

New Product Development

Strategy, Tactics & Process

Anand Subramaniam

“Knowledge speaks, but wisdom listens.”

- Jimi Hendrix

Highlights

- NPD - Strategy
- NPD - Design
- NPD - Types
- NPD – Process
- NPD - Levers

Reason for New Product Failures

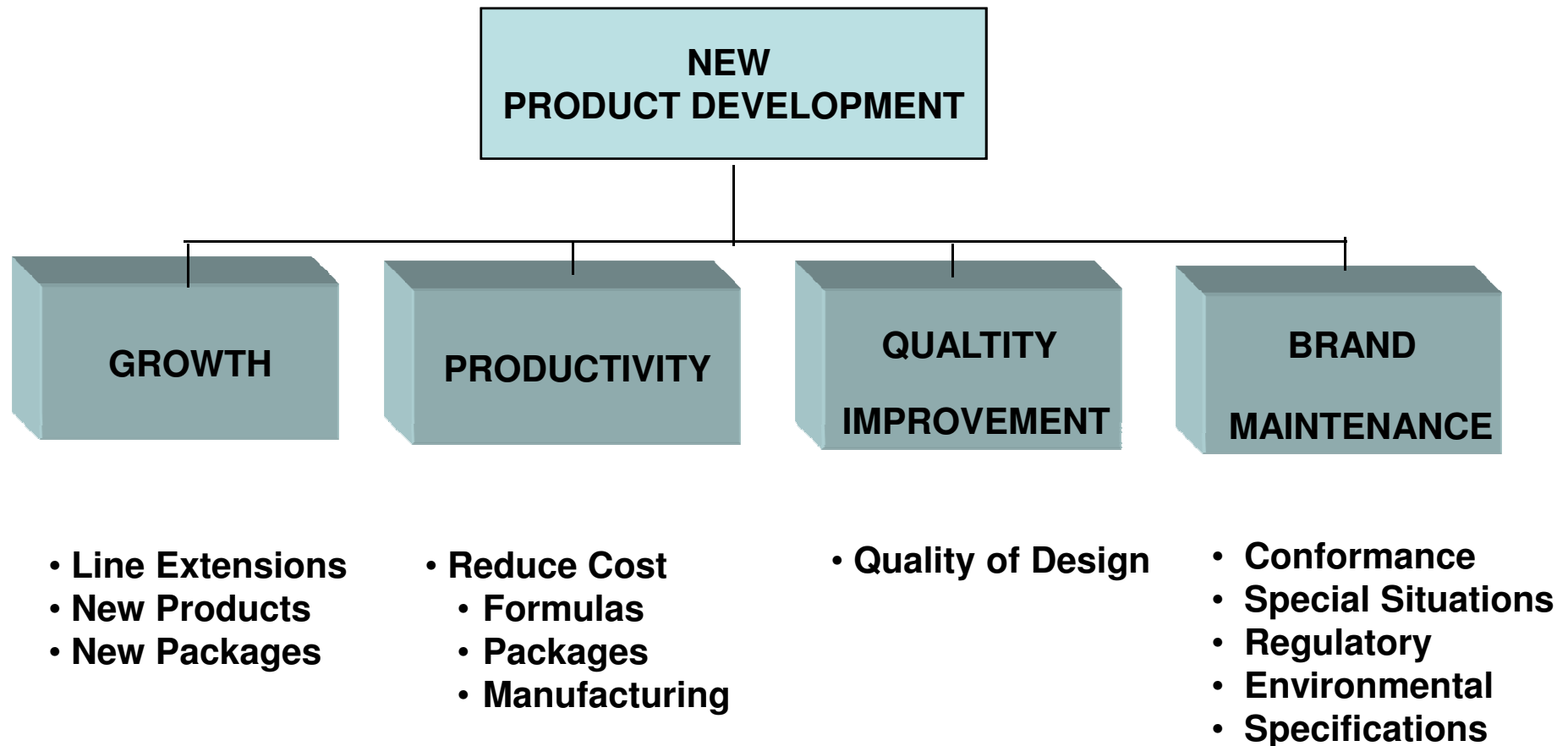
- Overestimating market size
- Poor marketing research
- Design problems
- Excessive development costs
- Incorrectly positioned, priced, or advertised
- Competitive reaction

New Product Development Strategy

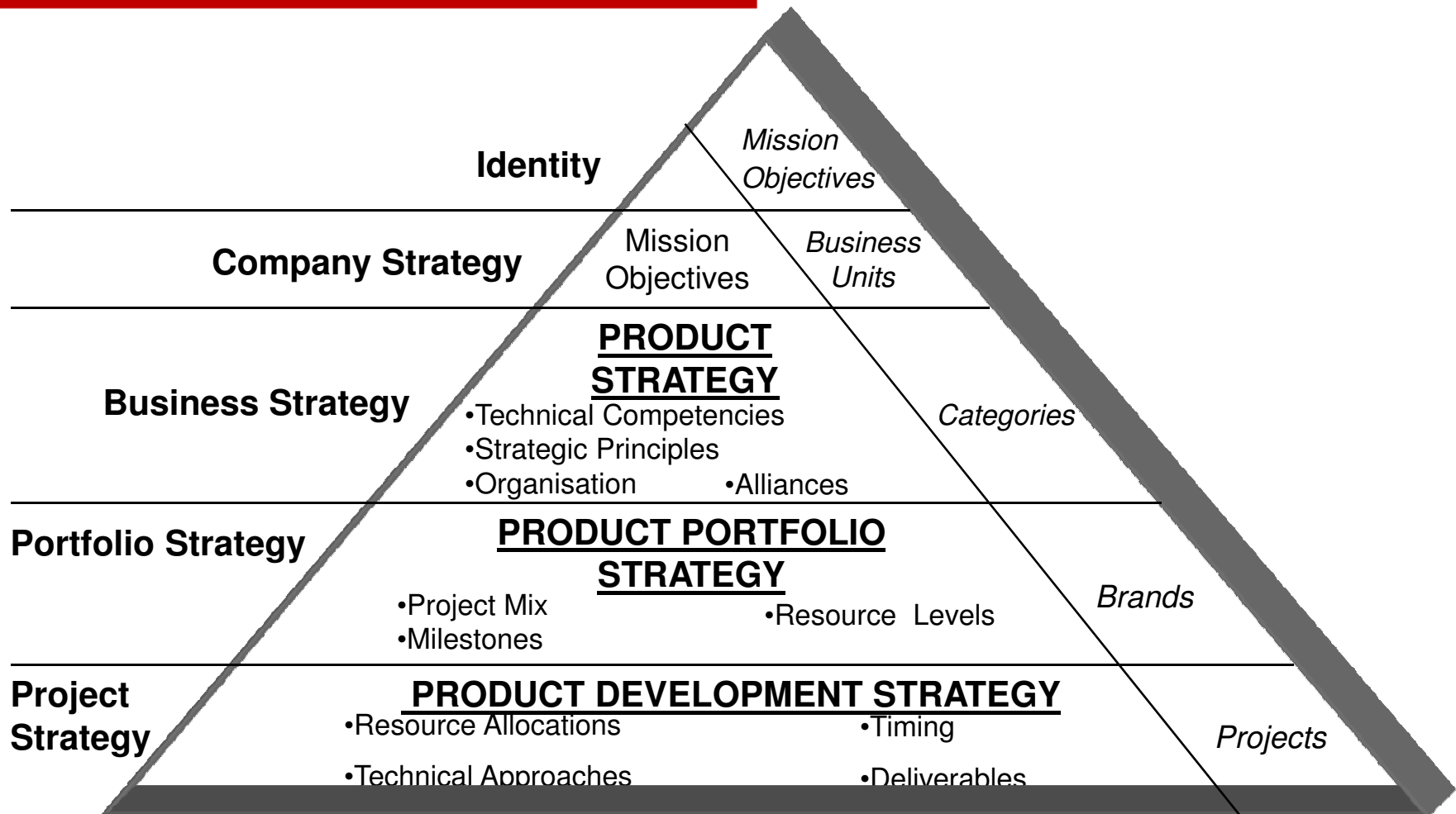
New Product Development Strategy

- Original products
- Acquisition
- Product improvements
- Product modifications
- New brands through the firm's own R&D efforts.

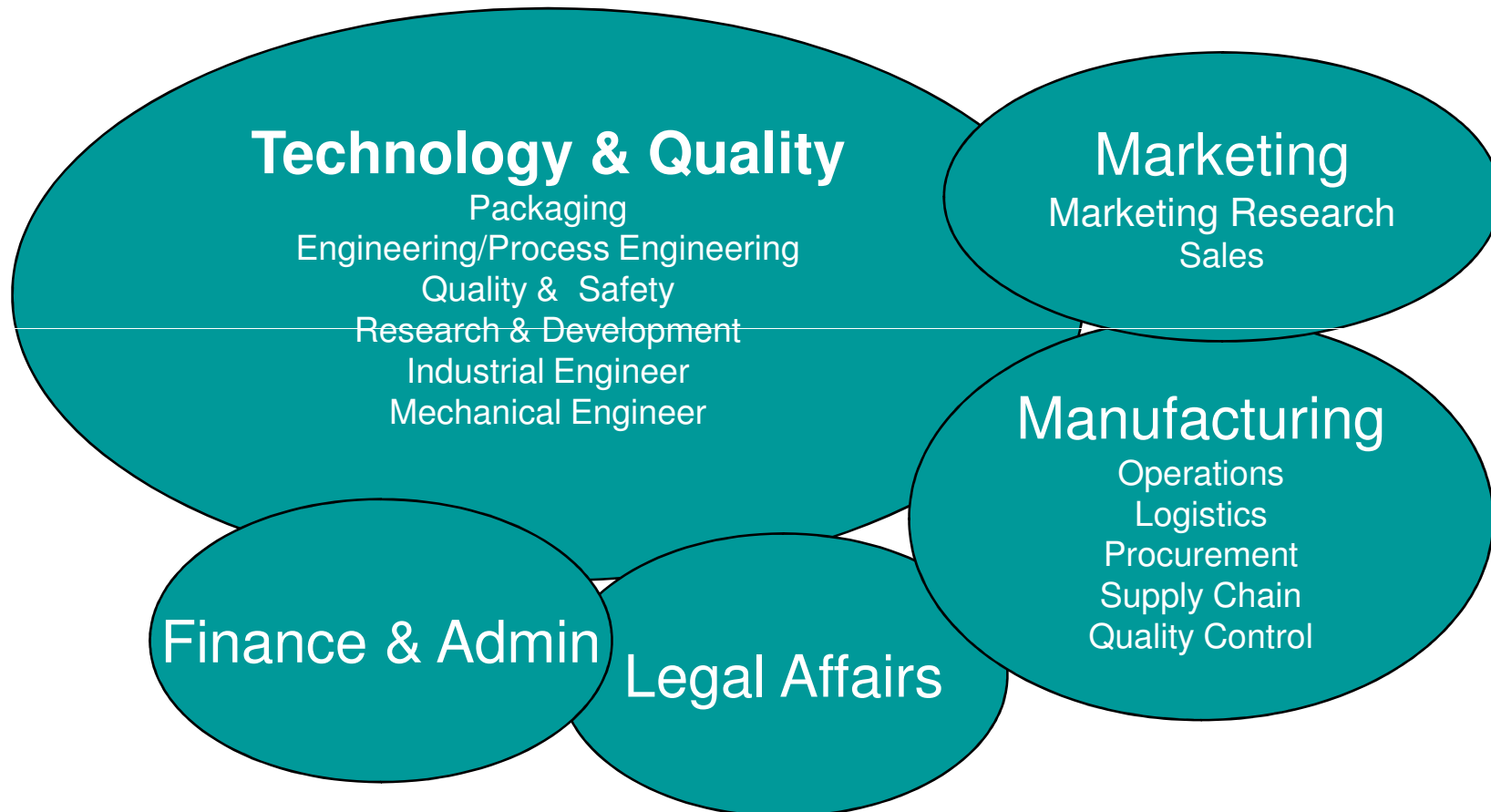
NPD - Value Add



NPD Strategy - Planning Levels

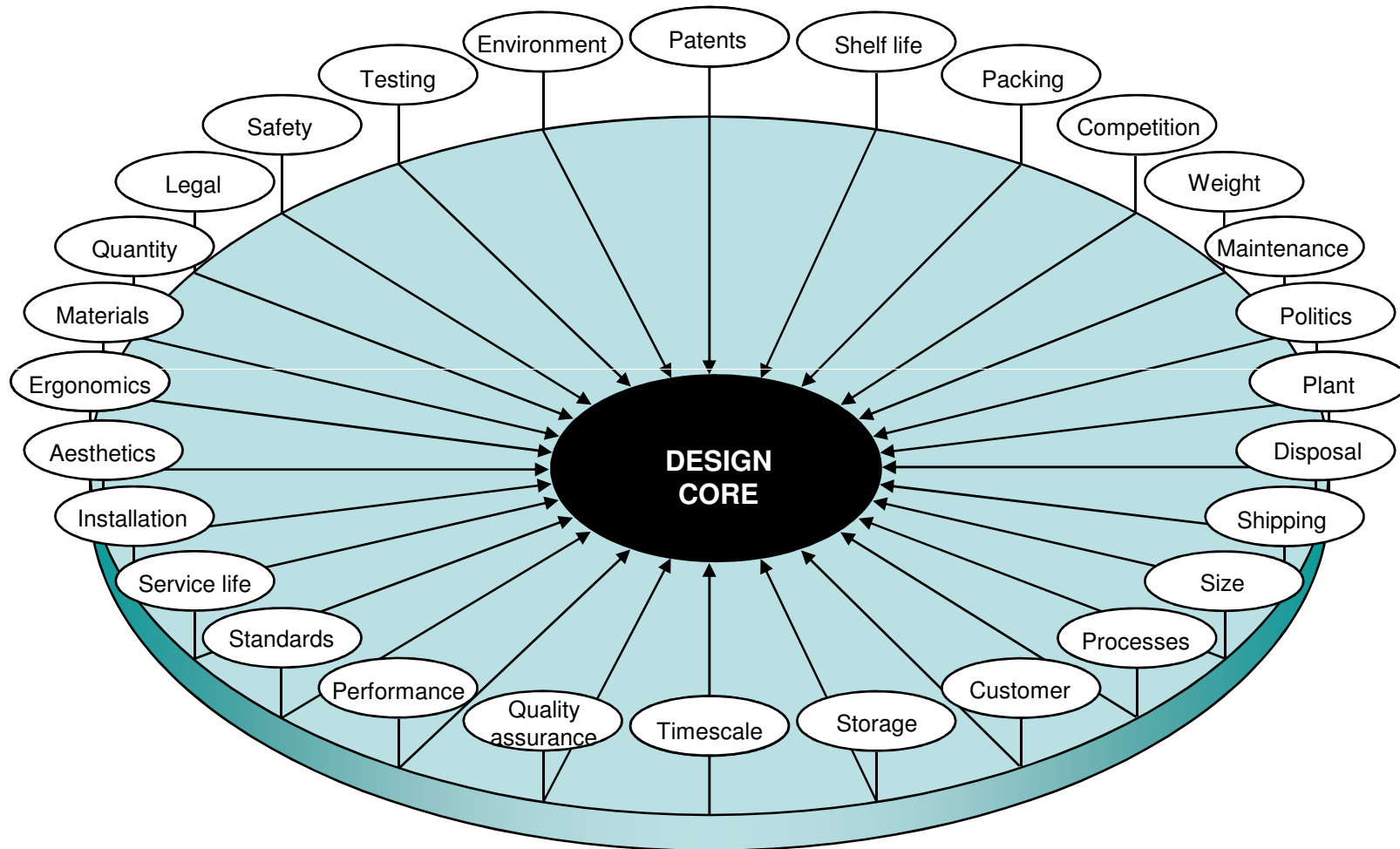


Cross Functional Team



New Product Development Design

Product Design Specification



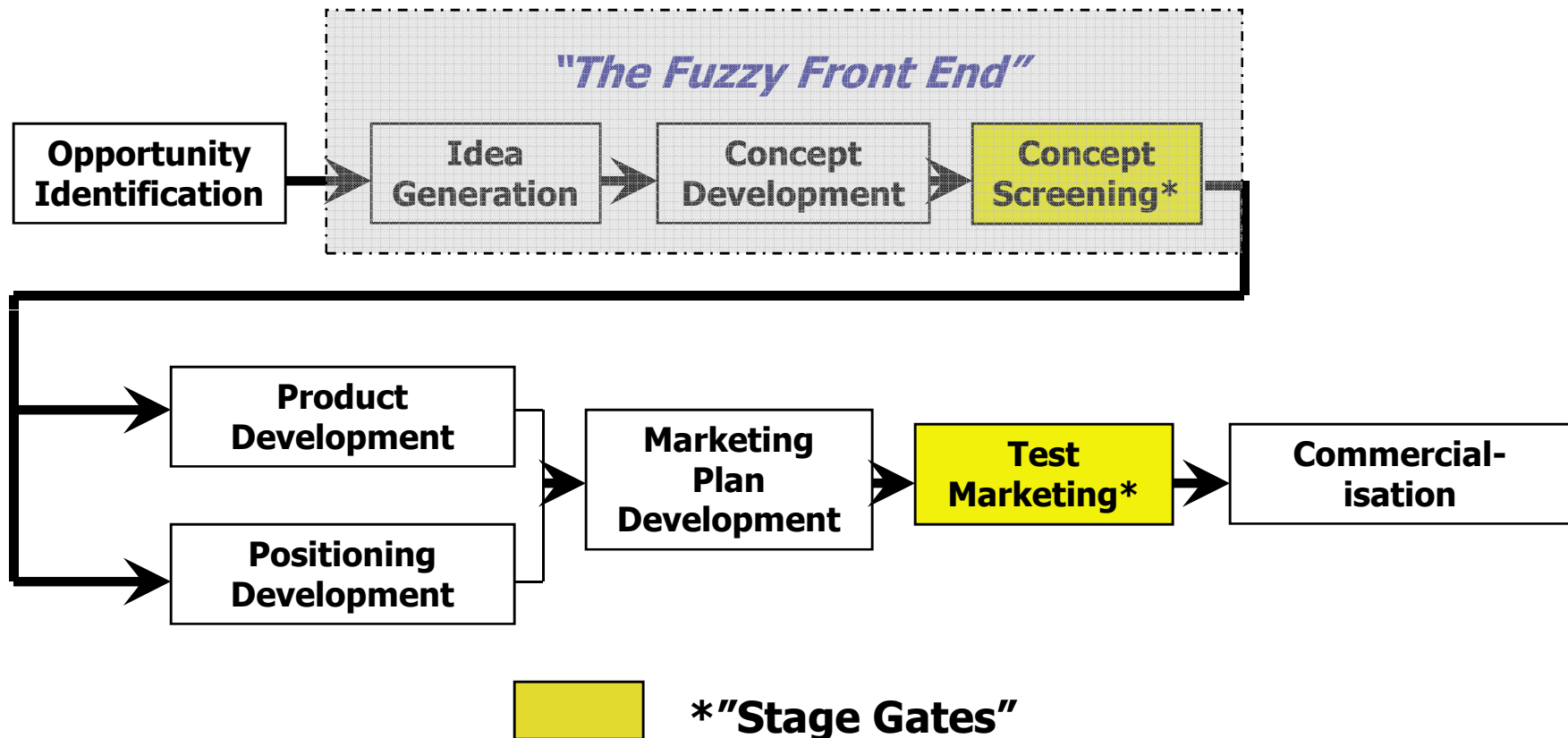
New Product Development Types

Product Development Types

	Generic (Market Pull)	Technology Push	Platform Products	Process Intensive	Customisation
Description	The firm begins with a market opportunity, then finds an appropriate technology to meet customer needs.	The firm begins with a new technology, then finds an appropriate market.	The firm assumes that the new product will be built around the same technological subsystem as an existing product.	Characteristics of the product are constrained by the production process.	New products are slight variations of existing configurations.
Distinctions with respect to the generic process		Additional initial activity of matching technology and market. Concept development assumes a given technology.	Concept development assumes a technology platform.	Both process and product must be developed together from the very beginning, or an existing production process must be specified from the beginning.	Similarity of projects allows for a highly structured development process. Development is almost like a production process.
Examples	Sporting goods, furniture, tools.	Synthetic Fabrics	Consumer electronics, computers, printers.	Snack foods, cereal, chemicals, semiconductors.	Switches, motors, batteries, containers.

New Product Development Process

New Product Development Process



Opportunity Identification

- Internal sources
 - Company employees at all levels

 - External sources
 - Customers
 - Competitors
 - Distributors
 - Suppliers
 - Outsourcing
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Idea Generation (Ideation)

- Cross Functional Team

- Generate Ideas
 - Brainstorming
 - Suspend judgment
 - Encourage creativity

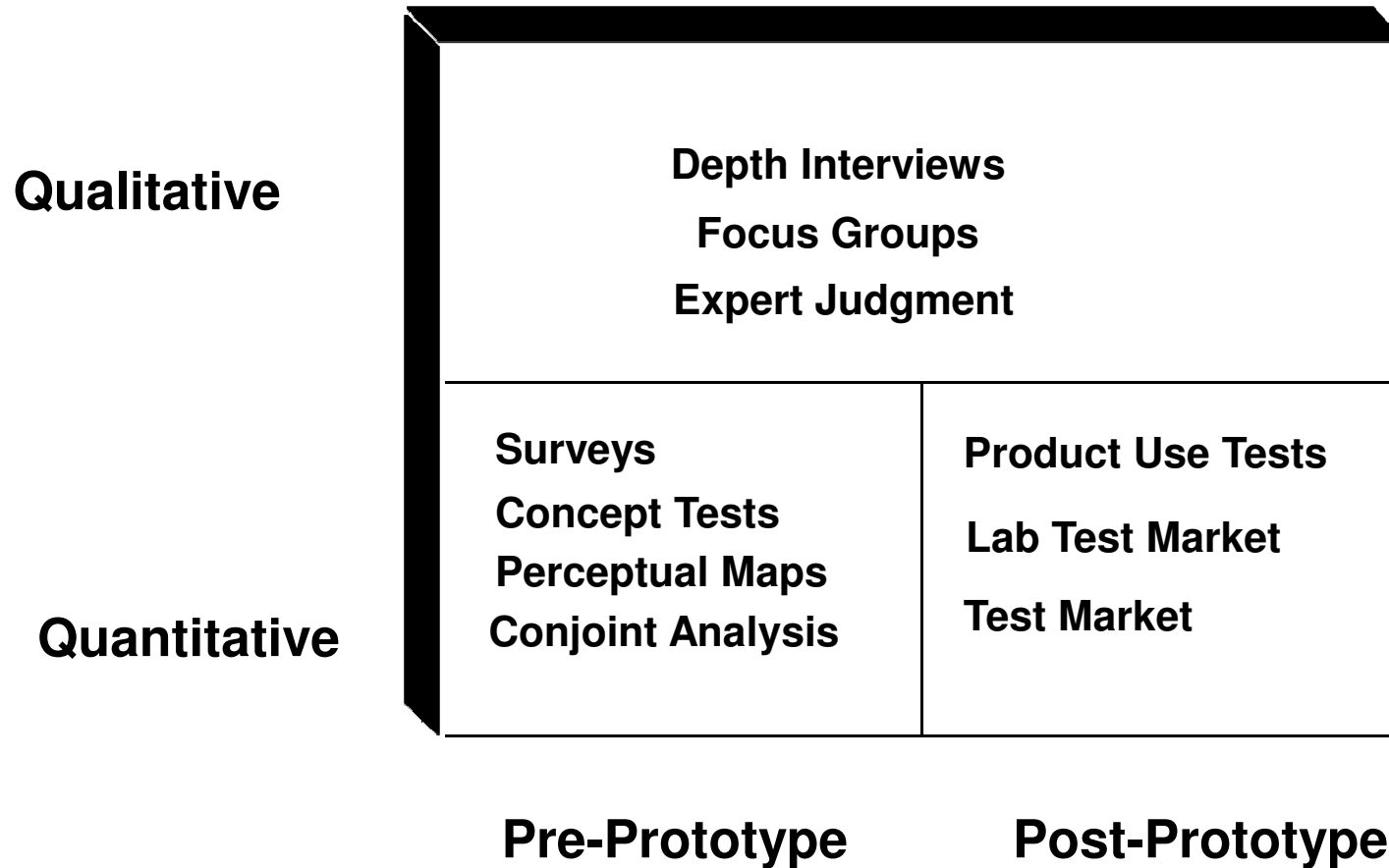
- Identify Opportunity Areas
 - Problem solving to bring new ideas to the table
 - Sketching or prototype
 - Idea prioritisation

- Generate New Product Concepts and evaluate against a set of company criteria for new products.

Concept Development

- Done by Marketing and/or Advertising Agency
- Conducting “Focus Groups”
- Objectives
 - Judge whether the concept fits the opportunity area, and constraints
 - Refine and / or describe the product concept
 - What it is :
 - What benefit(s) will it deliver to the user
 - Key information – size, varieties, package, price

Market Research Options



Concept Screening / Testing

- Produce a Concept Board
- Conduct a survey
 - Representative sample of end users via Internet, Panel
 - Show concept and ask buying intent, uniqueness, value
- Analyse the results
 - Compare scores to internal criteria, benchmarks, norms
 - Forecast “Trial”
- If end user shows interest in trying the product during the trial forecast, then the concept qualifies for development – ***It clears the first stage gate.***

Product Development

- Initial stages with broad design parameters
 - Produce early prototypes
 - Show and obtain feedback from end users
 - Refine design
- Fine tune & finalise design
 - Vary formulations on key ingredients
 - Conduct product testing amongst end users
 - Experimental designs offer most powerful learning
 - Optimise final design and packaging

Position Development

- Develop positioning
 - Target : Benefit(s) : Frame of Reference : Support
- Develop communications strategies
 - Media strategy
- Test & refine copy
 - Qualitative research – “Communications Check”
 - Produce, test and refine the advertisements
- Conduct final test (Stage Gate Review)

Marketing Plan Development

- **Final Positioning Statement**
 - Target : Benefit(s) : Frame of Reference : Support
- **Sales Plan**
 - Who will sell it? : Where will it be sold?
- **Advertising Media Plan**
 - How will we advertise it?
- **Promotion Plan**
 - Consumer promotion (coupons), Trade promotion (on-sale)
- **Production Plan**
 - How will we make it? (make / buy analysis)
- **Financial Plan**
 - How do we make the profit necessary to satisfy our share holders?
 - Fixed Costs : Variable Costs : Breakeven : Targeted ROI

Test Marketing

- Two Stages:
 - Simulated Test Market
 - Live Test Market

Test Marketing (Contd.)

- Simulated Test Market (STM)
 - Similar to Concept Test but with product
 - Provide samples to consumers who are interested in the concept
 - Measure both trial potential and reaction to product
 - Reaction to product is used to forecast repeat rate
 - Volume is forecasted on basis of both the trial forecast and the repeat forecast.
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Test Marketing (Contd.)

- Live Test Market (LTM)
 - To measure actual sales volume
 - Controlled – Behavior Scan
 - Conventional –normal channels.

 - Track sales rate, trial, repeat

 - Compare to goals and identify gaps

 - Investigate and close gaps
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Commercialisation

- National expansion of product
 - Develop market rollout plan
 - Can involve significant capital investment
 - Brick & Mortar : Equipment
 - Can involve distribution costs
 - Slotting fees : Sales incentives
 - Build product into a “Platform”
 - Maintain growth and sustain competitive advantage
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New Product Development Levers

Time to Market

- Prioritise development projects
- Don't overload resources
- Rapidly staff the project according to plan
- Emphasise design re-use to minimise development cost & schedule
- Capture and document requirements and specifications completely
- Tightly manage requirements
- Plan concurrent development
- Tightly synchronise development activities
- Learn to work with partial information
- Prepare to roll out the product early
- Involve subcontractors and suppliers in development
- Plan and coordinate production requirements
- Resolve production problems quickly
- Create a comprehensive, realistic project plan
- Obtain personnel's commitment to the project plan
- Communicate project plans and responsibilities
- Identify project staffing requirements
- Plan development resource requirements
- Allocate and manage resources
- Use modular design approach
- Standardise parts and materials
- Balance testing and time-to-market considerations
- Create electronic mock-up of the product
- Simulate & analyse product designs early to minimise late iteration and physical prototypes.
- Tightly integrate analysis & simulation with design
- Use rapid prototyping technologies
- Use collaboration systems to facilitate communication

Points to Note

- **New Product Development Process** is used to reduce the risk of failure, and produce new winning products
- It should start with an **opportunity identification** step
- The “**Fuzzy Front End**” considers a lot of alternatives
- **Business analysis** occurs throughout the process
- “**Stage Gates**” are built in:
 - At the concept test stage – to justify development costs
 - At the test market stage – to justify going to market.
- The **Marketing Plan** includes a comprehensive set of plans that involve Sales, Finance, Promotions, Advertising and Production

“Opportunities multiply as they are seized.”

- Sun Tzu

Good Luck

<http://www.linkedin.com/in/anandsubramaniam>

