R. Williams has over 25 years of experience as a program and project manager for system/software engineering and Information Technology (IT) development and management in aerospace, DOD, and commercial IT industries. He has been a Project Manager, Sr. PM, Program Manager, and Sr. Program Manager. Mr. Williams has been a certified Project Management Professional (PMP) through the Project Management Institute since 1999. Before becoming a certified project and program manager, he held positions such as Systems and Procedures Analyst (programming and creating system/software specifications), Configuration Management Specialist and Manager, Software Product/Quality Assurance Engineer and Manager, Division Administrator/Manager (development methodologies, management and control).

He is also a coach/mentor and educator, has been a speaker at numerous conferences, and is the author of: *Software/Firmware Configuration Management (Within the System Development Process)*, *Management Control and Quality*. Eddie can be contacted at <http://www.itprofessionalfacilitator.com>.

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