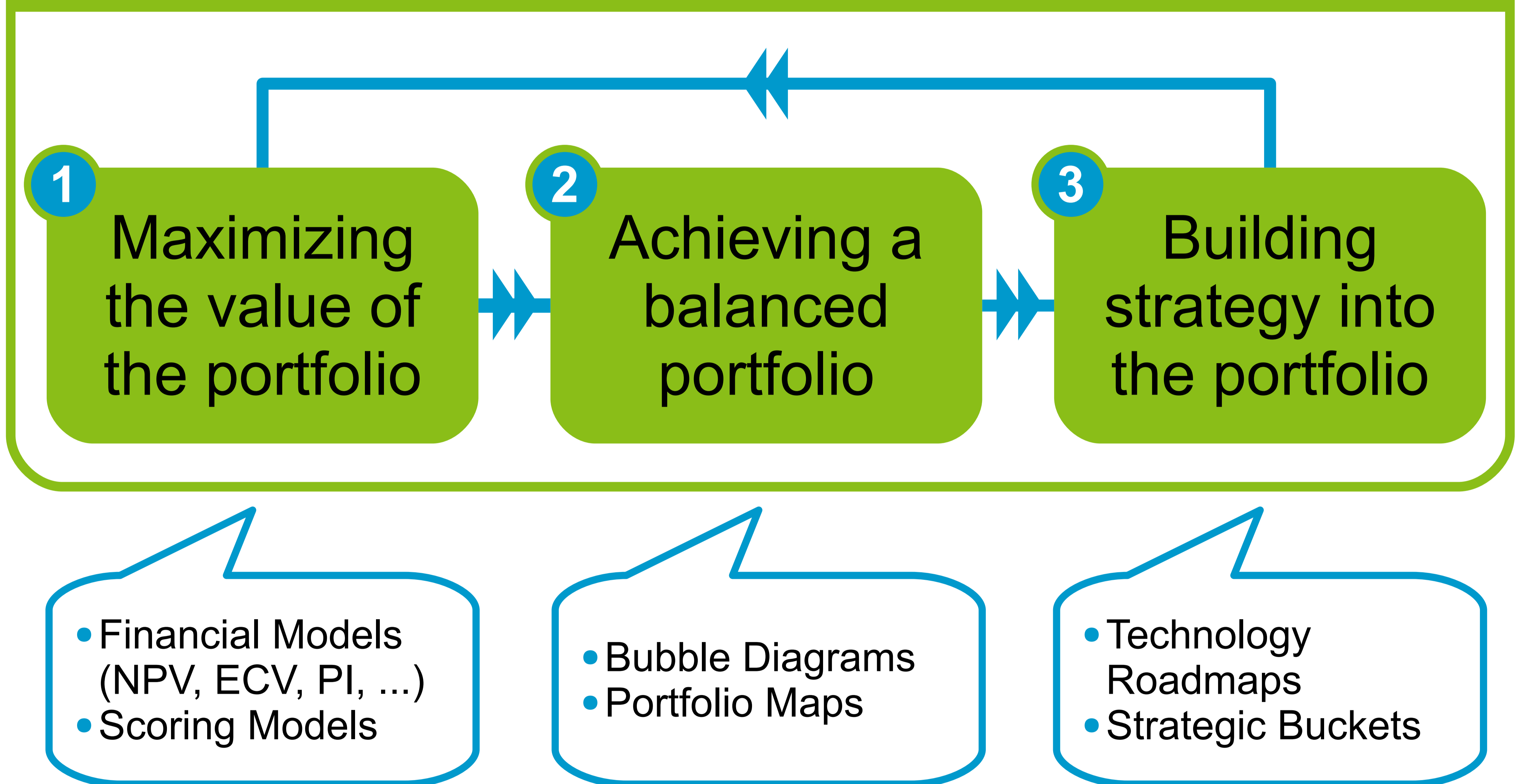


R&D Portfolio Management Process

« The R&D project portfolio selection is a **periodic activity** that aims at **optimizing** the research effort of the company, while enabling it to select a portfolio, which corresponds to its **strategic objectives** and without exceeding the resources available. »

R&D Portfolio Management Process Framework



Main issues of traditional quantitative approaches:

- Selecting the right criteria
- Collecting the data
- Negotiating the portfolio

Prediction Markets Approach



1

More than 63%

EU start new IS project

How many of us will be assistant professors at the end of 2012?

€ 63

2

BUY 35 shares at €66

SELL 35 shares at €66

Price	Qty
€70	80
€66	35
€60	53
€57	12

4 Market settlement 31.12.2012 @ €68

35 * 68 = 2'380 35 * 66 = 2'310

- 35 * 66 = 2'310 - 35 * 68 = 2'380

€70 -€70

3

EU project € 66

Price	Qty
€70	80
€60	53
€57	12

35@€66 -35@€66

Prediction Markets in Fortune 500 Companies



Predicting the number of bugs in new software applications



Choosing the best new research ideas



Forecasting microchip prices



Predicting the date of product launches

Research Methodology

Design Science Research Framework

[Hevner 2004]

PM for R&D portfolio management

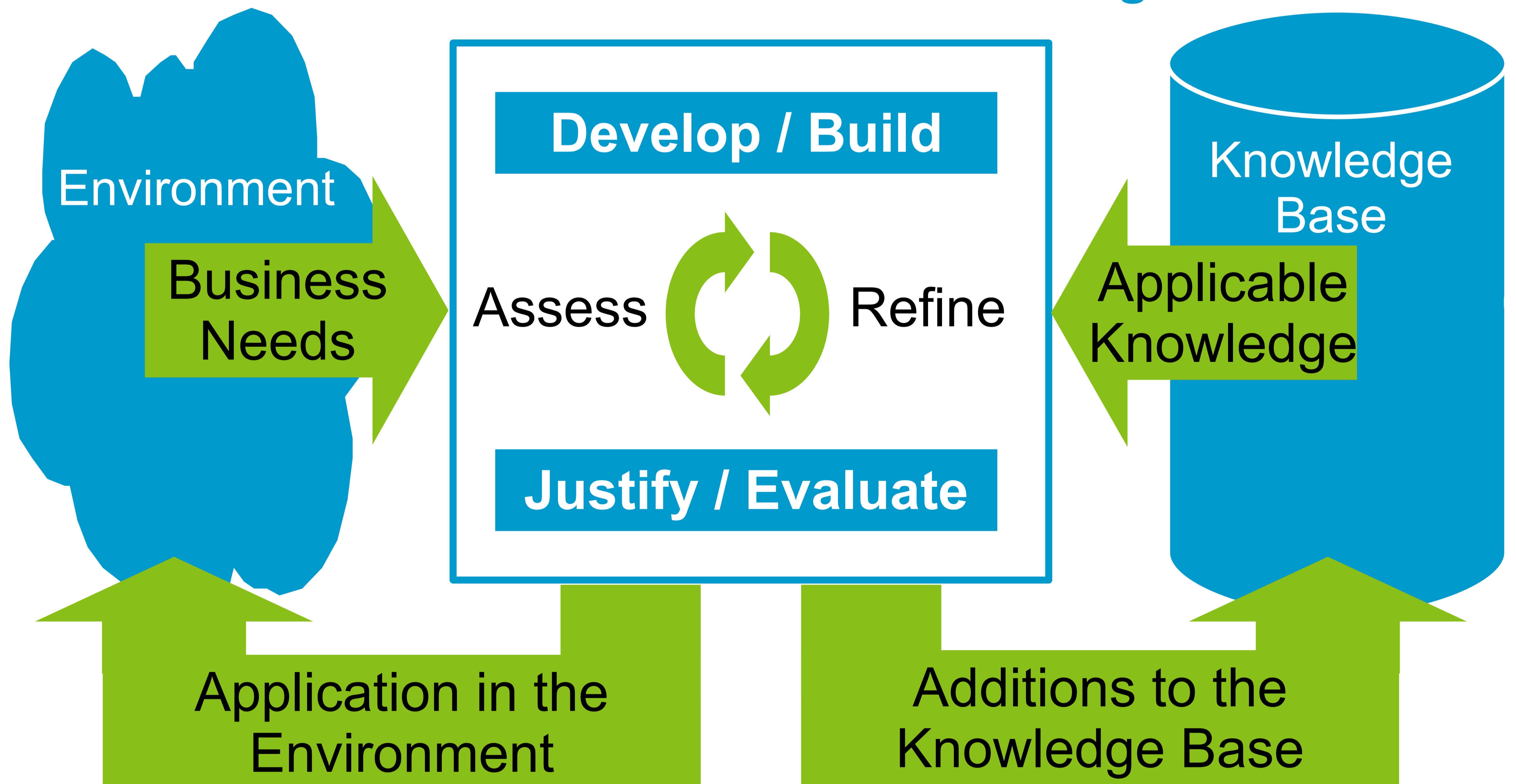
- IT artefact
- Claim ontology
- Conceptual model

Appropriateness of the design

- Case study in R&D community
- Interviews
- Comparison with other tools

Relevance

Rigor



- New DSS for R&D portfolio management
- Guidelines to use PM in corporate environment

- Design propositions and mechanisms
- Appropriateness of PM to manage R&D portfolios