

Research Question and Hypothesis

by *Gerrit Muller* University of South-Eastern Norway-NISE

e-mail: `gaudisite@gmail.com`

`www.gaudisite.nl`

Abstract

The research question and objectives with respect to architecting methods are defined. The scope is product-family and product level primarily. An hypothesis is formulated, that is based on a multi-view framework allowing many submethods to be used. Criteria for architecting methods are articulated.

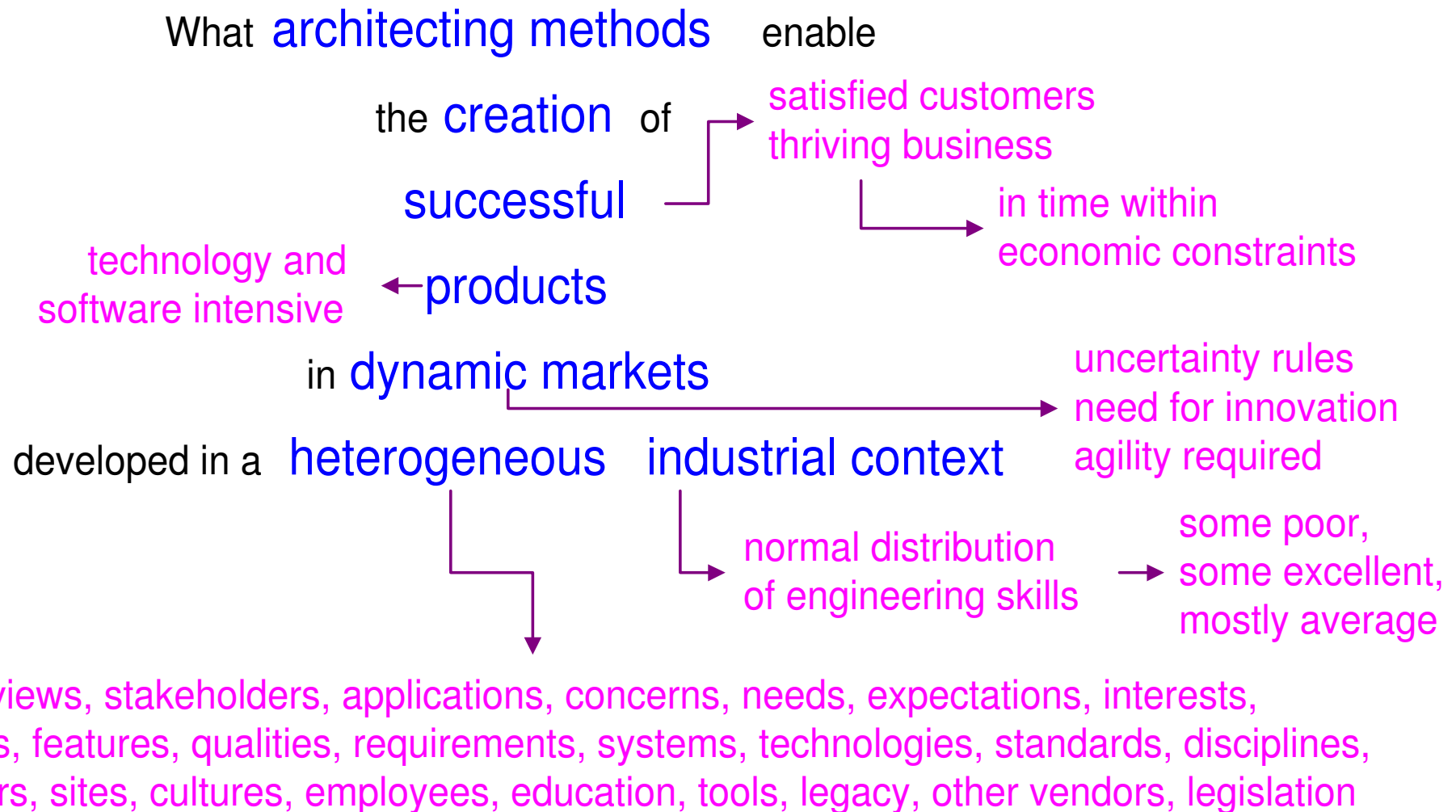
Distribution

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.

September 9, 2018
status: finished
version: 4.5

research question	What architecting methods enable the creation of successful products in dynamic markets developed in a heterogeneous industrial context
hypothesis	A rich collection of submethods fitting in a multi-view framework complemented with reasoning methods enables successful architecting of technology and software intensive complex systems in heterogeneous environments by means of generic insights grounded in specific facts
criteria	<ol style="list-style-type: none">1. product is a commercial success2. product family is sustainable commercially successful3. architect benefits from deploying submethods4. project leaders, product managers and engineers are able to use the outcome of the submethods

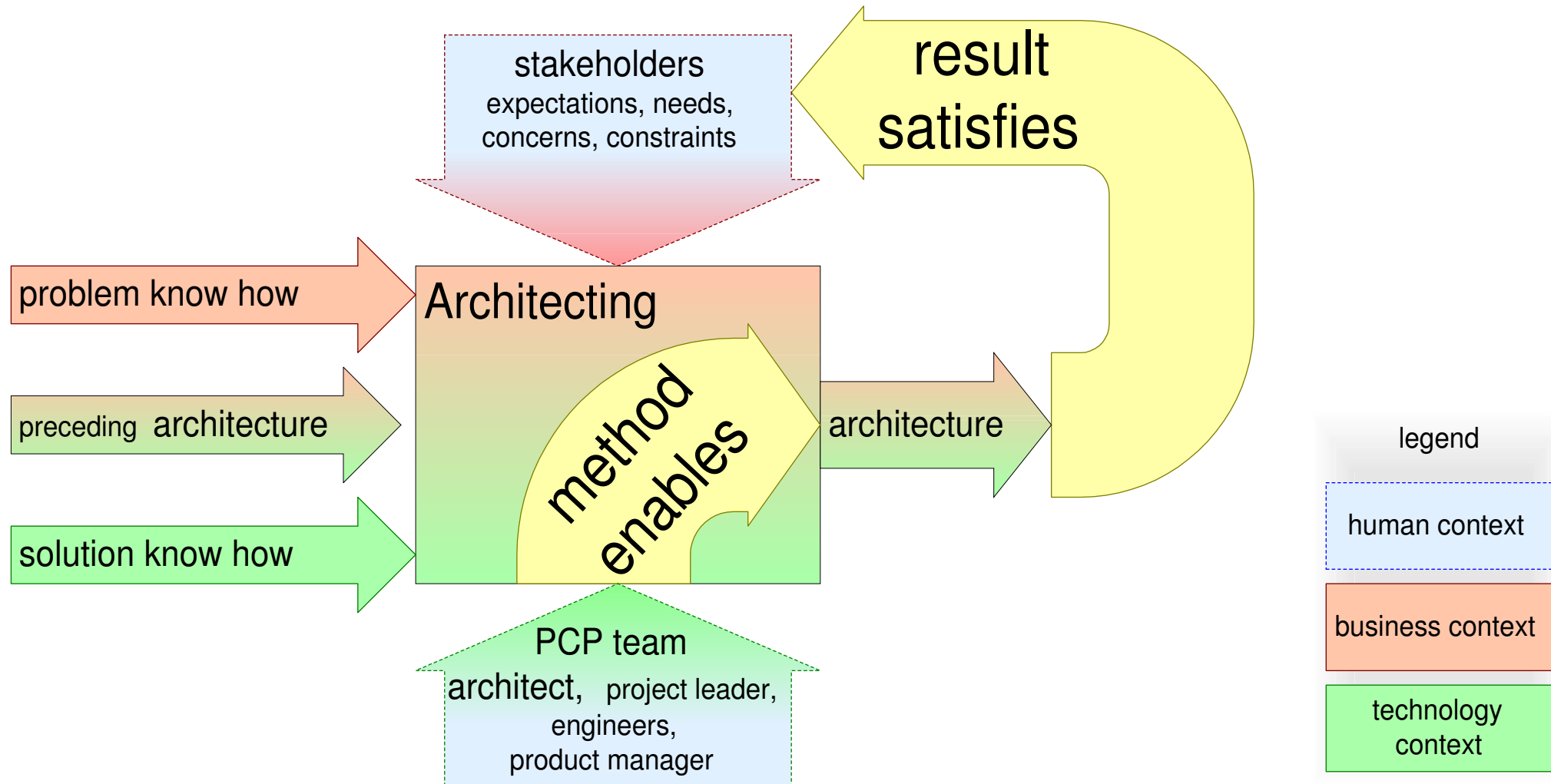
Research question



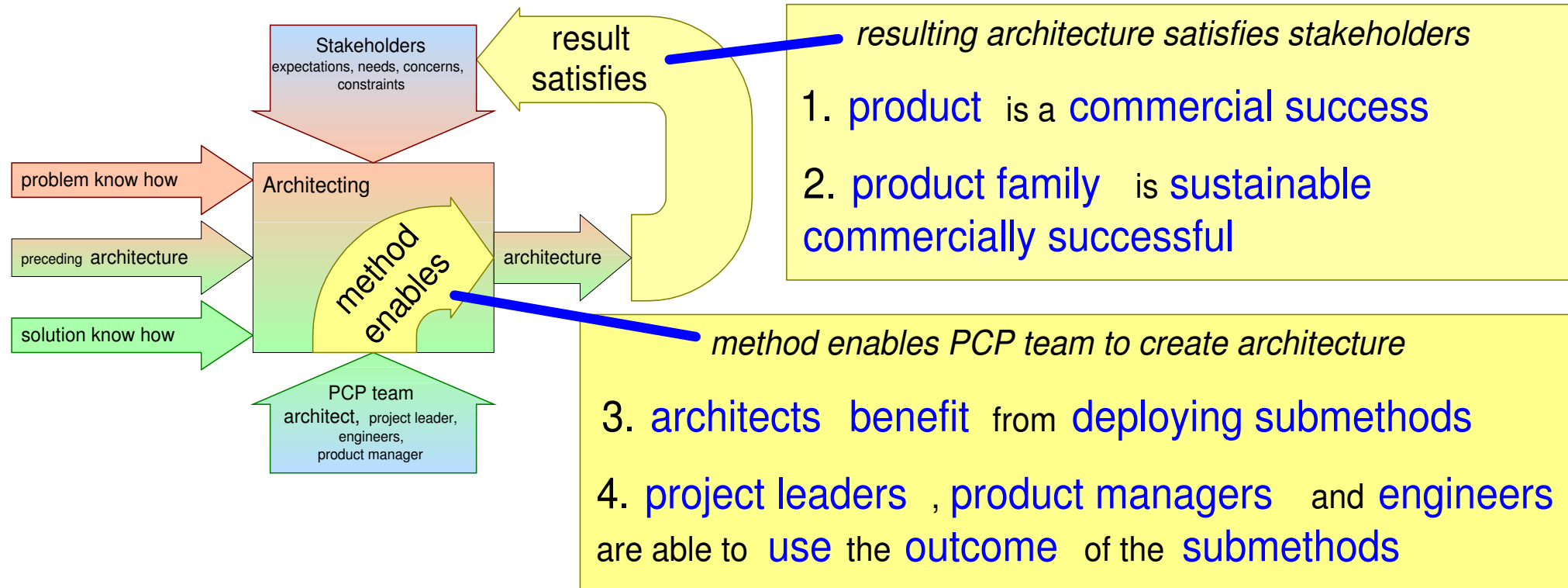
Hypothesis

A **rich collection** of **submethods** fitting in a **multi-view framework**
complemented with **reasoning methods** enables **successful architecting** of
technology and **software intensive complex systems** in **heterogeneous environments**
by means of **generic insights** grounded in **specific facts**

Successful architecting and architecting method



From hypothesis to criteria



Overview

research question

What **architecting methods** enable the **creation** of **successful products** in **dynamic markets** developed in a **heterogeneous industrial context**

hypothesis

A **rich collection** of **submethods** fitting in a **multi-view framework** complemented with **reasoning methods** enables **successful architecting** of **technology** and **software intensive complex systems** in **heterogeneous environments** by means of **generic insights** grounded in **specific facts**

criteria

1. **product** is a **commercial success**
2. **product family** is **sustainable commercially successful**
3. **architects benefit** from **deploying submethods**
4. **project leaders** , **product managers** and **engineers** are able to **use** the **outcome** of the **submethods**