case study and role play

### The voyage of technological invention to the market

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case study:

probiotic yoghurt

- actors of role play: academic researchers
  - industrial researchers
  - development managers
  - marketing/product mangager



### Introduction

- ✓ probiotic is defined as live preparations of bacterial species
  which, when ingested, are beneficial to the consumer.
- ✓ the claimed health benefits of probiotic-containing foods are concerned with general gut health, blood cholesterol and body's natural defences, lactose intolerance, chronic liver disease, pancreatitis and certain forms of cancer.
- ✓ probiotic products can reduce the need for use of antibiotics.
- √ to exert a probiotic effect, the strain should
  - be able to survive the gastrointestinal transit and,
  - have the capability to adhere to the intestinal mucosa.

## the voyage of technological invention to the market <u>case study</u>: probiotic yoghurt

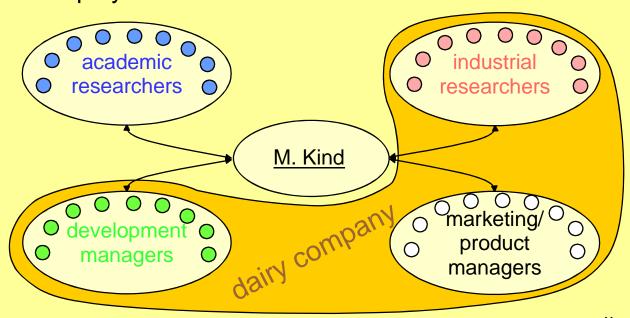
#### the scenario

- your dairy company is a leading domestic undertaking (30 % market share in conventional yoghurts in Germany)
- foreign companies enter the domestic market with probiotic yoghurts
- the board of your dairy company has decided, that the company should enter the probiotic yoghurt market in 10 months from now
- promising probiotic strains have been found by academic researchers

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#### a role-play:



# the voyage of technological invention to the market <u>case study</u>: probiotic yoghurt

#### the ACADEMIC RESEARCHER

- analyze scientific results
  - √ by evaluating strains
  - ✓ by choosing best strains with respect to
    - -their survival rate of the gastrointestinal transit
    - -their adhesive properties to the intestinal mucosa
- improve understanding of product quality related to
  - ✓ process parameters (temperature, pH, time, concentration, ...)
- publish or commercialize your discovery?!

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#### the INDUSTRIAL RESEARCHER

- provide key production parameters for your company
- cooperate with university
- optimize product quality to fit the expectations of the market
  - > taste, rheology, appearance, scent
  - keeping quality
  - ➤ probiotic effect

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#### the DEVELOPMENT MANAGER

- make sure, that required production rate can be realized
  - > at minimal cost
  - > at maximal process reliability and reproducability
  - > at maximal product safety
  - > at maximal formulation flexibility
  - within given time frame
- work out production process, technological requirements

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#### the MARKETING / PRODUCT MANAGER

- make sure, that maximum profit will be realized
  - by defining and communicating a realistic business plan
  - by allocating and controlling ressources
  - by defining and executing the marketing strategy on the basis of a profound market knowledge (product portfolio, brand image, advertisement actions, ...)