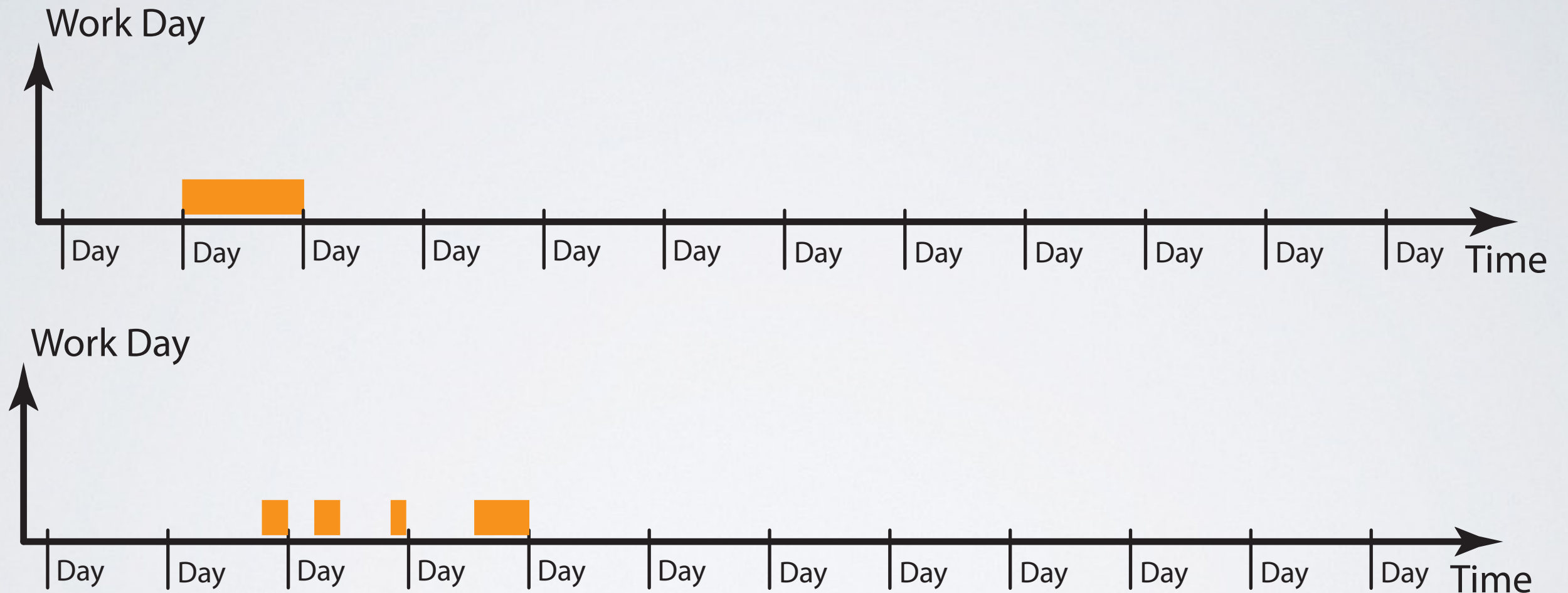


PROJECT SCOPING

The Engineer Accelerator
Malcolm Knapp
10/11/16

TASKS

 Task



TASKS

TASK AND SUBTASKS

GROUPS

DEPENDENCIES

TASK ENUMERATION

PRODUCT DEFINITION

- Feature List
- Flow Diagram
- Behavior Description
- Interface List

ARCHITECTURE

- Major Components BOM
- Product Architecture
 - Major Signals Characteristics
 - Current Budget
 - Pinouts
 - Calculations
- Hardware Block Diagram

REALIZATION

- Board Design
 - Library
 - Schematic
 - Layout
 - BOM
- Detailed Design
 - Bypassing
 - Damage Protection
 - ESD and EMI Protection
 - Design for Test
- Cable Design
- Manufacturing Package

MANUFACTURE

- Procurement
- Kitting
- Fabrication
- Assembly
- Enclosure Assembly
- Cable Assembly
- System Assembly

BRING UP

- Set Up
- Base Line Existing Hardware
- Board Induction
- Smoke Test
- Debug Cycle

TESTING

- Test Setup
- Testing the Test
- Testing
- Analysis Development
- Analysis

UNSCALED TASKS VS SCALED TASKS

SCALED TASKS

FEATURES

BEHAVIORS

INTERFACES

PERCENTAGE TASKS

PROJECT MANAGEMENT

CONTINGENCY TIME

RESOURCES

- Units
- Amount Assigned
- Efficiency

WORK EQUATION

$$\text{DURATION} = \frac{\text{EFFORT} / \text{UNITS} / \text{EFFICIENCY}}{\text{AMOUNT ASSIGNED}}$$

RESOURCE OVERLOADING