



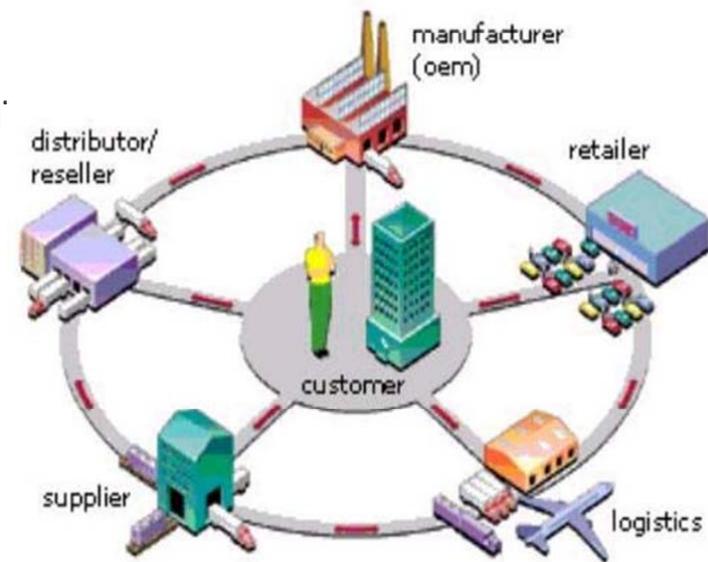
**FARADAY CENTRE
FOR RETAIL EXCELLENCE**

Faraday

Centre for Retail Excellence

The Faraday Centre for Retail Excellence is a new type of University consultancy that delivers specialist knowledge to the consumer packaged goods and retailing industries.

Our aim is to take the risk out of innovation enabling our clients to build better and more profitable product and customer experiences.



Faraday

What makes us unique

Faraday is the UK's only academic research centre that combines consumer retailing, product and packaging research.

Faraday has a truly global search capability, providing a one-stop shop on the hottest research, expertise and new technologies from around the world.

Faraday has 15 years proven experience of sourcing novel packaging solutions for the world's leading brands and retailers.



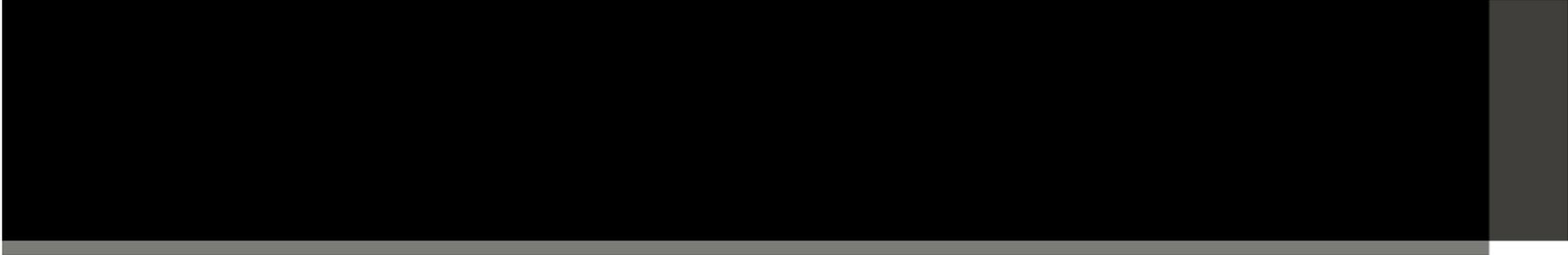
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Who we currently and have worked with...



UPM RAFLATAC





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modern family





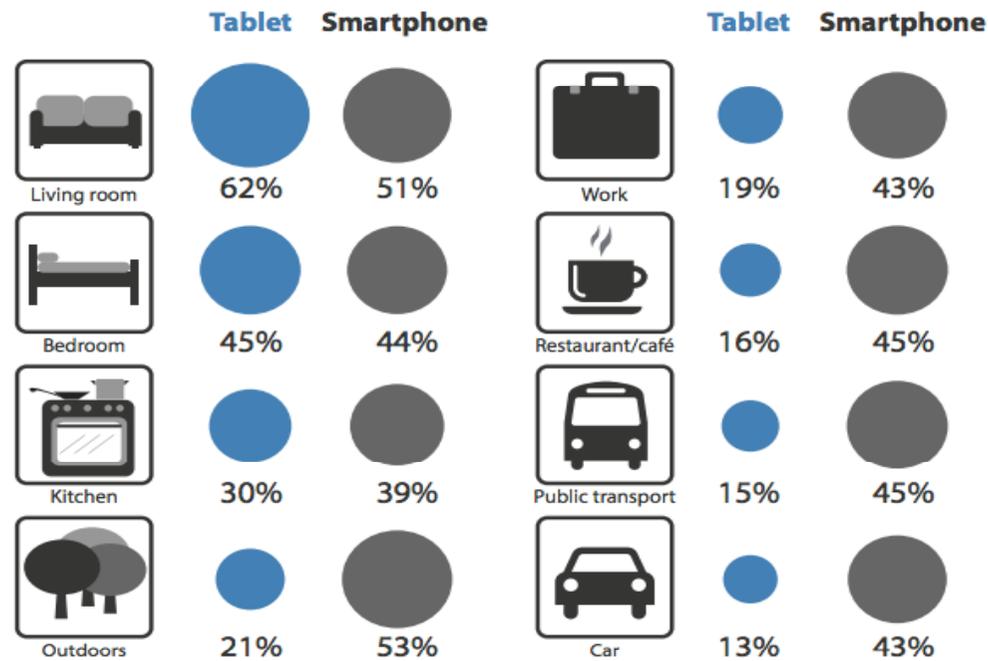
The Age of the Smart Phone (Tablet)

- Over 50% of UK mobile phone users use a smartphone
- Average smartphone data usage nearly tripled in 2011
- More than half of western Europe will own a tablet by 2017



Figure 4 The Tablet Beats The Smartphone For Surfing At Home

Where tablet owners access the Internet on their smartphone and on their tablet:



Base: 1,530 European online adults (18+) who access the Internet via their tablet and smartphone

Source: European Technographics® Consumer Technology Online Survey, Q4 2012

91561

Source: Forrester Research, Inc.





little Waitrose

TESCO metro

Welcome to TESCO metro

Helping you spend less every week

Welcome to TESCO metro

Sainsbury's Local

Open every day 7am - 11pm

Open every day
7am - 11pm

Bakery
Fruit & veg
Meat & fish

Click & Collect

WIN
Paralympic
Games 2012

official partner



amazon







**CURRENT
TECHNOLOGY**

What's currently Smart?

- MAP (Modified Atmosphere Packaging)
- Gas Scavengers
- Chemical Indicators



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PLASTIC ELECTRONICS

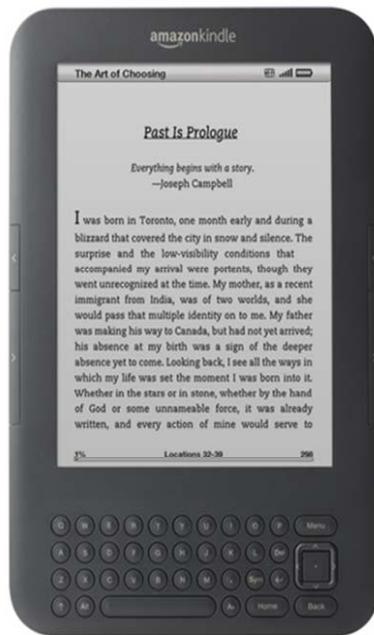
The Plastic Electronics Promise

- Mass Produced
- Printed
- Low Cost
- Electronic Functionality
 - Improved pack functionality
 - Improved pack appeal



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What Works Now



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MariSense shelf tickets as part of the IBM Smarter-Plant project

What Works Now



LG 55EM960V



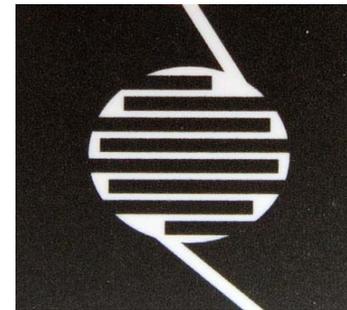
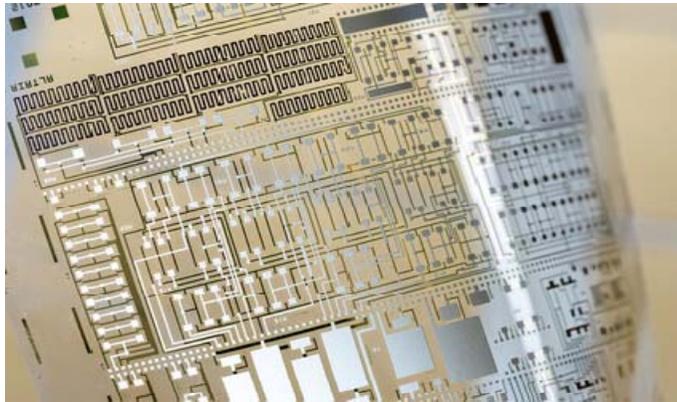
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What Works Now



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What Works Now



Barriers

- Lower performing components (exception OLED)
- Power
- High initial costs due to large R&D investment
- What to do with PE?
 - Lack of PE understanding and concepts
 - Difficult to imagine something new!
- Legislation



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**AUGMENTED
REALITY**

Augmented Reality

A brief history



Thomas Caudell from Boeing first coined the phrase in 1990.

Augmented Reality



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Augmented Reality

A brief history

- PC webcam based
- Mobile phone
- Projector
- Gesture
- Obvious markers
- Hidden markers



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Benefits of Augmented Reality

- You don't have to do anything to the pack other than print the marker!
- Bridges the gap between the digital and physical worlds
- It is interactive
- It is available now!



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Augmented Reality

The future

- Projector
- Change your surroundings



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Augmented Reality

The future

- In car systems



Augmented Reality

The future



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Reality Now

IKEA 2013
Catalogue, one of
the most
downloaded
branded AR aps in
2012.



INVITING DIGITAL IDEAS TO PAPER PAGES

With this year's catalog, we want to give you more. That's why we've added engaging films and interactive features to design, entertain and offer even more ideas and insights for a better life at home. We love having a printed catalog that can be a part of everyone's homes all year long, but with today's technology you get more:

- films with how to's and behind-the-scenes clips
- image galleries with additional photos
- stories from product designers
- 3D and interactive views

To access the bonus material, you can download the app to smartphones/tablets or see everything at IKEA-USA.com. If you're using a smartphone or tablet, look for the phone symbol throughout the catalog (as seen below) and scan the whole page.



Reality Now

IBM Augmented Shopping Assistant aims to bridge the gap between the average shopper store and the wealth of product information available online.



Augmented Reality

Smart Phone Shopping

TESCO's
Homeplus
subway pop-up
shop format in
Korea and now
Gatwick



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Thank You

To discover more about Faraday or any of the areas covered today please feel free to talk to me.



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