

# Master Project; Execution Phase

by *Gerrit Muller* University of Southeast Norway-NISE

e-mail: gaudisite@gmail.com

www.gaudisite.nl

## Abstract

A master project in systems engineering using action research or industry as laboratory requires that the student is both researcher and engineer. In this presentation we give guidelines for the execution phase of the project to ensure that the master project student plays both roles. These roles require quite different behavior. Especially the role of researcher is new for most students.

### Distribution

This article or presentation is written as part of the Gaudí project. The Gaudí project philosophy is to improve by obtaining frequent feedback. Frequent feedback is pursued by an open creation process. This document is published as intermediate or nearly mature version to get feedback. Further distribution is allowed as long as the document remains complete and unchanged.

June 5, 2018  
status: planned  
version: 0

*Research is an adventurous journey, be perceptive and see where it goes*



*Some students in the past called it a rollercoaster...*

# Know your Academic Supervisor

---

Discuss *way of working* and *expectations* with your *academic supervisor*.

The following slides are valid for supervision by Gerrit.

Other academic supervisors may have other doctrines.

# Recommendations for Project Execution

maintain a project log	data, findings documents references
keep supervisors involved	regular presentations regular meetings
time box and iterate	case system and context reflection and consolidation
early feedback on paper	start writing early elicit feedback early work incremental

# You have Multiple Roles!

	<i>systems engineer</i>	<i>researcher</i>
normal work	elicit needs, specify, design, analyze, integrate, test	observe, experiment, argue, evaluate, write
attitude	explain, educate, sell	question everything, proof opposite

# Maintain a Detailed Research Logbook

Word or PowerPoint file  
take notes continuously!

date/time

what

how

why

when

where

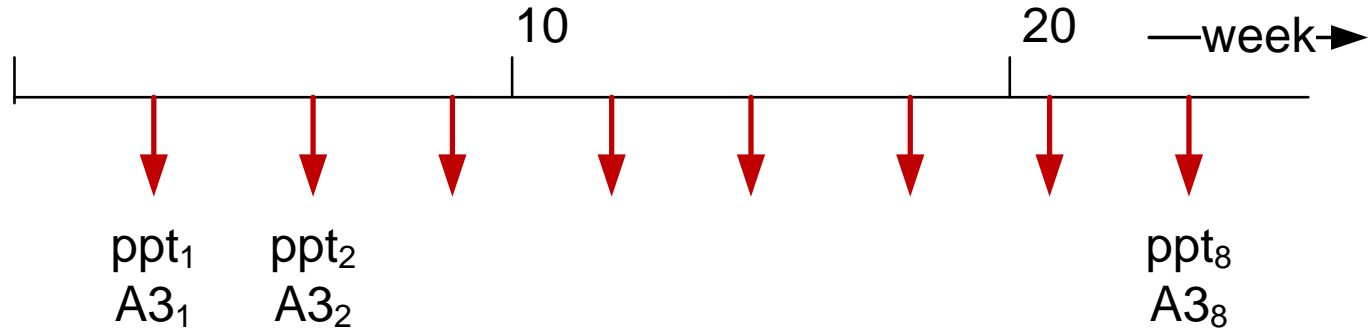
who

references, e.g. URLs; make electronic copy of any relevant material

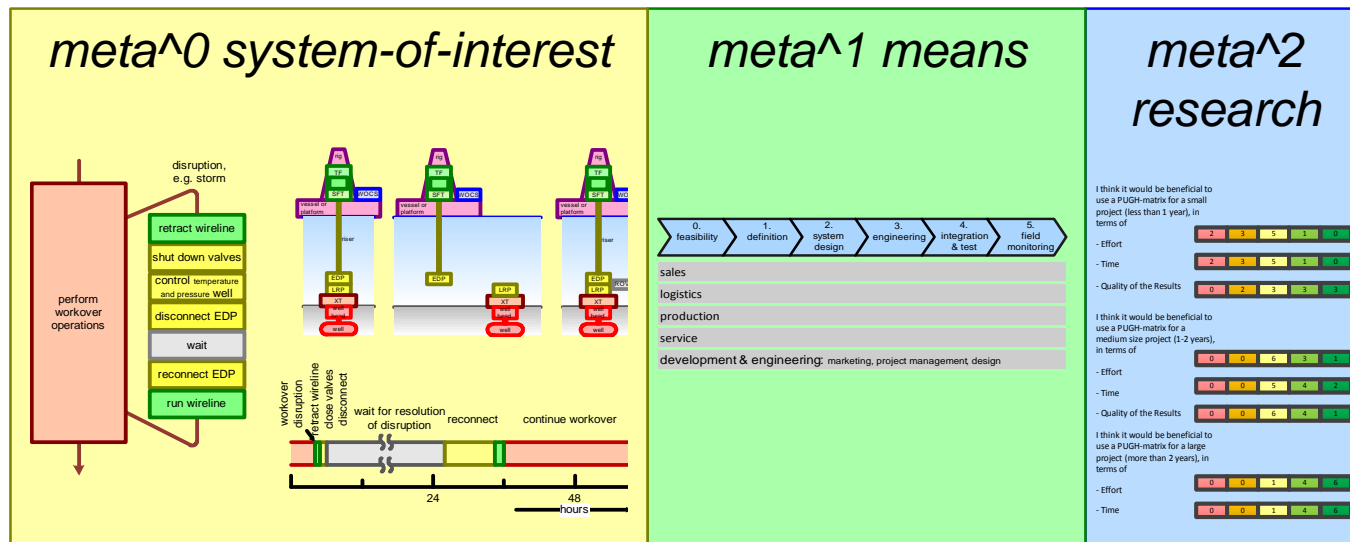
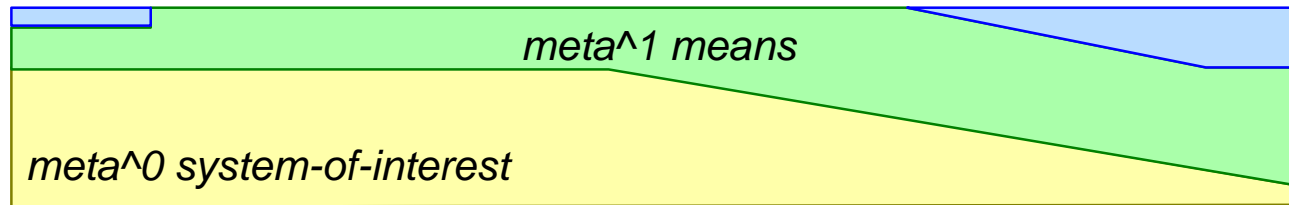
all "raw" data, e.g. submitted questionnaires

all intermediate data, e.g. spread sheets with version numbers and dates

# Discuss Regularly With Company Supervisor

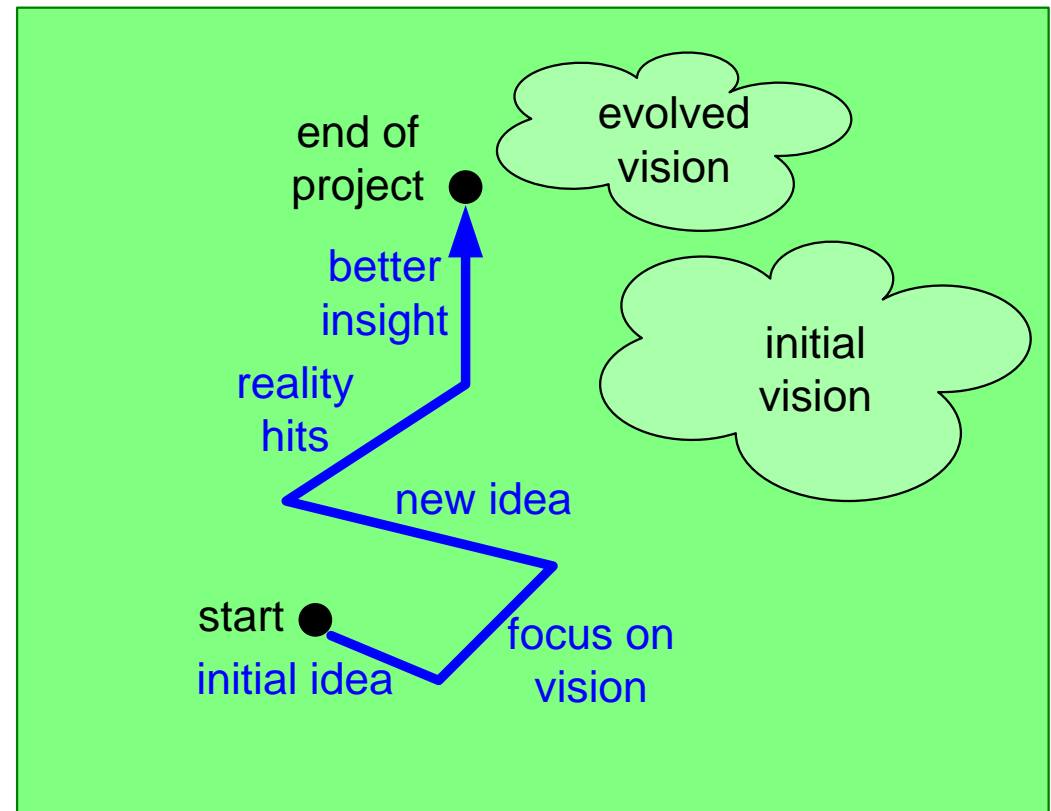
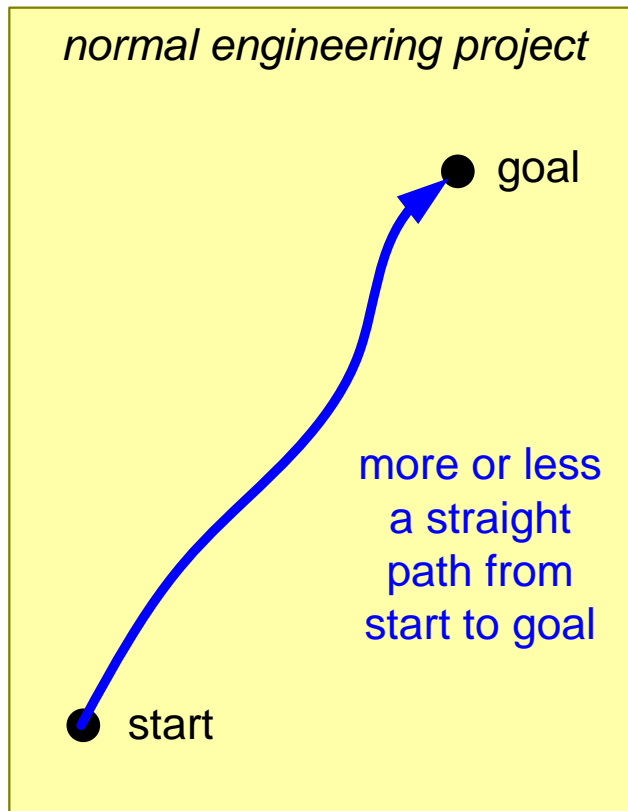


focus first on content, then means and then research approach



# The Nature of Research Projects

*Research is an adventurous journey, be perceptive and see where it goes*



*Some students in the past called it a rollercoaster....*