



Sustainability Wheel^o Packaging Evaluation Tool

Joint Industry Initiative Proposal



What is **Sustainability** in Packaging?

Sustainability

Sustainability & Ethics Megatrend

Consumer & Society Trends



Environmental Responsibility



Resource Scarcity



Ecological Technology



Sustainable Living Homes

Packaging & Technology Trends



Lightweighting



Circular Economy



Bio-based Materials



Compostable & Dissolvable



Renewable Material Use



Recycled Material Use



Return Systems



Re-usable & Second Use



Sustainability & Ethics Megatrend

Mounting awareness and concern surround the scale, complexity, and interdependence of shared social and environmental challenges globally (GlobalData's Consumer Intelligence Center).

Packaging Sustainability

What is Sustainability in Packaging?

This is a good question actually. And one that is not easy to answer. There are many opinions about this, most of them biased. As long as there is no commonly accepted truth, people of course support their own products.

An easy example:

If you compare a paper bag and a plastic bag, most people would intuitively say that a paper bag is more sustainable. Probably for the following reasons:

- Paper is made from wood – a 100% renewable resource – while currently, most plastic is made from fossil oil, which is a limited resource.
- Paper bags, thrown away into nature, will rot & decompose quite quickly & completely. Plastic bags do not rot & therefore are responsible for much environmental pollution.



Packaging Sustainability

What is Sustainability in Packaging?

The Plastics Industry will now tell you the exact opposite:

- The production of paper uses several times more energy than the production of the same amount of square meters of plastic film. As long as the paper mill still uses fossil energy, it is more sustainable to produce plastic bags.
- After being used as bags, both paper & plastic bags go into the heating station, where the plastic bag is the better fuel & produces nearly the same amount of energy as if it would have been burnt as oil in the first place.

And this is all true, of course! The Plastics Industry is not lying. These arguments are true and valid.

This leads us to the following conclusions:

- Packaging Sustainability can only be evaluated holistically.
- An Industry Consensus is required, achieved through a neutral initiative.



Packaging Sustainability

CO₂ Footprint vs. Holistic Strategic Evaluation

An evaluation system based on calculating a ‚Carbon Footprint‘ results in a single number – it is basically a system made for taxation. The higher your number, the more ‚sinful‘ you are. **But the system does not really tell you how to become better.** And to improve this number, even ‚certificates‘ can be bought for different parts of the process.

MONEY & TAXATION



ECOLOGY & EFFICIENCY



Packaging Sustainability

CO2 Footprint vs. Holistic Strategic Evaluation



The Sustainability Wheel° is not aiming to replace these systems that measure current output, but instead it is a strategic evaluation tool that lets us compare different options and their qualities concerning a number of sustainability benefits.

The Wheel° is a visual & logic evaluation tool that makes the cooperation in multi-disciplinary project teams easier. Team decision processes can be guided and supported by this flexible system for strategic evaluation, knowledge transfer & democratic decisionmaking.

The related Wheel° benchmarking process works by categorising items into evaluation levels – and finding attributes / rules for this that define what is a high and a low level for the different benefits.

PACKAGING LOGISTICS

PACKAGING PRODUCTION



RE-USAGE & DISPOSAL

RAW MATERIAL & ENERGY

The Sustainability Wheel°

Example Evaluations: Nutella



FERRERO NUTELLA 450g
1-Axis Symmetric Shape 34

The Classic Jar & Brand Icon:
The Nutella jar is one of the few iconic shapes in Packaging. In the end, it is a very simple shape, optimised for maximum facing on the supermarket shelf. Drawback is that it is difficult to empty.

Sustainability:
The expanded 1-axis symmetric shape takes more space than a simple rotary symmetrical jar of the same content volume does. Last but not least, the jar is – due to its shape and screw thread – usually not re-used except maybe sometimes for home-made jam.

The Sustainability Wheel°

Example Evaluations: Nutella



FERRERO NUTELLA 200g
Rotation Symmetric Shape

43

The Re-usable Drinking Glass:

A great variation especially for e-commerce – an easy-to-empty 200g jar that can be re-used as a drinking glass. Inferior only concerning the Branding.

Sustainability:

This variety is also superior concerning many other aspects of Sustainability, especially if it is shipped to a single customer and not on a pallet to a supermarket. Due to its rotation-symmetric shape, it uses less material – which also makes it considerably lighter – and it takes less space.

The Sustainability Wheel^o

Example Evaluations: Nutella



FERRERO NUTELLA 15g
Thermoformed Traylets

29

The Single-Serve Foodservice Packaging:

Many good hotels offer Nutella as part of the breakfast menu. But single-serve packs require lots of packaging material...

Sustainability:

Of course it is more sustainable to have larger jars, but is it hygienic? The energy required & CO2 emitted to produce this packaging is still only a fragment of the energy required to produce the actual product. Any Nutella wasted is much worse.

The Sustainability Wheel°

Tool for Holistic Evaluation & Target Definition

With the Sustainability Wheel°, the Pool° will work on creating (and later on refining and updating) an easy-to-use and commonly accepted Tool that helps to evaluate and compare the ecological Impact of Packaging Solutions.

The Sustainability Wheel°, supported by a digital application, could make it relatively easy to evaluate how sustainable a packaging solution truly is – and to define development targets concerning Sustainability.

The Office of Strategic Services is still looking for sponsoring partners for the Sustainability Wheel°!

Feel invited to contact the OSS°: oss@poolorganisation.org

The Time is right, since the public opinion is now longing for such an Initiative and wants to see someone making a change.

This will give the Sponsors the chance to get the BEST PRESS EVER!



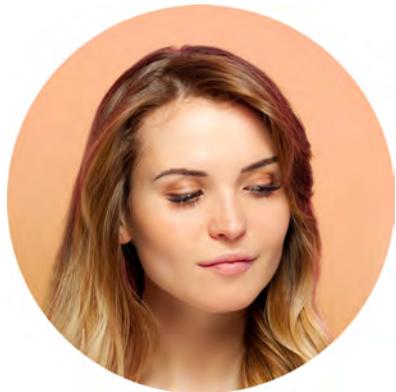
The Sustainability Wheel°

First Step: Wheel° Setup & Team Setup

When a Wheel° project is started, the first thing to do is the Wheel° setup, meaning the definition of a set of (usually 12) benefits for which evaluation criteria will be defined later through attributes of sample items.

The Office of Strategic Services (OSS°) has defined a draft Wheel° setup as starting point for a Joint Industry Initiative.

Now it needs to be examined, refined & fixed by a multi-disciplinary team of experts. To keep things transparent, a lot of the related discussion is planned to be published or done in public.



Athena° is looking forward to getting your support & expert opinions*!

* Expert Opinion = Holistic Professional Estimate



The Sustainability Wheel°

First Step: Wheel° Setup & Team Setup

Would you like to be part of this team?



Please contact the Office of Strategic Services:
oss@poolorganisation.org





The Wheel^o

Holistic Strategy

Holistic Strategy & Intuitive Process Tools

In Marketing & Strategy, we do not believe in the application of the so-called ‚Scientific Method‘ of the Materialists, that solely relies on empiric data & quoting of other publications.
Not at all.

Instead, we believe in Holistic Strategy & Intuitive Process Tools that work with Expert evaluations & democratic decision-making. Tools like the Wheel° help to direct & enhance the communication between the different disciplines of mixed teams.

The Wheel° for example is a holistic sample-based visual logic evaluation tool & process for knowledge transfer & democratic decision-making in interdisciplinary teams.



„The intuitive mind is a sacred gift and the rational mind is a faithful servant. We have created a society that honors the servant and has forgotten the gift.“

– Albert Einstein

Holistic Strategy

Global & Multidisciplinary Project = Trouble³

The 5 people of our project team on the right can be...

- working for 4 different companies,
- coming from 3 different countries with 3 different mother tongues,
- representing 4 different functions or disciplines,
- booked on 3 different flight schedules relevant either for the beginning or the end of the meeting.

In our experience, this often results in some of the following problems:

- Misunderstandings happen, often even unnoticed & concerning important decisions.
- People are avoiding decisions in order to avoid conflicts.
- Dominant people talk much more than they should.
- Shy people talk much less than they should.
- Unclear meeting structure costs extra time.
- Documentation of the meeting is not efficient.



The picture shows a typical meeting situation in today's Business World of (merged) Multi-National Corporations: 5 people who barely know each other are presenting their stuff to the group & then try to get questions answered & decisions made.

Holistic Strategy

Benefits as Target Items

Different benefits are ,owned‘ by different disciplines –
Efficiency Benefits are related to Engineering & Purchasing,
Impression Benefits to Design & Marketing, etc.

COMMUNICATION

FUNCTIONALITY

EFFICIENCY

ATTRACTIVITY



Holistic development strategy is working with Benefits as target items. Their exact definition is essential & needs to be agreed on by everybody in the same team.

The Wheel° Process

Packaging Benefits as Target Items



FUNCTIONALITY



Handling

- Easy opening
- Easy re-closing
- Easy product access
- Convenient storage
- Easy to take out portions



Protection

- Physical protection
- Compression strength
- Biological protection
- Spoilage protection
- Aroma protection



Ecology

- Renewable material use
- Recyclability
- Compostable
- Dissolvable
- Climate neutral, etc.
- No overpacking
- No harmful contents

EFFICIENCY



Production Efficiency

- Runability
- Complexity
- High-speed machinability
- Manual assembly
- Directly filled



Logistic Efficiency

- Stackability
- Volume occupation
- Sturdiness
- Pack footprint



Material Efficiency

- Reduced material usage
- Low material costs
- Low production waste
- Empty headspace

ATTRACTIVITY



Finishing & Enhancement

- Printing techniques
- Coatings & special inks
- Foil application
- Labelling
- Added elements



Shelf Impact

- Shape uniqueness
- Facing
- Size / volume impression



Quality Impression

- Artwork with high quality images & clear information
- High quality material
- Convenient format, e.g. easy opening, re-closing
- Well made structure (construction & converting)
- Premium finishing effects (foil, high gloss, matt varnish)

COMMUNICATION



Brand Link

- Shape linked to brand
- Graphics linked to brand
- Opening ritual
- Usage ritual (sharing...)
- Brand sound effect



Information

- Outside communication
- Inside communication
- Additional flaps
- Labels
- Connection to online info



Category Fit

- Packaging type
- Category codes in design
- Colours
- Finishing effects
- Content size
- Usage occasion

- The evaluation criteria for different Benefits are defined through attributes of sample items.
- This system needs to be fixed first by a multi-disciplinary team of experts in a process called Wheel° Setup.
- Once defined, the setup can be used again & again for the same product category.

The Wheel° Process

The Evaluation Wheel°

WHEEL° TARGET PROFILE



Brand Link
How much the pack connects to the Brand, to its story & values

Handling
Level of convenience in usage & handling (access, portioning, ...)

Finishing & Enhancement
The amount of Finishing & other Enhancements used on the pack



Material Efficiency
The relative amount of material used as well as the material costs & waste produced

Natural Impression
How well the packaging supports an image of Naturalness

- The Wheel° Setup is flexible – single or multiple Benefits can be exchanged depending on the project targets.
- Automatically, a pool of possible Benefits is created – with compatible sample evaluations as a perfect project documentation.

The Wheel° Process

The Evaluation Wheel°

WHEEL° TARGET PROFILE



Unique Impression
The uniqueness of the pack's looks compared to competitors

Ecology
The ecological impact of the pack concerning production & disposal

Quality Impression
How well the packaging supports an image of High Quality



Protection
How well the contents are protected against mechanical & other environmental influences

Production Efficiency
Criteria include the level of complexity, runability & machinability of a packaging solution

- The Evaluation Wheel° always works sample item or example-based.
- Sample items / examples are evaluated by Experts to get their individual Wheel° profiles.

The Wheel° Process

Wheel° Target Profiles for better Briefings



PACKAGING BRIEF = MULTIDISCIPLINARY



WHEEL° TARGET PROFILE



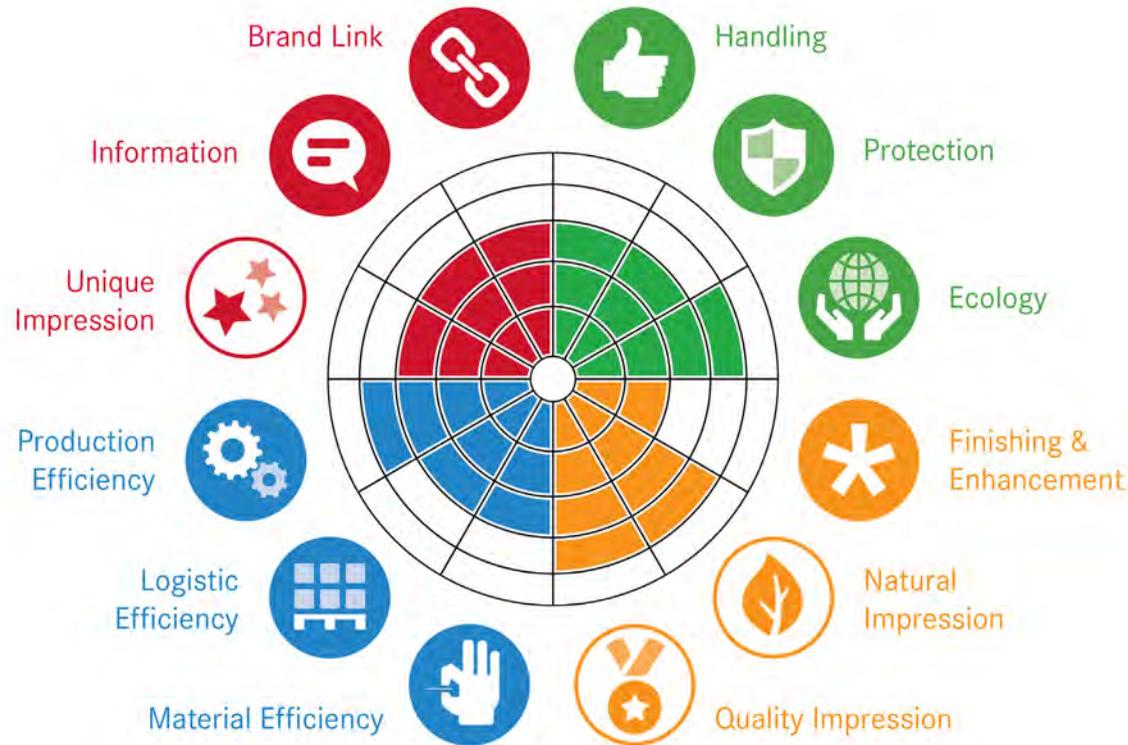
- A typical Packaging Innovation briefing needs to go through 3 different hands at least: Marketing, Development & Procurement.
- As a result, most briefings are not accomplishable, since every party tries to play safe.
- Wheel° Target Profiles can help!

The Wheel° Process

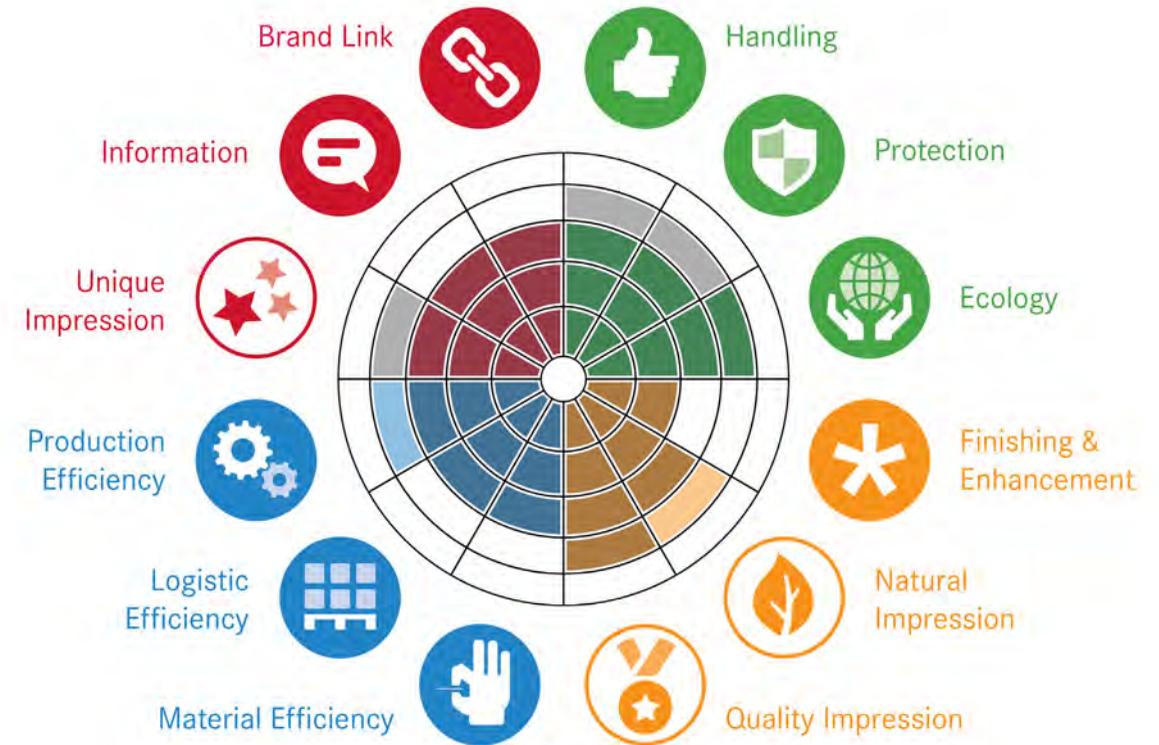
Wheel° Target Profiles for better Briefings



WHEEL° EVALUATION PROFILE



WHEEL° TARGET PROFILE



- Wheel° profiles can easily, quickly & visually be compared with the profiles of other samples or target profiles.
- Target profiles can be defined for a project, a specific category, a strategy, etc.

The Wheel° Process

Benchmarking of different relevant Samples



VITALIS Müsli BAG-IN-BOX



Kellogg's VARIETY



Kellogg's RECLOSABLE BAG



mymuesli TUBE



mymuesli KICKSTART



Handling // Cereals Category

- Easy opening
- Easy re-closing
- Easy product access
- Convenient storage
- Easy to take out portions
- ...

During this intuitive process, samples/examples for all evaluation scores from 0 to 5 for a Benefit are chosen. By choosing items for both extremes, the possible range is defined.

- Attending the evaluations of sample items through Experts is a perfect way for Juniors to learn everything about the business.
- In Packaging, a lot of samples need to be handled for this and Excel lists need to be written – a classic job for Juniors.
- Wheel° Benchmarking in a Team is an intensive exchange of valuable Information.

Packaging Explorer°

A tidy House, a tidy Mind...

To achieve a perfectly streamlined project execution, a Wheel° process with physical packaging samples is best accompanied by a flexible well-arranged shelf system. The Pool° is using standard IKEA Kallax shelves with wheels mounted at the bottom.

Attending the evaluations of sample items through Experts is a perfect way for Juniors to learn everything about the business. In a Packaging Agency, you need to handle a lot of samples for this and document the evaluations digitally. This 'legwork' on the other hand is a perfect job for Juniors. So a Wheel° process is a great basis for a process of individual advancement from Trainee to Junior and from Senior to Expert. Knowledge transfer happens automatically during the process.



- The Evaluation Wheel° always works sample item or example-based.
- In benchmarking sessions, sample items / examples are evaluated by Experts to get their individual Wheel° profiles.
- Between those meetings, an orderly, convenient way of sample storage is essential.

Wheel° implemented as a Sales Tool

ACTEGA Coating Wheel© – Knowledge Exchange & Image Building



ACTEGA
Coatings & Sealants

Using the Coating Wheel©

Easy coating selection for your categories

A member of **ALTANA**

Packaging Wheel© Strategic Evaluation Tool

The Packaging Wheel© is a logic evaluation tool helping in strategic thinking, communication and decision-making processes. It is also a way of working, with the tool itself supporting the exchange of opinions and know-how when used in packaging development. Interdisciplinary teams can work and evaluate examples together with a standardised benchmarking process.

EFFECT IMPACT **APPLICATION**

IMPRESSION **ADDED VALUE**

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We are encouraging everybody to use the Packaging Wheel© in general and its variation described here – the Coating Wheel© – for their benefit and for the advancement of packaging solutions in the market.

Attributes and features of evaluated items are translated into a set of benefits that are rated with values from 0 to 5.

Complex information is reduced to simple visual profiles that allow to make decisions in large (interdisciplinary) teams.

Evaluation profiles of items (here: of coatings) can quickly be compared to requirement profiles (here: of categories) to easily find matching pairs.

Wheel Setup

SPECIFIC WHEEL SETUP
The Coating Wheel© is a variation of the Packaging Wheel© that has a specific setup of benefits defined for the evaluation and comparison of ACTEGA's packaging coatings.

Coatings here refer to overprint varnishes. They protect the printed product and enable a fast further processing. They add the right visual or tactile finishing and may extend the packaging by valuable functions, e.g. barrier properties.

On the right of this page, you find these 12 benefits. The petrol blue and green ones are rather objectively rated while the ratings of the red and orange ones are more emotional and subjective.

In addition to the coating evaluation profiles, we have defined requirement profiles for the most important categories in which the coatings are used. Both types can be matched to find the right coating(s) for an end use.

PARTNER COMPANIES AND SPONSORS
This project has been realised under the lead of ACTEGA and pacproject with the support of the following partner companies and sponsors:

Mechanical Persistence
Scuff and scratch resistance during production and logistics

Technical Standardisation
How easy it is to apply the coating and if special equipment is required

Efficiency
How efficient the application of the coating and the further processing is

Regulatory Compliance
If the coating is appropriate for indirect or direct food contact

Ecology
The ecological impact of the coating concerning production and disposal

Special Properties
Additional beneficial properties that are not included in the other benefits

Visual Impact
The strength and impact of the coating's visual effect

Tactile Impact
The strength and impact of the coating's tactile effect

Highlighting
How well the coating can be used to highlight specific artwork elements

Luxury Impression
How well the coating can support an impression of Luxury

Natural Impression
How well the coating can support an impression of Naturalness

Quality Impression
How well the coating can support an impression of superior product quality

Profile Comparison

End Use Requirement Profiles
In the first pocket of this folder, you will find our booklet *Coatings by End Use* with valuable information about the use of coatings in different categories. There is a page for each end use, including an Coating Wheel© profile reflecting the general requirements there.
E.g. Confectionary - Premium:

Those benefits for which the wheels and thus coating and end use perfectly match will instantly become obvious, as here e.g.:

Especially for the Regulatory Compliance benefit, it is essential that the coating matches or exceeds the end use requirements.

Coating Evaluation Profiles
In the other pocket, there are descriptive cards for selected ACTEGA coatings, each one including a Coating Wheel© evaluation profile for the coating.
E.g. TerraEffekt® Pearlescent G 29/438:

It is also easy to see for which benefits the coating exceeds the end use requirements, as there, the outer wheel segments still appear clearly coloured:

Attention is required with those benefits getting dark grey outer wheel segments:

Here, the coating does not reach the general end use requirements. You need to consider if you are ready to make a compromise or not.

- ACTEGA's Coating Wheel© for example helps end-users choose the right coatings for their specific end-use or project.
- By offering a tool that anybody in the industry can use, you show that you are the expert in your area.
- With a variation of the Wheel°, you are a communication and technology leader.



Packaging Innovation!?

Where is it designed / invented / created / developed / done?

And why is there not more of it although everybody wants it?

Secret Agents – or what?

More Open Innovation is required

Many ,Secrets‘ are no Secrets ...

... and should not be treated as such. In Packaging Development, most often only state-of-the-art technology is used for new launches anyway while Suppliers are pressed to sign exclusivity for anything they show to Brand Owners.

This is one of the reasons why proactive Supplier Innovation Work is degenerating to show business – with no winners on any side.

But the rules for NDAs & exclusivity usually do not come from Packaging Development at the Brand Owners, but from IP specialists & lawyers who do not have a clue how **real** Packaging Innovation is made.



The original Office of Strategic Services (OSS) was an intelligence agency of the USA during World War II, and a predecessor of the modern CIA.



Packaging Innovation Value Chain in FMCG

Status Quo: The ‘Merry Food Chain Gang’



Innovation = Sales Show

- Lack of strategic expertise
- No participation in BO process

Innovation = Sales Tray

- Lack of strategic expertise
- Shallow briefings from BO

Innovation = Sales Promotion

- Lack of packaging expertise
- Lack of vision



Innovation = Playground

- Lack of market insights
- Weak connection to end-use

Innovation = Potential Trouble

- Lack of time & technical expertise
- No good education materials

Innovation = Risk Investment

- Lack of packaging expertise
- Job rotation in Marketing too quick

Strategies for the Future

Fine Feathers will still make Fine Birds!

The Packaging Industry has always been...

... interdisciplinary, with a very wide array of different people involved &

... a secondary Industry, attached to that Industry of which the goods are packed.

In the past, this was fine, since Packaging was not very important. Brands were made through Advertising – and with superior Quality. Today now (and in the future even more), Advertising is not only not effective anymore, it has already become something we **hate**. **Advertising is everywhere today, it is intrusive harassment. We are stressed by it, we need to invest energy to avoid it & often we hate it** (pop-up ads!).

The Pool° was designed with the Packaging Industry in mind because it offers the widest diversity of people working there. And because more beautiful Packaging and less Advertising will be the quickest feasible measurements to make our lives better on the biggest scale. ♥ **You will see.**



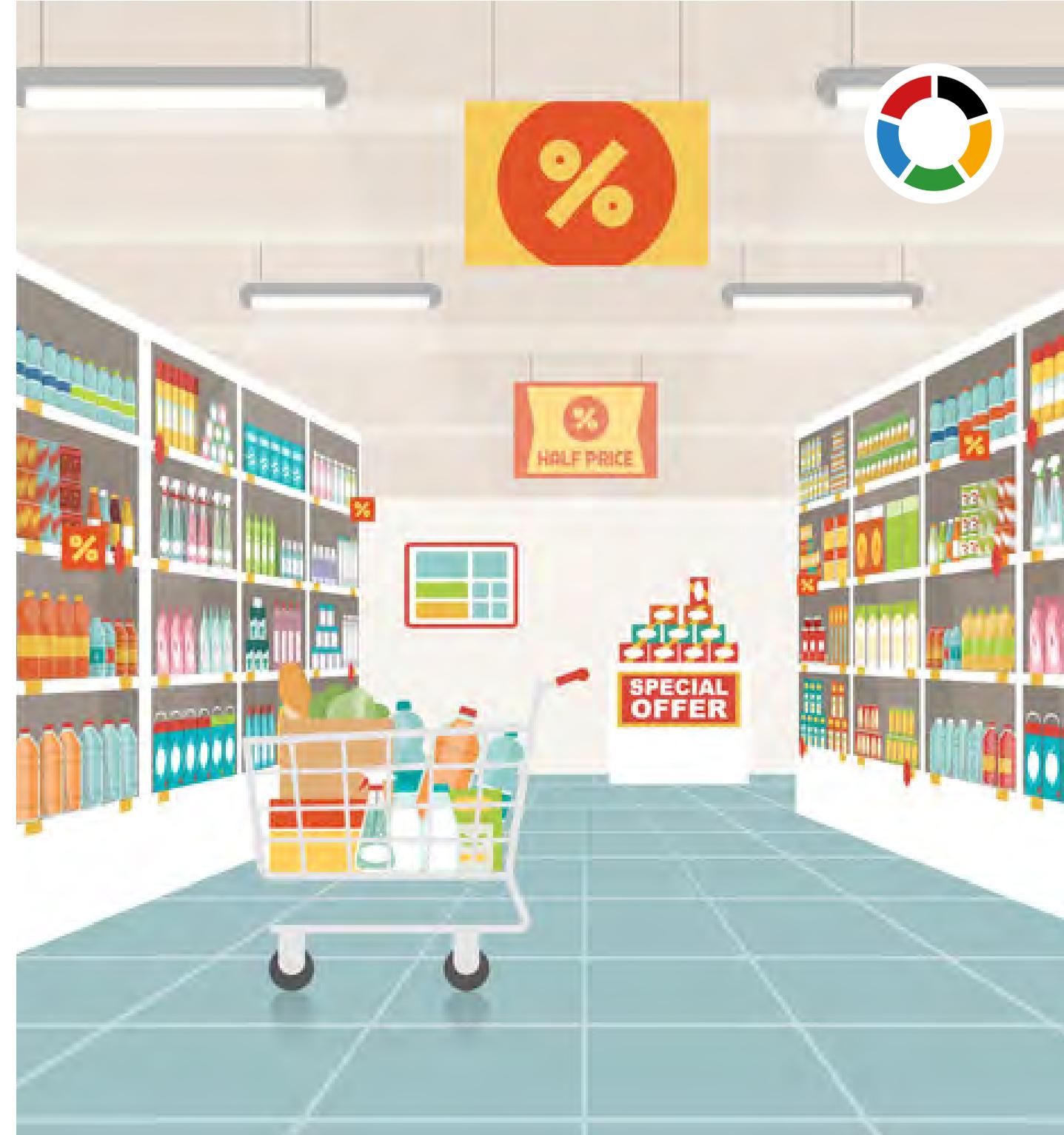
Looking for ROI?

Use Packaging, not Advertising.

Packaging is silent salesman on shelf and brand ambassador in people's homes. In addition to being able to create value by itself, through added or improved functionalities, the quality impression that it delivers is also (subconsciously) transferred onto the product.

Consumers who do not know a product yet might have a quality preconception, but they will include the packaging to make their final assessment – at shelf or upon delivery. A strong material and solid feeling to the whole pack e.g. communicates high quality. Elegant use of finishing effects can lift a product into a whole new price tier.

Packaging is the superior Marketing tool compared to public one-way Advertising. It complements Internet Marketing and E-Commerce to get a beautiful purchase experience.



Key to Real Packaging Innovation

A Complex Multidisciplinary Industry demands for Cooperation between Companies



The parties with the money need to start using money together for higher goals

Brand Owners and Retailers need to understand the full value of packaging for their brands: A product quality evaluation modifier and brand communicator with extensive consumer contact.

#1 Sustainability

#2 Innovation

#3 Education

#4 Promotion

#5 Cooperation



Mat. / Mach. Supplier



Packaging Converter



Brand Owner



Retailer



Consumer



Mat. / Mech. Engineer



Packaging Consultancy



Creative Agency

The parties with expert know-how need motivation / incentives and an organisation to share it

Material & machine suppliers & engineers need to participate in the Brand Owners' innovation process

Packaging converters and engineering consultants need strategic directions for development

Brand Owners and their creative agencies need hands-on education and project support





The Office of Strategic Services (OSS°)



Athena° ♥ SPOTIFY! She is collecting Playlists about things that she is currently dealing with:

www.poolorganisation.org/Athena°/

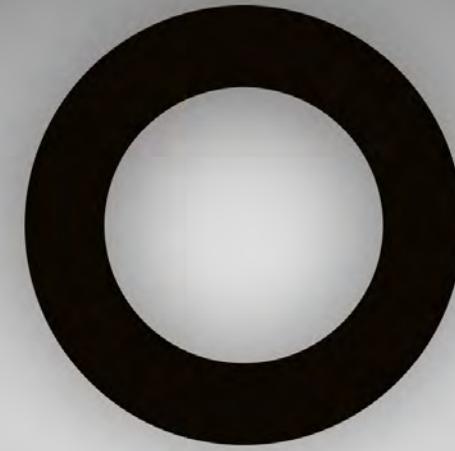
Holistic Strategy

The Office of Strategic Services

In our globalised & multidisciplinary industries, smart tools & processes can be as important for project & market success as winning concepts.

The Office of Strategic Services (**OSS**°) provides Artful Design, Expert Consulting as well as Project Management & Execution. The **FMCG & Packaging Industry** is our core competence and usually we work in the following areas:

-
- Synergetic Industry Marketing
- Holistic Strategy for Innovation
- Knowledge Transfer Process Tools
- ★ Brand Creation & Strategy
- ★ Packaging Design & Finishing
- ★ Communication Design
- ★ Sales/Marketing Presentations

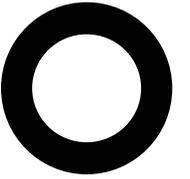


Office of Strategic Services



The Office of Strategic Services (OSS°)

Competent Project Management & Execution throughout the Innovation Process Chain



If required, the OSS° can act as Your competent Project Manager throughout the whole FMCG & Packaging Innovation process chain. Including workshops & events. Or the whole electronic or print publishing process chain.

However, we are most valuable if we can join You in the very beginning of a project, when directions & strategy are still to be defined.

Here, we can also act without any briefing, as Your responsible proxy & agent within a defined budget.



The earlier we can join You & the more influence You allow us to have on Your brands, products & strategies, the more we can create synergies – between each other & with other areas or current trends.

Maybe also with other customers. If You have common goals and/or common competitors, an alliance might makes sense.

Research & Intelligence

Strategy & Branding

Concept & Storyline

Design & Development

Testing & Optimisation

Realisation & Implementation

Benefits & Synergies



 **The Pool°**

Office of Strategic Services // **OSS°**

Holistic Strategy / Design / Innovation

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TOBIAS KREDEL

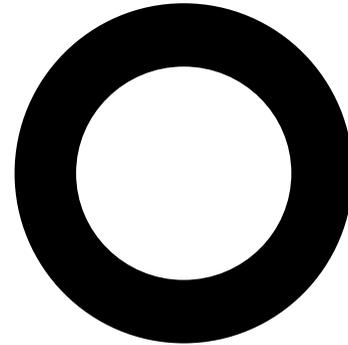
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Carpe Futurum!*

Science Fiction can be **now**.

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