Flexible Packaging, Innovation and Development Needs

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Content

- Introduction to P&G
- Flexible Packaging in P&G
- Innovation in P&G
- Flexible Packaging Needs
- Recent Flexible Packaging Developments
- Future Development Needs
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Procter and Gamble

- Large Consumer Products Company
- Founded in 1837, Cincinnati, Ohio
- 300 products / 5 billion consumers in 140 countries
- 115,000 Employees
- $70 Billion Sales in 2006
- Recent Acquisitions: Clairol, Wella, Gillette
Five Global Business Areas

- Fabric & Home Care
  - Tide, Downy
  - Mr. Clean, Swiffer
  - Cascade, Dawn

- Baby & Family Care
  - Pampers
  - Bounty
  - Charmin

- Beauty Care
  - Pantene
  - Always / Tampax
  - Olay
  - Gillette

- Health Care
  - Crest
  - Iams
  - Pepto-Bismol, Actonel

- Snack & Beverages
  - Pringles
  - Folgers
Flexible Packaging in P&G

- Total Spend of around $1 Billion / yr
- $300MM / yr - Laminated “Barrier” Films
- $300MM / yr - “Non-Barrier” Films (LDPE)
- $350MM / yr - Labels
- Examples →
Flexible Packaging in P&G

- Bags
Flexible Packaging in P&G

• Pre-Made Pouches/Bags
Flexible Packaging in P&G

• Flow Wraps
Flexible Packaging in P&G

- Sachets
Flexible Packaging in P&G

- LDPE Wraps
Flexible Packaging in P&G

• Specials
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P&G’s Innovation Process

• Innovation Basics
• P&G’s Innovation Culture
• “The Innovation Equation”
• Latest Trends in P&G
Innovation Basics

• Creativity / Innovation is a Skill
• It can be Taught
• People can become More Innovative
• Organisations can become More Creative
  – Culture
  – Organisation / Rewards
  – Funding
P&G’s Innovation Culture

- Specific Goals / Targets for Innovation
- Incentive Systems linked to Innovation Targets
- Co-Operation & Networking with External Partners
- Cross Functional Teams
- Co-Location of Teams and Departments
- Detailed Understanding of Consumer/Market Needs
- Communication across Hierarchies
Innovation Funding

Absolute R&D Expenditure

Million $

Clorox
Colgate
Gillette
K. Clark

Innovation Funding

Absolute R&D Expenditure

Million $
Innovation Funding

R&D Expenditure vs. Sales

- Colgate
- Gillette
- K. Clark
- Clorox
Innovation Funding

R&D Expenditure vs. Sales

- Sales Volume up 50%
- Share Price Doubled

- Colgate
- Gillette
- K. Clark
- Clorox
- P&G

Percentage

“The Innovation Equation”

Un-Met Consumer Need + Proprietary Technical Solution + Innovative Marketing Strategy = $

Responsible: R&D R&D Marketing

Funding: 40% of R&D Budget 60% of R&D Budget Own Budget
Latest Trends: The Big Idea

- Home Care: Convenience
Latest Trends: The Big Idea

- Home Care: Convenience

>$1 Billion in Incremental Sales
Latest Trends: Connect & Develop

- Developments via External Partnering

Unicharm

BASF

Clorox
Latest Trends: Aesthetic Design

• 75% of Purchase Decisions made In-Store
  – Pharmaceutical 0-1%
  – Washing Powder >50%
  – Chocolate 99%

• TV Advertising Less Effective
  – 1980: Adverts on 4 US Channels = 80% Population
  – 2005: Adverts on 117 US Channels = 80% Population

• On-Shelf Advertising Critical to Business Success
Latest Trends: Aesthetic Design
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Package Requirements

• Barrier/Product Compatibility
• Consumer Needs
• Packing Line
• Shipment
• Aesthetics
• Cost
Package Requirements

- Barrier/Product Compatibility

- Product Protected: Shelf Life/Usage

- Consumer Needs

- Packing Line

- Shipment

- Aesthetics

- Cost
Package Requirements

- Barrier/Product Compatibility

- Product Protected: Shelf Life/Usage
Package Requirements

- Barrier/Product Compatibility

- Product Protected: Shelf Life.Usage

- Oxygen Transmission Rate (cc.m2/day)
- Water Vapor Transmission Rate (g/m2/day)
Package Requirements

- Barrier/Product Compatibility
- Product Protected: Shelf Life/Usage

**Graph:**
- Oxygen Transmission Rate (cc.m2/day)
- Water Vapor Transmission Rate (g/m2/day)
- mBOPP Laminates
- mBOPP
- PANTENE
- ARIEL
- ThermaCare
Package Requirements

• Barrier/Product Compatibility

• Product Protected: Shelf Life/Usage

Oxygen Transmission Rate (cc.m²/day)

Water Vapor Transmission Rate (g/m²/day)

BOPP Laminates

BOPP
Package Requirements

- Barrier/Product Compatibility

- Product Protected: Shelf Life/Usage

PET Laminates

Oxygen Transmission Rate (cc.m²/day)

Water Vapor Transmission Rate (g/m²/day)
Package Requirements

• Barrier/Product Compatibility

- Product Protected: Shelf Life/Usage

![Graph showing Oxygen Transmission Rate and Water Vapor Transmission Rate for different products like Bounty, Tempo, Tide, Always, and Pampers. The graph compares LDPE Monofilm with PE.](image-url)
Package Requirements

• Barrier/Product Compatibility
  • Product Protected: Shelf Life/Usage
  • No Reaction between Pack/Product

• Consumer Needs

• Packing Line

• Shipment

• Aesthetics

• Cost
Package Requirements

- Barrier/Product Compatibility
  - Product Protected: Shelf Life/Usage
  - No Reaction between Pack/Product
  - Light Protection
- Consumer Needs
- Packing Line
- Shipment
- Aesthetics
- Cost
Package Requirements

• Barrier/Product Compatibility
• Consumer Needs
  • Functional: Easy open, reclose, dosing, carriage & storage in home
• Packing Line
• Shipment
• Aesthetics
• Cost
Package Requirements

- Barrier/Product Compatibility
- Consumer Needs
- Packing Line
- Shipment
- Aesthetics
- Cost

- **Functional**: Easy open, reclose, dosing, carriage & storage in home
- **Ergonomic**: Opening & dispensing force, ease of usage, recharging
Package Requirements

• Barrier/Product Compatibility

• Consumer Needs
  • Quality, Output, Reliability
  • Friction, Static, Stiffness, Sealability

• Packing Line

• Shipment

• Aesthetics

• Cost
Package Requirements

- Barrier/Product Compatibility
- Consumer Needs
- Packing Line
- Shipment
- Aesthetics
- Cost

- Mechanical / Environmental Abuse
- Drop Test / Puncture Resistance
Package Requirements

• Barrier/Product Compatibility

• Consumer Needs

• Packing Line

• Shipment

• Aesthetics • On Shelf Advertising

• Cost • Fits with and Supports Brand Equity

• Shelf Fit, Legal Labeling

• Appearance in Home
Package Requirements

• Barrier/Product Compatibility
• Consumer Needs
• Packing Line
• Shipment
• Aesthetics

• Cost  • Right Cost for Project Financials
## Technical Design Check List

### Barrier/Product Compatibility
- Product Protected for it’s Shelf Life
- No Reaction between Pack/Product
- Light Protection

### Consumer Needs
- **Functional**: Easy open, reclose, dosing, carriage & storage in home
- **Ergonomic**: Opening & dispensing force, ease of usage, recharging

### Packing Line
- Quality, Output, Reliability?
- Friction, Static, Stiffness, Sealability

### Shipment
- Survive Mechanical / Environmental Abuse
- Drop Test / Puncture Resistance

### Aesthetics
- On Shelf Advertising
- Fits with and Support Brand Equity
- Legal Labeling
- Appearance in Home

### Cost
- Right Cost for Project Financials
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Granule Detergent Bags

Before 1992: Cartons

1992: Flexi Bag
- 90% Less Material
- “Refill Concept”

1993: Perfume Barrier
- Trade Complaints

1995: Air Free Bag
- Better Shelving
- Stackable on Pallet

1996: Internal Scoop
- Dosing Compliance
- Puncture Resistance

2000: Corner Seals
- Shelf Impression

2004: Easy Open

2006: Soft Touch
Recent Developments

Cleaning Wipes
- Metallic Look
- Portrait Orientation
- “Scrubby Patch”

Dish-Wash Tablets
- Transparent
- Zipper Reclose
- Liquid-Solid Tablet

Granule Detergent
- Blue Inner Liner
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Future Technical Needs

- **Structural Cost Savings**
  - Film Standardisation across Multiple Products
  - Lower Cost Barrier Layers
  - Layer Removal

- **Better Product Compatibility**
  - Enhanced Product Resistance / Predictability

- **Better Aesthetics**
  - Ongoing Aesthetic Improvements
  - Sensory Improvements

- **Ergonomics**
  - Easy Open / Reclose / Dispensing

- **Sustainability**
Future Supplier Needs

• Global Corporations Need Global Partners
  – Lead innovation
  – Maintain competitive advantage

• Simplicity
  – 15000 film Packaging Specifications
  – Films covering Multiple Applications

• Fit for Use Films
  – Easy to qualify / meet consumer requirements

• Renewable Resources
  – Industry to Accelerate Progress

• Meaningful and Affordable Innovation
Future Trends

• Ageing Population
• Convenience
• Oil Price
• Decoration
• Customisation
Thank You