

# Software Development

## Processes(Methods)

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### 1.Introduction

The software development methodology (also known as SDM) framework didn't emerge until the 1960s. According to Elliott (2004) the systems development life cycle (SDLC) can be considered to be the oldest formalized methodology framework for building information systems. The main idea of the SDLC has been "to pursue the development of information systems in a very deliberate, structured and methodical way, requiring each stage of the life cycle—from inception of the idea to delivery of the final system—to be carried out rigidly and sequentially"within the context of the framework being applied. The main target of this methodology framework in the 1960s was "to develop large scale functional business systems in an age of large scale business conglomerates. Information systems activities revolved around heavy data processing and number crunching routines"

### Overview

The three basic approaches applied to software development methodology frameworks. A variety of such frameworks have evolved over the years, each with its own recognized strengths and weaknesses. One software development methodology framework is not necessarily suitable for use by all projects. Each of the available methodology frameworks are best

suited to specific kinds of projects, based on various technical, organizational, project and team considerations.

Software development organizations implement process methodologies to ease the process of development. Sometimes, contractors may require methodologies employed, an example is the U.S. defense industry, which requires a rating based on process models to obtain contracts.

The international standard for describing the method of selecting, implementing and monitoring the life cycle for software is ISO/IEC 12207.

A decades-long goal has been to find repeatable, predictable processes that improve productivity and quality. Some try to systematize or formalize the seemingly unruly task of designing software. Others apply project management techniques to designing software. Without effective project management, software projects can easily be delivered late or over budget. With large numbers of software projects not meeting their expectations in terms of functionality, cost, or delivery schedule,[citation needed] it is effective project management that appears to be lacking.

Organizations may create a Software Engineering Process Group (SEPG), which is the focal point for process improvement. Composed

of line practitioners who have varied skills, the group is at the center of the collaborative effort of everyone in the organization who is involved with software engineering process improvement.

A particular development team may also agree to programming environment details, such as which integrated development environment is used, and one or more dominant programming paradigms, programming style rules, or choice of specific

software libraries or software frameworks. These details are generally not dictated by the choice of model or general methodology.

### 3.Summary

Methodologies, processes, and frameworks range from specific proscriptive steps that can be used directly by an organization in day-to-day work, to flexible frameworks that an organization uses to generate a custom set of steps tailored to the needs of a specific project or group. In some cases a "sponsor" or "maintenance" organization distributes an official set of documents that describe the process