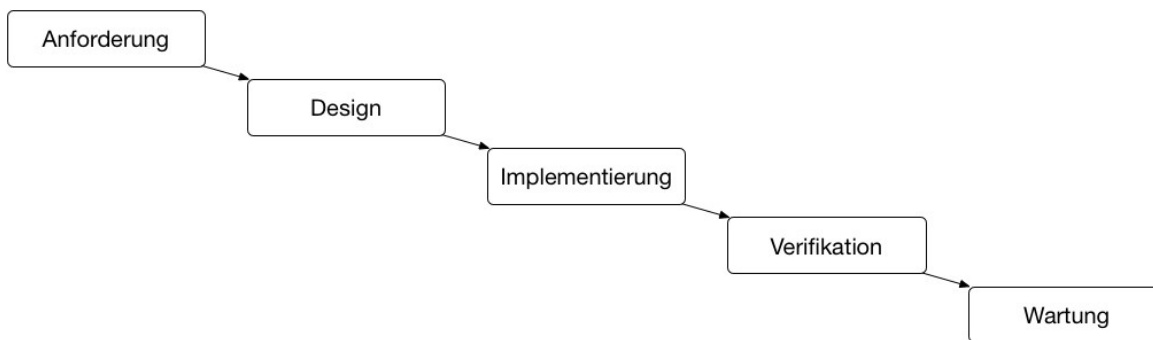


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<https://www.heise.de/developer/artikel/Wasserfall-Modell-LOL-4878614.html>

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Rathaus Schleswig

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Situation Display Console @ Computer History Museum
Photo: Steve Jurvetson

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OA-1008 Situation Display (SD) with Light Gun
Photo: Joi Ito

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Maintenance Console
Photo: Don DeBold

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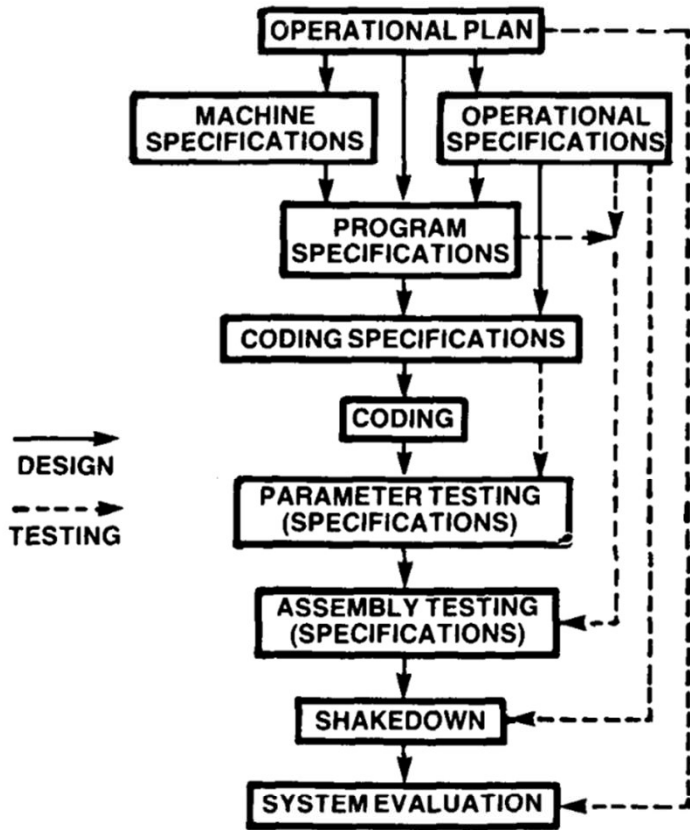


Figure 4. Program production. Production of a large-program system proceeds from a general operational plan through system evaluation; for example, assembly testing verifies operational and program specifications.

Production of Large Computer Programs Herbert D. Benington

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MANAGING THE DEVELOPMENT OF LARGE SOFTWARE SYSTEMS

Dr. Winston W. Royce

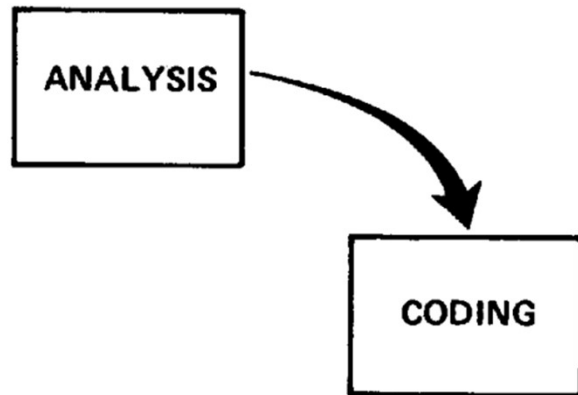


Figure 1. Implementation steps to deliver a small computer program for internal operations.

Winston W. Royce: Managing the Development of Large Software Systems

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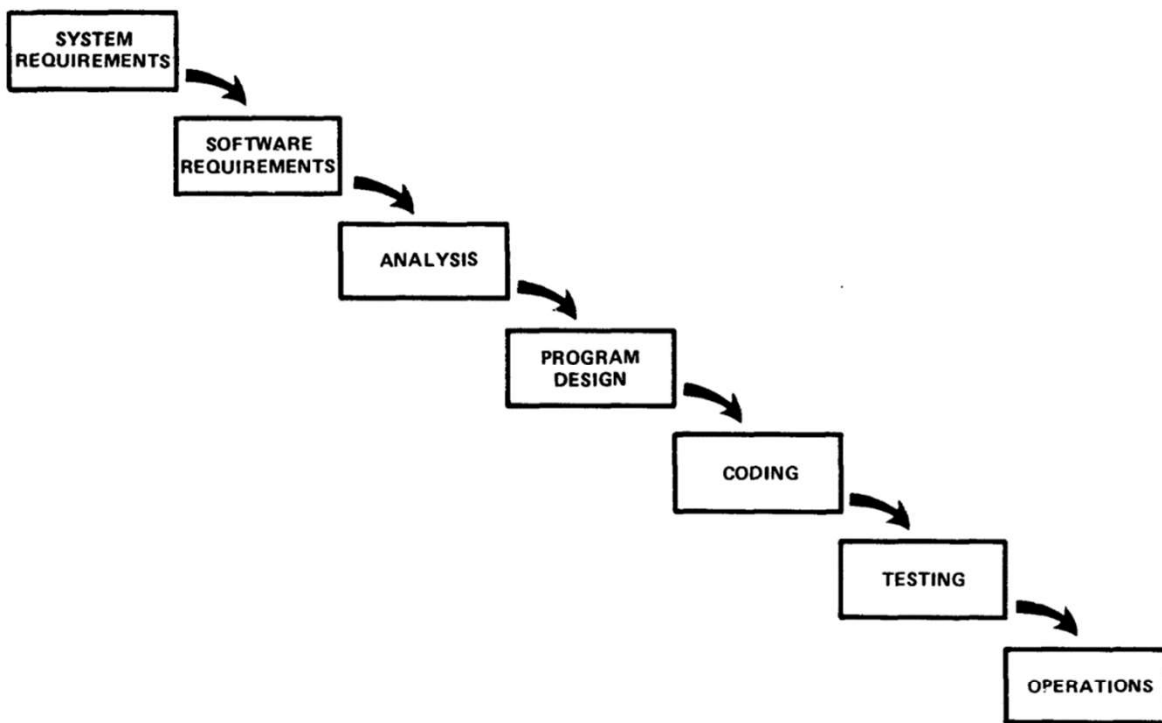


Figure 2. Implementation steps to develop a large computer program for delivery to a customer.

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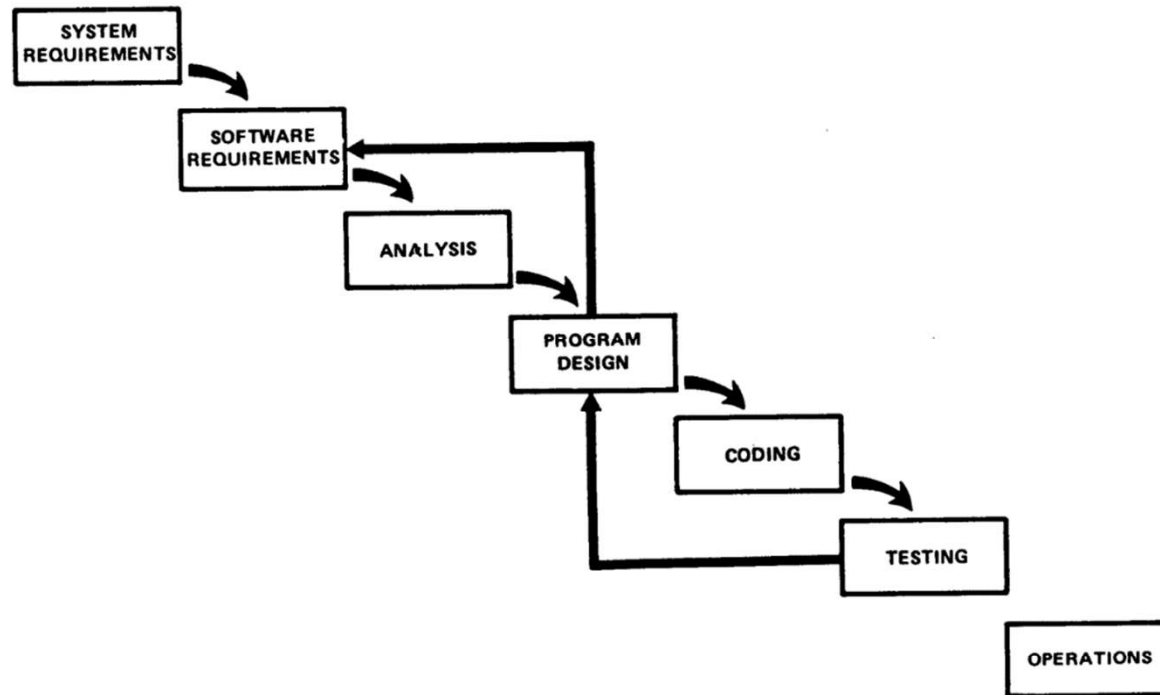


Figure 4. Unfortunately, for the process illustrated, the design iterations are never confined to the successive steps.

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- Step 1: Program Design Comes First (Architektur-Phase)
- Step 2: Document the Design
- Step 3: Do it Twice (nächste Folie)
- Step 4: Plan, Control and Monitor Testing
- Step 5: Involve the Customer

Winston W. Royce: Managing the Development of Large Software Systems

Step 3: Do It Twice

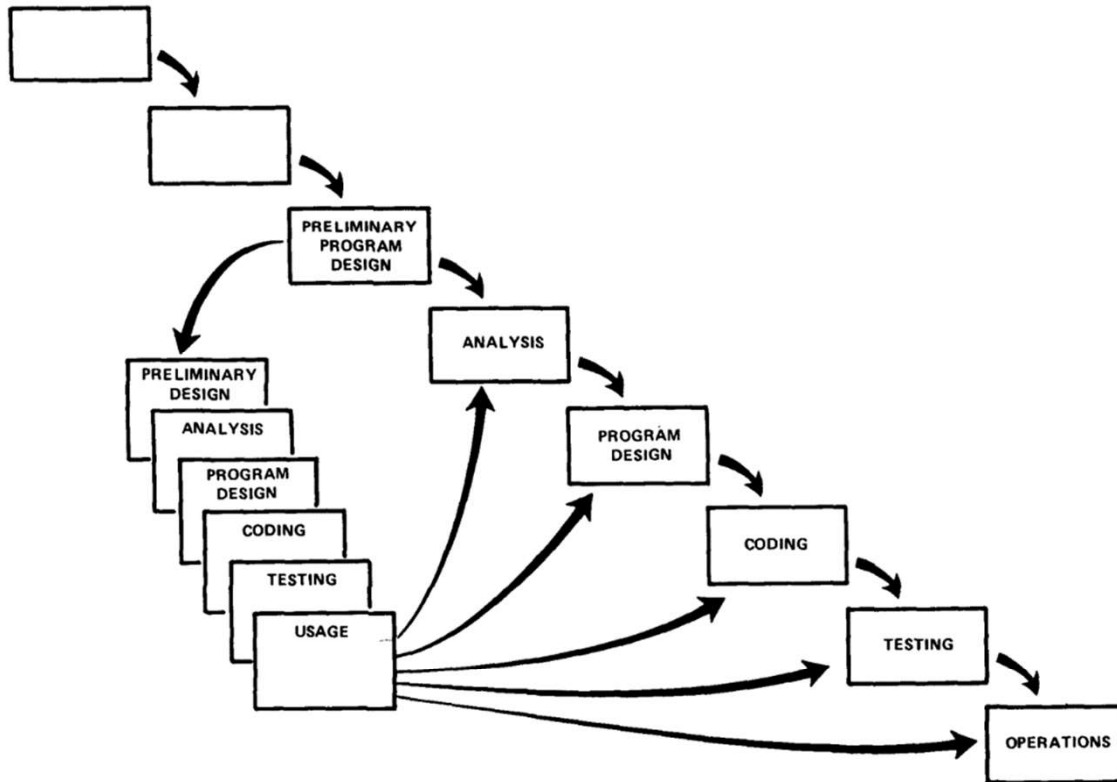
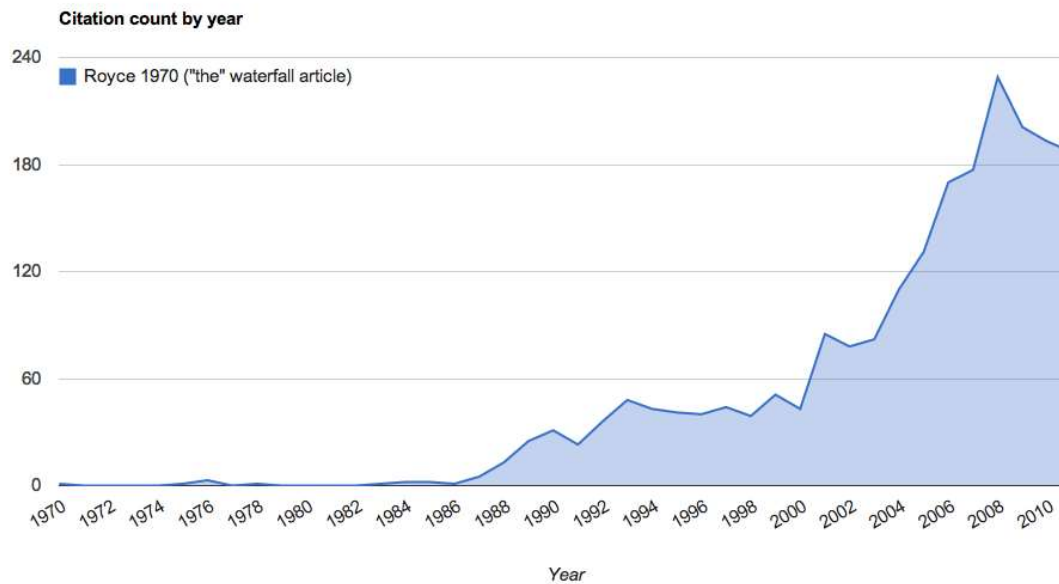


Figure 7. Step 3: Attempt to do the job twice – the first result provides an early simulation of the final product.

Winston W. Royce: Managing the Development of Large Software Systems

Bossavit: Leprechauns



<https://leanpub.com/leprechauns/>

Citations

- Boehm nutzt 1976 Royce Figure 3
- Ohne Quelle
- Um Verbesserungen in den Phasen zu erläutern
- Dann wurde es zu Boehms / Royces Wasserfall
- 1987: Erneute Publikation (mit einem Paper von 1956) durch Boehm
- Boehm führte damals das Spiralmodell ein

DOD-STD-2167A

4.1.1 Software development process. The contractor shall implement a process for managing the development of the deliverable software. The contractor's software development process for each CSCI shall be compatible with the contract schedule for formal reviews and audits. The software development process shall include the following major activities, which may overlap and may be applied iteratively or recursively:

- a. System Requirements Analysis/Design
- b. Software Requirements Analysis
- c. Preliminary Design
- d. Detailed Design
- e. Coding and CSU Testing
- f. CSC Integration and Testing
- g. CSCI Testing.
- h. System Integration and Testing.