“At the fuzzy front end”

Introducing four stages of innovation to Solo Cup Europe
A Knowledge Transfer Partnership with Teesside University

Presented by:

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Order of Presentation

• **Background** for Solo Cup
• **Situation and Challenge** for the Company
• **The Opportunity** for the business and
• **The Process** for successfully implementing & embedding innovation
• **Measuring Success**
Solo Cup Europe (SCE) Background

- A UK limited company
- 13 acre site in Huntingdon
- 400 employees (approx) - factories, warehouses and offices
- Part of the Solo Cup company, a global organisation and
- One of the world’s largest manufacturers of disposable foodservice packaging
- In 2009 SCE produced over 3.5 billion units with sales of £70 million
- A forward thinking company
Core Competencies...

- **Manufacturing** disposable foodservice packaging products from paper, plastic and foam
- one of the first food packaging companies to implement an effective **Environmental Management System** (EMS) system based on the International Standard ISO14001
Core Competencies...

- **Strong Engineering CAD design** allowed technical refinements and alterations to products at a customer’s request.
- **Limited Collaborative Product Development** took place by tailoring products to customer requirements often stemming from customer initiation.
Core Competencies...

- **Graphic Design Service** – allowed Solo to offer a wide range of print services from stock prints and speciality designs, to custom design and printing
- **Sales and Marketing** - Strengths in product knowledge and market expertise for foodservice and packaging products enable advise to customers on a wide range of disposables and the industry as a whole.
Product Ranges for Foodservice and Packaging include:

1. **Plastic Thermoforming** – e.g. Polyethylene terephthalate (PET) tumblers and containers and thermoformed dairy pots and lids.

2. **Paper Conversion** – converting various papers into ranges of products e.g. cups and containers.

3. **Foam Extrusion and Forming** - Expanded Polystyrene (EPS) products from cups to containers and bowls.
The Situation...

- SCE previously relied upon decreasing polystyrene usage as its base material as a means of innovation and in order to comply with increasing environmental pressures and customer demands.

The Challenge...

- “Decrease the UK dependence on a single monomer material in a single market sector
- Enter new food/foodservice packaging markets with innovative value added products which accounted for environmental factors.”
The opportunity...

“To design and implement a market driven N.P.D. facility to enable the commercialisation of new, innovative & environmentally responsible products”

The purpose of the project was to:
• **Predict** changes in the marketplace
• **Enable** SCE to be responsive to these changes.
• **Ensure** that SCE products meet and/or exceed customers’ changing needs and expectations
• **Protect** SCE’s existing market share from its competition
• **Drive** increased sales
The Process...

Innovation would be at the core of the activity. This would be achieved by:

1. **Understanding** SCE capabilities, the competitive market environment, strengths, weaknesses and areas for competitive advantage

2. **Implementing** an NPD strategy, systems and procedures to identify new customers, product and market gaps and to deliver suitable designs that would have protectable IP.

3. **Embedding** NPD best practice and protocols in SCE within a continuous research and NPD facility.
Company Structure

- M.D.
  - Health & Safety
  - Human Resources
  - Marketing
  - Executive P.A.
    - Finance
    - Supply Chain
    - Sales
    - Innovation, Environment & Packaging
M.D.

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**Principle NPD Contributions**
The Innovation Space

- Marketing
- Sales
- Production
- Innovation & Environment

- Lifestyle
- New Markets
- Competitor Activity
- Possible Futures
- Intellectual Property
- Sustainability
- Legislation
- Tooling/Technical
- Materials & Processes
- Current Needs
- Customer Interface
- Trade Intelligence
- Future Investment
- Current Capability
- Production/Distribution
- International
The Innovation Funnel

Stage 1: Discovery

• Research and Intelligence Feed
  • Product Idea Net
  • Ideas generated
  • Initial screen against NPD strategy
  • Gateway at Concept Funnel
Stage 2: Ideation

- Shaping the Idea

- Creative Tools Applied, e.g.
  - Brainstorming
  - Scenario setting
  - Sketching
  - Experience prototyping
  - Form prototypes
  - Consumer trials

- Results fed to Innovations Meeting to shape ideas to best configuration
The Innovation Funnel

Stage 3: Development

- Concept to feasible product
- Detailed product design brief finalised
- Tooling design & manufacturing prototypes
- Risk analysis
- Outline specification for product
- Detailed financial analysis
- I.P. Filed (where appropriate)

Stage 4: Launch Process

- Resource Assessment
- Full Production Tooling
- Customers Targeted
- Sales Team Trained
- Marketing materials developed
So... what has changed?

- **A new Innovation Department**
  - headed by a new innovation manager

- **Innovation Team now operating**
  - NPD procedures and protocols in place
  - Creative culture developed
  - cross functional inputs into the creative process and decision making
  - improved efficiency (time to market)

- **Enhanced design process model in operation**
  - A deeper understanding of competitors and the marketplace based on research
  - a steady stream of new product initiations
  - creative and evaluative techniques adopted
  - Project timeline management process enables project progression to be monitored and efficiency enhanced
  - reduction of risk for NPDs due to greater understanding of market dynamics and metrics evaluation procedures
So... what has changed?

- **Presentation capability has been enhanced**
  - Improved visual coherency across presentation materials
  - 2-D (sketches), 3-D (CAD visualisation, prototyping), moving image (video demo.s)

- **Increased customer focus**
  - Key customer requirements now clearly understood
  - Customer facing materials and interaction improved (briefing sheets)
  - Customer involvement in the innovation process
  - Proactive development of products to anticipate customer needs

- **NPD strategy document implemented**
  - A platform now exists for continuous Research & NPD
    with checkpoints for management decisions
  - Roadmap with clear expectations
  - Future resourcing identified
  - Greater emphasis now placed on sustainable design
Measuring Success...

**Company Partner**
Seven New products (inc. protected IP) nearing market readiness, e.g.
- **Cold Food Container**
  Expected £2.4M in additional revenue.
- **Pasta Container**
  Estimated £1.45M in additional revenue.

**Associate**
- 2010 National KTP Business Leader of Tomorrow Award
- North East Knowledge Transfer Showcase Best Poster Award.
- CMI Level 5 Diploma in Management
- Prince 2 Foundation and Practitioner certificates
- full time, permanent position as innovation manager

**University Partner**
- Supported teaching and live student projects
- Case study materials
- Increased the profile of the university through PR opportunities
- KPI’s for enterprise engagement and research outputs
Thank you for listening

any questions…

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