“At the fuzzy front end”

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

Presented by:

Peter Reid

Senior Lecturer Product Design and Enterprise

Teesside University

Teesside University

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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

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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

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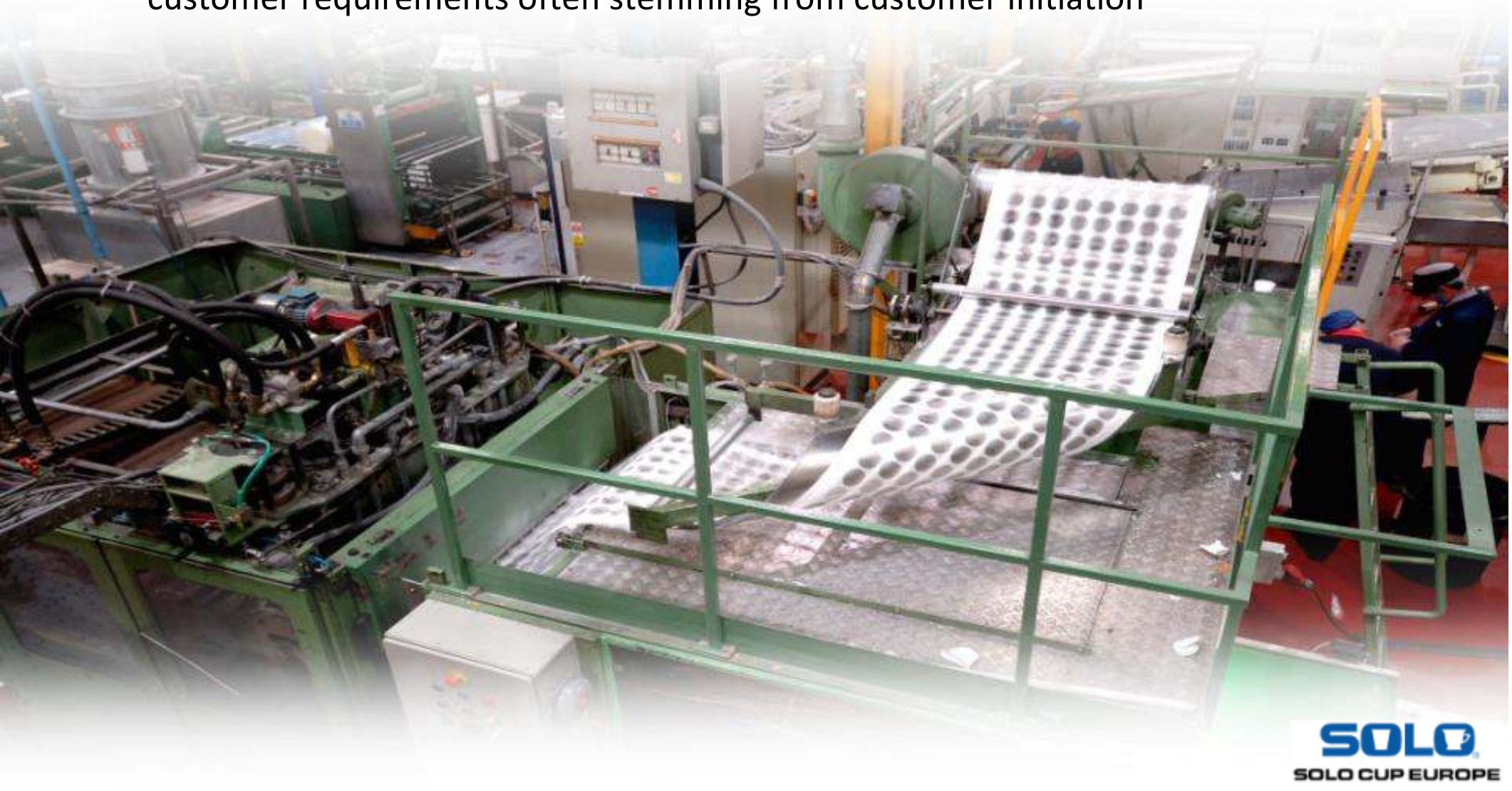
Core Competencies…

- **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



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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.

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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…

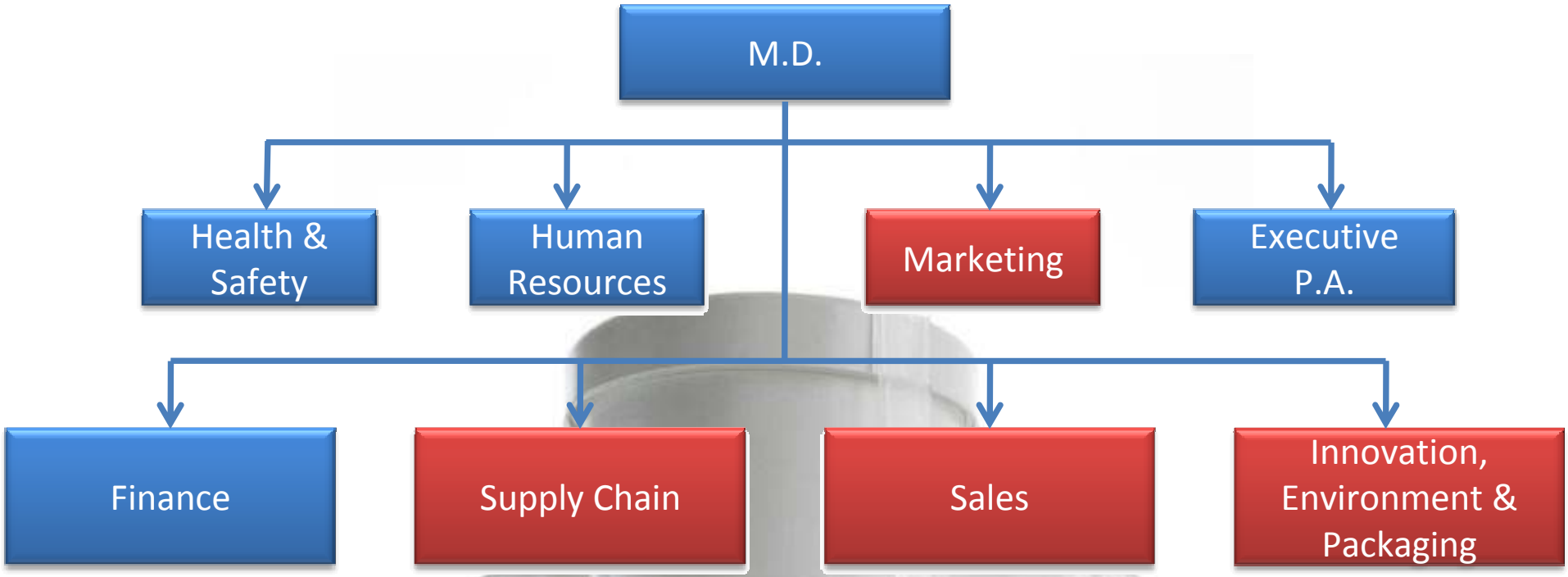
Innovation would be at the core of the activity. This would be achieved by:

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

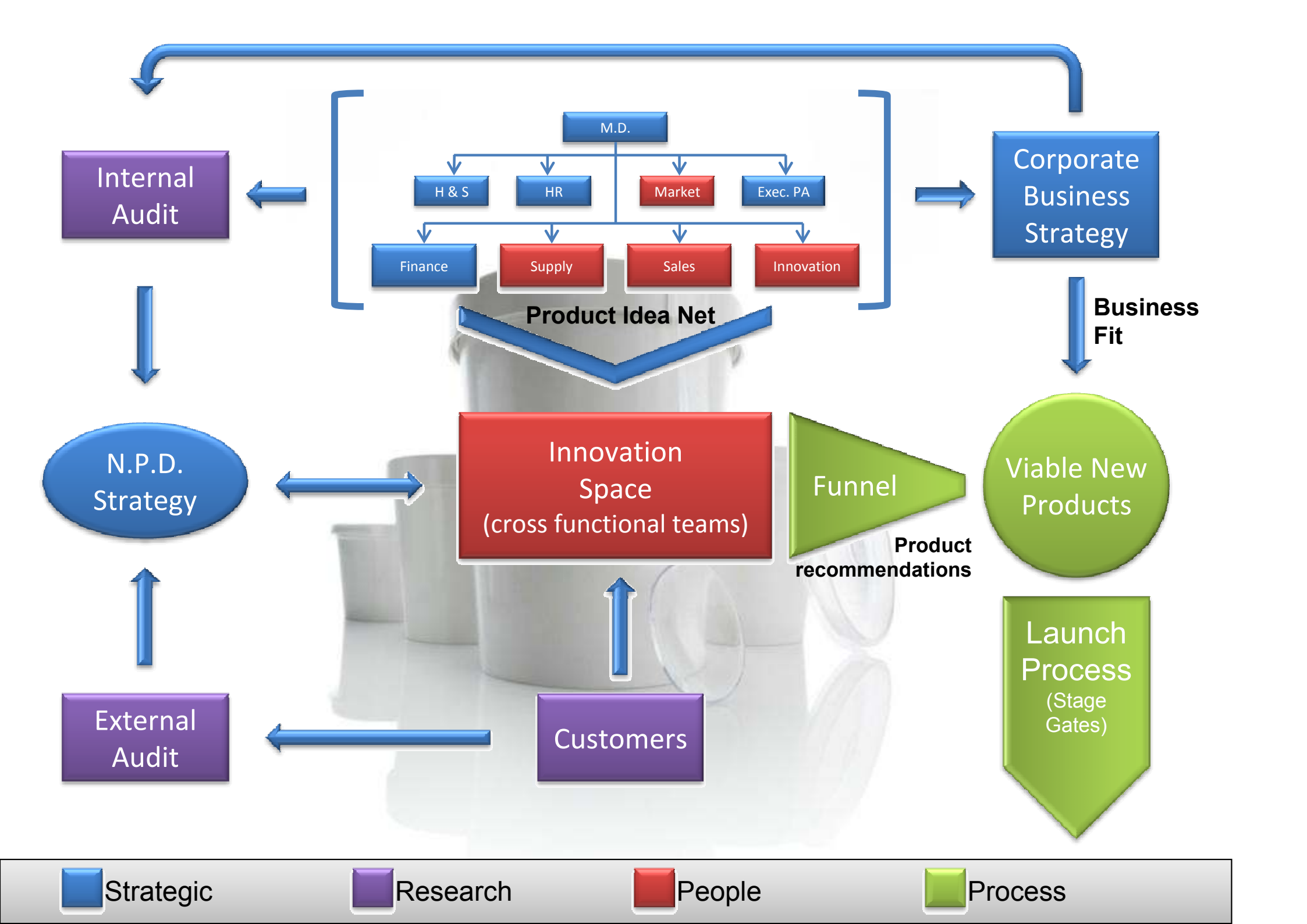
2. **Implementing** an NPD strategy, systems and procedures to identify new customers, product and market gaps and to deliver suitable designs that would have protectable IP.

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

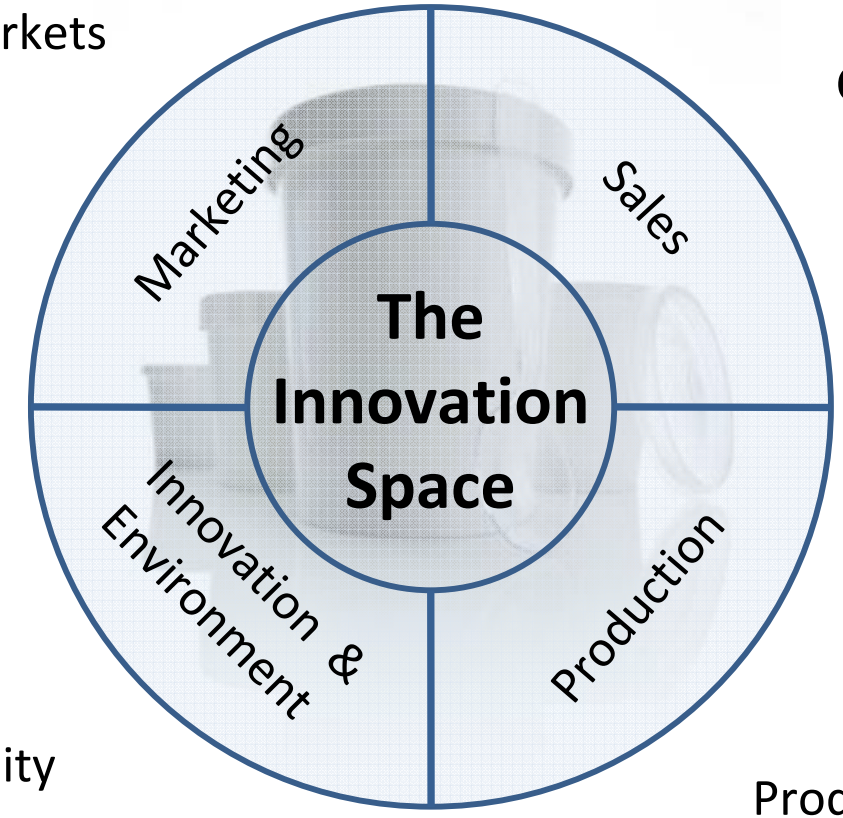
Company Structure



Principle NPD Contributions


M.D.
H & S
HR
Market
Exec. PA
Finance
Supply
Sales
Innovation
Product Idea Net
Internal Audit
Corporate Business Strategy
Business Fit
N.P.D. Strategy
Innovation Space (cross functional teams)
Funnel
Product recommendations
Viable New Products
Launch Process (Stage Gates)
External Audit
Customers
Strategic
Research
People
Process

The Innovation Space



Inter national

Lifestyle

Current Needs

New Markets

Customer Interface

Competitor Activity

Trade Intelligence

Possible Futures

Intellectual Property

Future Investment

Current Capability

Sustainability

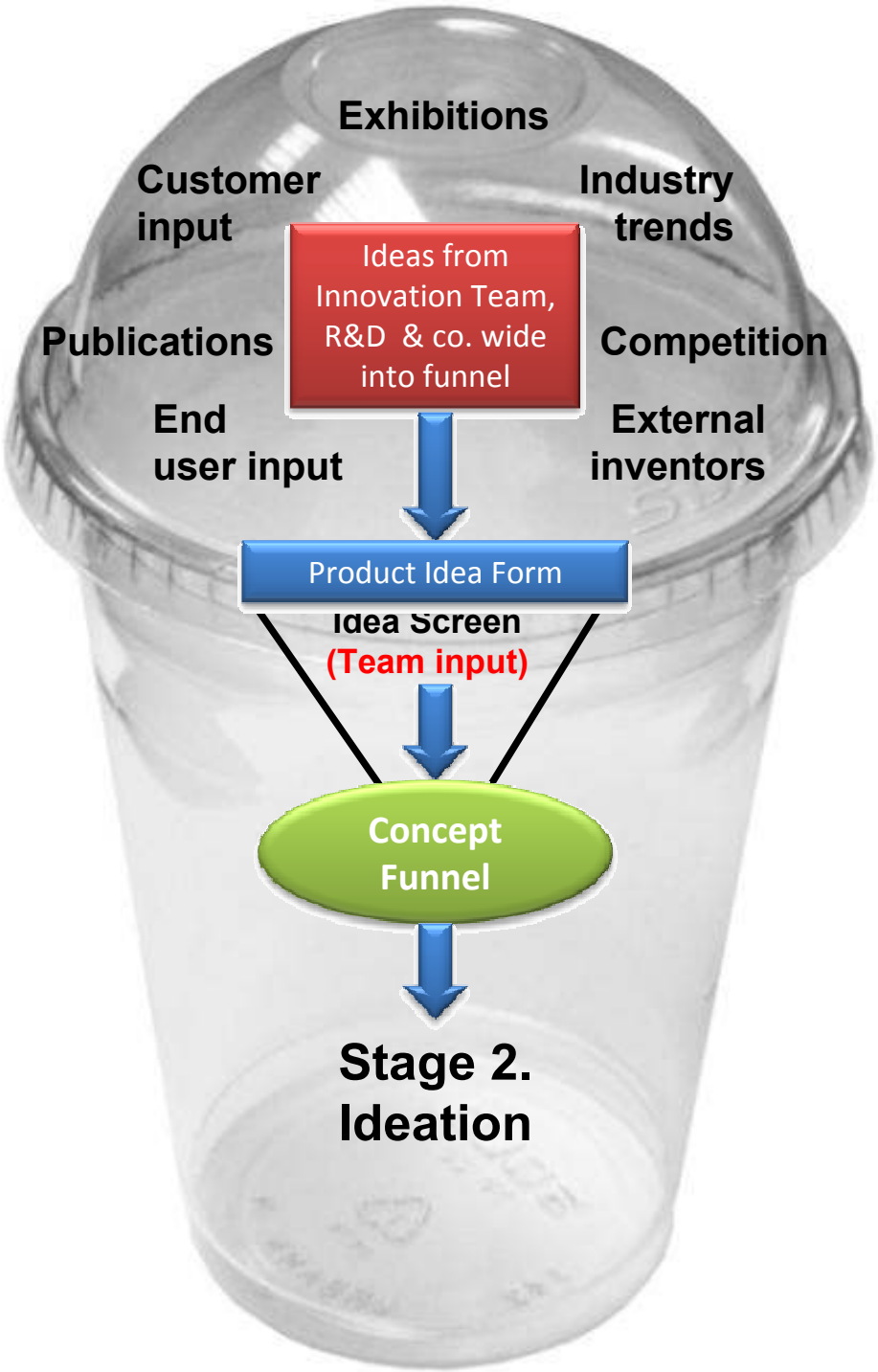
Production/Distribution

Legislation

Tooling/Technical

Materials & Processes

The Innovation Funnel



Stage 1: Discovery

•Research and Intelligence Feed

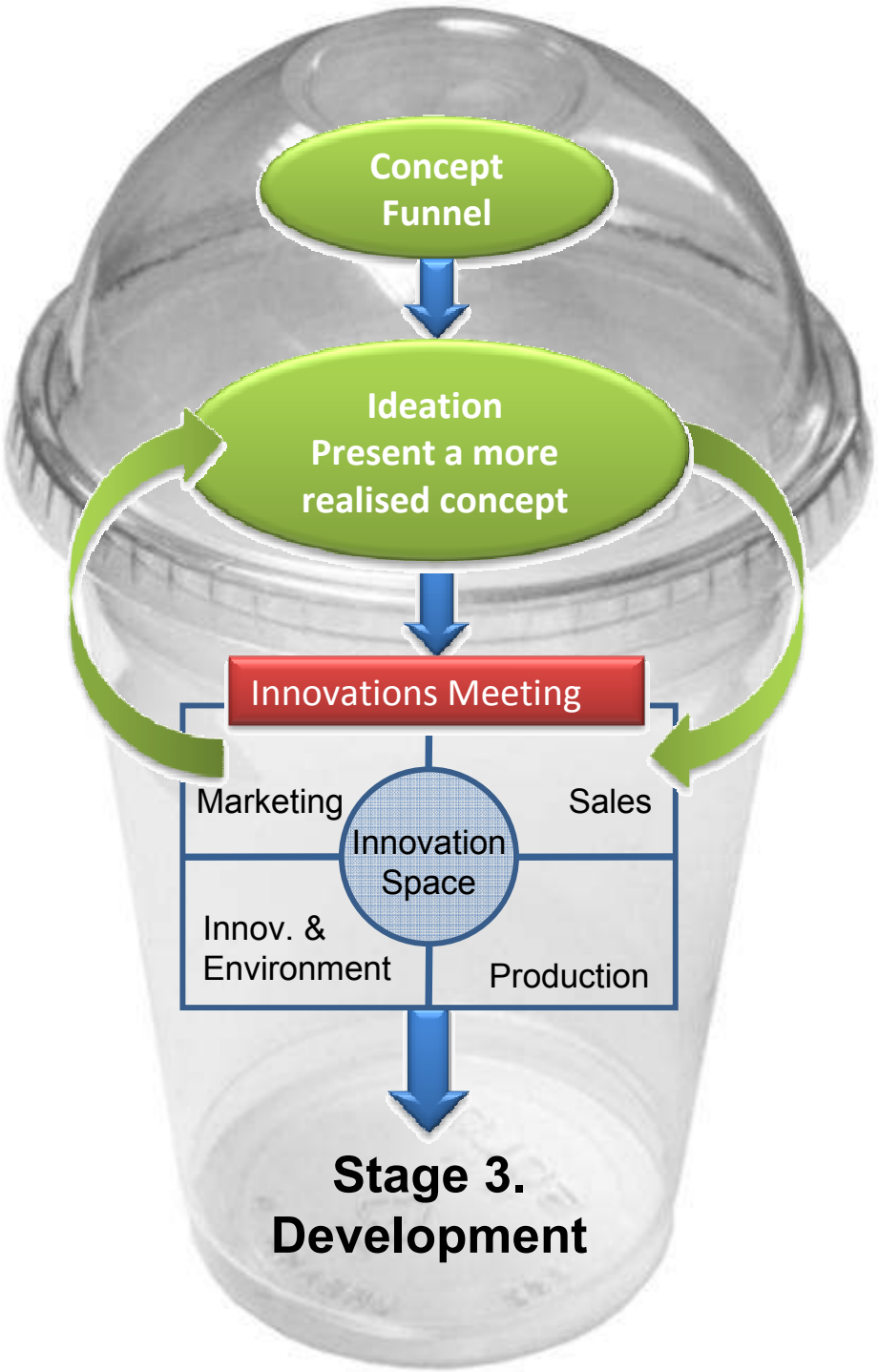
• Product Idea Net

• Ideas generated

•Initial screen against NPD strategy

• Gateway at Concept Funnel

The Innovation 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?

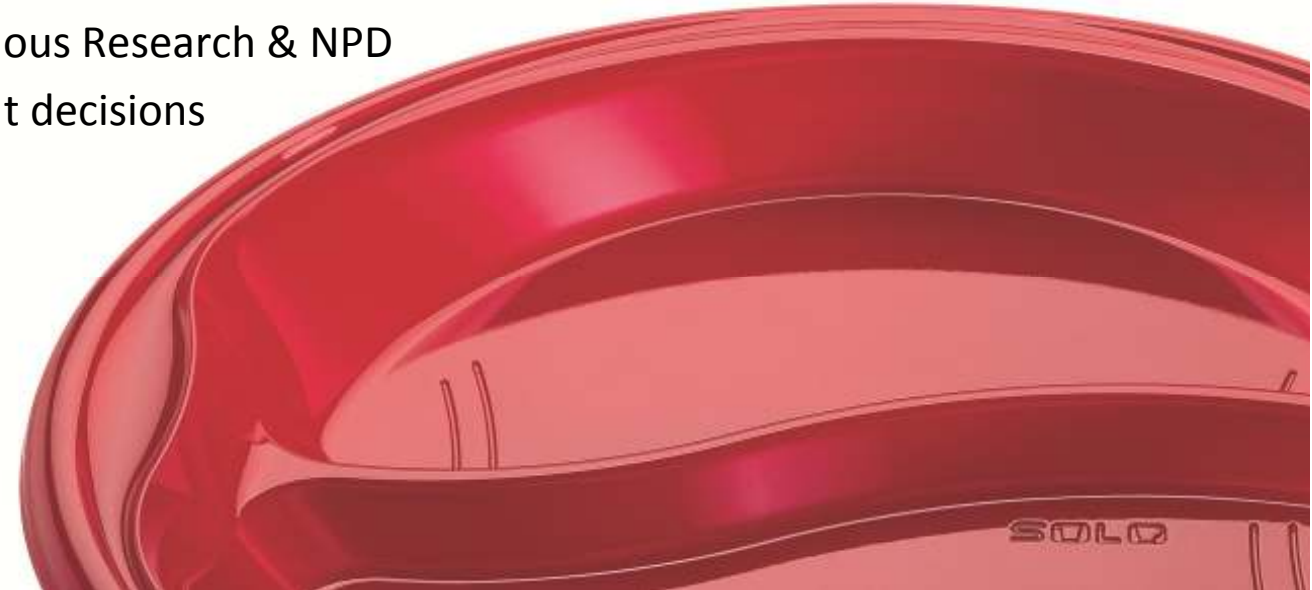
- **A new Innovation Department**
  - headed by a new innovation manager
- **Innovation Team now operating**
  - NPD procedures and protocols in place
  - Creative culture developed
  - cross functional inputs into the creative process and decision making
  - improved efficiency (time to market)
- **Enhanced 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…

Peter Reid
KTP Academic Supervisor
Senior Lecturer
School of Arts & Media

p.reid@tees.ac.uk

Teesside University

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