

The Tool Box of the System Architect

by *Gerrit Muller* Buskerud University College

e-mail: `gerrit.muller@embeddedsystems.nl`

`www.gaudisite.nl`

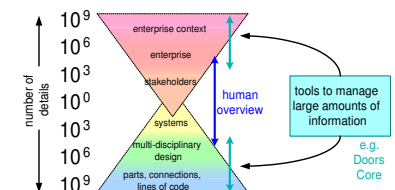
Abstract

The toolbox of a systems architect is filled with a quite diverse collection of tools. We will discuss the “intellectual” tools, practical low-tech tools, a number of classes of computer assistance tools, and architecting related standards.

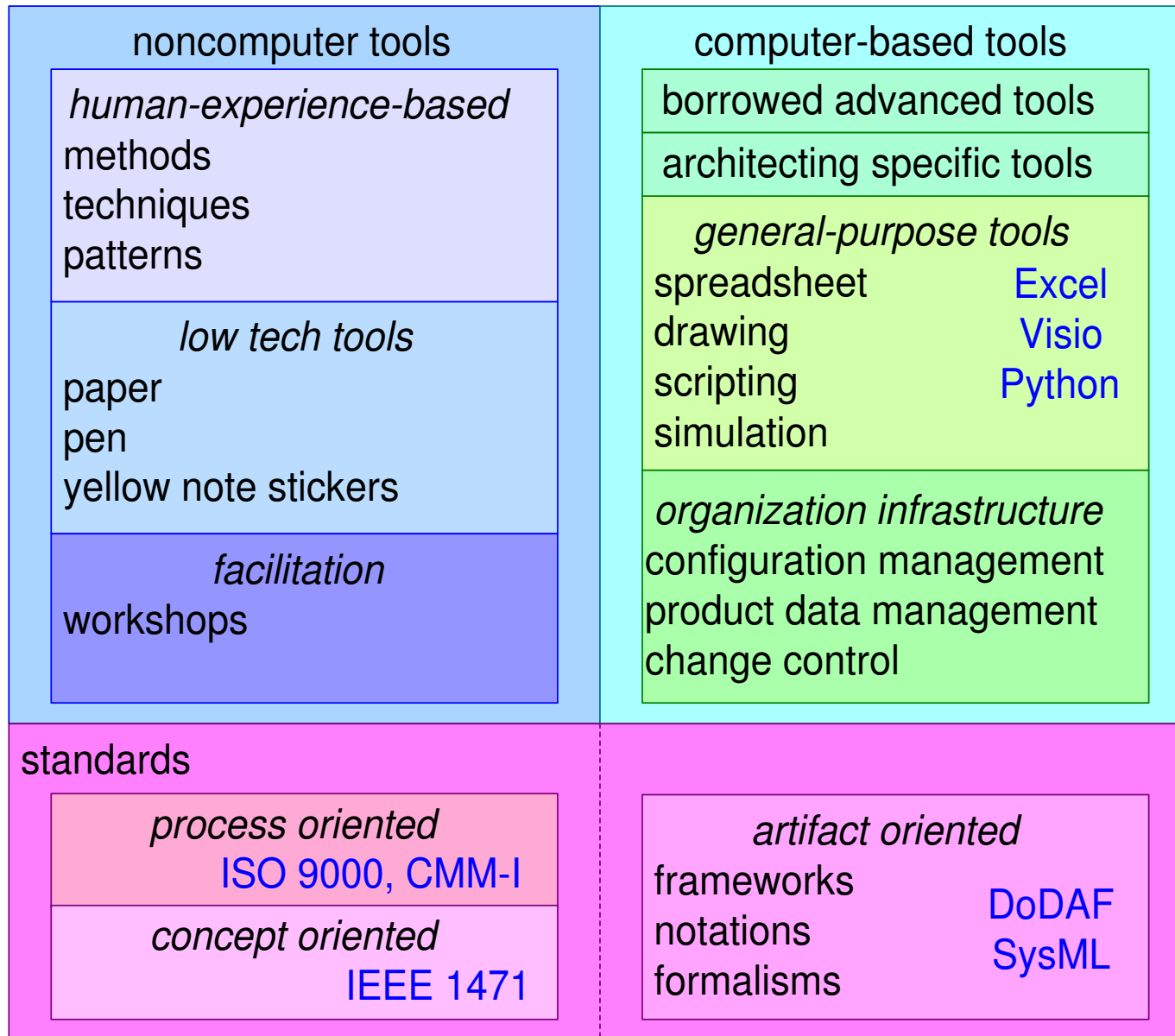
Distribution

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.

July 1, 2011
status: draft
version: 0.1



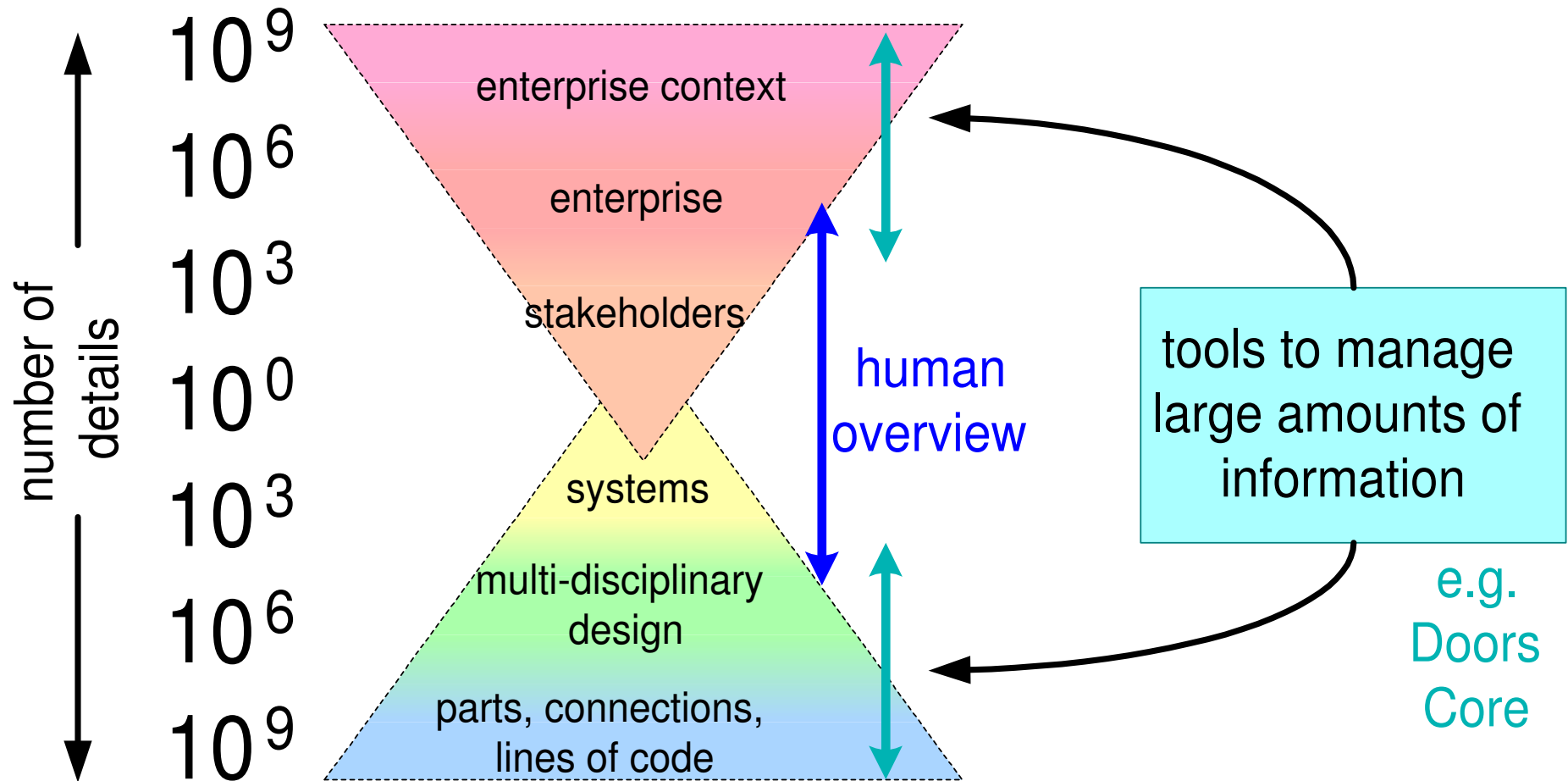
Classification of Architecting Tools



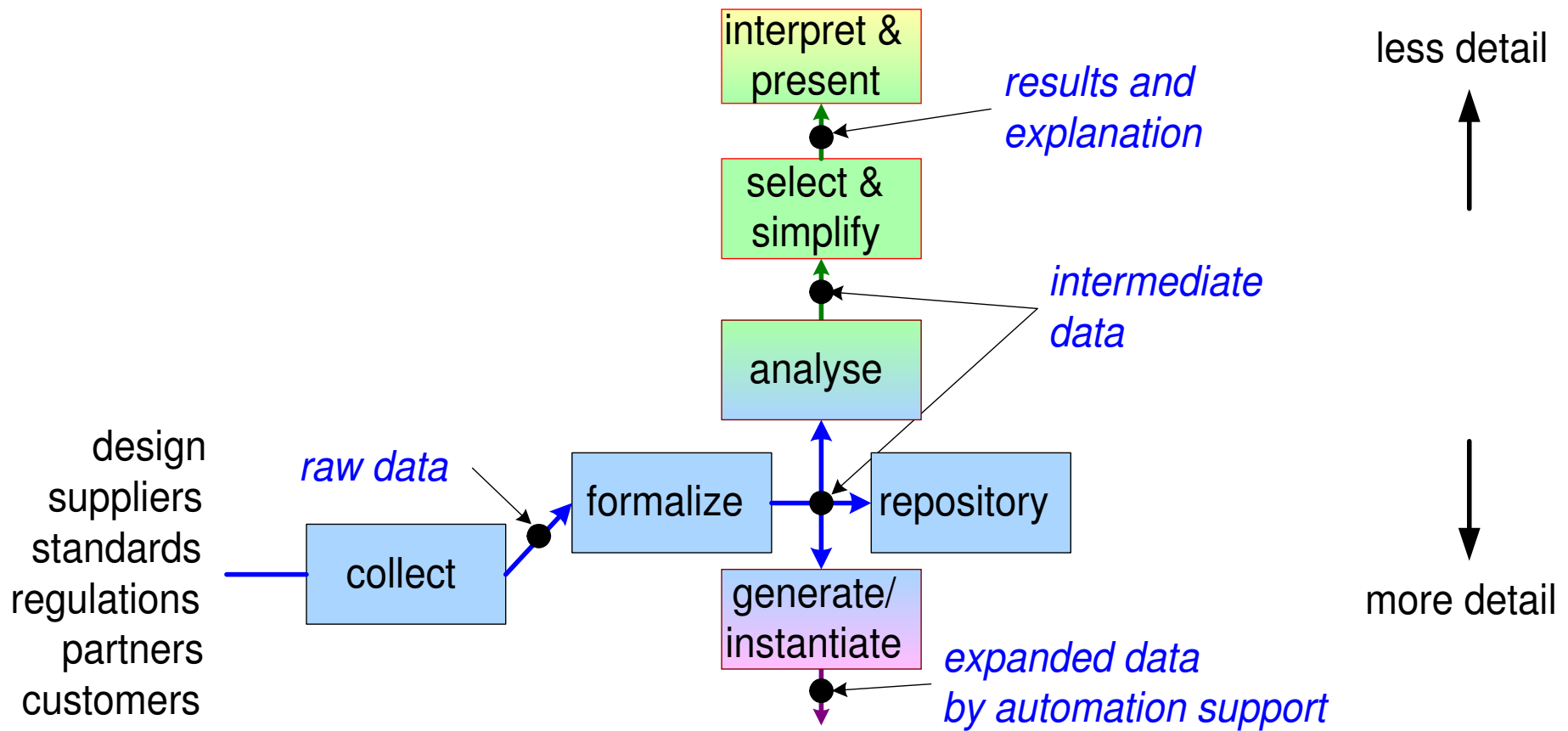
4 Quadrant Comparison of computerized and human tools

| | <i>humans</i> | <i>tools</i> | |
|-----------------|---|---|-----------------|
| <i>strength</i> | <ul style="list-style-type: none">focus on overviewidentify essentialsunderstand relationshipsinsight, intuitionsynthesis | <ul style="list-style-type: none">tool dominatesfocus on detailsno understandingfragmentation | <i>weakness</i> |
| <i>weakness</i> | <ul style="list-style-type: none">limited capacityerroneous behaviorincompletebiased | <ul style="list-style-type: none">"infinite" storage capacity"infinite" processing capacitycompleteneutralno errors | <i>strength</i> |

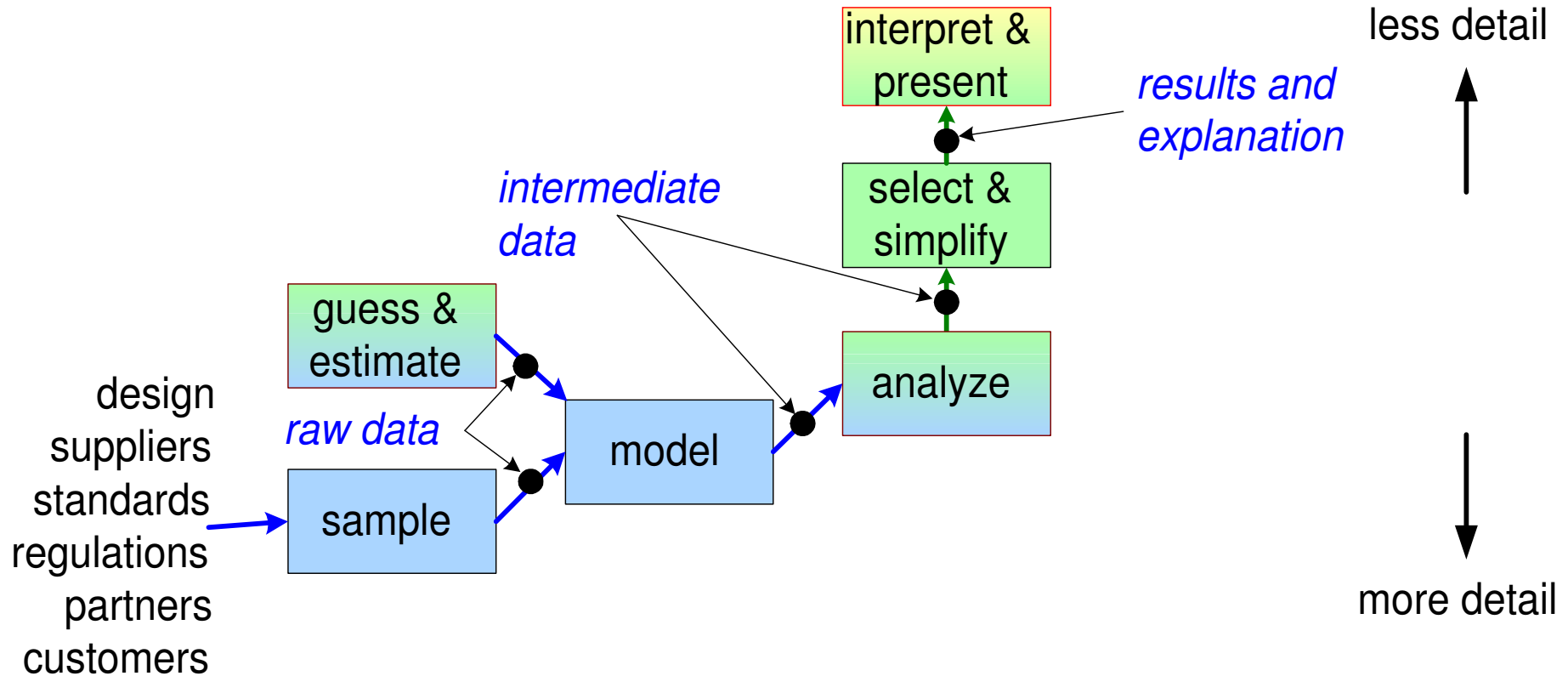
Tools Support Processing of Large Amounts of Details



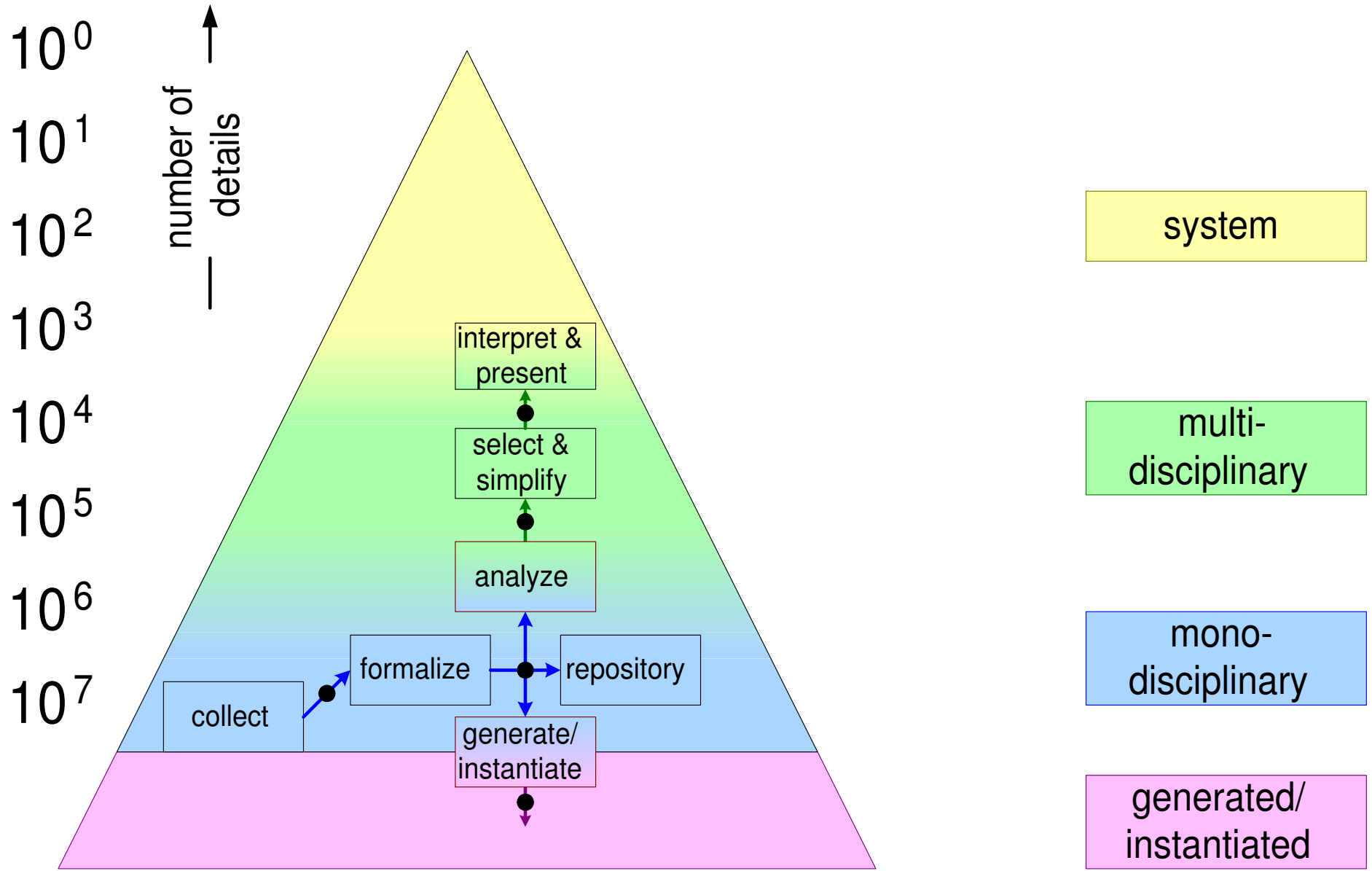
From Data to Understandable Information



Data Flow Early in Creation Process



Data Flow Mapped on Pyramid



Formality Levels in Pyramid

