


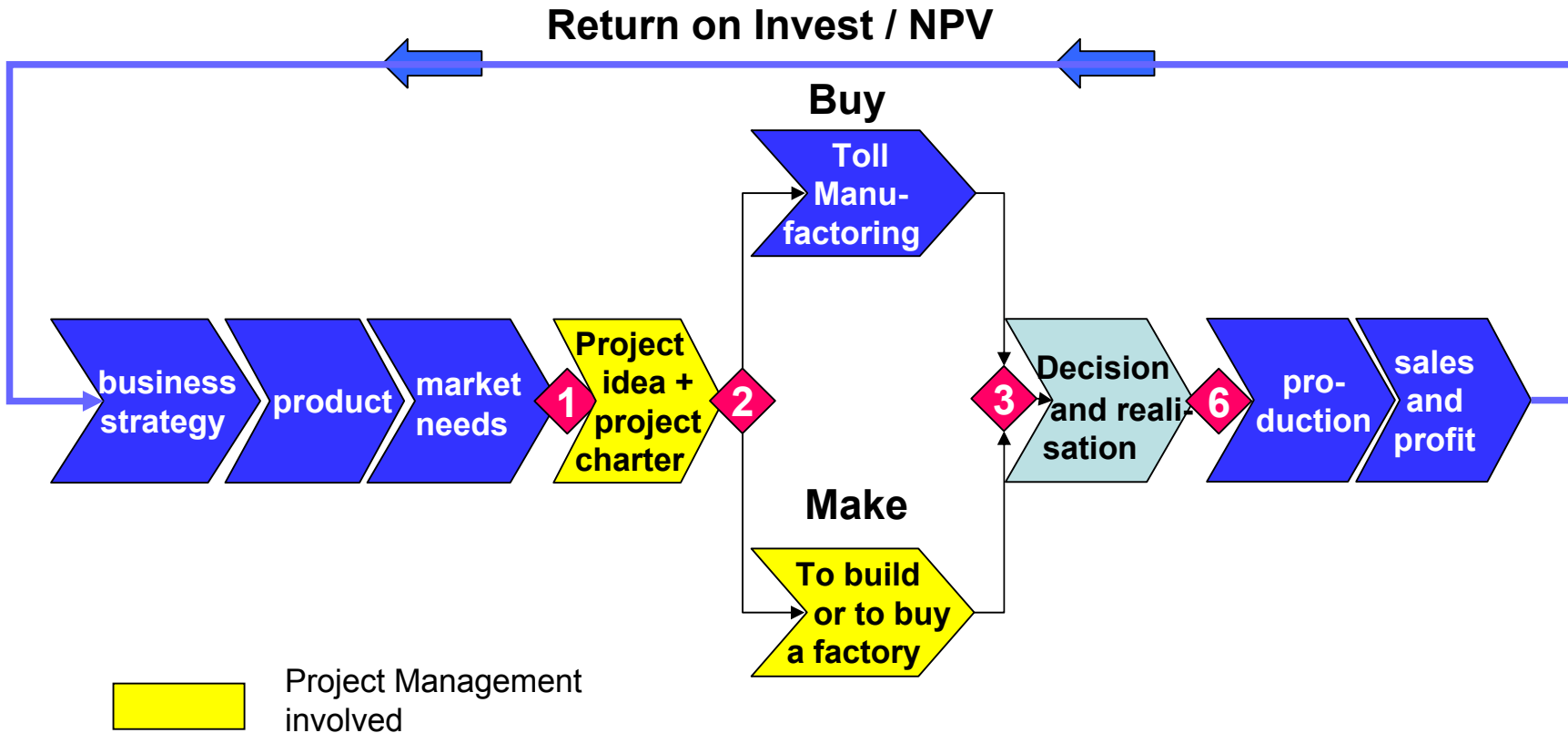
Investment Projects may be driven by:

- Strategy → long term planning
- Opportunity → long term planning and short term chance
- Priority → no planning, but operative needs

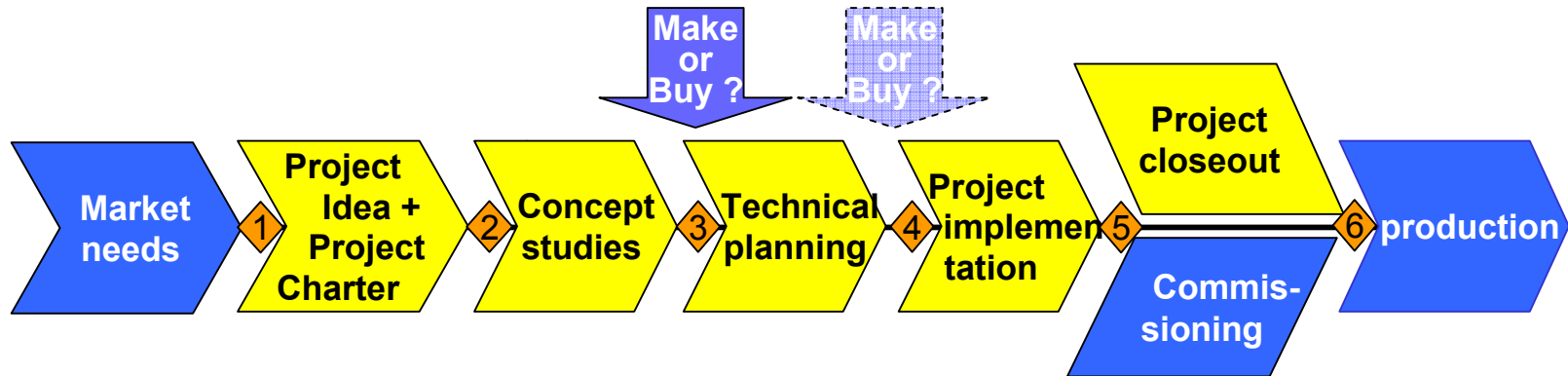
From mind to market - the investment process happens in three main steps:

1. From business strategy to market needs:
The investment idea as the outcome of a company's strategy
2.  Make or buy:
The preparation and appraisal of alternatives is a must
3. Decision and realisation

From mind to market – The investment process happens in three main steps



From market needs to production: Milestones are quality gates and points of decision



M1: Start of the project, definition of project goals

M2: Fixing of project charter, start of concept studies

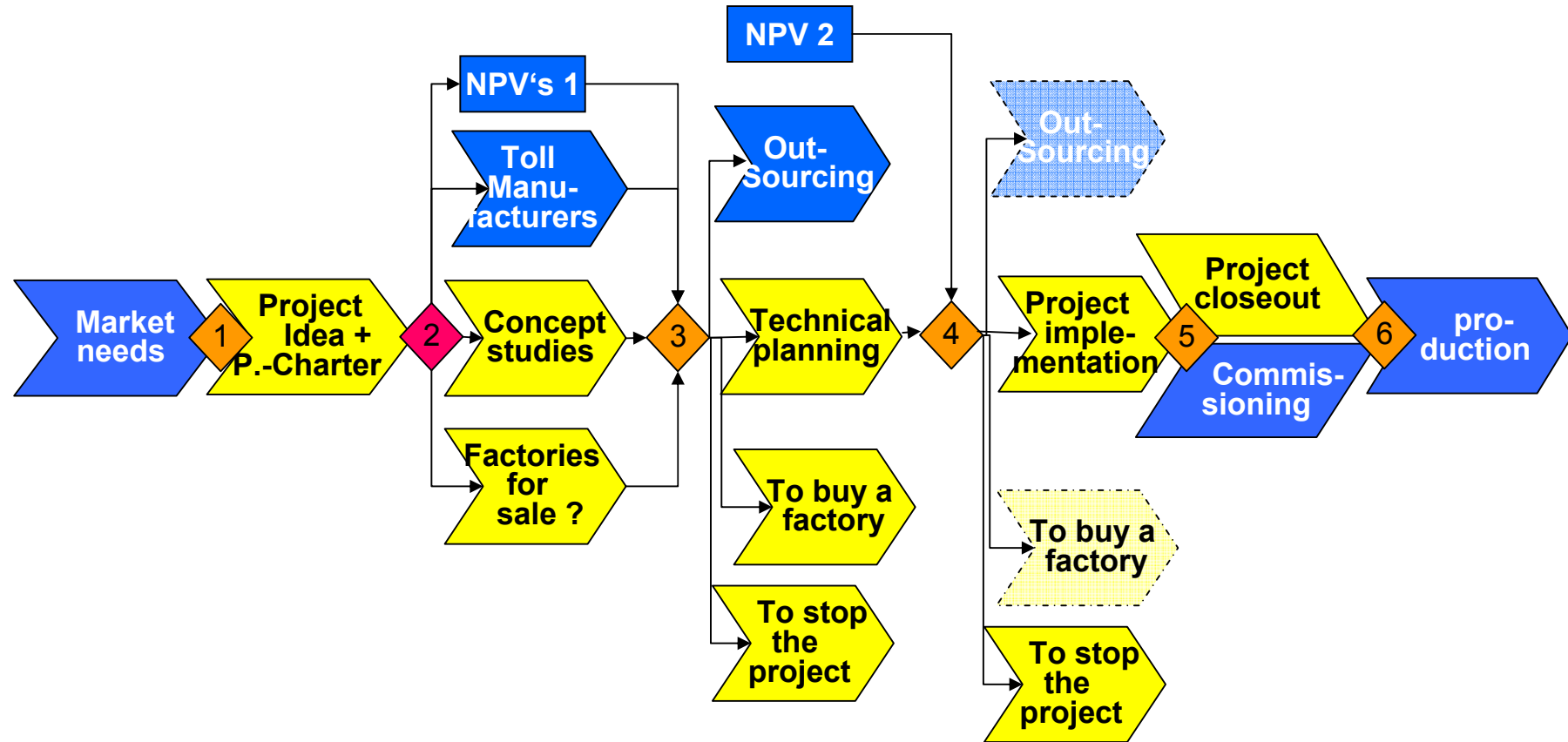
M3: Make or Buy ? / Selection of the best concept, start of technical planning and of awarding process

M4: Fixing of technical planning, release of project realisation (Make or Buy ?)

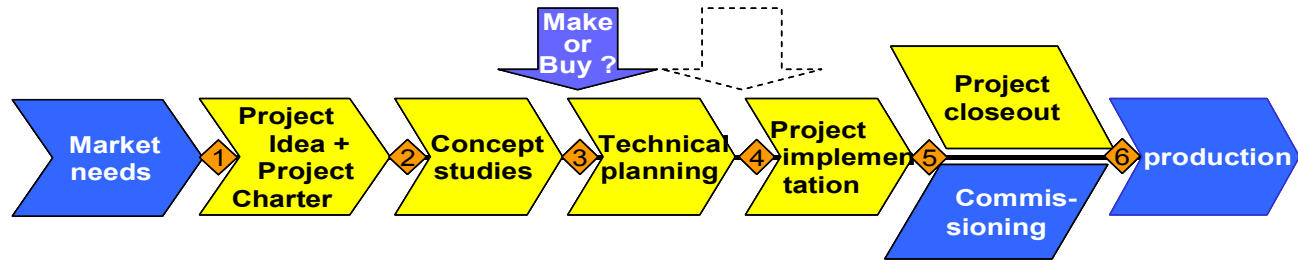
M5: Mechanical Completion, start of commissioning and preparation of production

M6: Hand over of the factory and start of regular production

Good Project Management Practice: The decision making process of investment projects



Project Management cooperates intensively with its strategic and operative partners in the company



Corporate Strategy

Project Strategy

Project Implementation

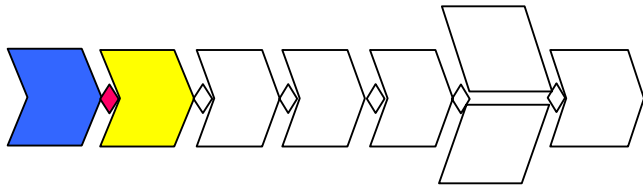
Start-up Strategy

Production



Project Management involved

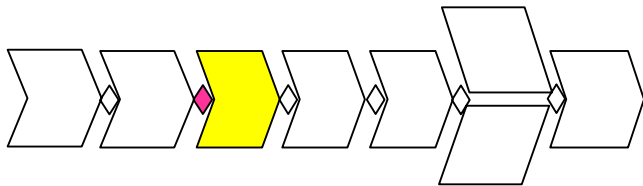
Show me how you start, and I'll predict
the quality of your results ...



M1: Start of the project, definition of project goals

- Describe the idea of the project and its benefits for the company
- Identify the stakeholders
- List the most important goals and boundaries of the project
- Discuss these goals with the stakeholders and come to a common understanding
- Come to a first risk assessment
- Identify your project sponsor(s)
- Prepare a project organisation and communication plan
- Prepare the project charter
- Achieve the full commitment of your sponsor(s) about the project goals

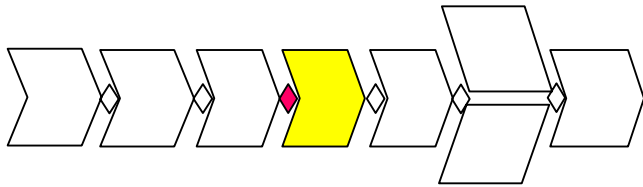
A professional process preserves of expensive and time consuming „loops“



M2: Fixing of the project charter, start of concept studies

- Come to a formal agreement about the project charter
- Look for experienced designers with good track records and agree in written about the design goals.
- Organise workshops with the users: describe the production process, define the minimum size of areas for the different production steps, discuss the users' requirements and agree on a "block layout".
- Based on these results fix a first schedule and figure, include sufficient contingencies for time and money.
- Prepare at least three concept studies.

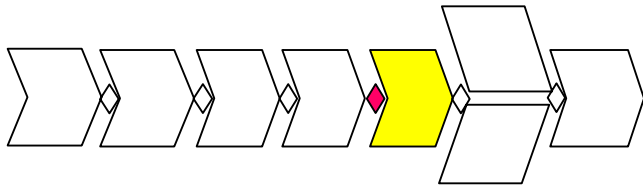
A professional process preserves of expensive and time consuming „loops“ (2)



M3: Selection of the best concept, start of technical planning and awarding process

- Re-check the project charter and decide on the best concept study. It's still "cheap an early enough" to change the boundaries.
- Decide about your contracting strategy for engineering and construction and award the engineering.
- Perform the Basic Engineering
- Re-calculate your budget for time and money
- Agree on these results with your sponsor and the users
- Start the formal process to obtain the authorisation for construction

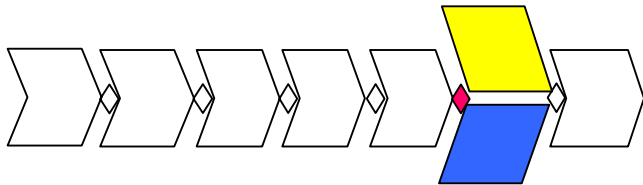
A professional process preserves of expensive and time consuming „loops“ (3)



M4: Fixing of technical planning, release of project realisation

- Obtain the formal approval for the Basic Design and your budget. Agree on the contracting strategy for Detail design and construction. Prepare your contracts thoroughly.
- Start the bidding and awarding process for Detail Engineering and Construction.
- Fix schedule, budget and cash-out planning
- Award contracts for Construction Management and Quality Control; install expertise for project controlling, contract management and reporting
- Perform the construction

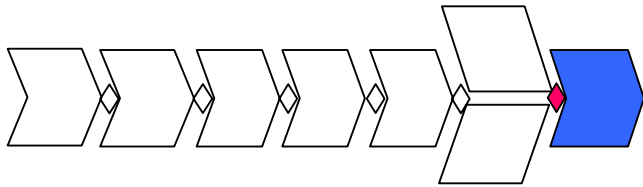
A professional process preserves of expensive and time consuming „loops“ (4)



M5: Mechanical Completion, start of commissioning and preparation of production

- Complete mechanical construction and agree formally on “Mechanical Completion” with users and contractors
- Start commissioning in strong cooperation between operators and contractors
- Close all contracts and prepare your final cost sheet
- Complete commissioning and prepare the take over of the factory by the user
- Agree with sponsor and users on the formal project close-out.

A happy customer is the best reference for your next challenge



M6: Hand over of the factory and start of regular production

- Pass-over the project to your client
- He starts the regular production
- Obtain your bonus, say bye bye to your former “baby” and ...