



**From Idea to
Opportunity :
Approach to
New Product
Development**

Idea and Opportunity

- A form, look or appearance of a thing as opposed to its reality
- A conception existing in the mind
- A thought, a mental image, a notion
- An opinion, view or belief
- **Opportunity Defined**
- **An opportunity is a favorable set of circumstances that creates**
- **the need for a new product or a service in a business context**

Ideas without Action Have No Economic Value

From Idea to Business

- Technological change
- Potential opportunity
 - ◆ New product or service
 - ◆ New raw material
 - ◆ New market
 - ◆ New method of production
 - ◆ New way of organizing
- Superior value proposition
- Creation of a new business

Converting Ideas into Opportunity

Form of the Opportunity	Techno-logical Change	Example of a Business Idea in Response to the Opportunity	Reasoning Superior Value Proposition
New product or service			
New raw material			
New market			

Converting Ideas into Opportunity

Form of the Opportunity	Technological Change	Example of a Business Idea in Response to the Opportunity	Reasoning Superior Value Proposition
New product or service	Internal combustion engine	Automobile	The internal combustion engine is used to power automobiles
New raw material	Oil	Producing gasoline	Oil is refined into gasoline to power vehicle
New market	Refrigeration	Refrigerated ship	The refrigerated ship allows farmers in one country to sell their produce in another country

Converting Ideas into Opportunity

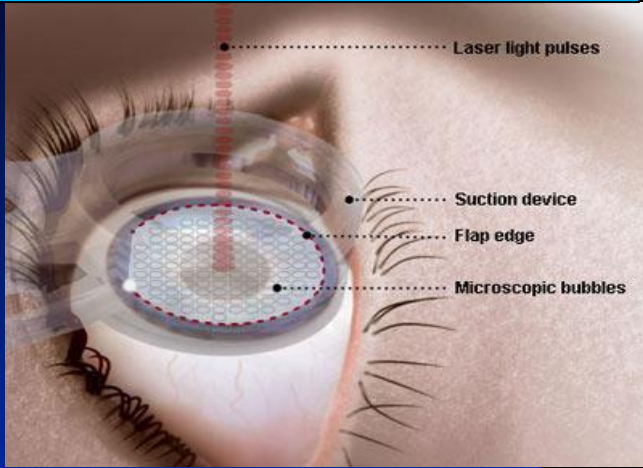
Form of the Opportunity	Technological Change	Example of a Business Idea in Response to the Opportunity	Reasoning Superior Value Proposition
New method of production			
New way of organizing			

Converting Ideas into Opportunity

Form of the Opportunity	Technological Change	Example of a Business Idea in Response to the Opportunity	Reasoning Superior Value Proposition
New method of production	Computer	Computer-aided design	The computer allows designers to make products without building physical prototypes
New way of organizing	Internet	Online book sales	The internet allows buying and selling products without retail outlets

What's the Connection?

Perfect Eyesight



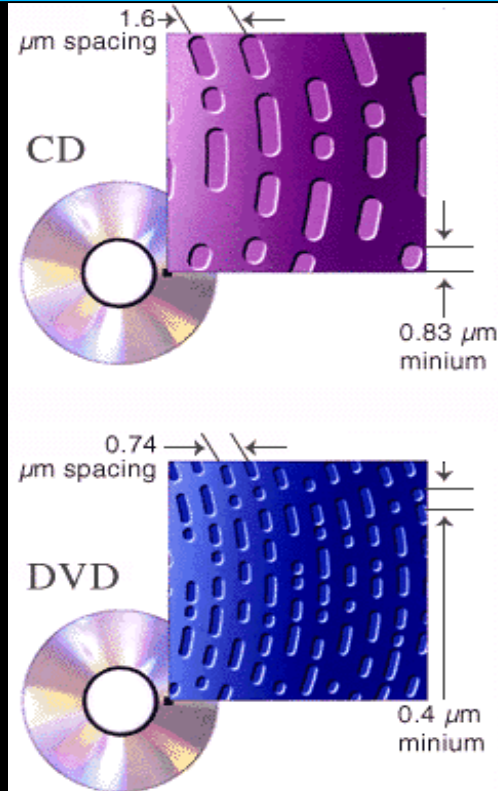
Form of the Opportunity

Technological Change

Example of a Business Idea in Response to the Opportunity

Reasoning Superior Value Proposition

HiFi Music



Throwing Light

Retail Revolution



Intersection of Laser technology with healthcare, entertainment and commercial sectors

Entrepreneurial Opportunity

A situation in which one can create a

**Superior
Value Proposition**

through

**New
Means-Ends
Framework**

Content

Creation

Consumption

Means-Ends Framework

Old Ends

New Ends

Old Means

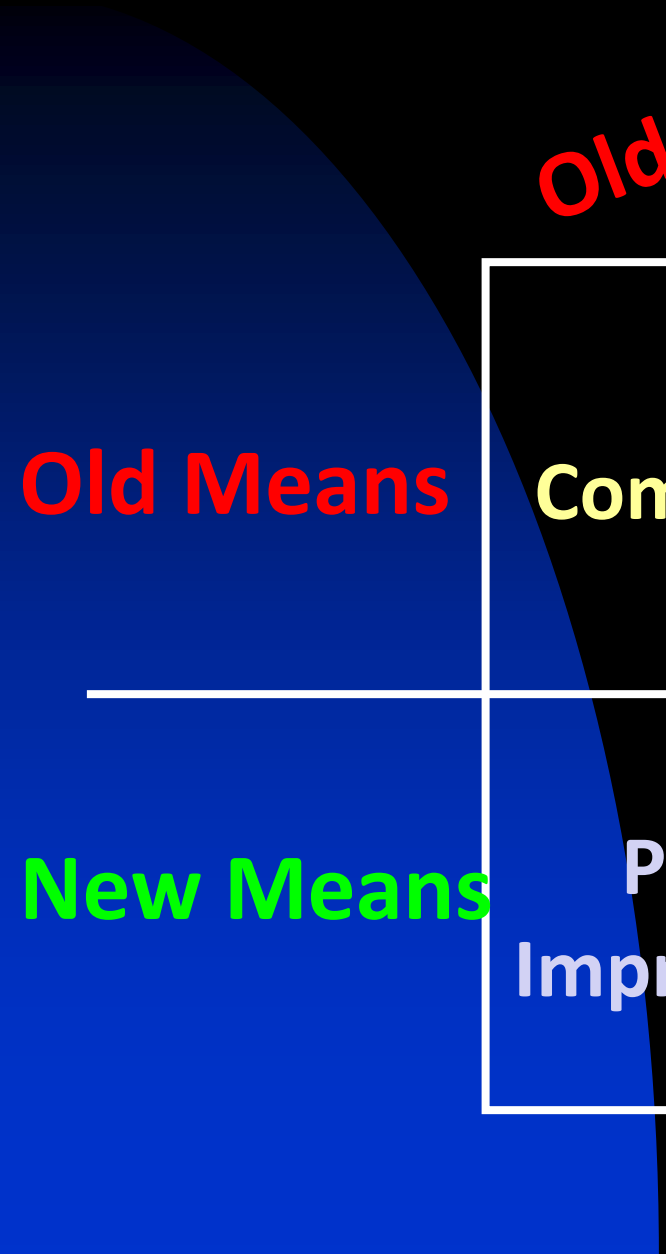
Commodity

**Product
Improvement**

New Means

**Process
Improvement**

**Breakthrough
Innovation**



Means-Ends Framework

Ends

Old

New

Old

Means

New

Existing
Current

New features
New versions

5 S
6 sigma

Breakthrough
Radical

Means-Ends Framework: Music Industry

Old Ends

New Ends

Commodity

Product Improvement

CDs

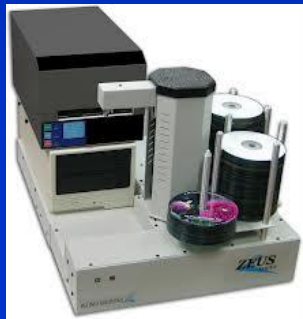
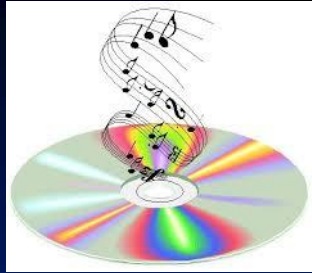
AudioBooks

Process Improvement

Breakthrough Innovation

Polymers/Layers

iTunes



Old Means

New Means

Means-Ends Framework

Applying
Imagination
and Creativity

Old Ends

New Ends

Novel solutions
to Problems

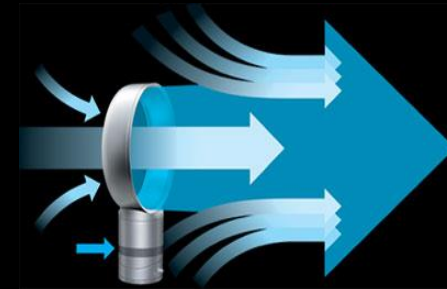
Old Means



New Means



In Identifying,
defining and
structuring



Creating a New Value Equation

Reduce

What factors should be reduced well below the industry standard ?

Create

What factors should be created that the industry has never offered ?

New Value Equation



What factors should be raised well beyond the industry standards ?

Raise

Eliminate

What factors should be eliminated that the industry has taken for granted ?

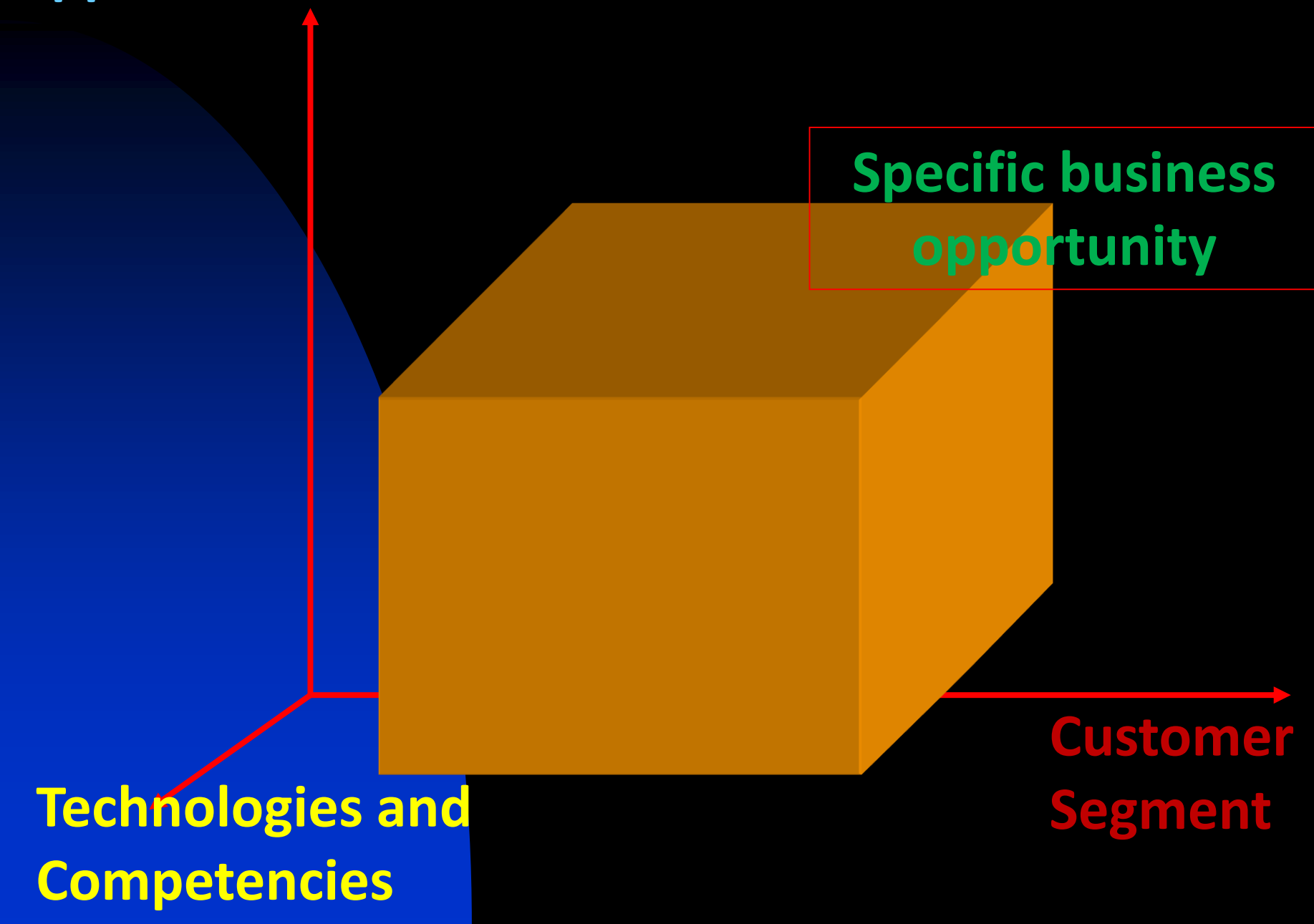
Technology-Driven Businesses

Applications

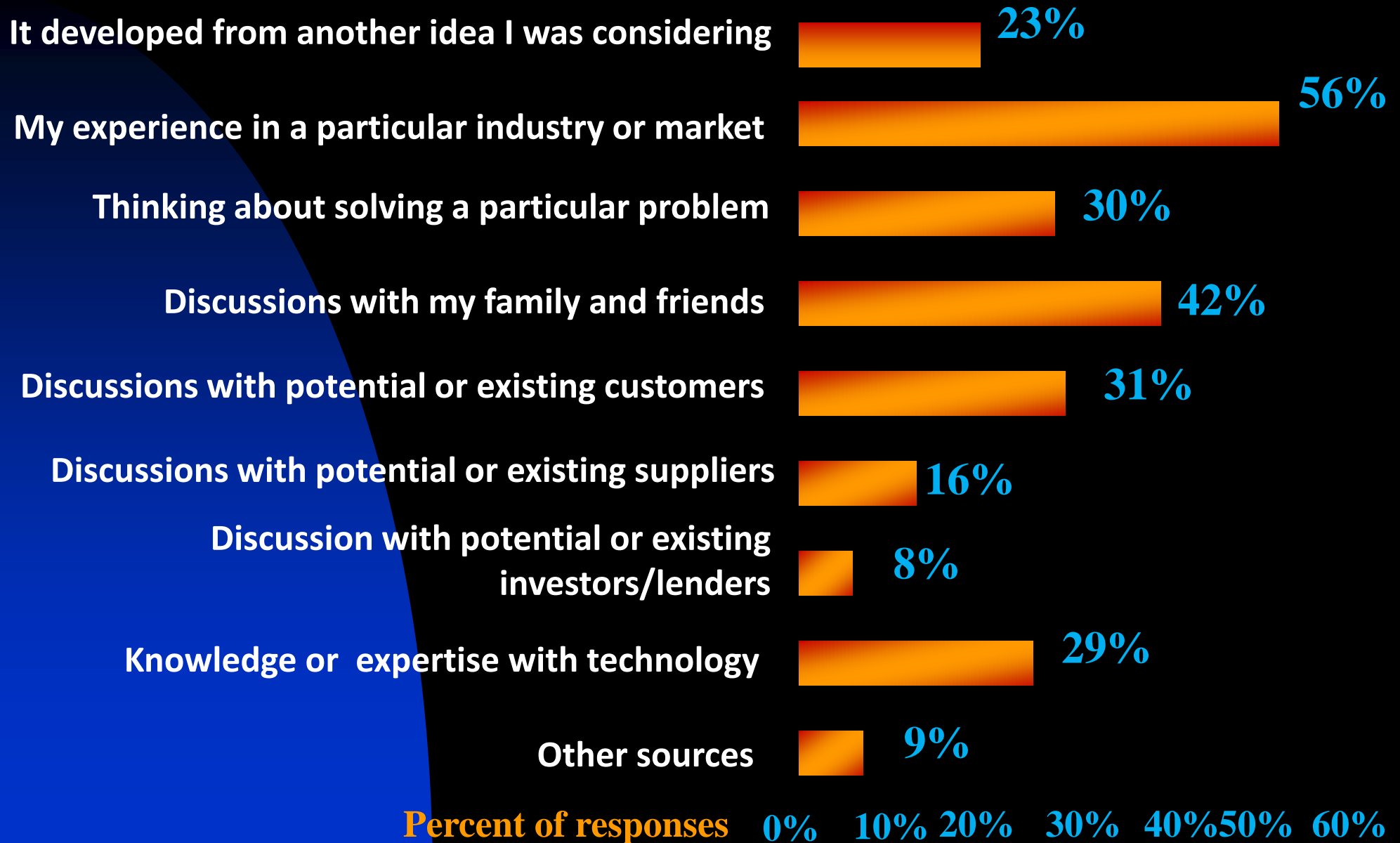
Specific business
opportunity

Technologies and
Competencies

Customer
Segment



Where Did the Ideas for Opportunity Come From?



Taking Idea Forward

- **Situation**
- **Problems and desires**
- **Diverse ideas**
- **Connection**
- **Application**
- **Benefit**
- **Value equation**

Beyond the Horizon

- A critical ability for a successful entrepreneur is to make appropriate predictions regarding the uncertain future
- Discovery of new resource
- New consumer desires
- New technological opportunities
- Correctly anticipate consumer preferences and efficiently use resources to meet these preferences
- The goal of an entrepreneur is to know the consumer's future wants

Before the consumer knows them

Characteristics of an Opportunity

- **Creating value**
 - ◆ **Not necessarily low cost**
- **Opportunity is not always (rarely?) found in well-documented growth markets**
- **Opportunities are not necessarily the result of inventions by the entrepreneur**
- **Not everyone pursues opportunities, even if they are obvious**

Vinod Khosla : Idea, Problem, Opportunity and Business

To me, any big problem is a big opportunity because
if you think about it,

no problem, no solution, no company

It's very simple

Every big problem is a big opportunity

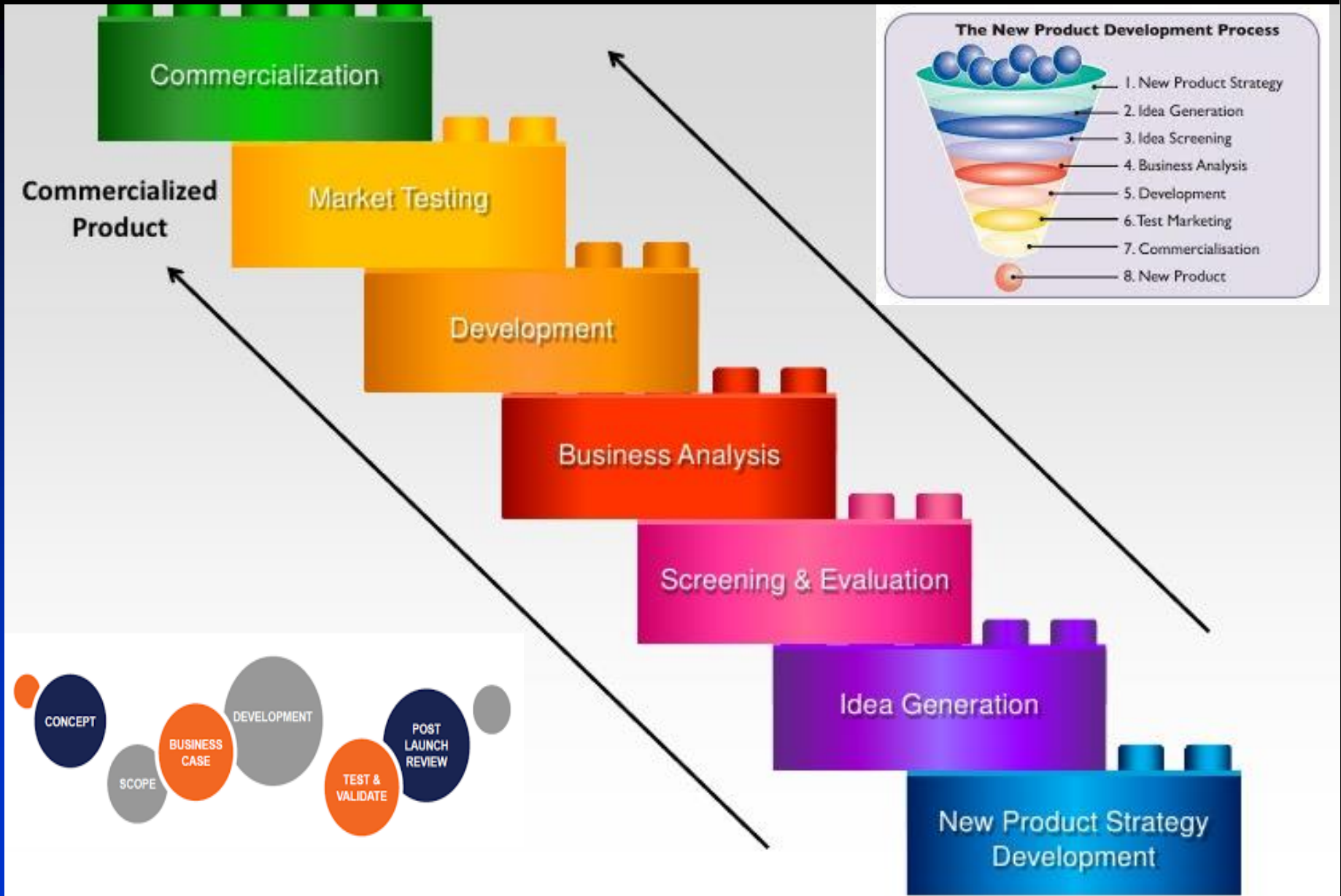
If you don't have a big problem, you don't have a big
opportunity

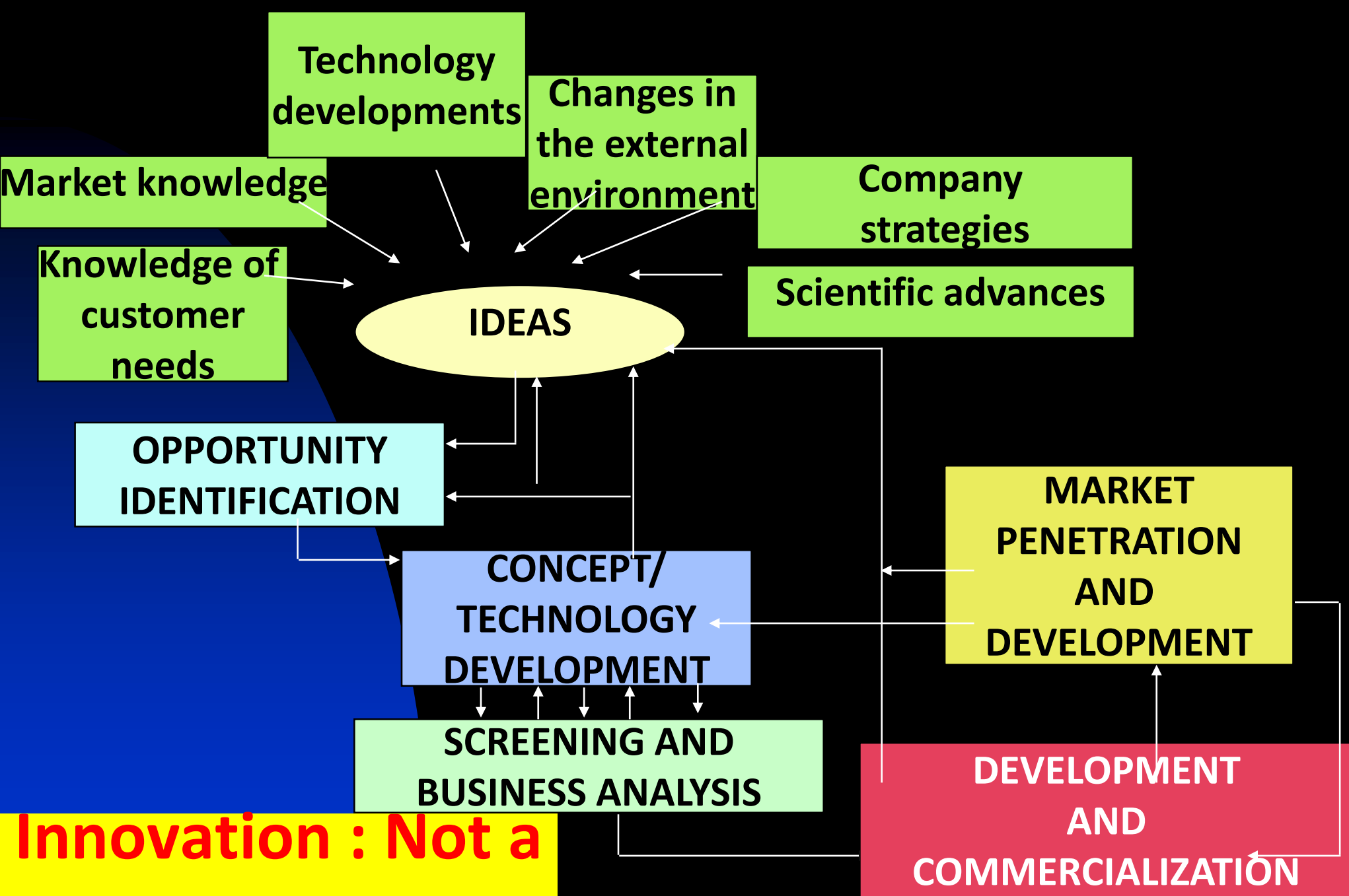
Nobody will pay you to solve a non-problem

Nine Categories of Opportunity

- Increasing the value of a product/service
 - New applications of existing means of technology
 - Creating mass markets
 - Customization for individuals
 - Increasing reach
 - Managing the supply chain
 - Convergence of change
 - Process innovation
 - Increase the scale of the firm
- New product or service**
- New raw material**
- New market**
- New method of production**
- New way of organizing**

New Product Development

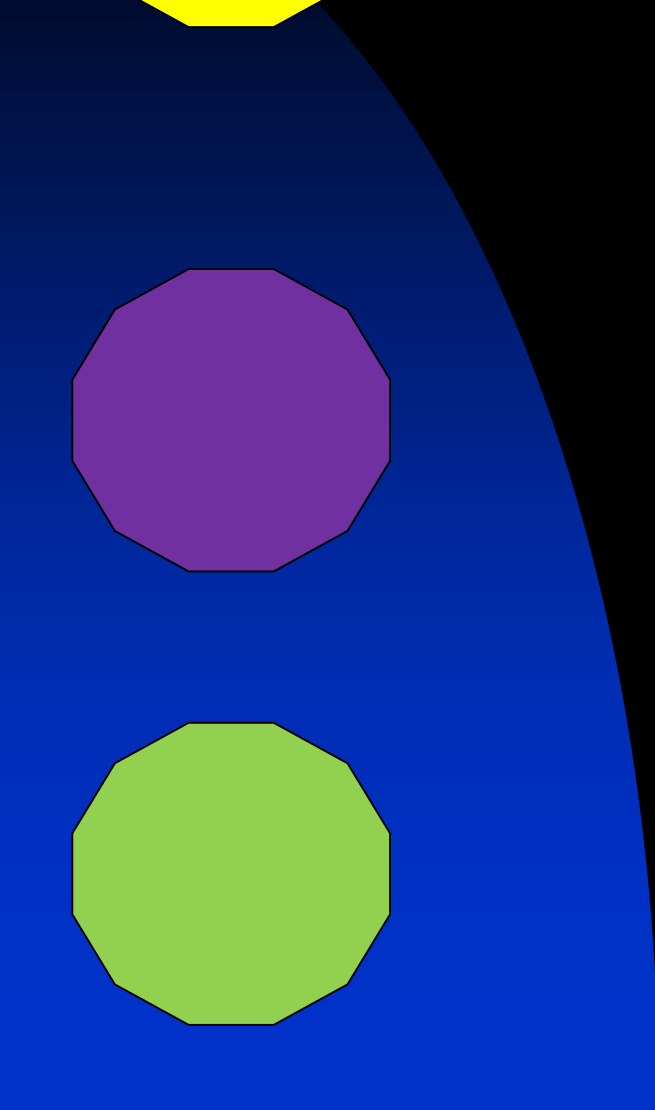
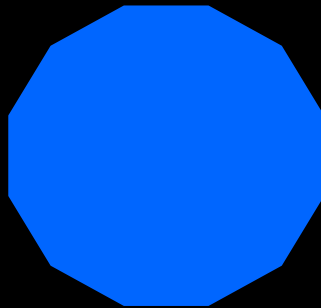
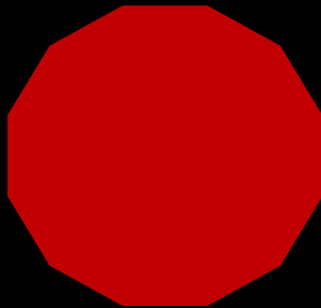
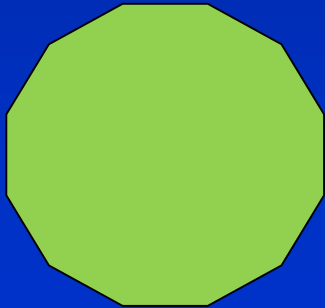
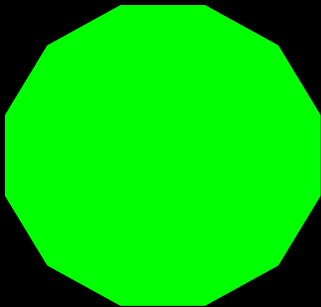
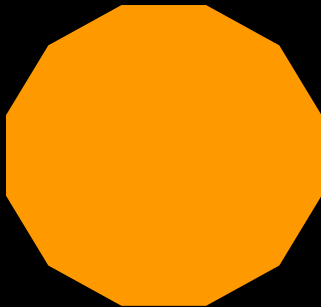
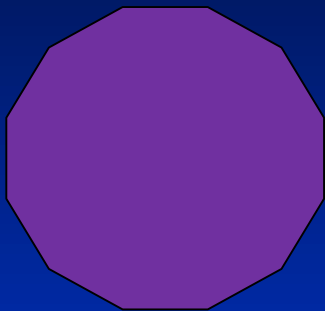
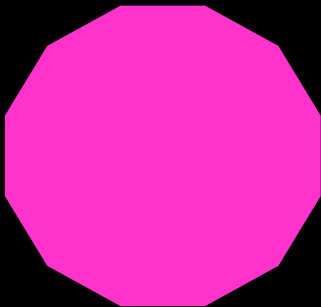
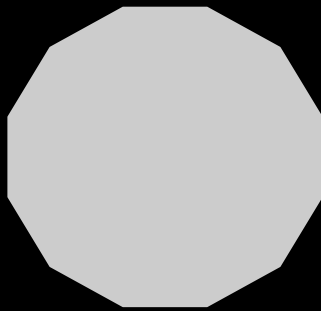
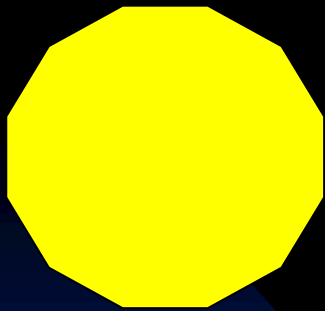




Innovation : Not a Linear Process

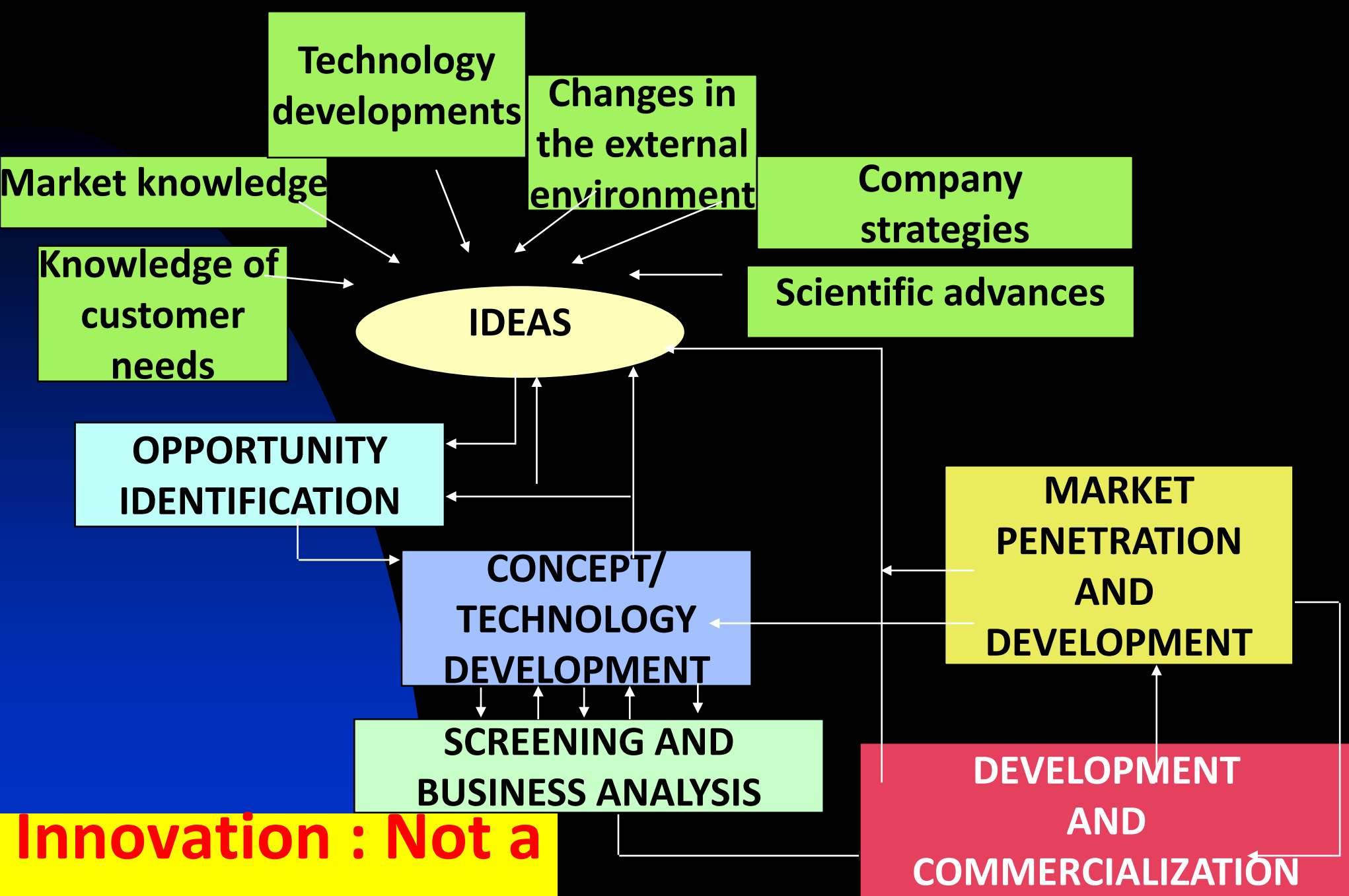


Thank You





New Product Development



Innovation : Not a Linear Process

The Evaluation Tasks

New Product Process Phase

Evaluation Task



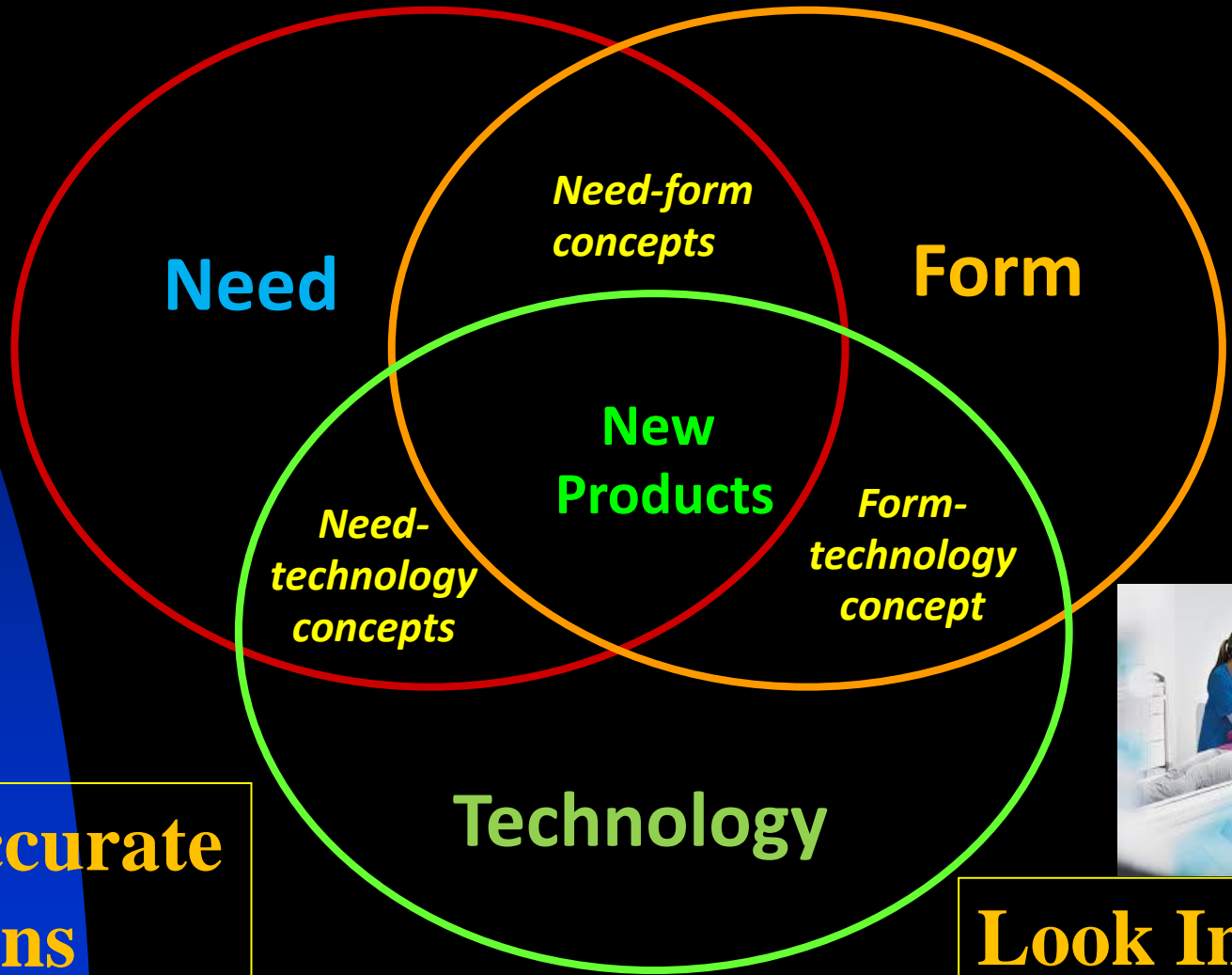
The New Product Concept



24X7 Cash



Instant and Accurate Calculations

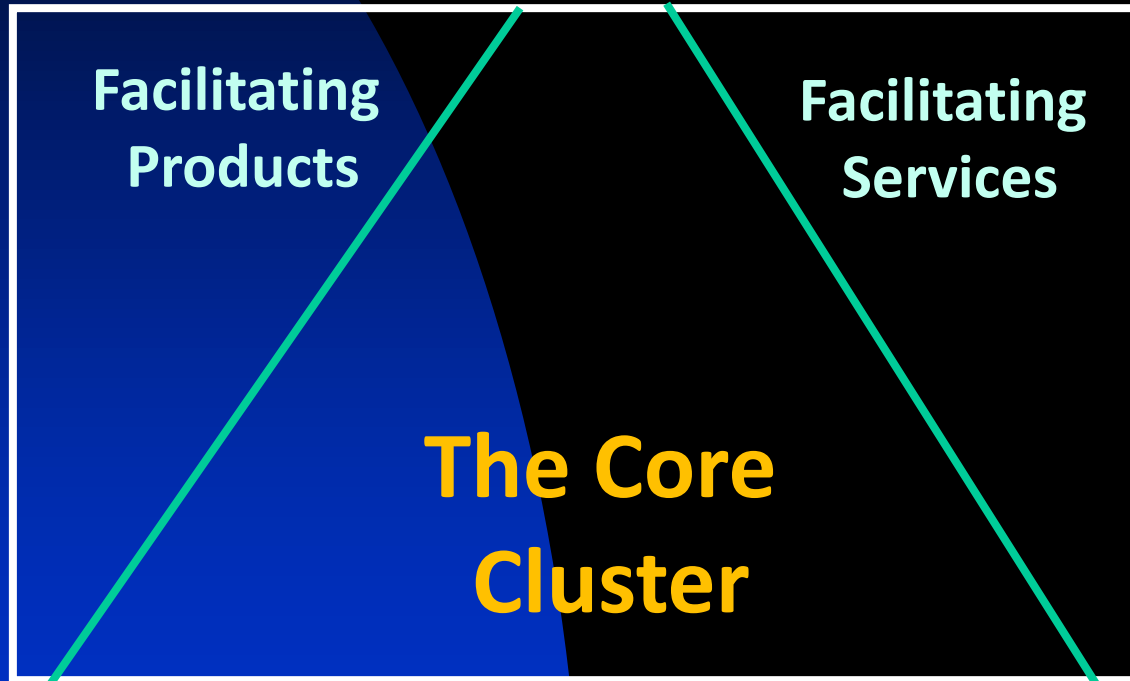


Look Inside the Body

Breakthrough Innovations

- **Pocket calculator**
- **Automatic teller**
- **CAT Scan**
- **CAD/CAM**
- **Camcorder**
- **Microwave oven**
- **USB Drive**

Elements of the Product



- The core cluster of tangible and intangible elements
- A separate cluster of tangible elements, the facilitating products
- A separate cluster of intangible elements, the facilitating services

Elements of the Digital Camera

**Facilitating
Products**

**Facilitating
Services**

**In-built
Projector**

**Transfer to
PC**

**Load on
YouTube**

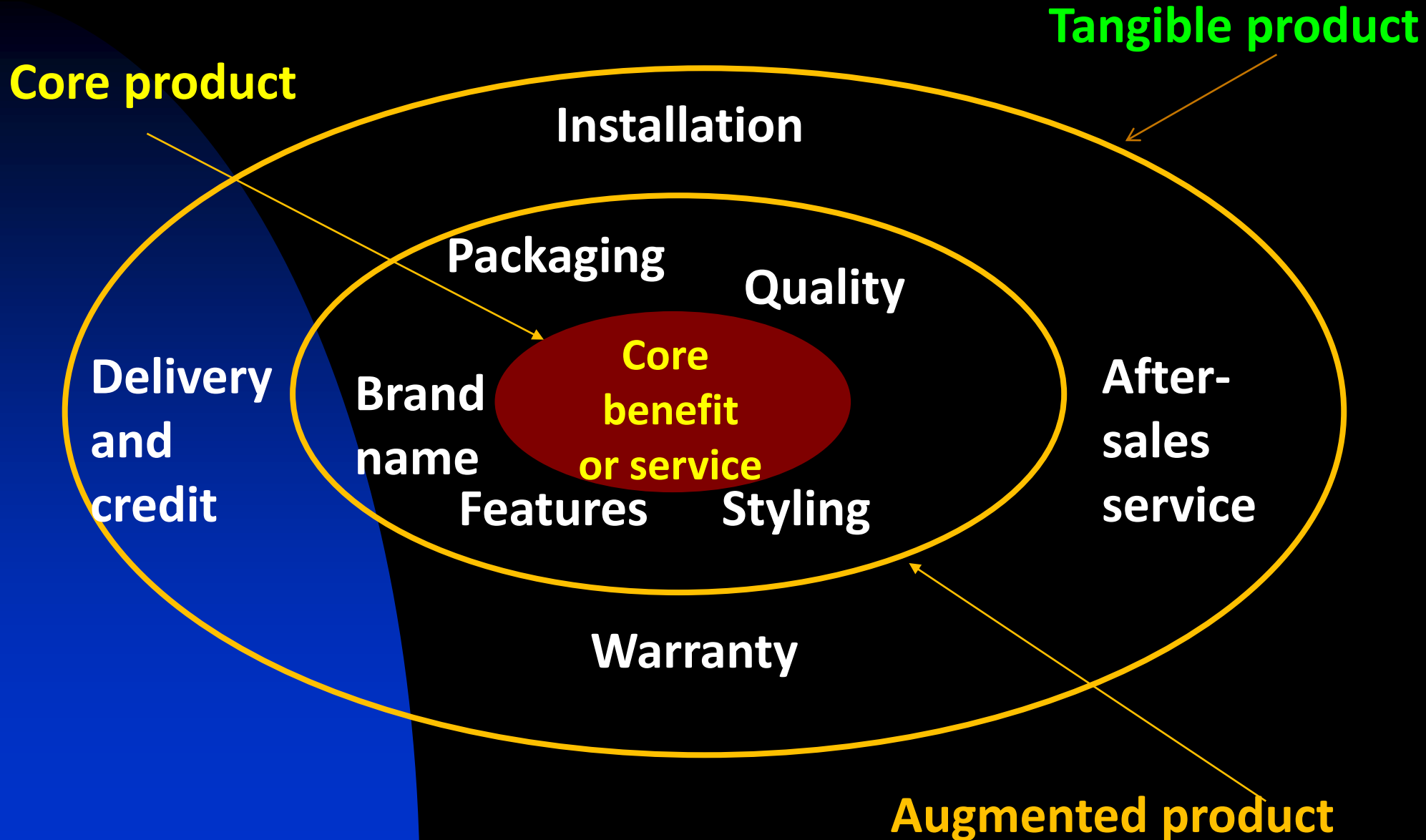
**The Core
Cluster**

**Capture
Store
Erase
Recall**

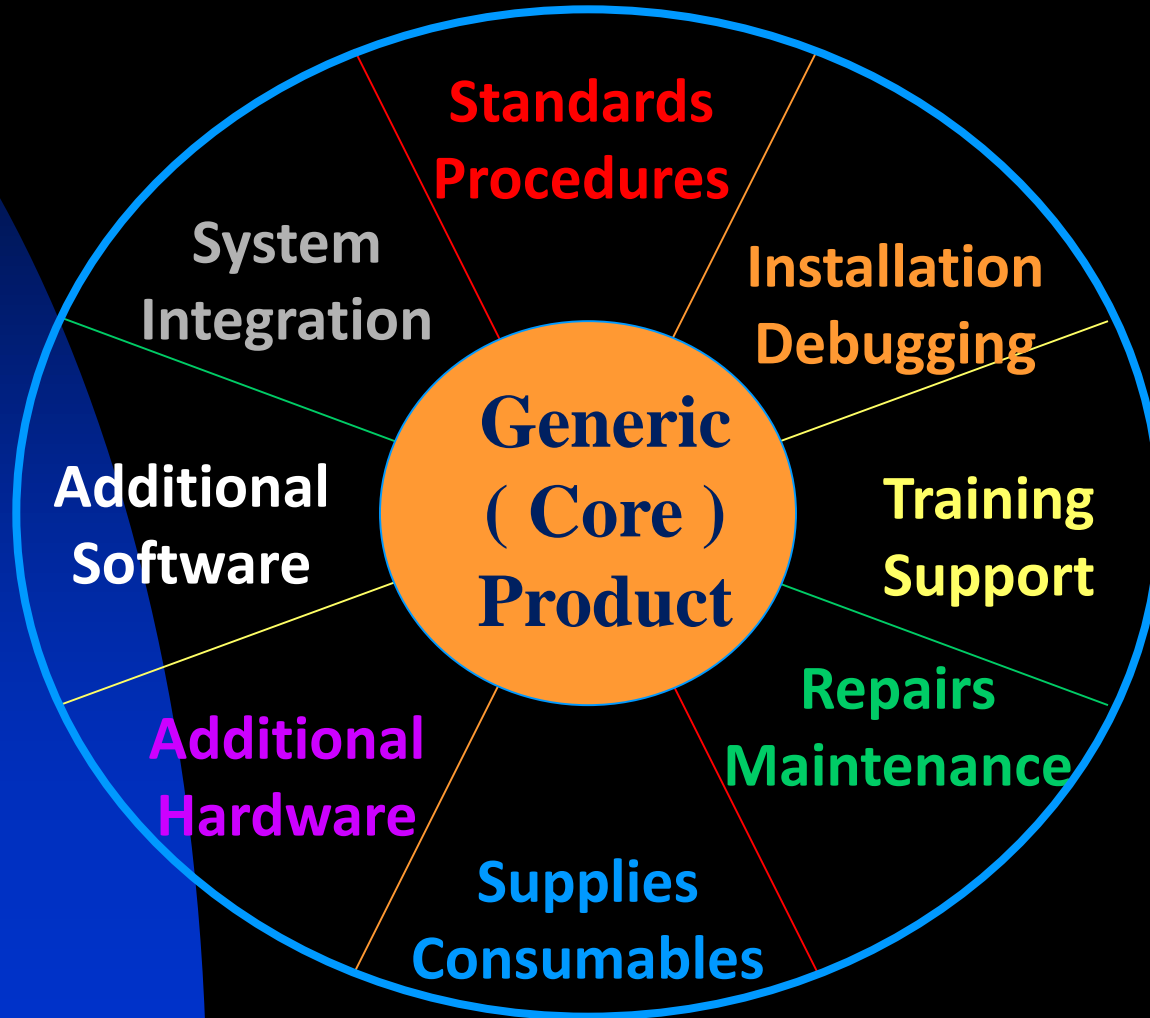
Product Definition

- What will it do ?
- Who will buy it ?
- What will be its rough dimensions ?
- What are the major competitors ?
- What functional features should it have ?
- What are the psychological descriptors of the product ?
- What is its context ?

Levels of Product



Model of the “ Whole Product ”



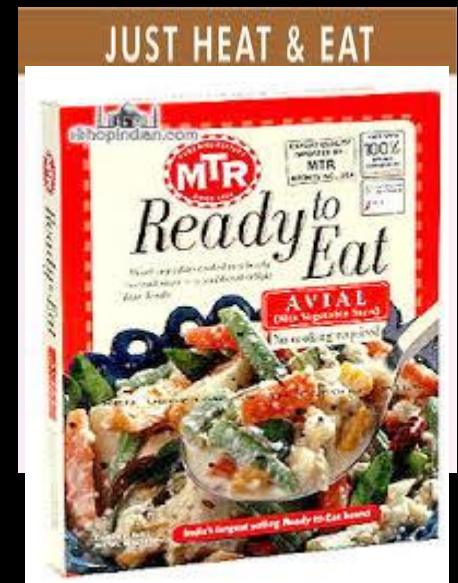
Trend 1: Economic Forces

- Economic forces affect consumers' level of disposable income
- When studying how economic forces affect opportunities, it is important to evaluate who has money to spend and who is trying to cut costs
 - ◆ An increase in the number of women in the workforce,
 - ◆ entry of youth in workforce
 - ★ related increase in disposable income
 - ◆ Many large firms are trying to cut costs
 - ★ Entrepreneurs have taken advantage of this trend by starting firms that help other firms control costs

Trend 2: Social Forces

Examples of Social Forces That Allow For New Business Opportunities

- Changes in social trends provide openings for new businesses on an ongoing basis
- Family and work patterns
- The aging of the population
- The increasing diversity in the workplace
- The globalization of industry
- The increasing focus on health care and fitness
- The proliferation of computers and the Internet
- The increase in the number of cell phone users
- New forms of entertainment



Trend 3: Technological Advances

- Given the rapid pace of technological change, it is vital that entrepreneurs keep on top of how new technologies affect current and future business opportunities
- Entire industries have emerged as the result of technological advances
 - ◆ the computer industry,
 - ◆ the Internet,
 - ◆ biotechnology and
 - ◆ digital photography
- Once a new technology is created, new businesses form to take the technology to a higher level
 - ◆ Real Networks
 - ◆ Acrobat
 - ◆ Photoshop



The App Phenomenon

Date	Available apps	Downloads to date	Downloads per app
June 2008	500	0	0
June 2009	50,000	1,000,000,000+	20,000
June 2010	225,000+	5,000,000,000+	22,222
June 2011	425,000+	14,000,000,000+	32,941
June 2012	650,000+	30,000,000,000+	46,154
June 2013	900,000+	50,000,000,000+	50,000
June 2014	1,200,000+	75,000,000,000+	62,500

Apple's iStore Revolution

- App Store made **\$3 billion** in revenue in December 2016, from a combination of in-app purchases, paid downloads, and fees for subscriptions
- App Store, which first launched back in 2008, has ballooned to **2.2 million apps**
- App makers were **paid out \$20 billion** in 2016, up 40 % from a year ago
- Assuming 30 % of the total app money went to Apple, Apple made around **\$8.57 billion** in App Store revenue in 2016

Trend 4: Political and Regulatory Changes

- **Political and regulatory changes provide the basis for new business opportunities**
 - ◆ **Environmental protection laws**
 - ◆ **Energy efficiency measures**
 - ◆ **Corporate governance covenants**

Nest Learning Thermostat

An electronic, programmable, and self-learning Wi-Fi-enabled thermostat that optimizes heating and cooling of homes and businesses to conserve energy



**Nest Learning
Thermostat showing
weather's impact on
energy usage**

Early investors in Nest Labs included Shasta Ventures and Kleiner Perkins Caufield & Byers.¹ On January 13, 2014, Google announced plans to acquire Nest Labs for \$3.2 billion in cash. In June 2014, it was announced that Nest would buy camera startup Dropcam for \$555 million.

Essential Qualities of an Entrepreneurial Opportunity

Attractive

Timely

**Opportunity
(rather than
just an idea)**

Durable

**Anchored in a product,
service or business that
creates or adds value
for its buyer or end user**

Analysis of Need

- How is this need being satisfied ?
- Is the present method inefficient ? Ineffective ?
What can be improved ?
- What is good about the present method of satisfying the need ?
- Why will this new way be better and succeed ?
- What is the relative cost of the present method v/s the proposed method ?
- Has an *unmet* need been *uncovered*?

Uncovering Unmet Needs and Problems

- **Becoming the customer: Discovering problems**
- **Anthropological Excursions**
 - ◆ **Live with and critically observe customers**
- **Talk to customers to get the voice of the customer (VOC)**
 - ◆ **Indirect questions to discover wants and needs by leading customers through the ways they currently solve problems**
 - ◆ **Questions about functions rather than products**
- **Customer Prototype**
 - ◆ **Draw pictures or create collages of people in the target market**

Writing a Winning Concept

■ **Insight:**

- To be successful, a concept must clearly state the consumer insight

■ **Point of Difference:**

- How the product will meet the need uniquely

■ **Reasons to Believe:**

- Provide convincing proof

■ **Rational Benefits:**

- Appeal to logic in line with current situation

■ **Emotional Benefit:**

- Make customer feel happy and delighted

Sell Water?

■ Insight:

- People are suffering from ill health : both sons had jaundice

■ Point of Difference:

- Water with maximum purity as against mere filtration

■ Reasons to Believe:

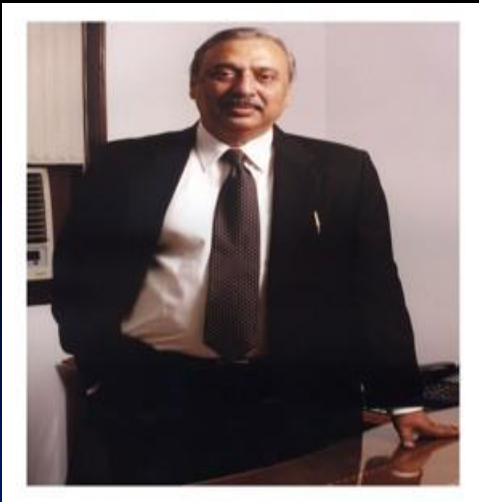
- Health is top priority

■ Rational Benefits:

- Pure, safe drinking water

■ Emotional Benefit:

- I will feel good about myself knowing that I am taking care of my family



Price Rs 15,000 to Rs 20,000

Turnover Rs 1,000 crore



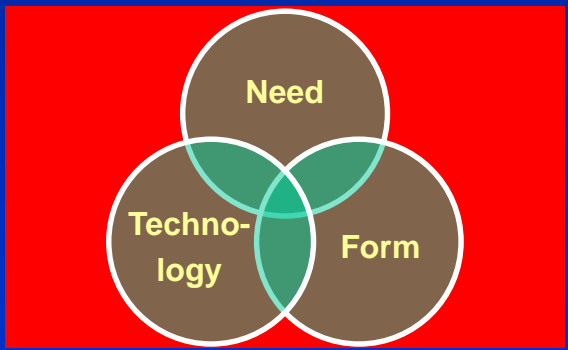
Kent



Swach



Pureit



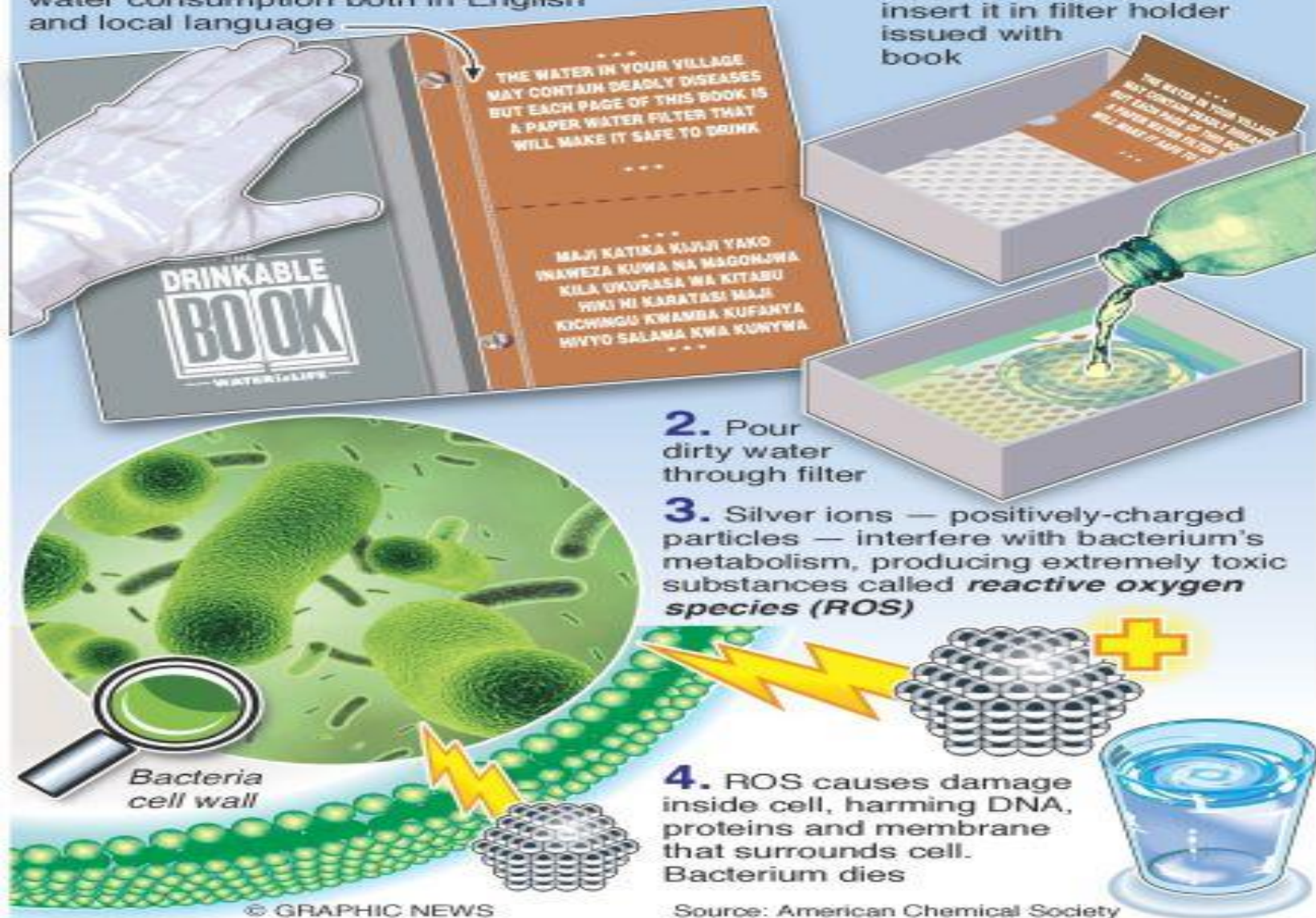
The
Drinkable
Book

Book that can literally save lives

Each pull-out page of the "Drinkable Book" contains nanoparticles of silver that can kill waterborne bacteria and purify up to 100 litres of water.

In trials, the paper successfully removed more than 99% of bacteria

Book comes printed with guidelines for safe water consumption both in English and local language



Service Definitions

Services are deeds, processes, and performances.

Valarie Zeithaml & Mary Jo Bitner

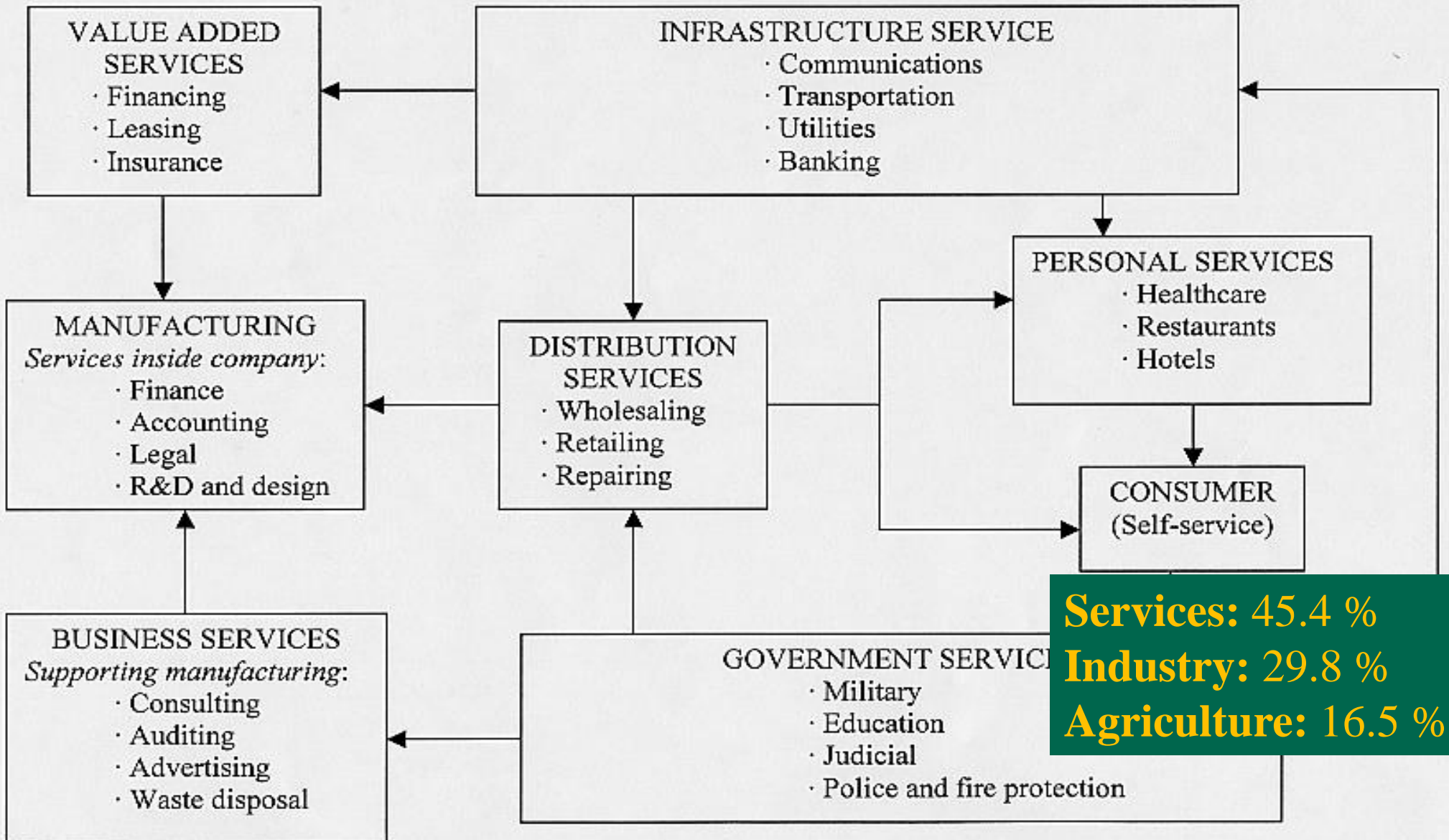
A service is a time-perishable, intangible experience performed for a customer acting in the role of a co-producer.

James Fitzsimmons

Service enterprises are organizations that facilitate the production and distribution of goods, support other firms in meeting their goals, and *add value* to our personal lives.

James Fitzsimmons

Role of Services in an Economy



Services: 45.4 %
Industry: 29.8 %
Agriculture: 16.5 %

Stages of Economic Development

Society	Game	Pre-dominant activity	Use of human labor	Unit of social life	Standard of living measure	Structure	Technology
Pre-Industrial	Against Nature	Agriculture Mining	Raw muscle power	Extended household	Subsistence	Routine Traditional Authoritative	Simple hand tools
Industrial	Against fabricated nature	Goods production	Machine tending	Individual	Quantity of goods	Bureaucratic Hierarchical	Machines
Post-industrial	Among Persons	Services	Artistic Creative Intellectual	Community	Quality of life in terms of health, education, recreation	Inter-dependent Global	Information

THE NEW EXPERIENCE ECONOMY

Economy	Agrarian	Industrial	Service	Experience
Function	Extract	Make	Deliver	Stage
Nature	Fungible	Tangible	Intangible	Memorable
Attribute	Natural	Standardized	Customized	Personal
Method of supply	Stored in bulk	Inventoried	Delivered on demand	Revealed over time
Seller	Trader	Manufacturer	Provider	Stager
Buyer	Market	User	Client	Guest

Outsourcing and Service Growth

Expected gains that companies can derive from outsourcing include:

- the reduction of operational costs;
- the ability to transform fixed costs
 - into variable costs;
- the ability to focus on
 - core competencies;
- access to the industry-leading
 - external competencies and expertise.

Typology of services

	Business-to-business services (traditional)	Business-to-business services (KIBS)	Consumer services	Internal firm services	Public services	Not-for-profit services
Description	Services provided for businesses	Specialist services provided to businesses	Services provided to individuals	Services provided by internal functions	Services provided by local and national government	Services provided by charities
Examples	Accountancy Legal advice Training	Management consultancy IT consultancy	Shops Hotels Banking Health and beauty	Finance Personnel IT	Health Education Leisure Prisons	Hospices Counselling Aid agencies
Customers	Frequently purchased by professionals, who may not be end users	Frequently purchased by professionals, who may not be end users	Purchased by consumer of the service	Consumers of the service have no choice of provider	Funded through taxation and little choice for consumer	Funded through charities maybe government grants consumers chosen or choose.
Challenges	Providing high-quality tailored and personal service	Providing high quality services to businesses who have high purchasing power	Providing a consistent service to a wide variety of customers	Delivering customised, personal service. And demonstrating value for	Delivering acceptable public services against a backcloth of political	Balancing needs of volunteers, donors and overwhelming needs of customers.

A range of new services that also create new business models, where technology plays a key role

Company	Industry sector	New service/new business model
eBay	On-line auction	A new way of buying and selling through a community of individual users
Ryanair	Airline	A new way of consuming air-travel with no frills service and emphasis on economy
Amazon	Retailer	New way to buy goods – on-line retailer
Napster; iTunes	Music retailer	New way to buy and download music
Google	Internet search engine	A fast way to search for information on the internet
Partygaming	On-line gambling	Gambling and gaming from the comfort of your own home
Myspace Facebook	Social networking	A community of users on-line who can chat and share music, images, news from their own home
You-Tube	On-line video and film archive	A community of users sharing home made video clips plus recorded favourite clips from movies

Categories of Service Mix



1- Pure Tangible Goods:

The offering which consists primarily of a tangible good with no services accompany the product. **For example:** Soap, salt, paper etc

2- Tangible with Accompanying Services:

The offering which consists of a tangible good with one or more services. **For example:** Nokia with warranty

Categories of Service Mix Cont...

3- Hybrid:

The offering which consists of equal part of good & services. **For example:** Restaurants provide both food & service.

4- Major Service with Accompanying Minor Goods/Service

The offering which consists of major services along with additional services or supporting goods. **For example:** Air travel is a major service of travelling along with food, shopping on airport etc is the accompanying minor goods.

5- Pure Services:

The offering consist primarily of a service. **For example:** a hair cut, tailoring a suit etc.

Means-Ends Framework



Ends

Old

New

Old

Means

New

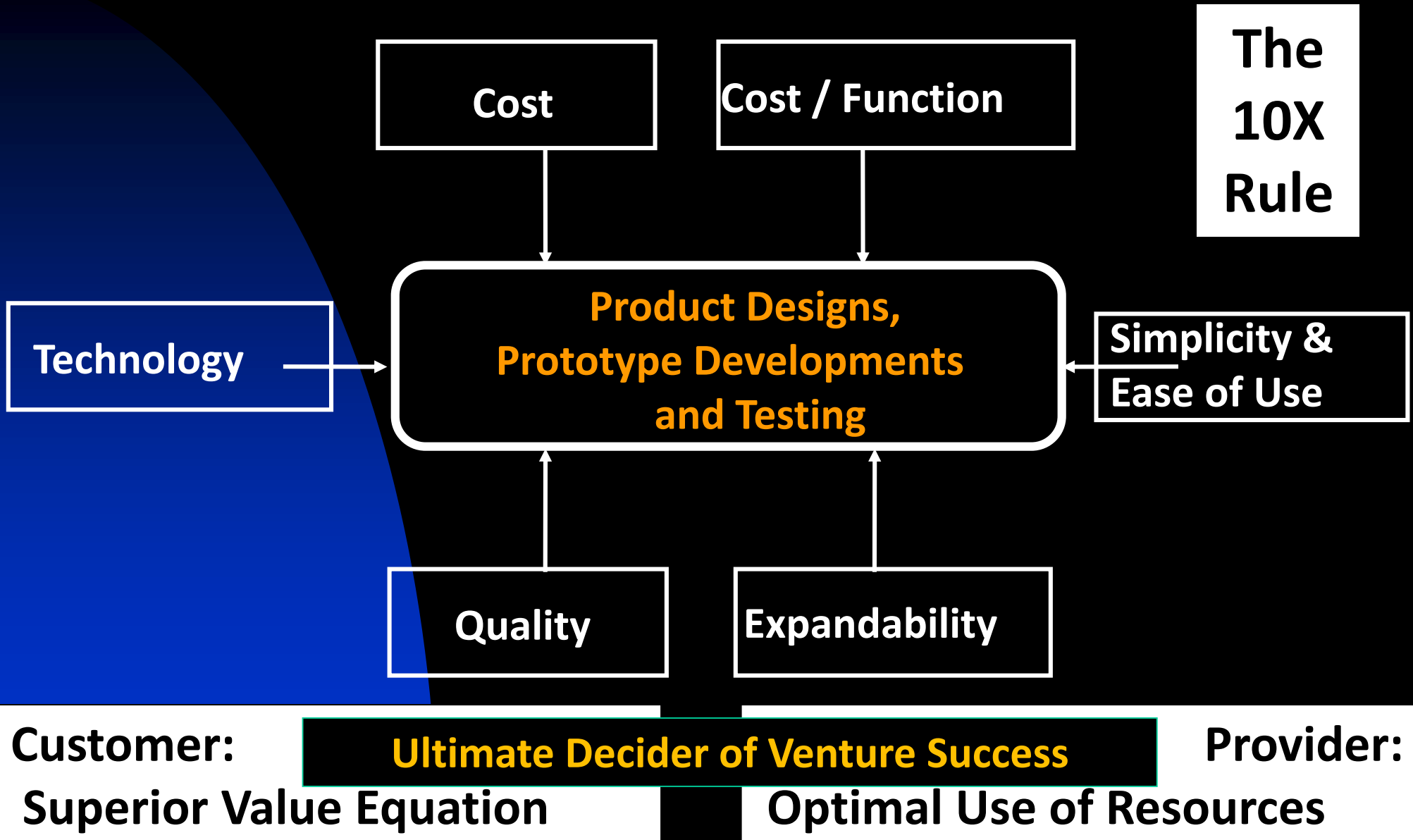
Existing
Current

New features
New versions

5 S
6 sigma

Breakthrough
Radical

Product/Service Development Framework



Factors Associated with Technological Product Failure

Customer expectation not met

No innovative advantage perceived

Information about product is scarce, unclear or difficult

Need for product is not seen

Unique attributes not seen

Poor selection of target market

Poor communication of product benefits

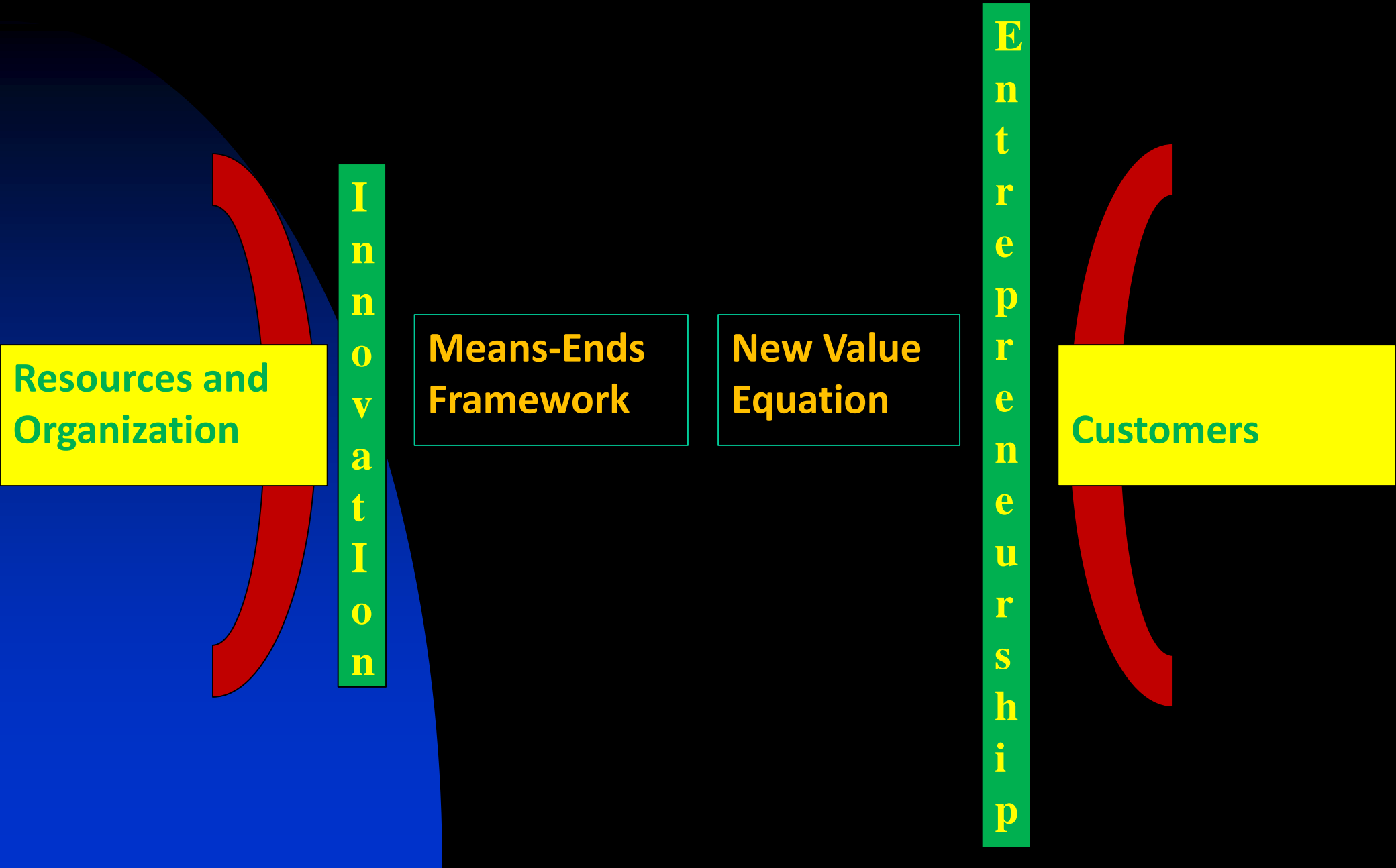
Distribution channel selection

Pricing problems

Five Critical NPD Success Factors

- #1: Differentiated product that delivers
unique benefits and superior value to the customer
- #2: Strong market orientation
market driven and customer focused new product process
- #3: Sharp and early product definition
- #4: Market attractiveness as a key project
selection criterion
- #5: Speed is everything!
but not at the expense of quality of execution

The New Venture Creation





Thank You