

# Light Weight Simulation

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

e-mail: `gaudisite@gmail.com`

`www.gaudisite.nl`

## Abstract

Many simulations suffer from the fact that the investment and the maintenance costs more than the harvested value of the simulation results. In this presentation we show a light-weight approach to simulation. Key success factors are discussed to keep the simulation light-weight and to get useful results nevertheless.

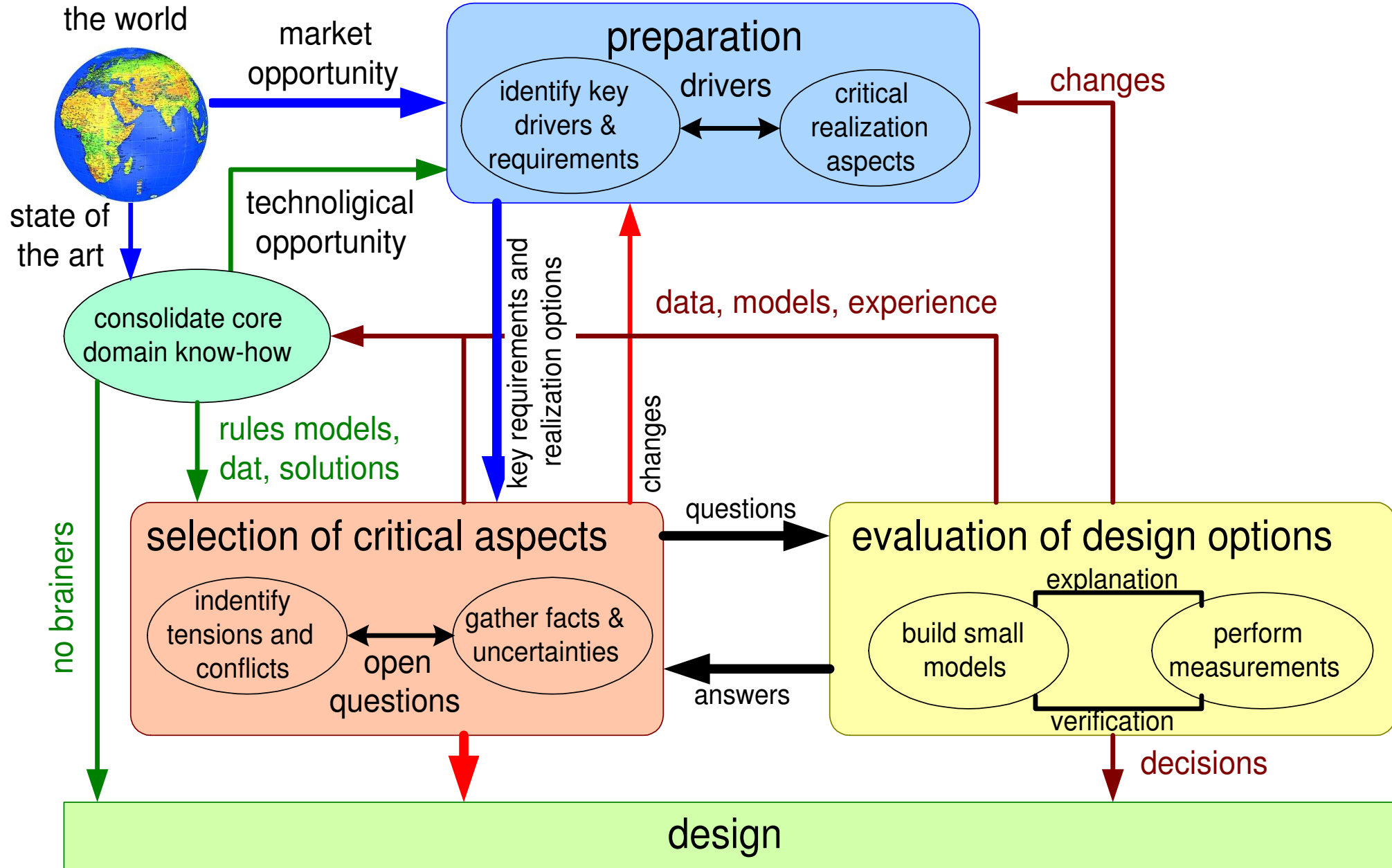
### Distribution

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: planned  
version: 0.1

logo  
TBD

# High Level Method

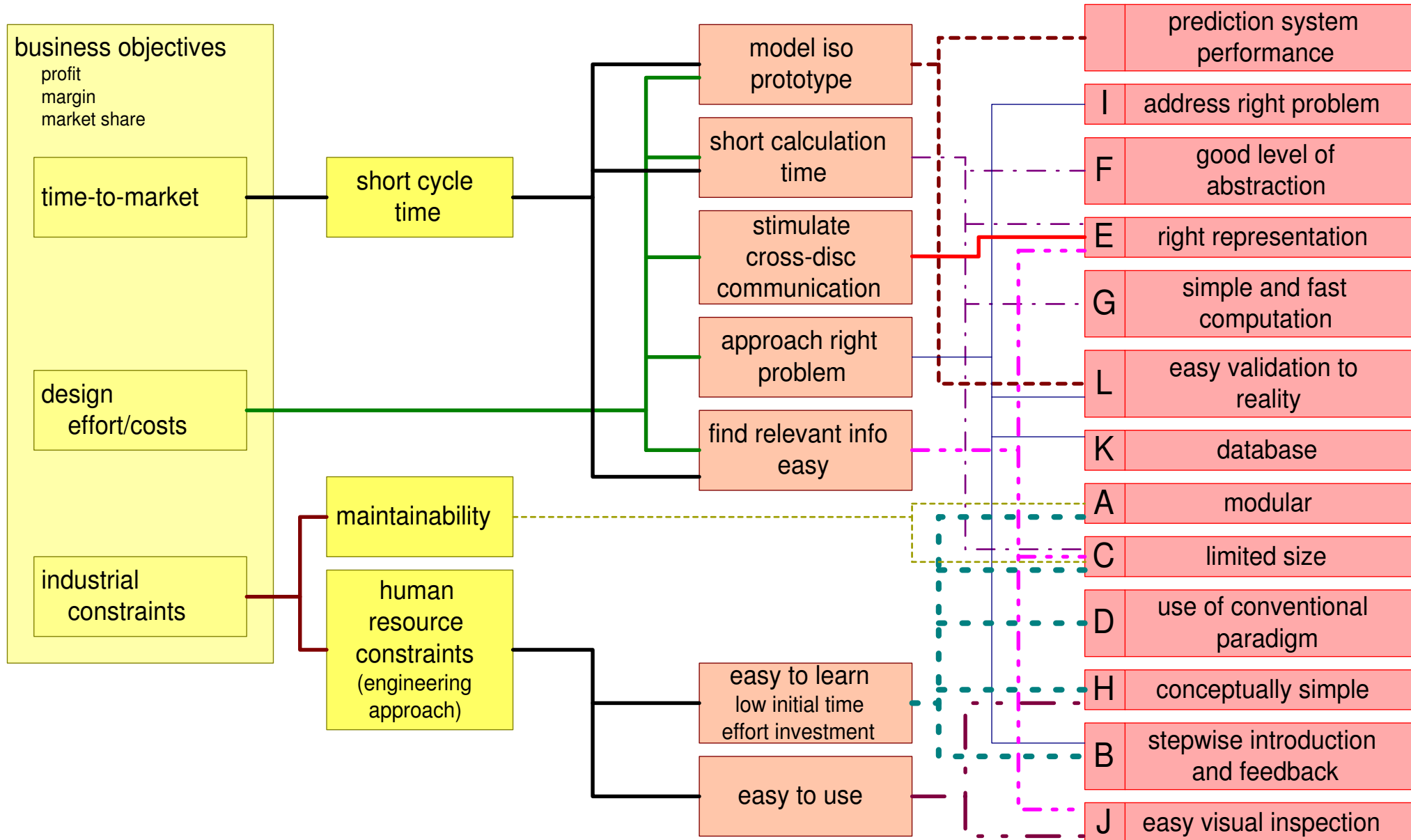


# High Level Method Stepwise

1A. Identify (customer) key drivers	in terms of stakeholders and concerns
1B. Identify critical realization aspects	for instance due to cost, performance, robustness, technological maturity, et cetera
1C. Consolidate core domain know how	make implicit know how explicit
2A. Identify tensions and conflicts	
2B. Gather facts, identify uncertainties	figures of merit, design rules
3A. Build small models <i>hours .. weeks</i>	addressing tensions, using facts, and creating insight in the uncertainties
3B. Perform measurements	for calibration and validation

- Iterate many times
- Provide overview by means of visualizations

# Success Factors Light Weight Simulation



Light weight simulation is based on  
research performed in the *Boderc* project.

Especially the work of

*Jan Beckers* (Océ) and *Maurice Heemels* (ESI)

has contributed.