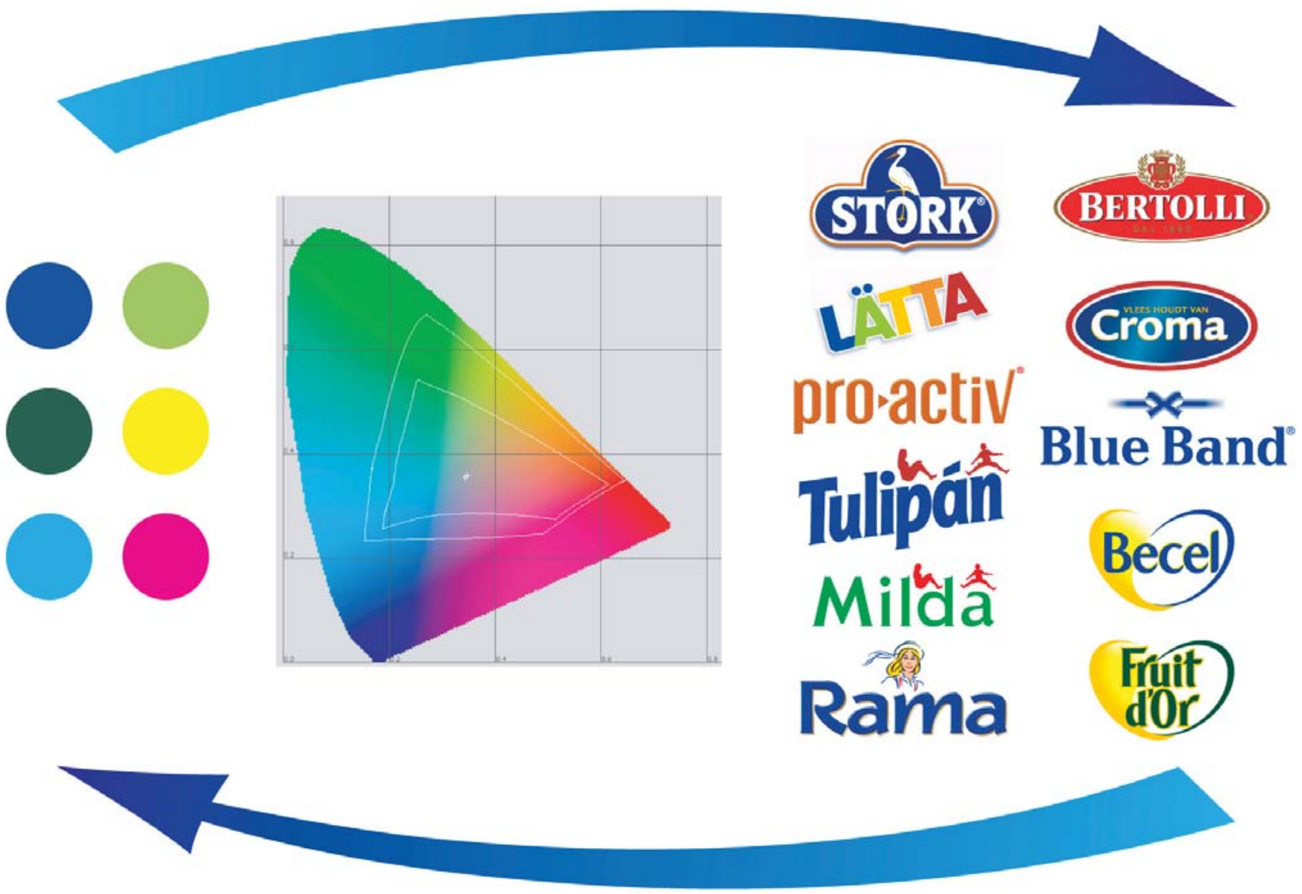
LFH

illuminating brands

LFH Colour Harmonisation
Design Effectiveness Awards 2012

FOR PUBLICATION



Project title: Colour Harmonisation 'Project Rainbow' 2006-2010
Category: Design Management
Client company: Unilever plc – Spreads & Cooking Category (SCC)
Design consultancy: LFH Brand Identity Consultants Ltd
Current date: 8th July 2011

Executive Summary

Unilever's Spreads & Cooking Category (SCC) produces soft spread brands such as Flora and Becel. This market is highly competitive with new products and own-label constantly challenging the brand's 'premium' price.

To help Unilever to effectively compete, designers naturally erred towards the selection of different spot inks when re-designing and extending the brands. This meant that the number of inks used to print the entire SCC range had increased to over 100 – a technical complexity that resulted in huge production costs.

In 2005, having worked with SCC for some time, **LFH identified an opportunity to reduce print costs without detriment to the 'look and feel' of their brands**. We found a way to 'faithfully' reproduce 150 different SCC brands using a fixed and constant set of **just six inks**.

This meant that, whilst printing is underway there is **dramatically less down time and greater actual print time, which equates to greater print capacity and total output. The result was lower print fixed cost allocations leading to lower print costs.**

LFH's 'colour harmonisation solution' involved fully engaging with the SCC Management team to ensure that our approach was championed, embraced and implemented to very tight deadlines.

Our solution remains the most comprehensive example of brand-focused colour harmonisation in the market. **'Project Rainbow' was a commercial success with brand value actually enhanced.**
Its success was entirely due to the fact that LFH are experts in both design and production.

> **"Cost savings as a result are set to be significant to say the least."**
>
> Mathew Daniels, Global Capability Leader – Printing and Decoration, Unilever

(262 words)

LFH COLOUR MANAGEMENT

chapter 1™

Project Overview

Outline of project brief

In order to achieve economies of scale efficiencies on press – rationalise the number of inks used to print the 150 different brands (and 400 SCC brand SKUs) down from over 100 to a core and fixed palette of six inks.

In addition, to leverage these efficiency gains into realised savings by re-negotiating printer's costs and to do so within a nine-month period (in line with the new financial year and standard printer contracts).

The key imperatives of this exercise were to:

- **not compromise the look and feel** across the 150 brands (failure to do so would lead to the project being cancelled)
- in production, **create greater consistency** in the brand's appearance across the roster of printers and different pack formats (e.g. tub and lid) and to do so in a more scientific way than before **(so enhancing brand value)**
- **improve speed to market**
- **reduce – or negate – the amount of time Unilever marketers had to spend on press**

Description

Unilever's Spreads & Cooking Category (SCC) markets soft spread brands such as Flora, Rama, Becel, Blue Band and Latta.

They justly claim *"global leadership in savoury, dressings and spreads (SCC)"*. With global sales of €14 billion in 2010, SCC represents over 30% of Unilever's total annual sales.

The market for soft spreads is highly competitive with the entry of new products – particularly in the 'heart health' sector – constantly challenging Unilever's brands. In addition, own-label is constantly challenging SCC brand's *'premium'* price points and, hence, margins.

To compete and justify premium pricing, designers seeking greater stand-out/brand difference, naturally err towards different spot inks in their designs. As a consequence of this, the number of different inks used to print the entire SCC brand range dramatically increased.

This technical 'complexity' was leading to additional on-costs of printing the packaging – as well as increasing the time to market. From a marketing and commercial standpoint, there was an opportunity to reduce this complexity by introducing LFH's brand focused colour harmonisation solution to the SCC category.

(See Appendix 1: 'The facts about brand focused colour harmonisation')

Overview of market

Rationalising the number of inks required to print a range of brands is not a new concept. Generic systems such as *'Opaltone'* and *'Hexachrome'* have offered brand owners a colour harmonising solution for years – but, with a colour palette that is fixed and not tailored to the specific brand's needs, particularly when unique spot colours are introduced by designers.

This 'non brand focused' approach leads to the loss of uniqueness that makes it an unworkable approach for FMCGs trying to build brand equity. Discount or own label brands would be most likely to consider a 'generic' colour harmonisation solution such as *'Opaltone'* – indeed, global FMCGs such as P&G, Colgate and Unilever have historically rejected *'Opaltone'* because their marketers would never support it.

Before this project, no comprehensive case studies existed of blue chip brands being colour harmonised by a generic solution.

Project launch date

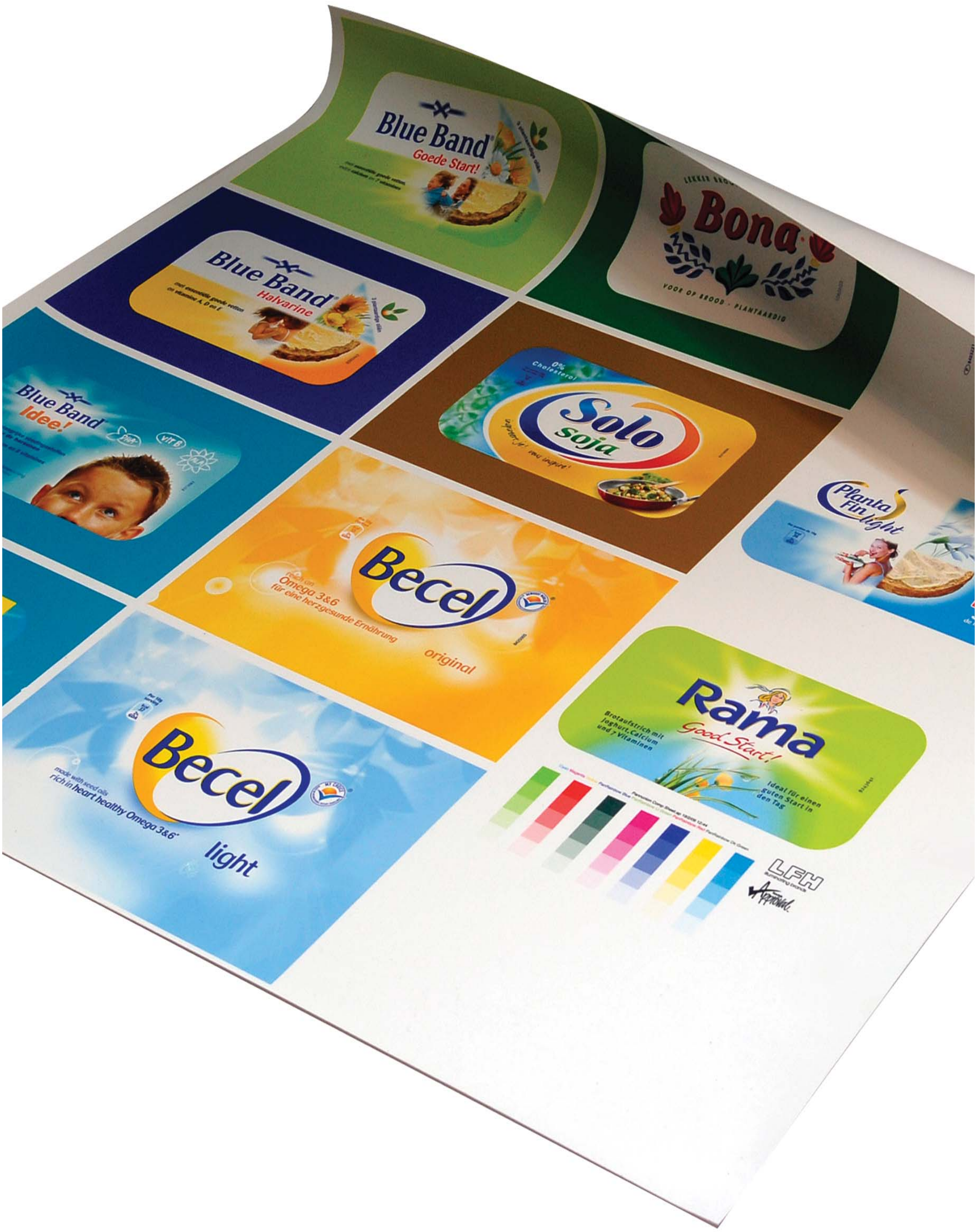
January 2006

Size of design budget

Confidential.

Project Overview cont.

Proofing Sheet - colour harmonised palette (print trial proof)



Design solution – 'Project Rainbow'

In order to achieve the goal of creating a tailored and fixed six colour palette capable of reproducing the original range of colours for all 400 SKUs, the entire range was first audited by our in-house Colour Managers.

This meant that all colours used across the range were listed in their:

- order of importance
- frequency of use
- difficulty of reproduction

The range of colours were then 'measured' to understand how they had actually been printed and were then compared against the original data and specifications. Different colour palettes and combinations were tested to create the ideal palette and the optimum colour space based on the specific range of packaging. Once the ideal colour palette was determined, specific designs were chosen to *'prove the case'* and these designs were then converted into the six colour palette and then proofed on substrate for client approval.

The result we achieved exceeded client expectations and LFH was given the green light to proceed to a full implementation roll-out.

The final core colour palette of six inks was:

A CYAN	D 'REFLEX BLUE'
B MAGENTA	E 'DARK GREEN'
C YELLOW	F 'WARM RED'

LFH then aligned the palette inks between all printers before fingerprinting with the full palette. Printers were given a defined process with set tolerances enabling them to achieve accurate and consistent results from all printers, matching marketers' expectations every time – in contrast to the previous vague, and often unachievable targets, with no conformity across printers.

All 400 SKUs were then converted into the new colour palette. And finally, the resulting files were ready for printing.

LFH's 'brand focused' approach differs from the generic systems because it uses a relevant colour palette that can faithfully reproduce all the chosen brands in a way that does not diminish the brands key equities – because we are first a design agency, the protection of brand equities is fundamental to our whole approach.

In this way, we began to do something that no other design agency in the marketplace was doing.

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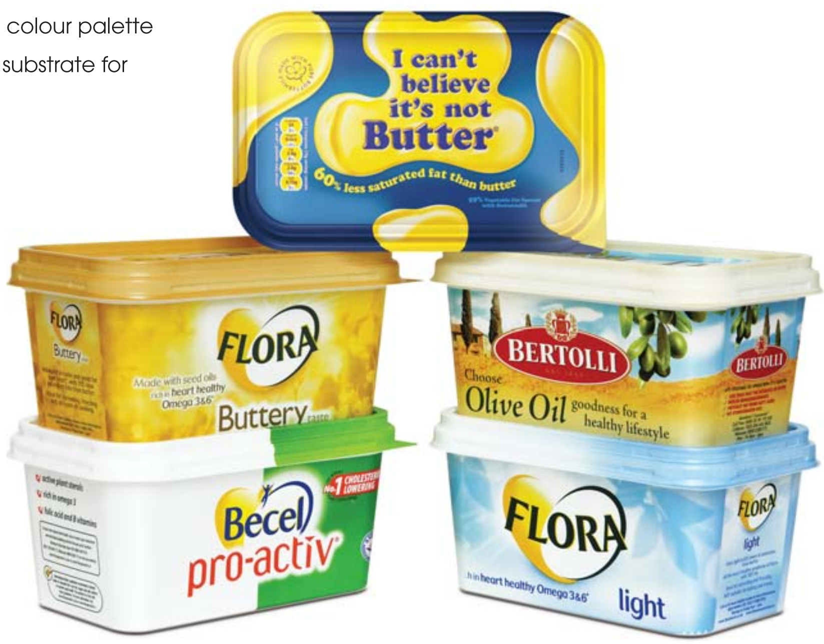

Summary of Results

1. Significant savings annually over five years

This represented approximately 10% of the annual print spend on tubs – and was therefore a substantial supply chain saving for SCC. This was from the re-negotiation of printer contracts, starting 1st January 2006 – following the economies of scale efficiency gains by the printers – but also from a reduced level of gravure cylinder usage. This was due to our design and implementation solution successfully reducing the number of inks used per design from a plus-six average to between three and a maximum of six inks per design. We therefore achieved an average cylinder usage of between four and five per SKU. At €500 a cylinder, this meant significant savings.

2. Improved consistency of designs across printers and different runs equating to greater brand value

Because printers were using a fixed colour palette and working to print tolerances pre-set by LFH, there was minimal scope for colour deviation

3. Reduced risk of stock errors/write-offs

Because of the greater control our process imposes on printers, there have been zero stock write-offs since its introduction in 2006. Savings are estimated at well over £100,000.

4. Zero attendance by Unilever marketers at press

Previously one day would be spent attending press runs by an SCC marketer for each new SKU. Now, because quality is being 'guaranteed' by our system controls, what marketers approve as a proof is exactly what they get as the printed result. That equates to an annual saving of 50 days (1/3 of all brands are re-designed every year). **Over five years, 250 working days have been saved – that's one extra marketer year gained.**

5. Sustainability improvements – a greener, leaner solution for packaging

Anyone who's seen a printing press in action will know how inefficient the process is. Waste is created at every step of the process:

- Changing over packaging designs and ink palettes
- Giving chemical baths to the press between 'runs'
- Frittering away power during wind-down and speed-up periods
- Sacrificing substrate during 'set-up' time

Using a common ink palette means there is no need to change ink between design changes. As a result, fewer chemical wash-downs are needed and the set-up time is far quicker. As a bonus, our brand focused colour harmonisation process generally avoids the use of black ink, which is harmful to the environment due to its high graphite content.

6. Improved speed to market

We have experienced up to half a day lost at press adjusting settings between runs. Even then the output could be wrong (i.e. colour reproduction is rejected) and stock has to be written off. All this reduces marketers' flexibility and responsiveness – whether it is reacting to a stock out, tactical promo activity or a deadline to fill a retailer's space at short notice. The science of our brand focused colour harmonisation process enables production to occur quicker – thus supporting marketers, rather than hindering the marketing of brands. The commercial benefit to Unilever marketers is unquantifiable.

7. Printers gained extra 'efficiency' capacity

Increasing their 'real' capacity gives them spare capacity to sell-on, and helps them to defer costly new print press capital purchase decisions.

The challenges we overcame:

Total buy-in from Unilever Management (Procurement, Technical and Marketing) across disciplines and countries

Unilever's roster of international printers on-side

Results achieved whilst still working with the existing and complex technical parameters of the category

Brand equities protected ensuring that we overcame the marketers' concerns and got them 'on-side'

(See Appendix 2 : 'The challenges we overcame' for more detailed descriptions)

Summary of Results cont.

“The team were, quite frankly, blown away with the results – no-one could quite believe that such quality could be realised when using six colours, considering our printers had, in many cases, been using well over 100! Revolutionary is a strong word to use but that’s exactly what we’re talking of here – cost savings as a result are set to be significant, to say the least.”

Mathew Daniels,
Global Capability Leader – Printing and Decoration, Unilever

“Together with the potential from a commercial point of view, it was a no-brainer to progress ‘Project Rainbow’ for implementation.”

Gijs van Schoot,
Supply Manager Packaging, Unilever

“LFH worked closely with our print team to realise the vision. We were very impressed with the results of the print trial and the opportunity to make substantial savings in time and, therefore, money.”

Ralph Christoffer,
Rahning GmbH (an SCC printer)

Other influencing factors

Our colour harmonisation solution is essentially about extracting costs from the Unilever supply chain without harming the overall ‘look and feel’ of the brands.

Its success was not dependent on PR, advertising or other marketing support – it was about winning hearts and minds.

Unilever is a €45 billion turnover company with a very complex management structure. For ‘Project Rainbow’ to succeed LFH needed to engage successfully with senior managers across disciplines.

We needed our Unilever ‘champions’ in each key area to ensure the project ran smoothly and to ambitious time constraints.

The three key ‘Unilever champions’ were:

1. Matthew Daniels
Global Capability Leader – Printing and Decoration

The success of this project was the result of a visionary client and the close collaborative relationships we were able to build with him and the key stakeholders.

2. Nils van Dam
SVP SCC, Europe

3. Gijs van Schoot,
Supply Manager Packaging

Additionally LFH needed all SCC printers on-side. Once we had convinced one printer, we could then ensure the rest fell into line more easily.

(All financial statistics provided by Unilever)

Addendum

European Patent for the LFH process – Chapter1™

After a number of years of research and development LFH submitted a Patent application for our colour harmonisation ‘printing process’ in 2007 – which was now trademarked under the name: ‘Chapter1’.

LFH was notified that it would be granted a European Patent for its printing process in May 2011.

APPENDICES

APPENDIX 1

The facts about brand focused colour harmonisation

The general goal of LFH's brand focused colour harmonisation solution is to take as large a range of a client's brands as possible – all in the same packaging format – and reproduce them using a fixed and constant set of inks of only six (rather than the 50 plus inks which are typically used in the process); crucially, without diminishing the overall 'look and feel' of these valuable brands.

This means that, whilst the printer is printing – using this fixed and constant set of six inks (also known as a 'fixed colour palette') – there is no need for wash-downs between print runs and a far lower set-up time, resulting in a dramatically reduced press down time and greater actual press print time; which all equates to greater print capacity and therefore total output.

This means the printer can then allocate lower print press fixed costs – per unit of packaging printed – for the client.

The client benefits from substantially lower print costs

The crucial USP of our approach is that the 'unique' inks chosen as part of the six colour palette must be able to faithfully reproduce all the brands in a way that does not diminish the brand's key equities ('look and feel'). This means that the original brand colours, as specified by Unilever's design agencies, are reproduced within a specified tolerance.

Our approach is a brand focused colour harmonisation solution that respects brand equities

As a design agency our intention was never to seek cost savings at the expense of brand integrity – but to aim for the best of both worlds.

What does LFH's brand focused colour harmonisation involve?

In order to achieve the stated business and marketing goals, LFH:

Engages with a consultancy mindset and approach

Follows a rigorous methodical process

Uses existing state of the art software and colour management tools

Combines all this with our design, artwork and repro expertise

APPENDIX 2

The challenges we overcome

Unilever Management (Procurement, Technical and Marketing)

LFH recognised that there was a commercial opportunity to apply our 'brand focused' colour harmonisation approach to SCC's range of brands and so we took it to them with the conviction that – if this was successful – it would become the most comprehensive project of its kind in the entire marketplace.

We recognised that a successful outcome for this completely new approach required complete buy-in from a wide array of Unilever Management across disciplines and countries. Because of this our first challenge was to win the hearts and minds of all the stakeholders within Unilever – including senior representatives from Marketing, Technical and Procurement.

Unilever printers

Without the printers being on our side, our ability to succeed would have been compromised. The savings made ultimately came from printers changing their traditional working practices (for the better) so the second challenge we faced was to effectively communicate to them how the introduction of our approach would help their business in the long term, and not damage it.

It was a 'win win' scenario for both the printers and SCC, because the former would gain longer term and larger contracts whilst creating extra capacity that could then be 'sold' onto other clients.

Technical complexity

The SCC category is hugely complex. The tubs are produced as 'in mould' labels and printed in offset and gravure (on different substrates). At the same time, the lids are pre-printed (and post formed) in offset and gravure (again on different substrates).

The appearance of tub and lid has to match, otherwise brand value could be – in in the eyes of the consumer – seriously diminished

Many of the decoration techniques and printing presses were customised whilst being at the forefront of printing technology. So our third challenge was to work within the existing and complex technical parameters.

Protecting brand equities

SCC brands are valued in the £millions. Therefore, the packaging has to support the brand equities and 'premium price' points. LFH's solution could not be seen as doing anything to tarnish or diminish brand values. At first, the Marketing department was skeptical as to our ability to reproduce 400 SKUs – which at that time used over 100 inks – with only a core six colour palette. Our fourth challenge was therefore the absolute requirement to overcome the marketers concerns and get them 'on-side'.

APPENDIX 3

The printing process for packaging

The printing of packaging:

- Branded packaging typically contains a brand logo, graphics and text. The graphics could include illustrations and photography
- When designing a piece of packaging, designers tend to select spot colours for producing brand logos and master elements, whilst using cyan, magenta, yellow and black (CMYK) – the so called 'process colours' - to reproduce illustrations and photo imagery
- Over time, a single brand develops and extends with the addition of line extensions, sizes and country variants
- Designers seeking greater stand-out/difference would naturally choose different spot inks in their designs as the range develops
- So over time the number of inks used in the entire brand range could move from only six or seven to well over 100 (as reference, Sun Chemicals the world's largest ink manufacturer, holds over 25,000 different spot inks)
- From a brand personality perspective this need for more and more spot colours is understandable. However 100s of different inks in a brand range creates complexity in the supply chain. Complexity means 'hidden' add-on costs to Brand owners – in the final cost of the printed piece of packaging

The economics of printing packaging:

Printing costs can represent a large part of the total cost of getting a brand onto supermarket shelves (it can therefore be a key component in the pricing of the brand – which has, in turn, a direct influence on its sales and profitability).

The costs of printing a single unit of brand packaging comprises:

- The costs of the material (or substrate) used to hold the product
- The ink used to print the designs onto the substrate
- Warehousing and transport
- Cost of the plates/cylinders
- A fixed-cost 'per unit' allocation to cover the printing press and relating costs

Each printing press represents millions of Euros in fixed-costs. This means the 'per unit' fixed-cost allocation can be a major component of the total cost of a single piece of packaging – typically this can be between 40% and 60%.

Therefore, the larger the total output from a printing press the lower the 'per unit' fixed-cost allocation (and vice versa).

It follows that any process that allows a printer to increase production from his fixed-cost press will bring print prices down for Brand owners – because the printer's fixed cost is being divided by a larger volume of output.

A printer typically operates by printing a brand, with its 'unique' set of inks. Then, when it has completed the required volume, the press stops. The press then needs to be made ready for the next print run of another brand with its own 'unique' set of inks.

This means the press has to be washed down (to remove traces of ink). Cylinder/plates would need to be removed and new ones added. And the new 'unique' ink set for the next print run would have to be added.

Then there is 'set-up' time for the new design which could take a lot of time, particularly when marketers and printers cannot agree on the correct/perfect result.

We have experienced wash-downs and set-ups, between print runs, that have taken up to half a day each, a monumental loss of printer efficiency - and that means on costs to Brand owners.

The 'holy grail' for any printer would be to print 24/7, with no stops. This could happen for a single brand, but it would need to be a power-brand such as Heinz baked beans.

Or it can happen if a range of brands can be printed using the same constant set of 'unique' inks.

This is what LFH's brand focused colour harmonisation solution is about.