Chapter 2

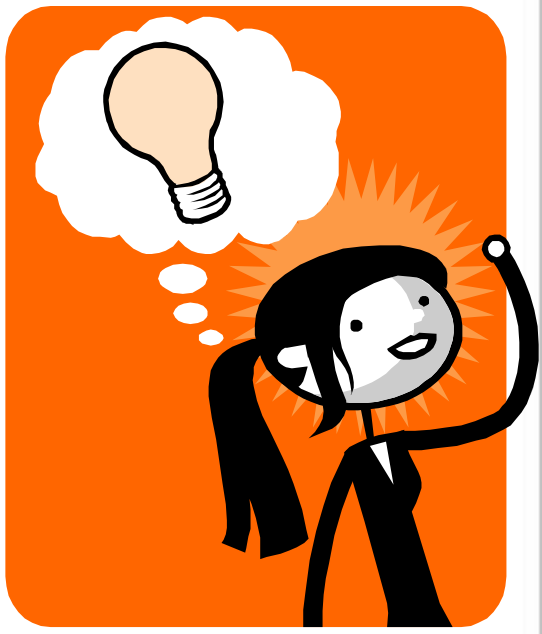
Creativity, Innovation and Entrepreneurship

Product development

Outline:

- **Ceativity , Innovation and Entrepreneurship**
- **Creativity and Product Development Success**
- **Development of New Products**
- **Product Development Pitfalls**
- **Product Development Processes**
- **Intellectual Property**

Creativity and Entrepreneurs



- The ability to develop new ideas and to discover new ways of looking at problems and opportunities.

Innovation and Entrepreneurs

- The ability to apply creative solutions to problems and opportunities to enhance or to enrich people's lives

- Ideas have little value until they are converted into new products, services or processes.
- Creativity as a prerequisite to innovation

- Researchers believe that entrepreneurs succeed by thinking and doing new things or old things in new ways .

Entrepreneurship = creativity + innovation

From Creativity to Entrepreneurship

Creativity

Thinking new things

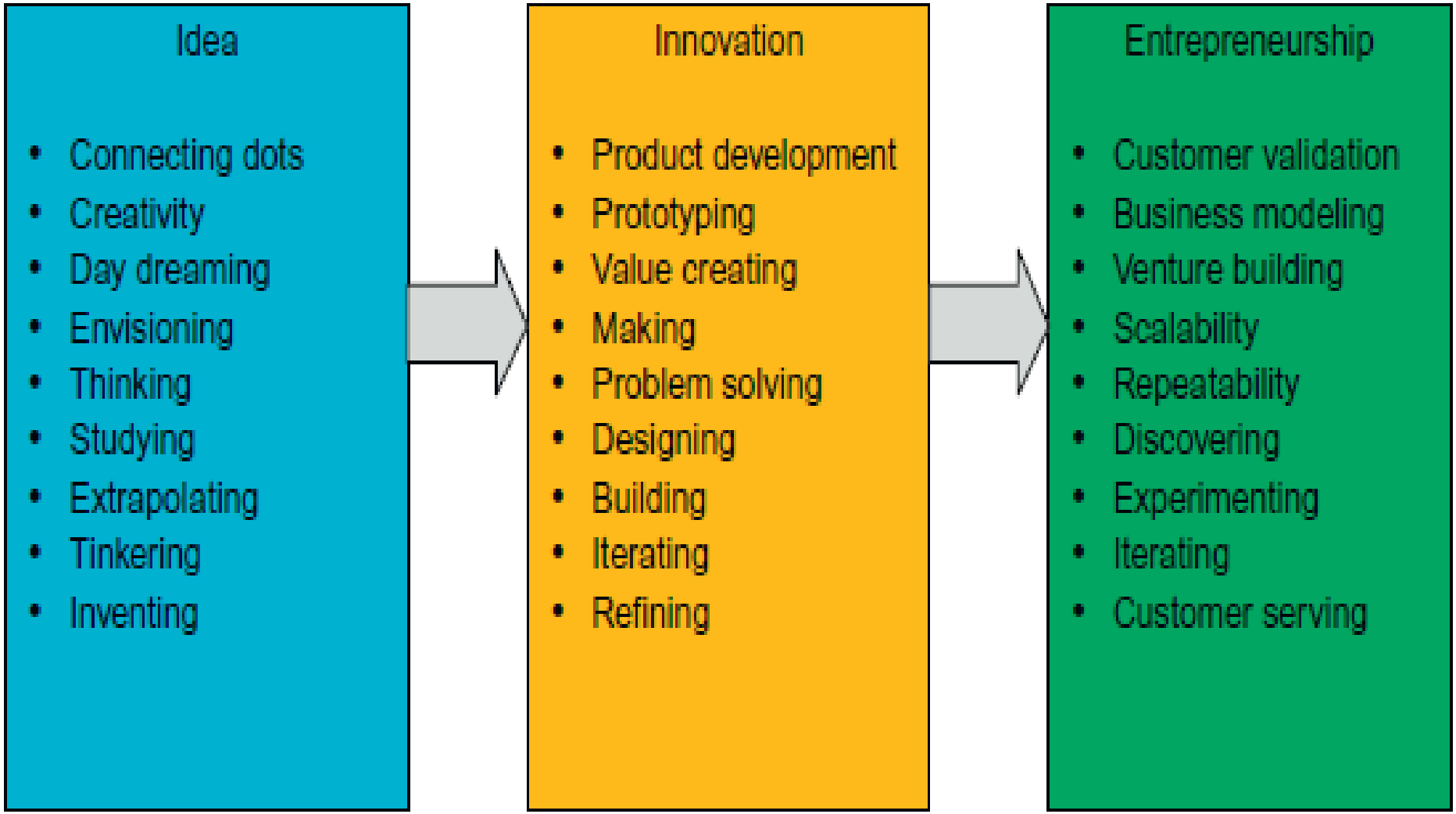
Innovation

Doing new things

Entrepreneurship

Creating value in the marketplace

Distinguishing ideas, innovation, and entrepreneurship

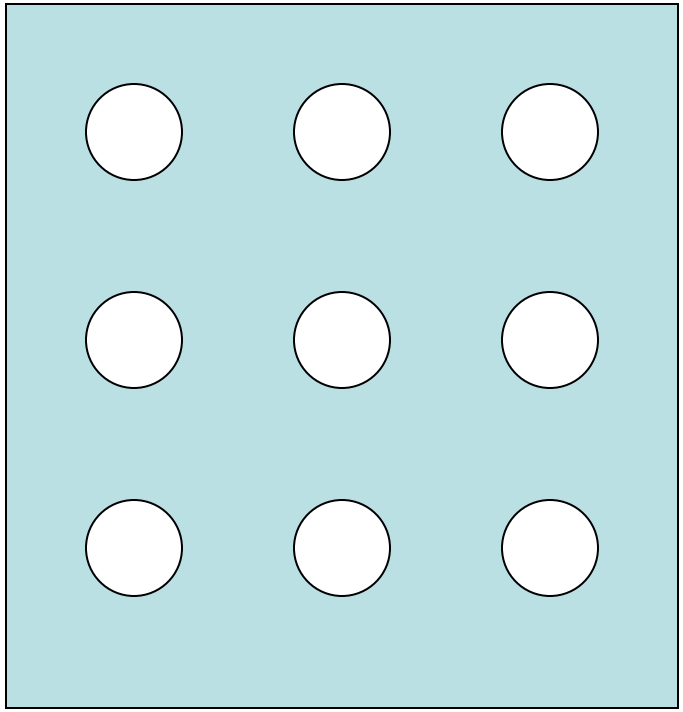


What does it take to be creative ?

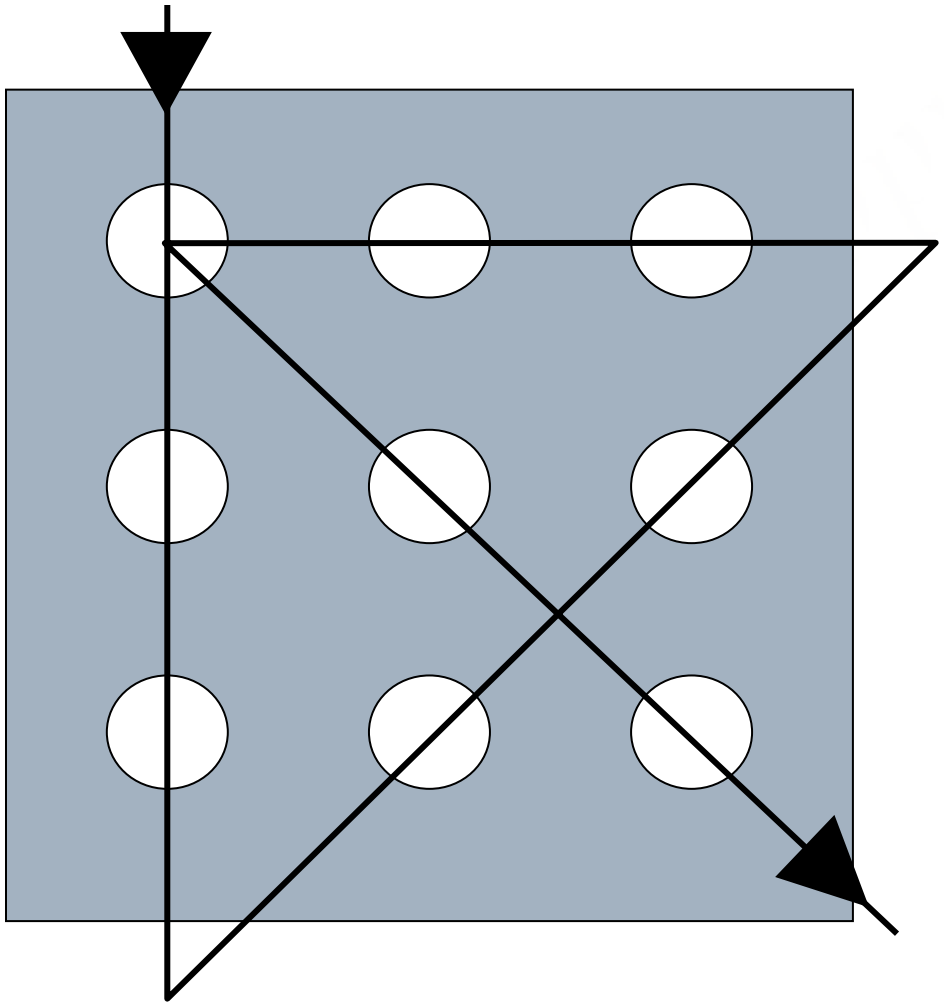
- An initial idea
- A willingness to engage in difficult work
- Customers who are willing to buy your idea

Creativity: Exercise

- See the figure below. Link all nine dots with only four straight lines, which have to be drawn without any breaks and in one go and without linking any of the points more than once.



Cross the line / think outside the „box“



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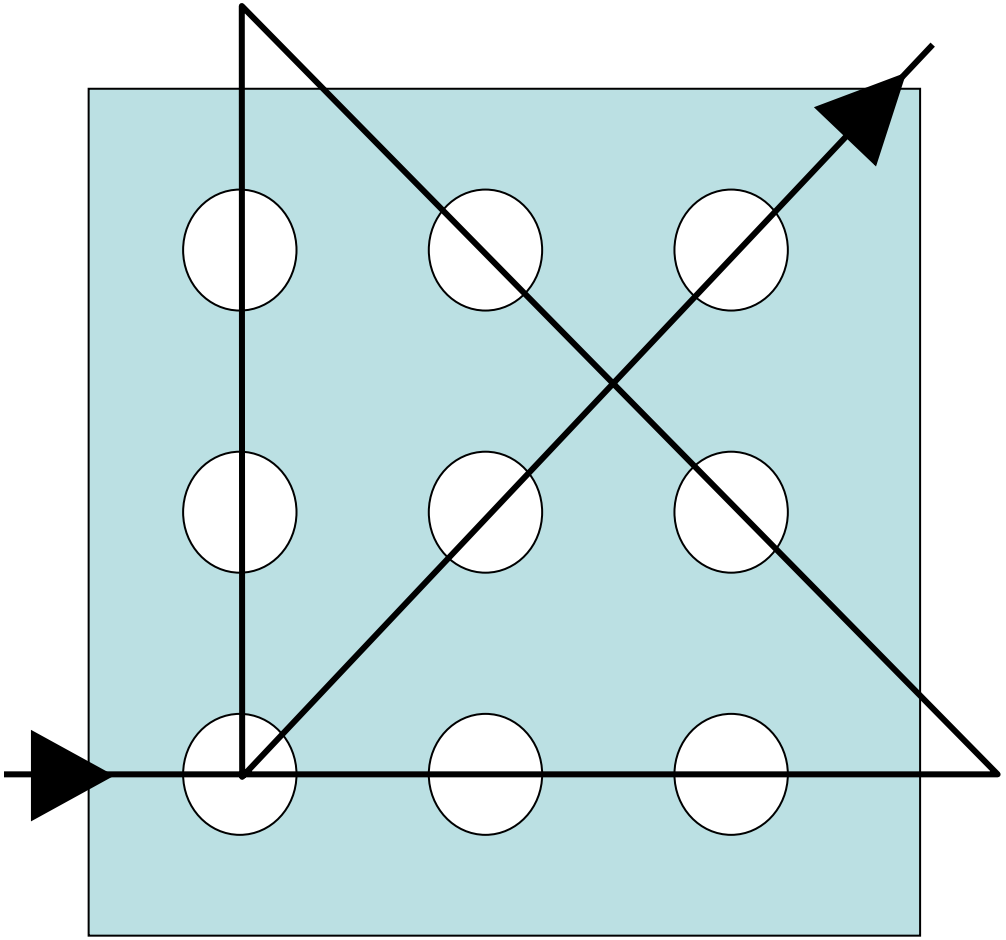

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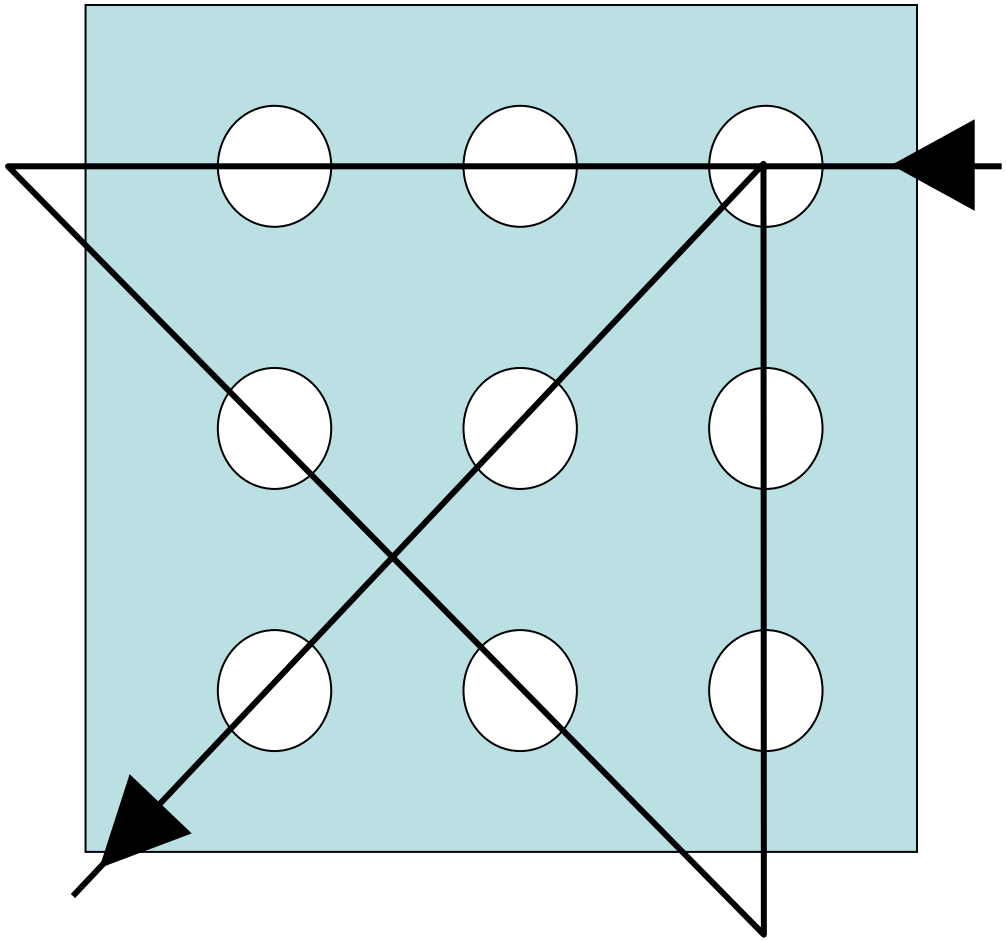
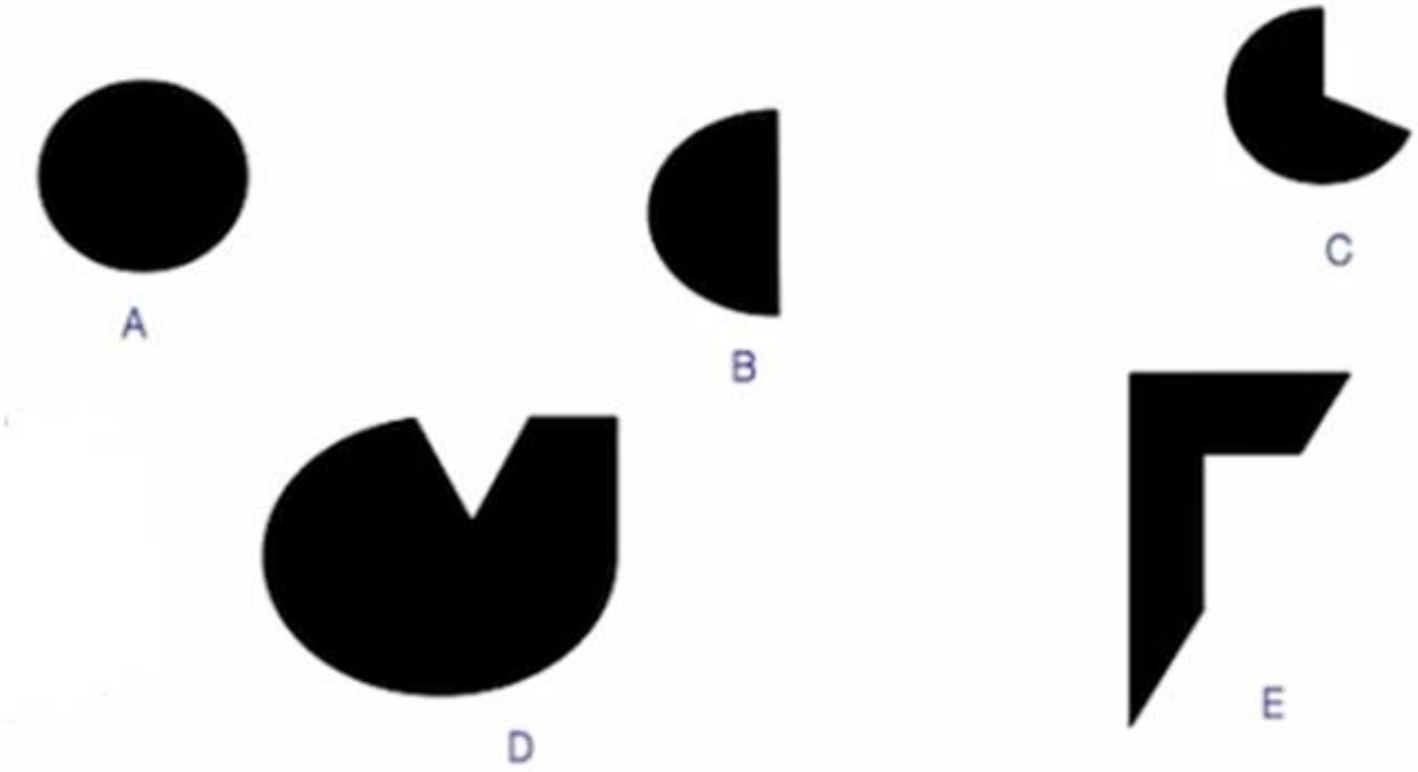


The Right Answer

- Find the one that is different from the others.



"The right answer approach becomes deeply ingrained in our thinking…the difficulty is the most of life isn't this way"
-Roger van Oech

Managing for Creativity

Barriers to Creativity

- Searching for the one "right" answer
- Focusing on "being logical"
- Blindly following the rules
- Constantly being practical
- Viewing play as pointless
- Becoming overly specialized

Enhance Ceativity

- Expecting creativity
- Expecting and tolerating failure
- Encouraging curiosity
- Problems=opportunities
- Trainings to tap one's creative capacity
- Capture ideas and harness them

…Managing for Creativity

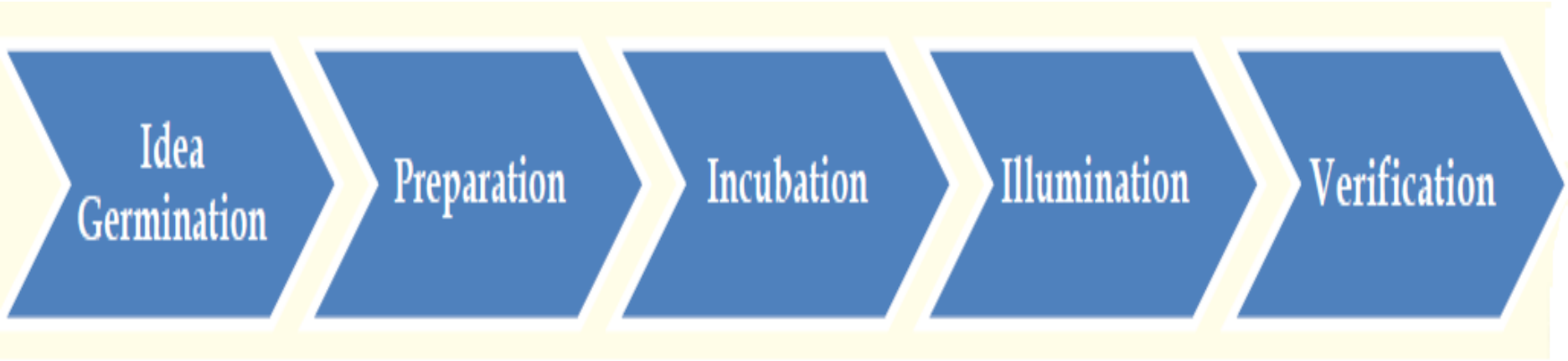
Barriers to Creativity

- Avoiding ambiguity
- Fearing looking foolish
- Fearing mistakes and failure
- Believing that “I’m not creative”

Enhance Ceativity

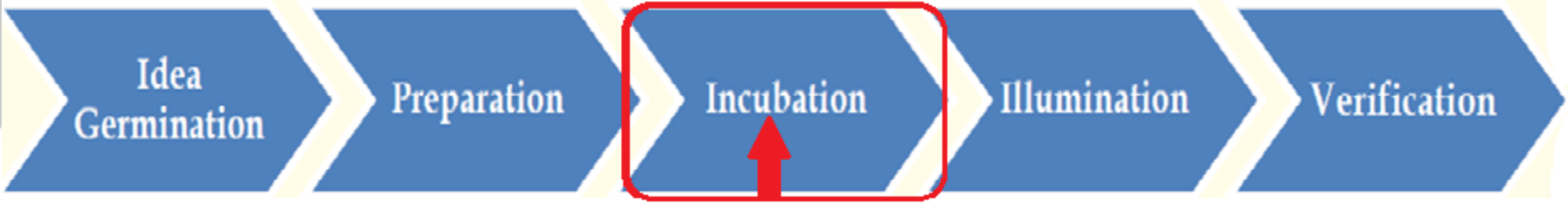
- Providing support
- Rewarding creativity
- Invite lateral thinking

The creative process

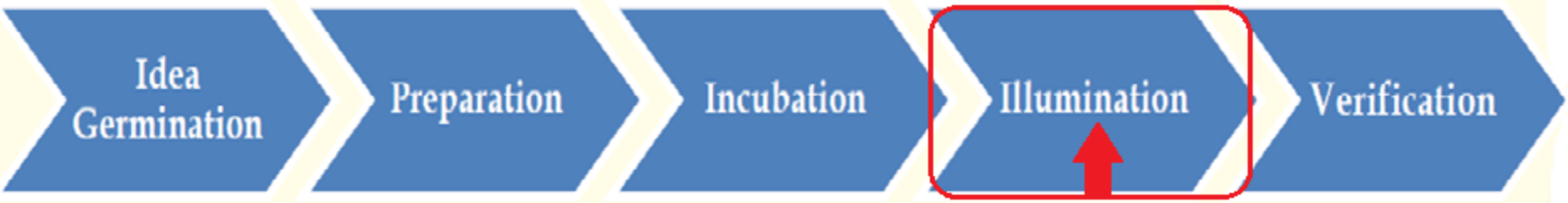


- This is the seeding stage of a new idea.
- It is the stage where the entrepreneur recognises that an opportunity exists.
- The idea germination takes place according to interest, curiosity of the entrepreneur

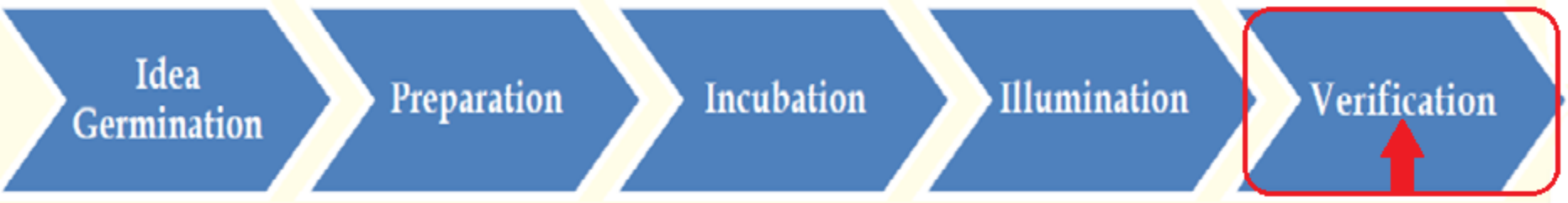
- On the basis of the idea, interest and curiosity the need is adjudged by the entrepreneur and he starts looking for the answer to implement the idea.
- If the idea is to launch a new product or service then market research is conducted.
- That happens because the seed of curiosity has taken form of an idea, the entrepreneurs foresee the future of the product



- Give the subconscious time to reflect on the information (daydream, relax, etc)
- The entrepreneur starts thinking about the idea and implementation in his sub-conscious mind
- Study the problem/opportunity in a wholly different environment
  - E.g studying the pros and cons of manufacturing the product before he had launched it.

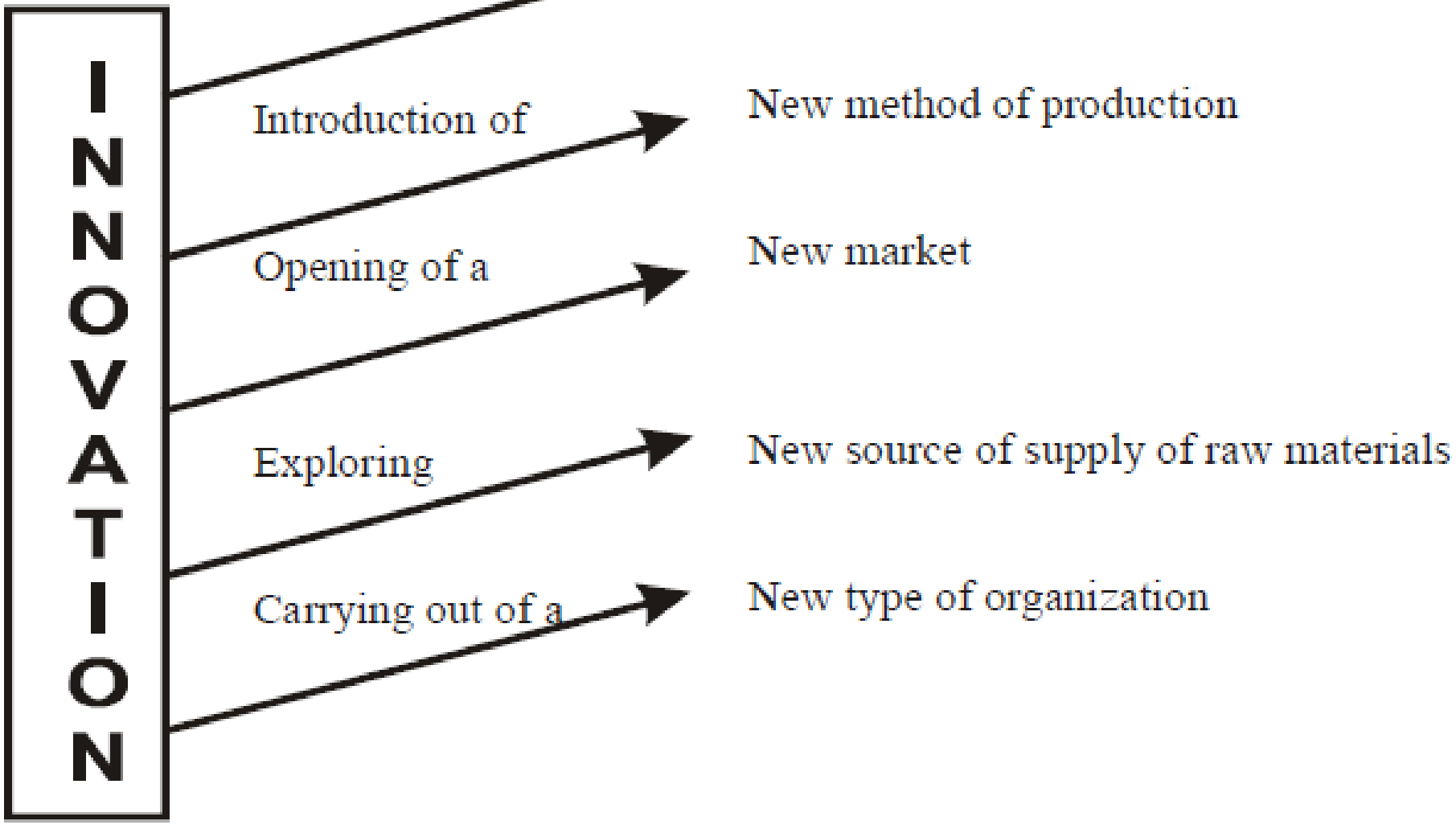


- **In this period of illumination the idea re-surfaces in realistic way.**
- The entrepreneur comes out with viable plan to give practical shape by collecting raw-material, arranging funds, policy–making for the implementation of idea.



- **Also called the validation or testing stage.**
- Validate the idea is accurate and useful (conduct experiments, prototypes, etc)
- This is the most difficult phase of creativity as obstacles begin to appear.
- This is the developing stage in which knowledge is developed into application

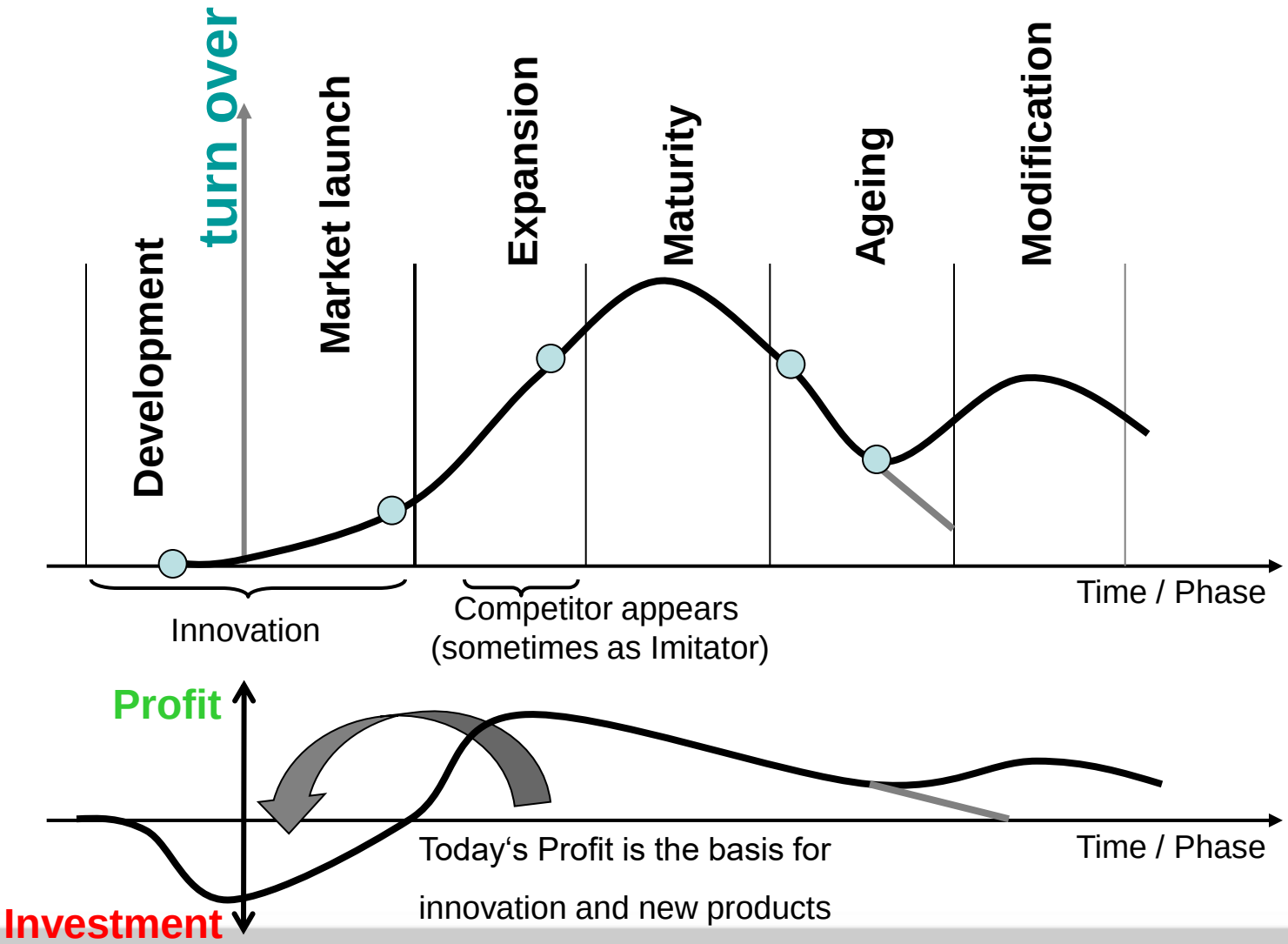
Innovation


INNOVATION
Introduction of
New product
Introduction of
New method of production
Opening of a
New market
Exploring
New source of supply of raw materials
Carrying out of a
New type of organization

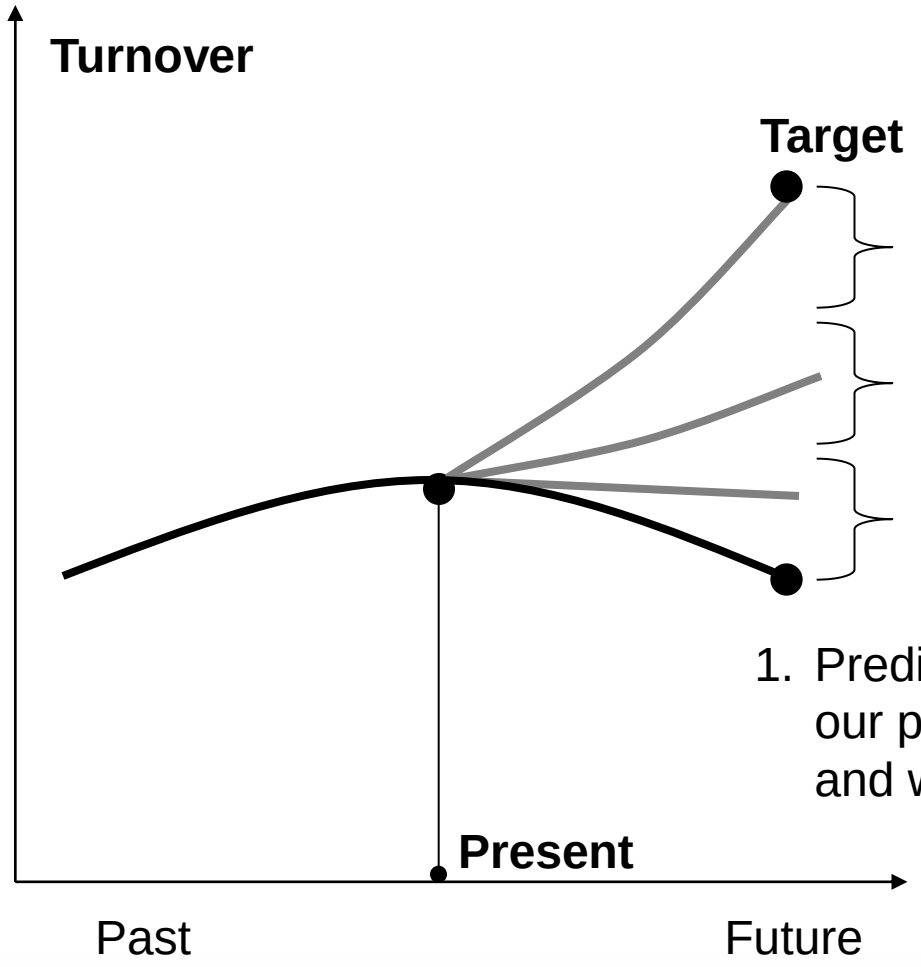
Product development success

- Two fundamental ways to succeed in product innovation:
  - **Doing projects right (EFFICIENCY):**
    - Employing cross-functional teams
    - building in the voice of the customer,
    - getting a sharp, early and stable product definition
  - **Doing the right projects (EFFECTIVENESS):**
    - project selection decisions and portfolio management techniques

Profit and CASH for new Product Development

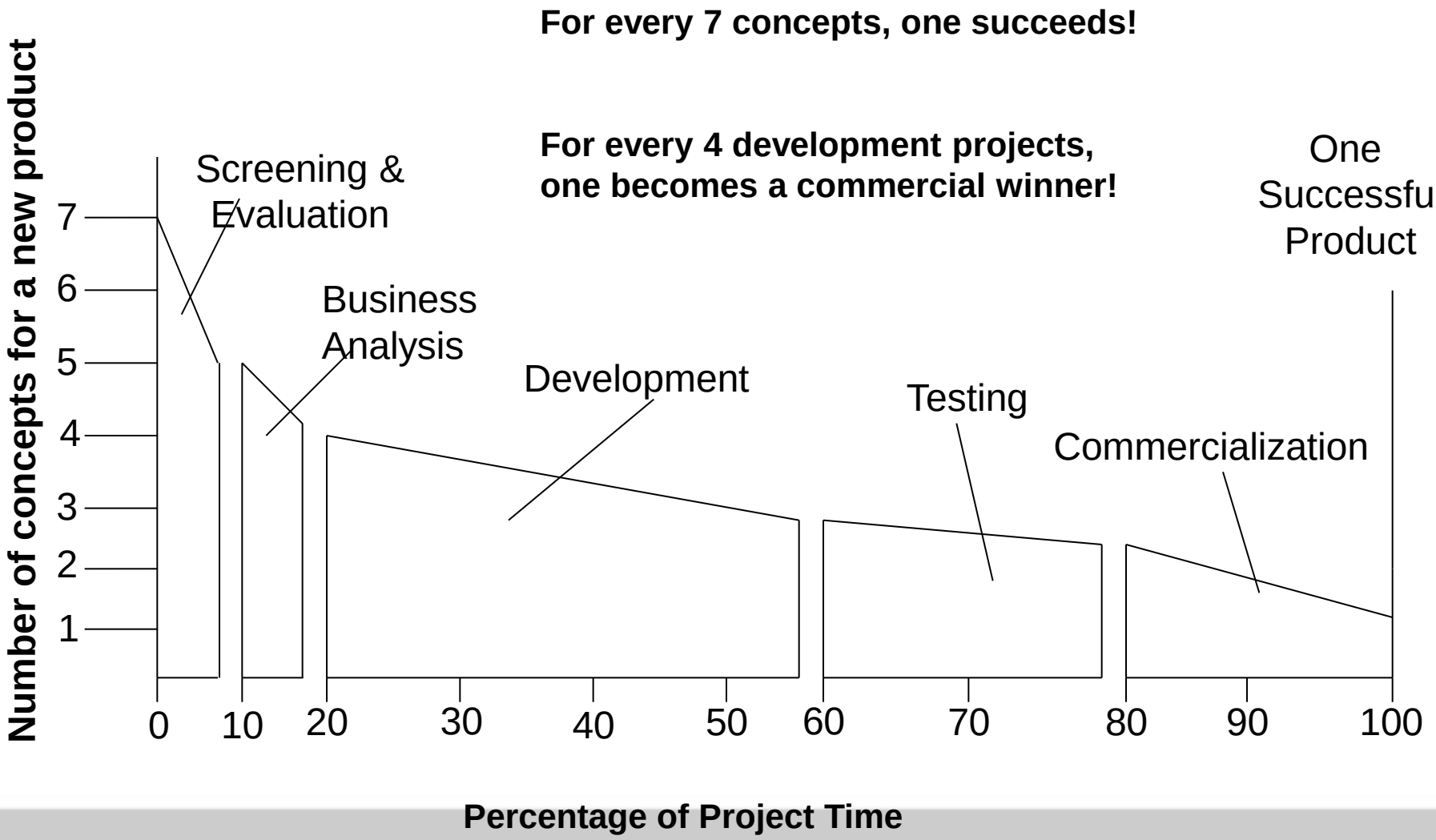


Innovation & Turnover



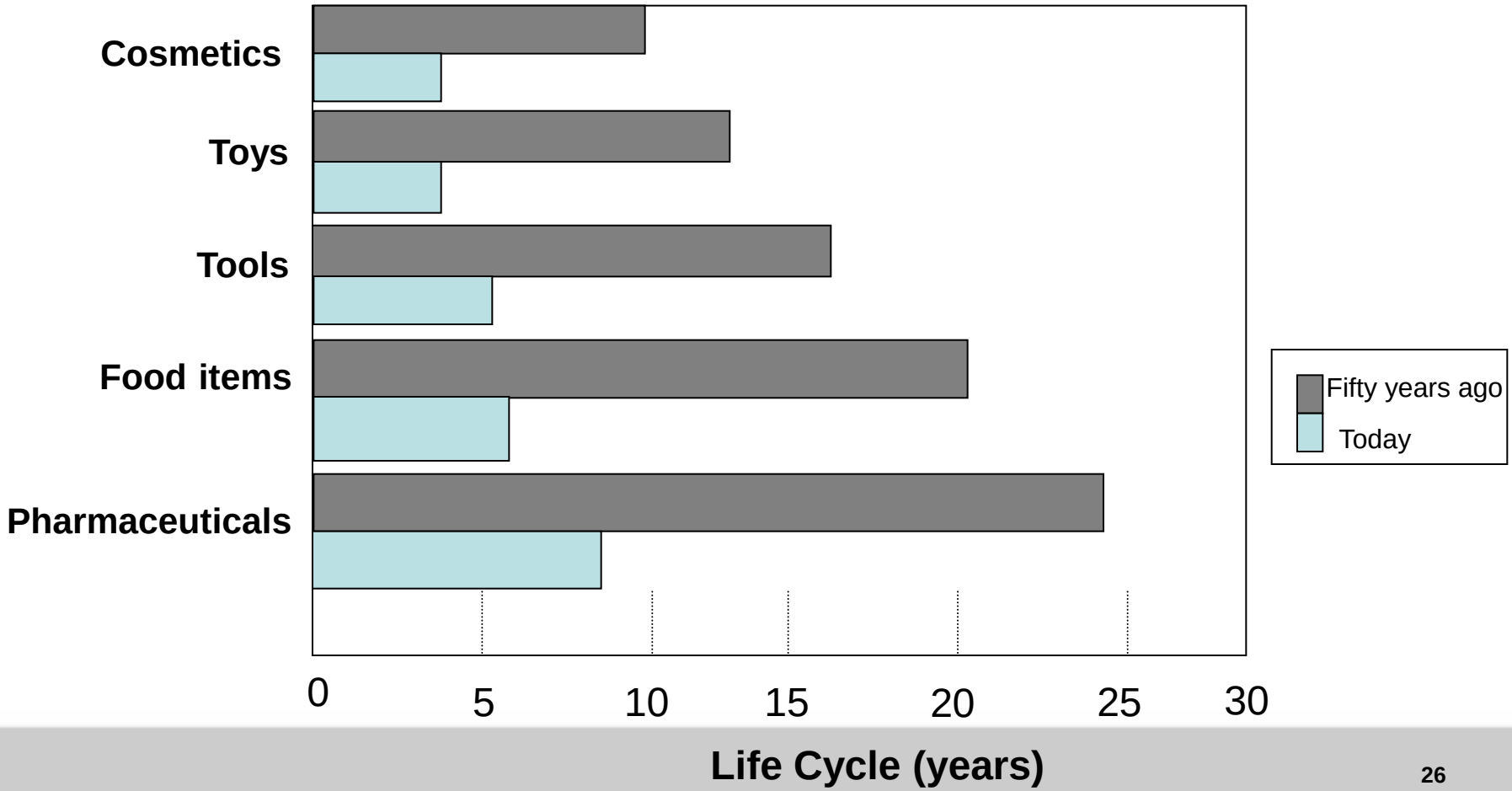
4. Increase turnover through new innovations
3. Increase turnover through innovative projects in progress
2. Increase turnover through marketing present products
1. Prediction of turnover with our present product portfolio and without innovation

Scrap Rate of New-Product Projects

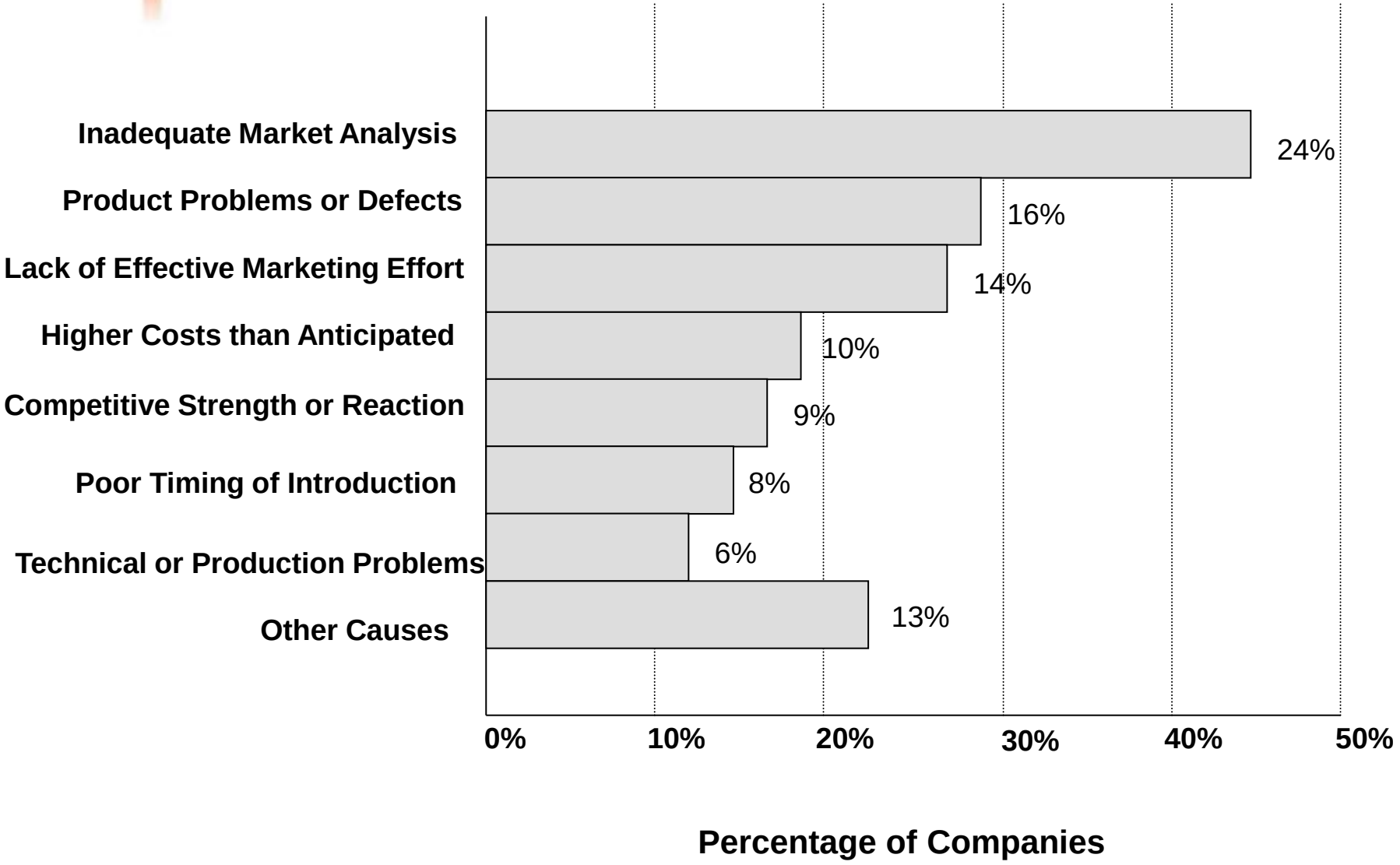


Decreasing Product Life Cycles

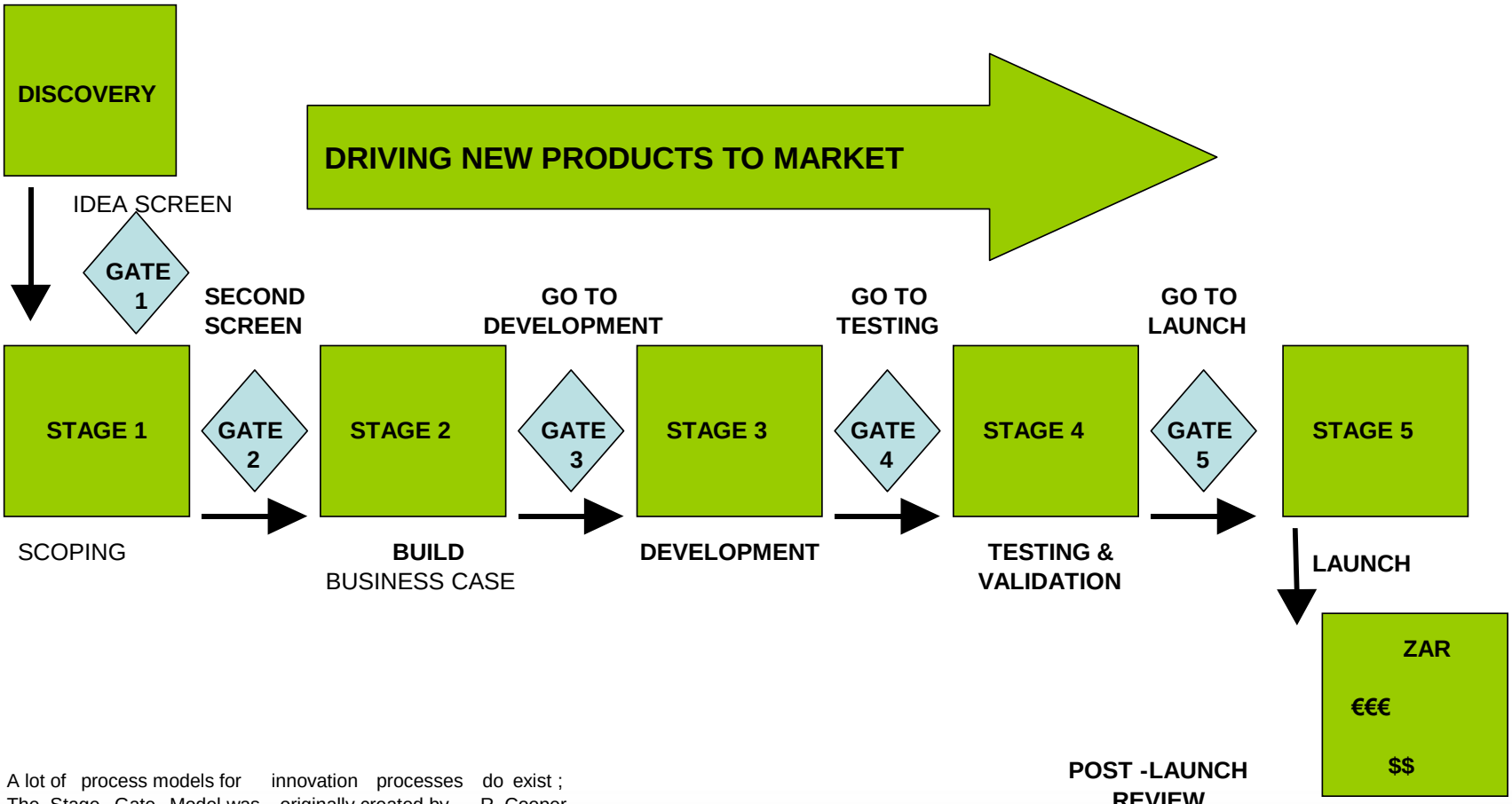
Product life cycles has shrunk by an average of 400 % over the past 50 years



Causes of new product failure



Stage-gate model



A lot of process models for innovation processes do exist ; The Stage -Gate -Model was originally created by R. Cooper.

Discover stage + five key stages

- **Stage 0 - Discovery: Activities designed to discover opportunities and to generate new product ideas.**
- **Stage 1 - Scoping: A quick and inexpensive assessment of the technical merits of the project and its market prospects.**
- **Stage 2 - Build Business Case: Technical, marketing and business feasibility are accessed resulting in a business case which has three main components: product and project definition; project justification; and**

Discover stage + five key stages

- **Stage 3 - Development**: Plans are translated into concrete deliverables. The actual design and development of the new product occurs, the manufacturing or operations plan is mapped out, the marketing launch and operating plans are developed, and the test plans for the next stage are defined.
- **Stage 4 - Testing and Validation**: The purpose of this stage is to provide validation of the entire project:
  - the product itself, the production/manufacturing process, customer acceptance, and the economics of the project.
- **Stage 5 - Launch**: Full commercialization of the product - the beginning of full production and commercial launch.

Types of Intellectual Property Rights

- *Patents*
- *Copyrights*
- *Trademarks*
- *Trade Secrets*

Types of Intellectual Property Rights

- **Trademark**
  - It is a ***recognizable sign, design or expression*** which distinguished products or services of a particular trades from the similar products or services of other traders.

Types of Intellectual Property Rights

- **Trade Secret**
  - Any confidential business information which provides an enterprise a competitive edge may be considered a trade secret.
  - For example, Coca-Cola formula

The END