

Modeling and Analysis: Reasoning Approach

by *Gerrit Muller* TNO-ESI, HSN-NISE

e-mail: gaudisite@gmail.com

www.gaudisite.nl

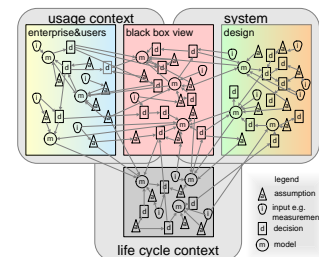
Abstract

We make models to facilitate decision making. These decisions range from business decisions, such as Service Level Agreements, to requirements, and to detailed design decisions. The space of decisions is huge and heterogeneous. The proposed modeling approach is to use multiple small and simple models. In this paper we discuss how to reason by means of multiple models.

Distribution

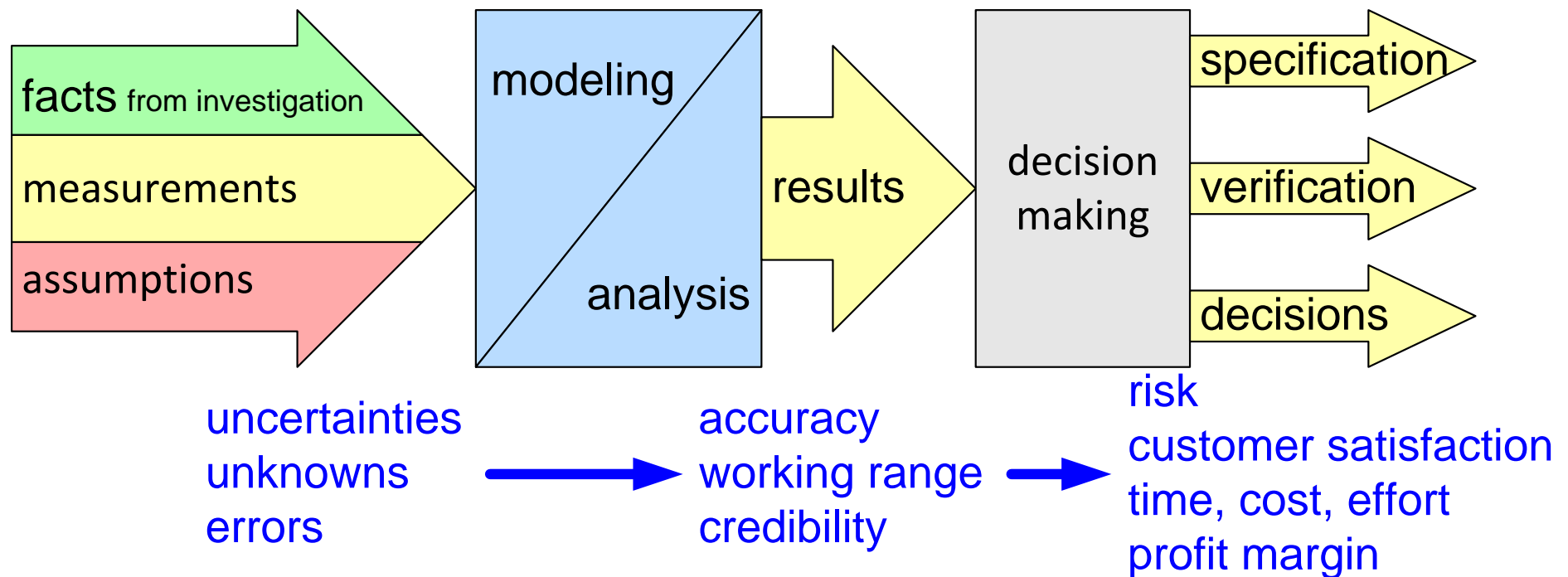
This article or presentation is written as part of the Gaudí project. The Gaudí project philosophy is to improve by obtaining frequent feedback. Frequent feedback is pursued by an open creation process. This document is published as intermediate or nearly mature version to get feedback. Further distribution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

October 20, 2017
status: preliminary
draft
version: 1.0

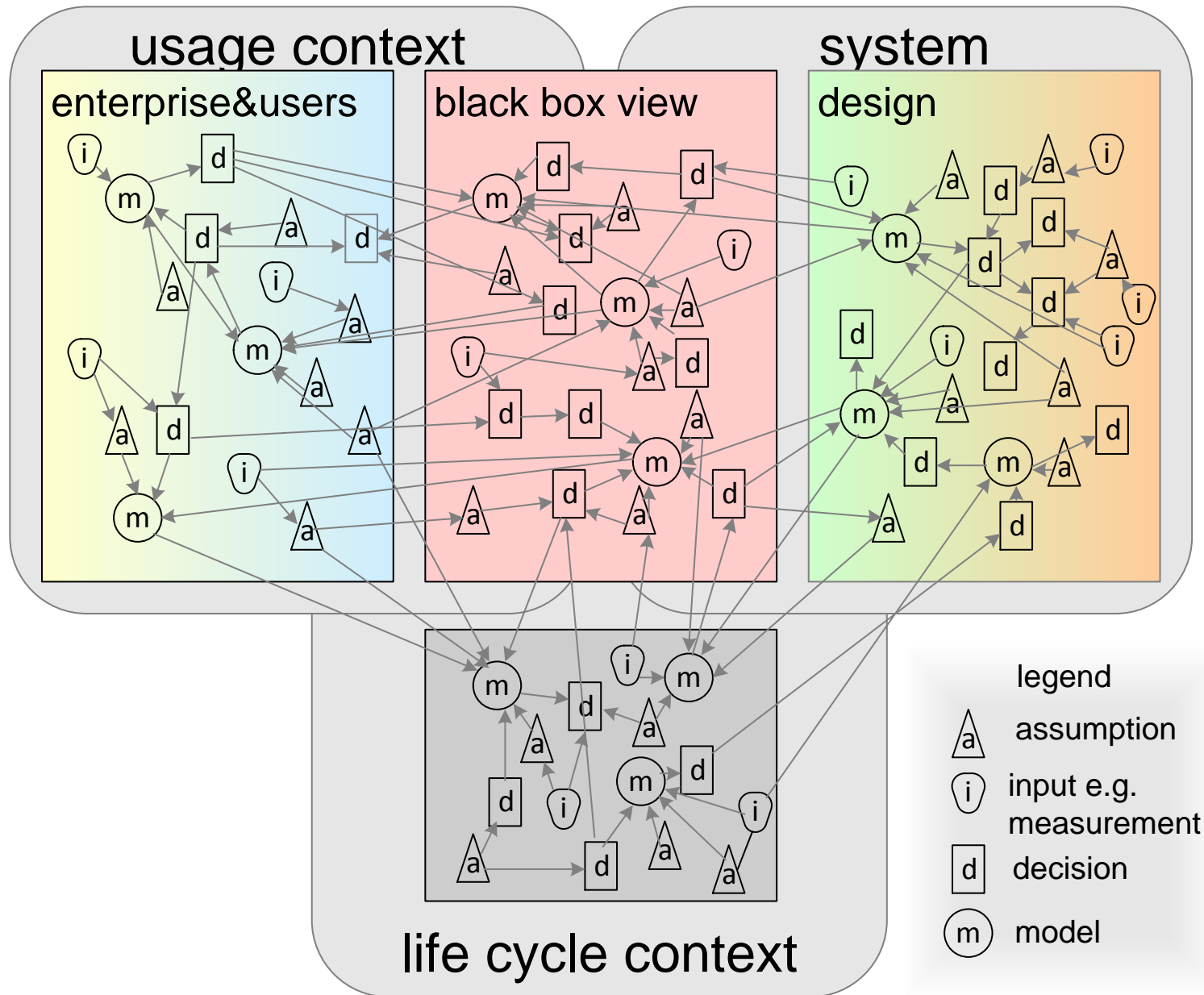


Purpose of Modeling

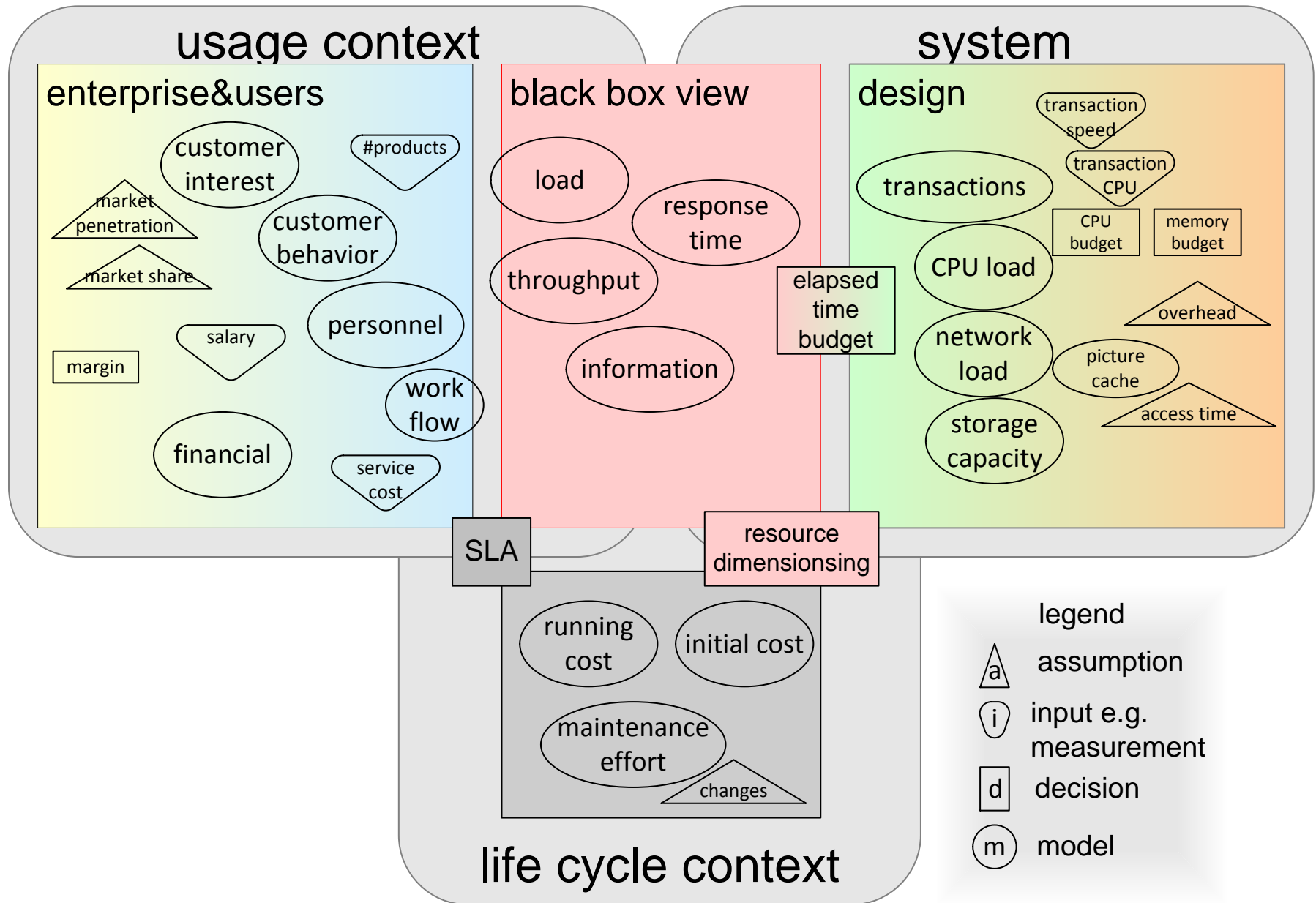
*How to use multiple models to facilitate decisions?
How to get from many fragments to integral insight?
How many models do we need?
At what quality and complexity levels ?*



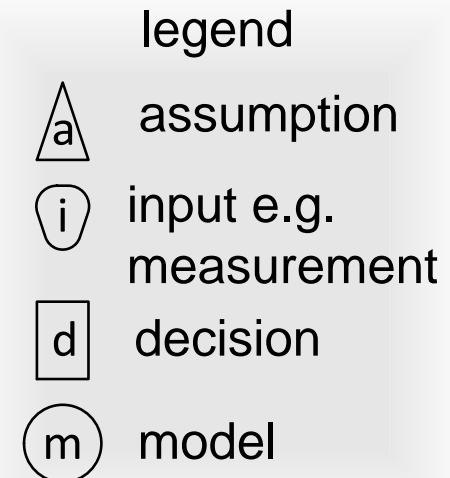
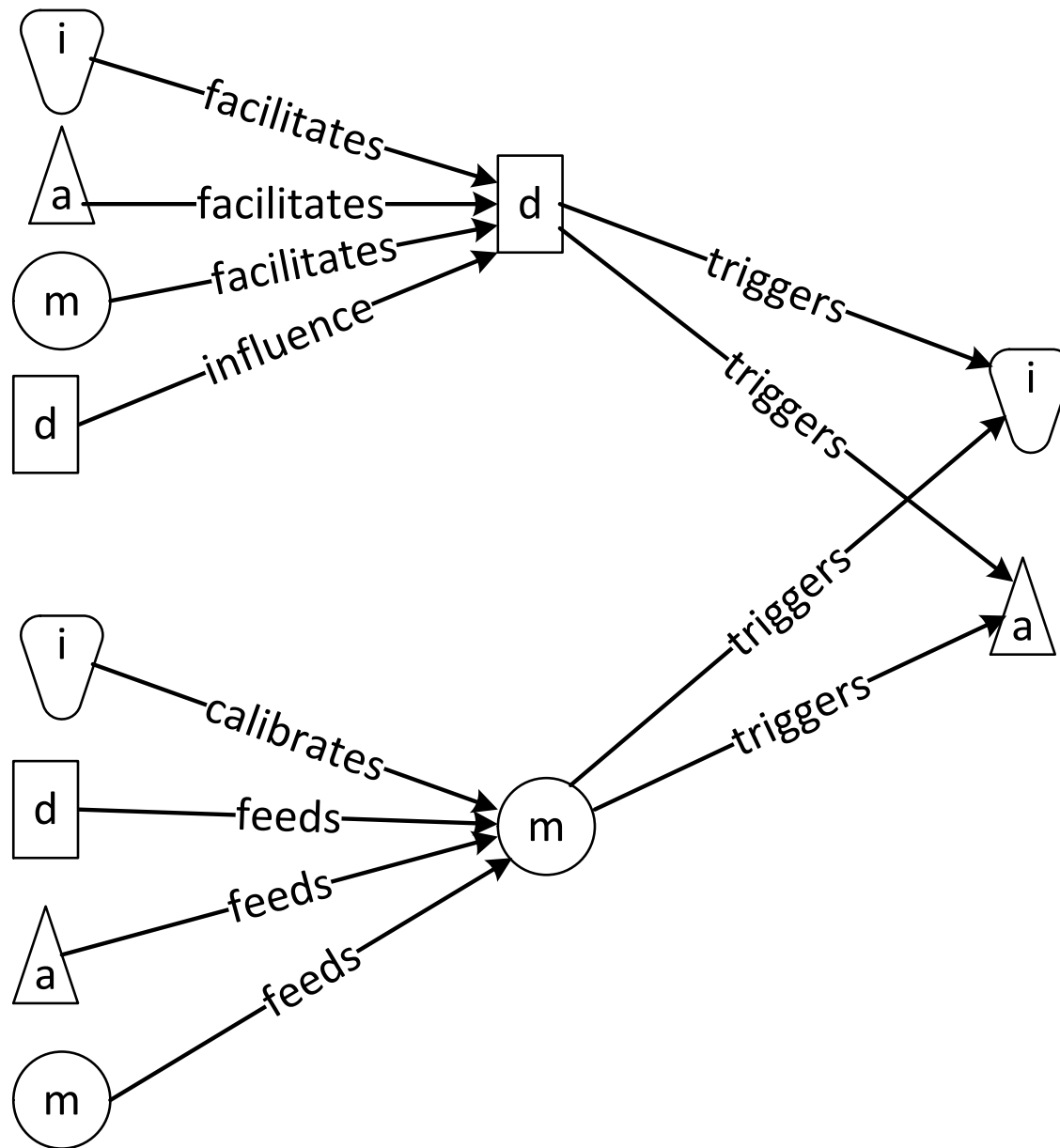
Graph of Decisions and Models



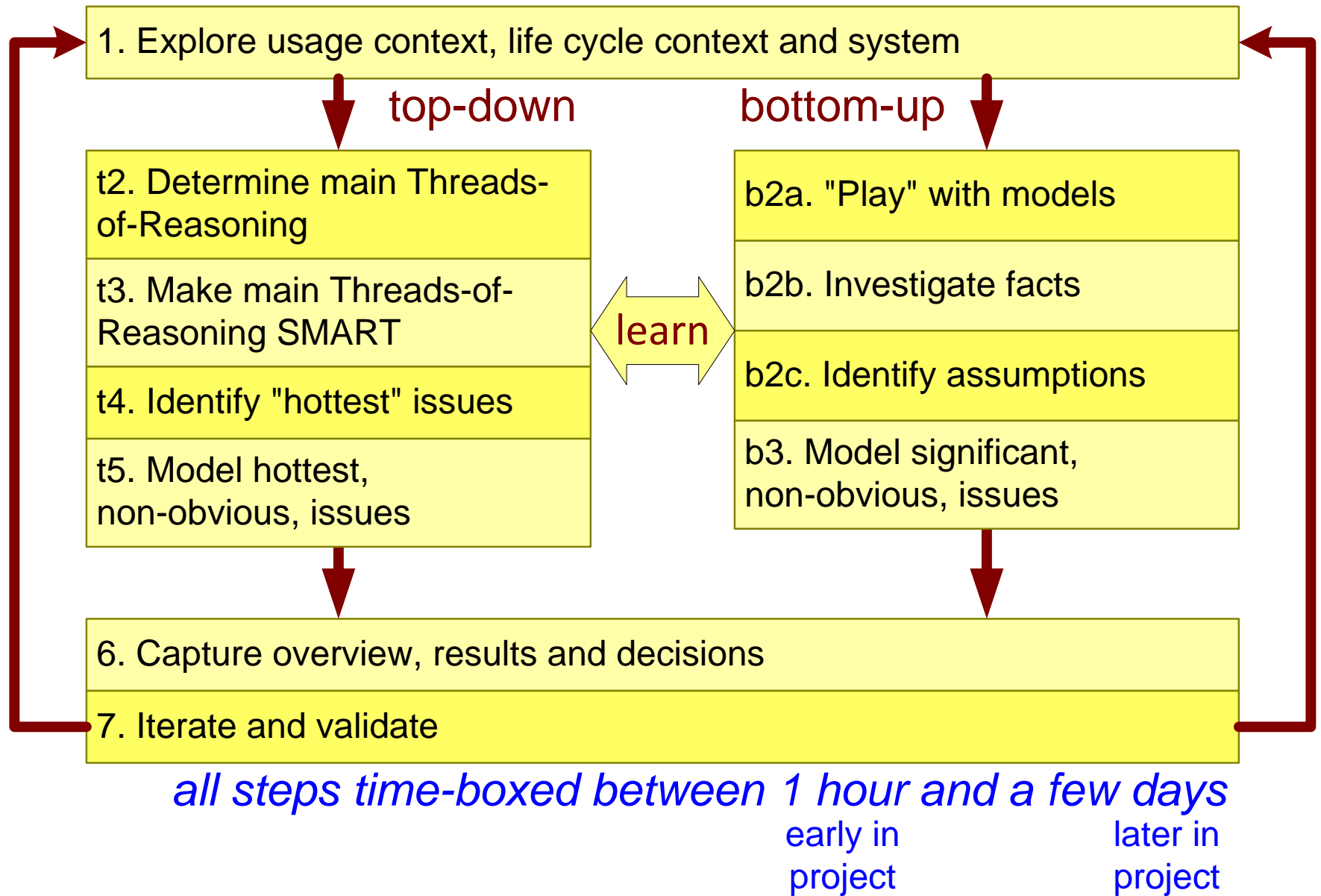
Example Graph for Web Shop



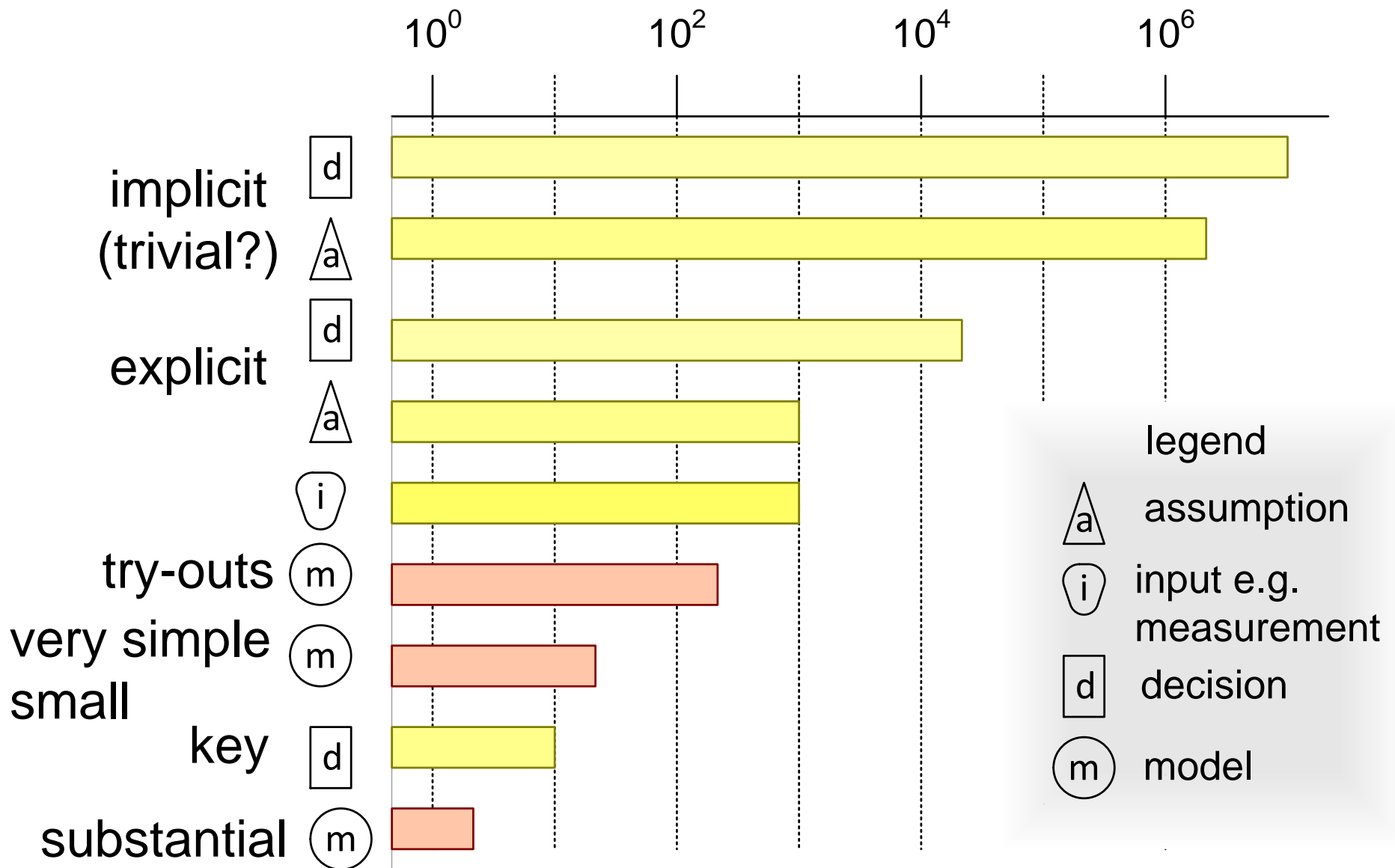
Relations: Decisions, Models, Inputs and Assumptions



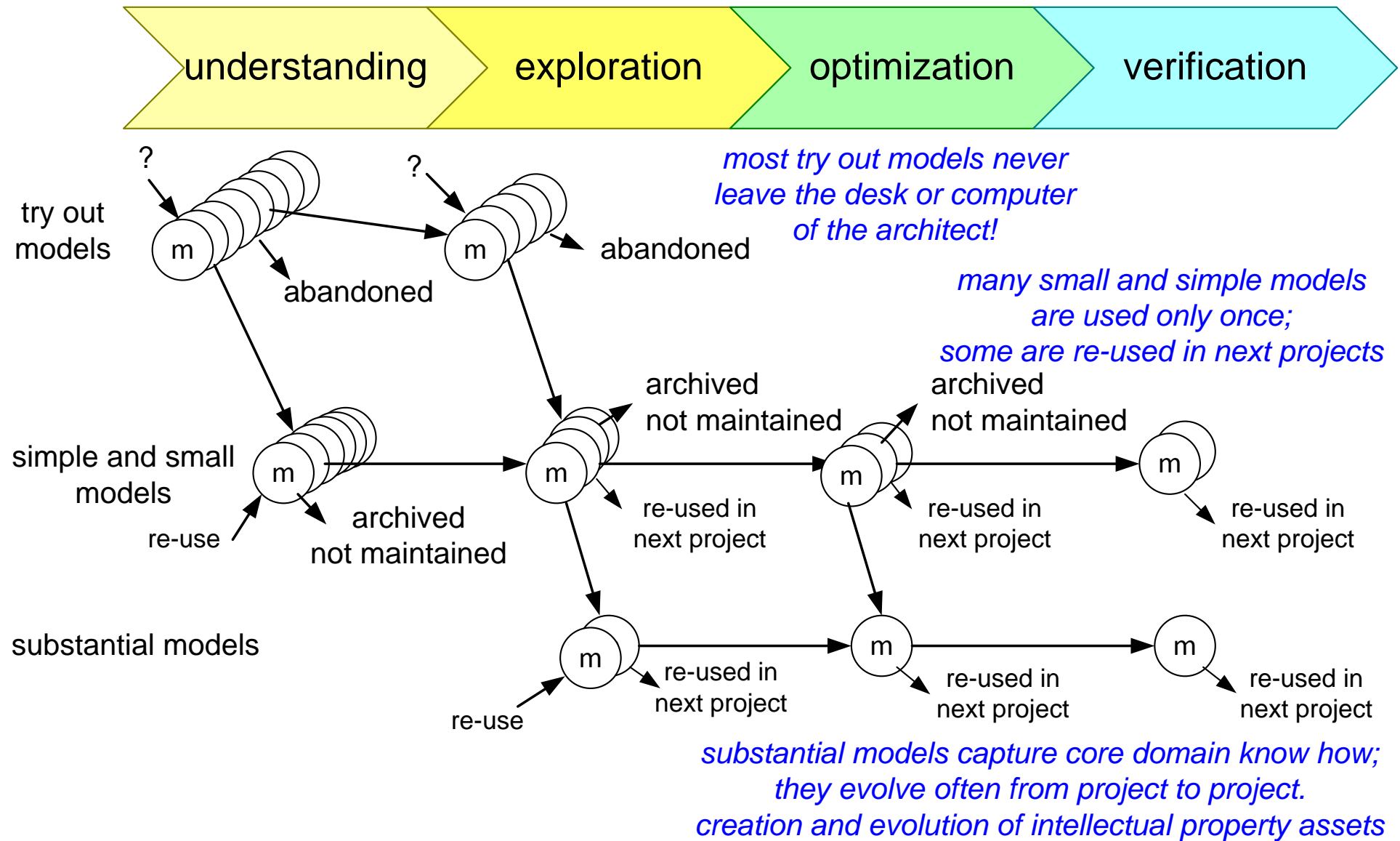
Reasoning Approach



Frequency of Assumptions, Decisions and Modeling



Life Cycle of Models



Examples of Life Cycle of Models

