



CHANGING CONSUMERS,  
**CHANGING KRAFT**

**Investor Meeting**  
**May 10, 2005**

**Jean Spence**

**Executive Vice President – Global Technology & Quality**

# Global R&D Investment

- **2,100+ scientists and engineers**
  - 36 countries
  - 441 universities represented
  - 96 disciplines (degrees)
- **Significant food patent estate**
  - 2,100 worldwide
  - 1,100 in U.S. (largest in industry)
- **R&D spending of \$388 MM (2004)**

# Build Superior Consumer Brand Value

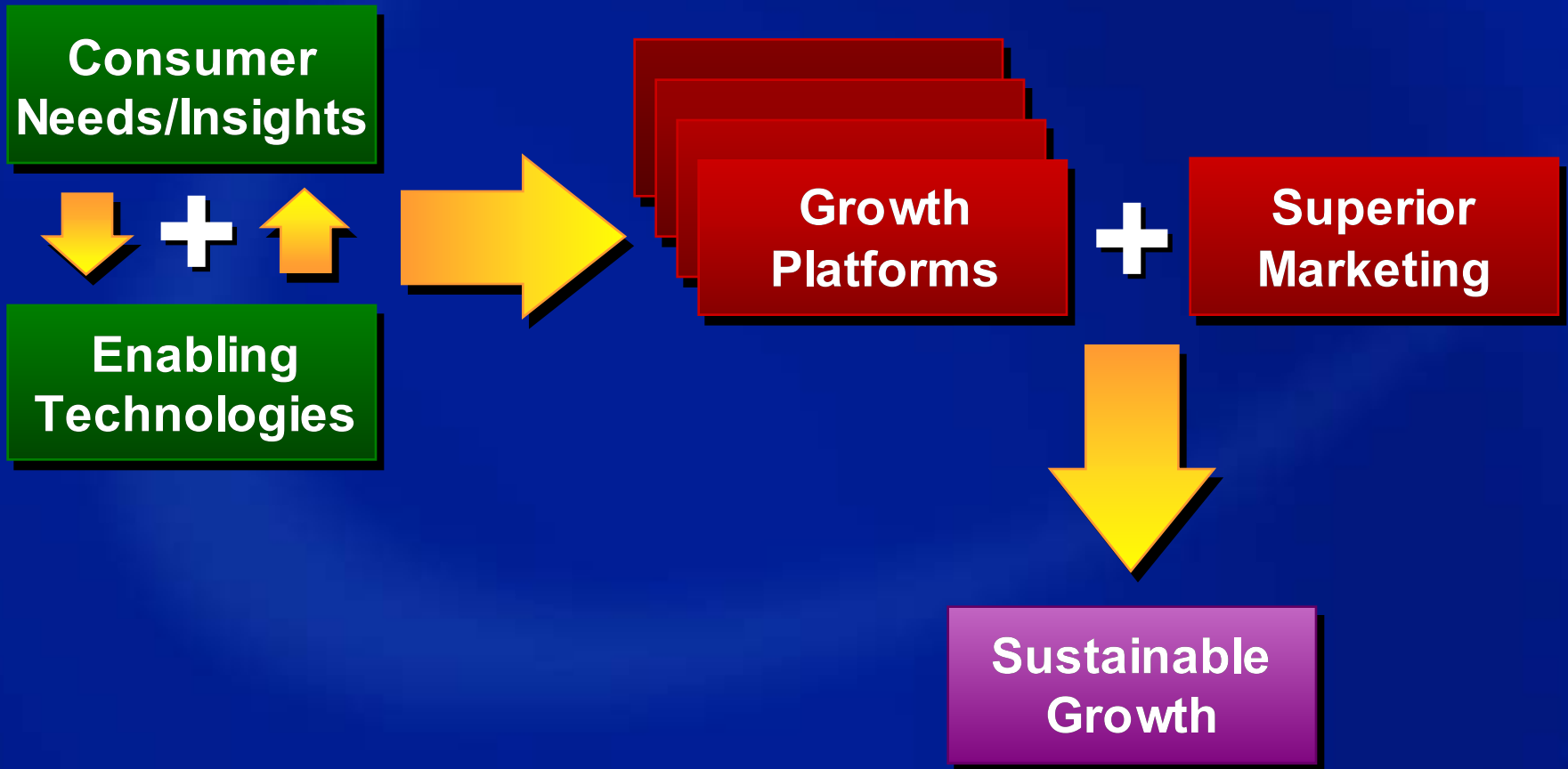
## Technology Impact

Global Portfolio As Of	Benefits						Price	Net Brand Value
	Product Quality	Package Quality	New Products	Availability	Brand Image	Consumer Spending		
Y/E 2003	Well Positioned	Watch Out	Watch Out	Well Positioned	Well Positioned	Watch Out	Significant Issue	Watch Out
Y/E 2004	Well Positioned	Watch Out	Well Positioned	Well Positioned	Well Positioned	Watch Out	Well Positioned	Well Positioned

- Significant Advantage
- Watch Out
- Well Positioned
- Significant Issue



# Innovation Model



# Increased Impact Of Technology

- **Improved Focus**
  - **Category Expertise**
  - **Dedicated Resources**
- **Enhanced Scale Leverage**
- **Faster Speed To Market**

# Focused R&D Infrastructure

## Global Core Category Centers Of Expertise



- ★ Biscuits
- ★ Cheese & Dairy
- ★ Coffee
- ★ Specialty Refreshment Beverages

# Focused R&D Infrastructure

## Regional Core Category Centers Of Expertise



- ★ Cereal
- ★ Chocolate
- ★ Convenient Meals
- ★ Meat
- ★ Regional Development

# Category Technology Expertise

**Sustaining**





# Category Technology Expertise

Leading

Enabling  
Technologies

Sustaining

Coffee

Dairy

Specialty  
Refreshment  
Beverages

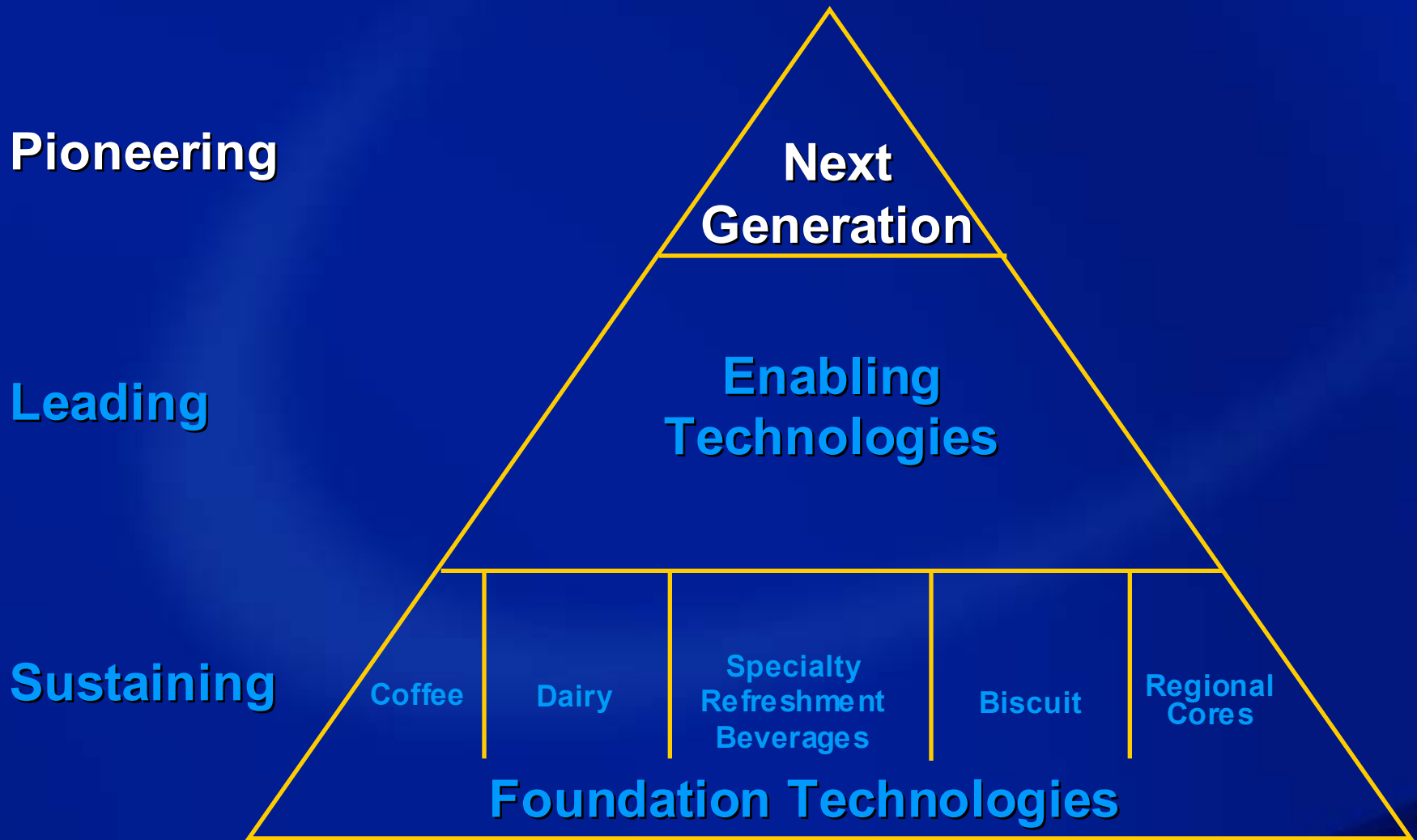
Biscuit

Regional  
Cores

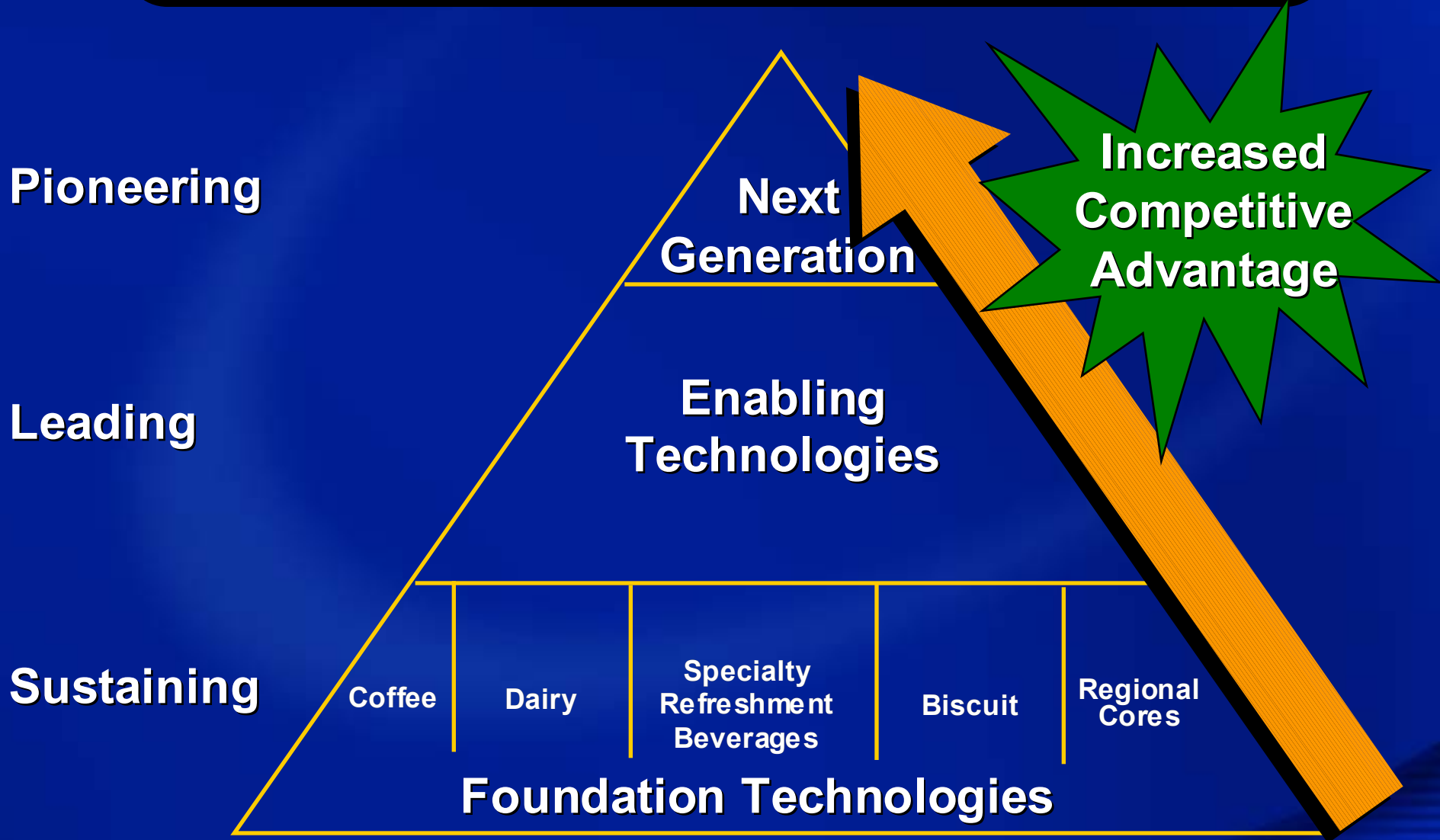
Foundation Technologies



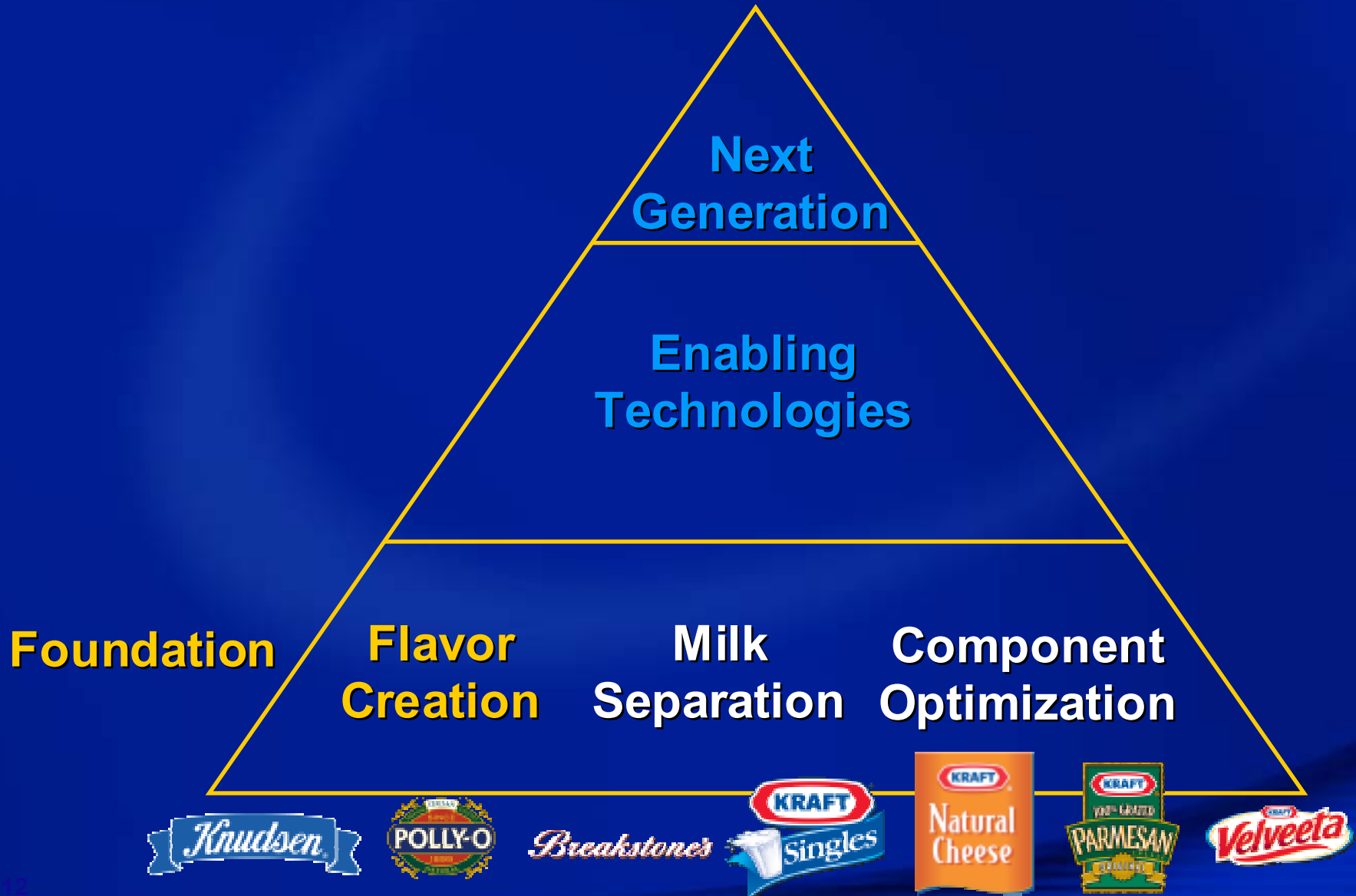
# Category Technology Expertise



# Category Technology Expertise



# Dairy Technology Expertise



# Dairy Foundation Technologies

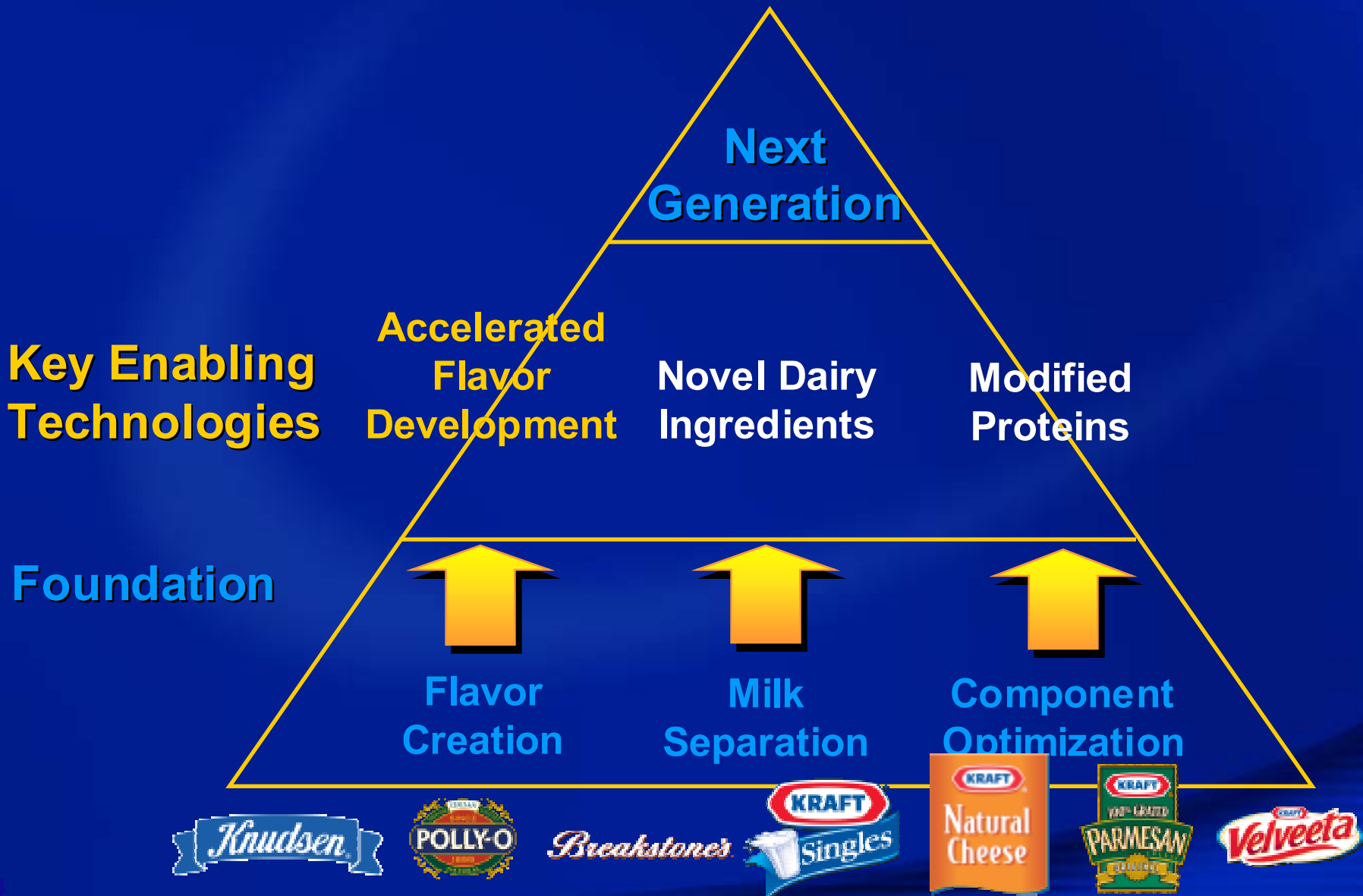
## Flavor Creation



- Proprietary:
  - Flavor creation
  - Formula
  - Processes
- Strong consumer preference – 67% say Philadelphia “makes a better cheesecake”



# Dairy Technology Expertise



# Dairy Enabling Technologies

## Accelerated Flavor Development

- Patented fermentation process
- Proprietary flavor ingredients
- Proprietary flavor & aroma chemistry
- Significant Velveeta consumer preference vs. Private Label (67% blind)



# Dairy Technology Expertise

Pioneering

Next  
Generation

Key Enabling  
Technologies

Accelerated  
Flavor  
Development

Novel Dairy  
Ingredients

Modified  
Proteins

Foundation

Flavor  
Creation

Milk  
Separation

Component  
Optimization



Breakstones

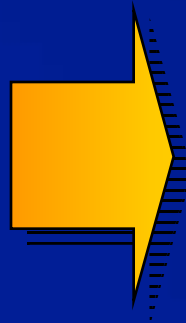




# Dairy Next Generation Technologies

## Emerging Science

- Flavor fractionation / potentiation
- Highly functional ingredients
  - Isolation
  - Modification



## Applications

- Improved Better-For-You Products
  - Flavor
  - Nutrition
- Lower cost structure (Developing Markets)

# Increased Impact Of Technology

- **Improved Focus**
  - Category Expertise
  - Dedicated Resources
- **Enhanced Scale Leverage**
- **Faster Speed To Market**

# Technology Scale Leverage

## Technologies

Single

Multiple

Single

Categories

Multiple

	Single	Multiple
Single		
Multiple		

# Technology Scale Leverage

## Technologies

Single

Multiple

Single

Categories

Multiple

100 Calorie Packs

KRAFT

# Technology Scale Leverage

## Technologies

Single

Multiple

Single

Categories

Multiple

	Single	Multiple
Single		
Multiple		

# Enabling Technologies

- 1. Dairy**
- 2. Grains & Baking**
- 3. Health-Promoting Ingredients**
- 4. Preservation & Food Safety**
- 5. Functional Packaging**

## 2. Grains & Baking

### Microwave Bread / Dough



- **Proprietary formulation**
  - Browns in microwave
  - Crispy crust
  - Aroma release
- **Patented susceptor design**
- **Extendable to other categories**

# 3. Health-Promoting Ingredients

## Healthy Oils



- Exclusive rights to proprietary, low trans – fatty acid oil
- Superior product stability over shelf-life
- Improved flavor
- Wheat Thins Q1 '05 revenues up double-digits
- Extendable across multiple categories



# 4. Preservation & Food Safety

## Anti-Microbials



- Patented ingredients
  - Sodium Lactate
  - Sodium Diacetate
- Licensing technology to processed meat industry
- Improved category safety

# 4. Preservation & Food Safety

## Next Generation

- **New Processes**
- **New Ingredients**



### Potential Benefits

- **Addresses consumer desire for “Freshness”**
  - Cleaner flavors
  - Crisper textures
- **Improved nutrition**

## 5. Functional Packaging

### Adhesives / Reseal



- Resealability the #1 consumer suggestion on biscuits
- Patented EZO/reseal technology
- Additional patents filed
- 70% of consumers say they “definitely would buy” (vs. 51% for current package)

# 5. Functional Packaging

## Design and Closure Technology



- Multiple design and utility patents
- Improved convenience and refrigerator storage
- Exclusive category access to patented manufacturing process
- Purchase interest significantly higher than glass package



# Technology Scale Leverage

## Technologies

Single

Multiple

Single

Categories

Multiple

	Single	Multiple
Single		
Multiple		

# Multi-Technology Scale

## Powdered Beverage Fortification



- \$1B global milk modified beverages category
- Integration of technologies
  - Health-promoting ingredients & fortification
  - Dairy expertise
  - Flavor expertise
- Margin contribution per lb. 40% higher than base Tang

# Multi-Technology Scale

## Tassimo On-Demand Hot Beverages



- Integration of technologies
  - Functional packaging
  - Dairy technologies
  - Flavor expertise
- >20 patent applications filed in multiple countries

# Multi-Technology Scale

## Coffee Category Transformation



France Avg. Price / Cup  
(Index Vs. Instant Coffee)

Instant Coffee	1.0
Filter Coffee	1.3x
Mixes	2.7x
On-Demand Pods	3.3x
<b>Tassimo</b>	<b>6.3x</b>
Away From Home	> 25x



# Technology Scale Leverage

## Technologies

Single

Multiple

Single

Categories

Multiple

	Single	Multiple
Single		
Multiple		

# Multi-Category Scale

## South Beach Diet Product Line



- Scale entry into \$20B+ weight management foods category
- Leverages:
  - Health-promoting ingredients
  - Grains and baking
  - Functional packaging



# Technology Scale Leverage

## Technologies

Single

Multiple

Single

100 Calorie Packs



TASSIMO  
THE ART OF THE PERFECT CUP

Categories

Multiple



0g Trans Fat  
Now Even Better Tasty



SOUTH  
BEACH  
DIET



KRAFT

# Increased Impact Of Technology

- **Improved Focus**
  - Category Expertise
  - Dedicated Resources
- **Enhanced Scale Leverage**
- **Faster Speed To Market**

# Faster Speed To Market

Back to Nature Acquisition – September '03



# Back to Nature

## Product Line Expansion



- Expanded into 7 new categories in 8 months
- Leveraged existing category technologies and expertise
- Achieved with less than \$1 million in capital

# Faster Speed Through Scale

## Tassimo Development

**Glenview,  
Illinois**



**Milk  
Development**



**Global Dairy  
Component**

**Banbury,  
U.K.**



**Global Brewer  
T-Disc  
Development**



**Global Brewer  
and Product  
Menu**

**Tarrytown,  
New York**



**N.A. Product  
Development**



**U.S. / Canada  
Application**



# Tassimo Expansion In 2005

U.K., Switzerland, U.S. & Germany





# Faster Speed Through Alliances

- **Ideation Alliances**
  - Consortium For Corporate Entrepreneurship
  - NineSigma
  - Kitchen of the Future
- **Research Alliances**
  - Nanotechnology Consortia
  - Senomyx / Monell
- **Development Outsourcing**
- **Supplier Production of Kraft patented ingredients**



# Kraft R&D Is Changing

## From

- Extensive project lists with lower impact

## To

- Improved Focus  
Fewer, bigger & more incremental new products

# Kraft R&D Is Changing

## From

- Extensive project lists with lower impact
- Category Councils optimizing local resources

## To

- Improved Focus  
Fewer, bigger & more incremental new products
- Enhanced Scale Leverage  
Global teams optimizing global resources & leveraging technology/ growth platforms

# Kraft R&D Is Changing

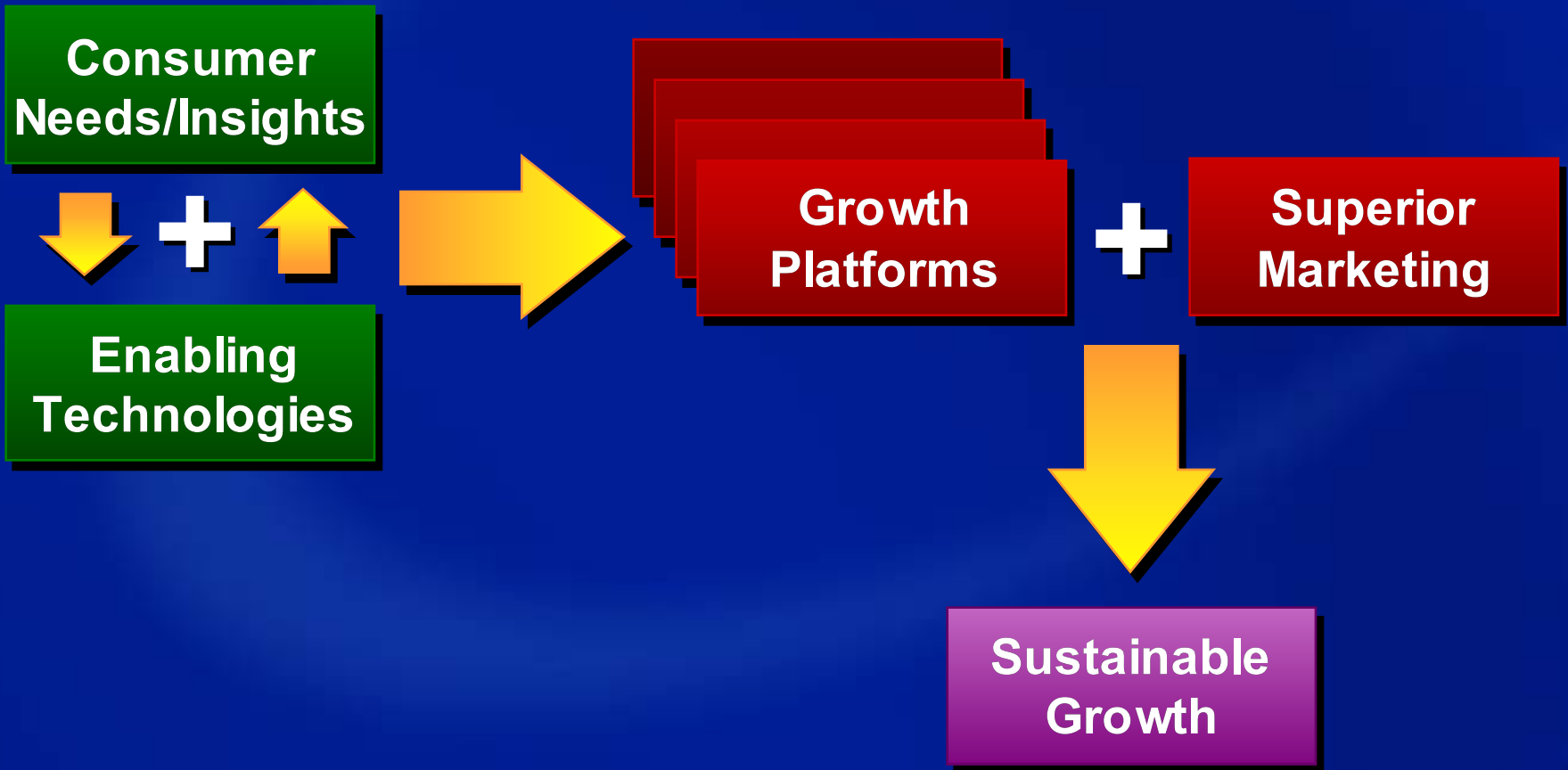
## From

- Extensive project lists with lower impact
- Category Councils optimizing local resources
- Inflexible processes & long time to market

## To

- Improved Focus  
Fewer, bigger & more incremental new products
- Enhanced Scale Leverage  
Global teams optimizing global resources & leveraging technology/ growth platforms
- Faster Speed To Market  
Flexible processes enabling quicker development & decisions

# Innovation Model



# Technology and Ideation

## Innovation Days



# Innovation Day Result



# Kraft Kitchens Innovation Center

## Kitchen of the Future





# Kitchen Of The Future

- **Innovation incubator**
- **Observation of consumer interaction with future technologies**
- **Technology / appliance / design expert partnerships**
  - Accenture
  - GHK Design
  - IBM
  - Appliance manufacturers
- **Kraft growth opportunities**
  - Products for emerging appliance/cooking options
  - Simpler meal preparation
  - Personalized nutritional guidance



***Video In Progress***



CHANGING CONSUMERS,  
**CHANGING KRAFT**

**Investor Meeting**

**May 10, 2005**

**Q&A Session**



CHANGING CONSUMERS,  
**CHANGING KRAFT**

**Investor Meeting**  
**May 10, 2005**