

Engineering Document Types

Following the build process starting at conceptualization (*PRS*) and ending in delivered product (*Man*)

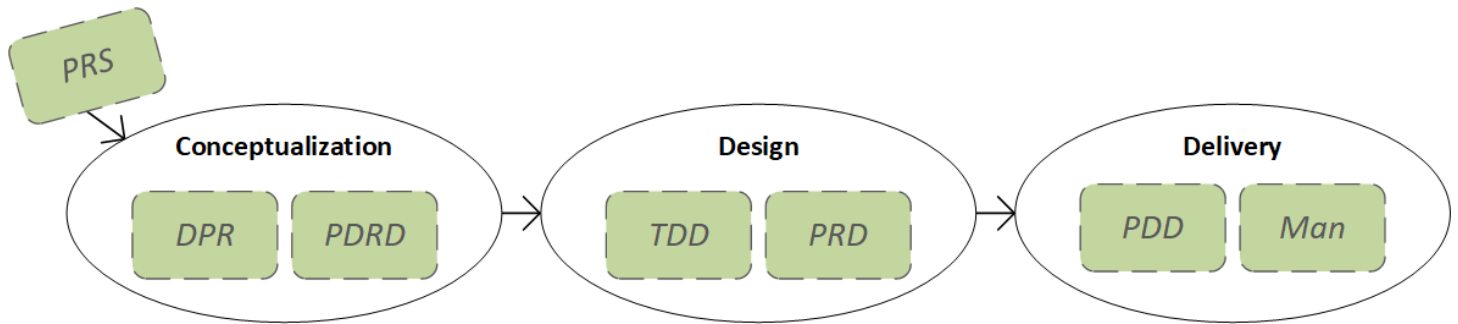


Figure 1: Design cycle stages and documentation

Starts With:

- Problem Statement ('*PRS*')
- Product Description Summary ('*SUMM*')

Moves Into:

- Design Prompt ('*DPR*')

Begins With:

- Prototype Definition & Requirements ('*PDRD*')
- The Design Document ('*TDD*')

Becomes:

- Product Requirements ('*PRD*')
- Internal Description Document ('*IDD*')

Delivered As:

- Product Description ('*PDD*')
- User's Manual ('*Man*')

Problem Statement (*PRS*)

Identification of the origins of product needs establishing this opportunity. This provides a clear description of the opportunity, identifying customer, need, competition and value generated. This content is presented clearly and concisely, avoiding design elements unless required. Starting vague, with intent and flow forming to generate a path to solution.

Product Description Summary (*SUMM*)

Description of the product in short form, for clarity of design presentation and form for internal team communication and alignment.

Design Prompt (DPR)

This is the origins of generated product result, where the team takes the origin and need and crafts the result. This prepares for PDRD and prototype generation but does not begin this stage yet.

Prototype Definition & Requirements Document (PDRD)

This is the document which describes an idea, in the tangible and quantitative form of what you are going to build. This is initiated before a final or firm picture of the product has been generated, you simply know the flavor and the desired outcome at this point, and use the PDRD to help get you there.

This document covers the concept, the prototype identification and sometimes the market, need and customer. Miscellaneous topics may be included if identified as contributing value, E.G. testing or requirements. This document can be led by a Problem Statement Document (PRS), then a Design Prompt Document (DPR) if needed.

Design Document (TDD)¹

This document is to communicate the technical details of the work to be done to the team. It also focuses and requires formal design establishment, preparing for production. This requires organization and consideration for all aspects of the design, delivering full coverage of the specification. This document covers product requirements, technical specification & requirements, testing method & path to production.

Product Requirements Document (PRD)

A document which defines what the product must do, in quantitative requirement. The PRD avoids description of how this is done, leaving that to the PDD and User Manual. The PRD may be written from the perspective of the end-user, to eliminate team bias and maximize alignment with the design and the requested target.

Internal Description Document (IDD)

A document used to define, explain or clarify any component of a product, technology or process which is intended for internal use. This definition is not as a requirement, but as an intent and a model. This may also be used along the path in transition from idea and PDRD onto and into a PDD or PRD.

Product Description Document (PDD)

A document which describes what was actually built, typically in short form with a target of a single page. Bulleted lists, graphics and block diagrams are emphasized, with a maximized emphasis on product communication with the intended audience of the user.

User's Manual (Man)

The culmination document for the product, intended specifically for the end user to provide assistance in use and troubleshooting or planning. This traditionally covers nearly all topics generated in the PRD and PDD and additionally includes a FAQ, Glossary and select Guides (e.g. installation or repair).