CS VISION

White Paper

PUBLISHING ENGINE CREATES EXPERIENTIAL WORLDS

Consistent customer experience from PoS display to mobile app
"Past thoughts may provide food for thought, but only that which is experienced will invigorate."

Paul von Heyse, winner of the Nobel Prize in Literature

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Introduction

Customers wish for new experiences that reflect their personal expectations and wishes. This high demand on advertisers and marketers stretches across all channels. In addition to creativity in the customer approach, consistent content and the right context form the cornerstones of a rich customer experience - a principle that applies equally to all formats, from PDF handouts to POS displays to websites. And all demanding innovative approaches for modern and efficient publishing.

While traditional advertising and marketing formats have been dominated for a long time by a purely informational principle, the digital channels are distinguished by content overload. The Internet – that magic novelty – had to do it all and all at the same time, inform, interact, entertain, inspire, connect, and convince. In terms of convergent communication, a new trend has been identified in the mean-time: Print products like flyers and brochures have gained in editorial substance and therefore also added value, while web shops on the other hand are more clearly arranged and rely on content design, like Pinterest – texts slip to the background in favour of a stronger visual product presentation.

Thus the catalogue becomes a magalog – a mash-up of magazine and sales brochure – and the website is again an inviting unique experience for a virtual shopping expedition.

Like every paradigm shift large and small, this development also brings not only a fresh breeze but also some challenges with it – challenges that are seen particularly in publishing. No matter how valuable a consistent customer experience across all formats, media and channels is – it has to remain manageable. Especially when publishing in short cycles and large volumes, the standardisation and (partial) automation of editorial processes makes a lot of sense.

The efficiency of the modern publishing environments depends to a great degree on the quality and compelling nature of the standards. Content and formats are no longer treated like a unique specimen, but instead are the results of smart "building blocks", comparable with the compilation of elements in series production. Thus in theory millions of variations can be drafted and produced. Only the framework in which this production takes place is defined.

In this whitepaper, you will learn how you can standardise your editorial processes with a publishing engine, automate it if needed, and guarantee efficient editorial and publishing processes.
The challenge: harmonisation of hybrid publishing environments

In the ideal scenario, the customer has a consistent brand experience throughout the entire customer journey. A good customer experience therefore depends significantly on content that can be accessed across all channels and media. This challenge in particular presents a considerable task for publishing managers who have to manage short production times and fast communication life cycles on a daily basis. More channels, more media, more formats – the complexity of corporate communication environments is growing steadily. This growth has had a negative effect on hybrid publishing environments.

It is undisputed that clearly structured content and an unmistakable brand image form the framework for a successful customer dialogue. The high art of a contextual marketing approach is developing the proverbial leitmotif not just for individual formats or media, but also designing it across all marketing and advertising activities.

A great many companies who are committed to such a communications philosophy use editorial content in almost all media selectively and purposefully. In so doing, a close interconnection of editorial content and product information becomes apparent:

- From catalogue to magalog: The product line is made more accessible with informative and entertaining content. At the same time customer magazines are enriched with hard facts about prices and products.
- From advertisement to mini advisor: The flyers with special offers commonly used in retail are enriched with recipes, merchandise knowledge and information on the product origin.
- From documentation to produtainment: In the presentation of products on websites, matter-of-fact descriptions and technical data are shown and details on benefits, uses and applications are delivered in an entertaining and informative manner.

THE DIRECTION OF SPECIALISATIONS FOR HYBRID PUBLISHING STRATEGIES:

<table>
<thead>
<tr>
<th>01</th>
<th>Digital ↔ Print</th>
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<tbody>
<tr>
<td>02</td>
<td>Automatic ↔ Blockbuilding ↔ Creative</td>
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<tr>
<td>03</td>
<td>Uniform ↔ Microtargeting* ↔ 1:1</td>
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<td>04</td>
<td>Central ↔ Local ↔ Regional &amp; Trade Marketing</td>
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<td>05</td>
<td>HTML ↔ PDF ↔ Adobe InDesign ↔ Office</td>
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*Microtargeting is targeted communication to increasingly smaller target groups. The customising does not happen on a single address basis, but based on target-group clusters as so-called “mass customisation”*
Digital media in particular offer a differentiated content strategy while at the same time impressing with high customisation and currentness:

- **Product and informational content via apps:** Mobile applications focus equally on generating turnover and added value with services.

- **Product offerings as an integrated component of newsletter marketing:** While newsletters are becoming higher quality in their editorial content, the focus is kept on turnover generation.

- **High relevance at the push of a button:** Push messages provide information on new campaigns matching the customer profile.

**Customer experience requires a solid content basis**
Creative planning and design surely take up a large part of the preparation needed for a rich experience. A good customer experience, however, is distinguished by the consistency of its content – this affects all channels, from point of sale with displays and posters to digital channels like newsletters, websites or apps, to traditional formats like catalogues or flyers. For an accurate customer inter-action one thing has to be available at all times: A solid content base. After all, only those who have relevant content can communicate within an optimised context over the various channels and media.

**Hybrid designs increase publishing complexity**
The mix of editorial building blocks with product information results in hybrid forms across all media, which have first and foremost caused a massive increase in the complexity in publishing. The time factor plays a significant role here. The lead times for individual productions are becoming shorter and shorter. Furthermore, the team borders between purchasing, product management, sales, customer service and editorial have become blurred. And last but not least, it has become more important for big productions with short publication cycles to standardise and thereby avoid inconsistencies. It is not only the content, but also the processes that have to be captured as precisely as possible in such a heterogeneous environment and be developed to guarantee efficiency and profitability, ideally with the highest possible degree of automation.

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**Media whose production can be designed more efficiently through intelligent publishing processes and the automated use of standard elements:**

- Newsletters
- Whitepapers in content marketing
- Landing pages for specific target groups, regions or topic areas
- Brochures for specific target groups, regions or topic areas
- Advertising leaflets and flyers
- Target groups and context-specific PowerPoint presentations
- iPad catalogue
- Sophisticated, custom-tailored e-mail campaigns
Heterogeneous system environments fall to their knees

Optimised marketing context, perfect target group approach, cross-departmental and cross-locational cooperation – the perfect mix for the optimal customer experience. The downside: Heterogeneous system environments that have grown over the years fall to their knees when faced with these challenges. Half-hearted renovation measures don’t help here. The solution lies in a completely new publishing architecture.

Customer Experience, Content Marketing and Targeting lead to a complete overload

Current print editorial systems are geared towards the creation of static print media and do not provide support for managing variations and context-specific media adaptations. While a simple personalisation can frequently still be handled via variables (e.g. first name, last name), a customized offer (optimised selection of content in an optimised presentation) is not feasible. The consequence: the tagging and preparation of content for various target groups, regions or channels is handled where it definitely does not belong… isolated in each output channel system.

High performance systems are in demand

Purely editorial solutions that have been used to date for customer magazines or image brochures are overwhelmed by the complexity. Particularly sophisticated media that generally come in large quantities but not similar patterns distinguished by variations demand a smarter publishing strategy. These can be implemented only on the basis of equally intelligent technologies. The context-based focus on diverse formats, media and target groups guarantees a variety of combinations.

Hybrid content, as well as context-optimised targeting and an ever increasing number of variations can hardly be stemmed without system-supported processes. A rich customer experience, which should be implemented both in proximity to the customer and with cost efficiency, is therefore always a question of the right technology.

Brand portals: typical examples for inefficient system silos

The structure of such publishing architectures is frequently completed contrary to established architectural principles:

- Image material is provided locally and redundantly to already established MAM or DAM systems.
- Editorial processes for text and images are completed locally and not interconnected with other systems and processes.
- Template databases are established locally and other systems are not able to use them.
- Interactive portals are frequently established in a proprietary technology and not based on company-wide portal standards.
- Order and payment processes are done separately from established shop solutions.
The white paper “Consistency in all Dimensions – Content Engineering for Marketing the Future” gives an extensive look into the wide range of possibilities of an intelligent, contextual marketing strategy. System-side support is therefore indispensable for the efficient management of complex advertising and marketing environments. A centrally arranged content engine functions as the centrepiece of all communication and publishing processes.

The publishing engine has a special task within the content engineering architecture: It forms a bridge between the media-neutral data storage and format-specific placement of standardised design templates. A smart publishing solution offers the opportunity to combine the share of automated and manual tasks, depending on the requirements and quality of a publication. The figure to the right clarifies the three central process categories of modern publishing environments.

To complete various work processes with varying degrees of automation basically places the publishing engine in three basic modules: compelling data supply for populating layouts, composing content modules defined in advance as well as the automatic rendering of formats.

The solution:
central control of content and publishing workflows

The response to the challenges of modern publishing environments lies in the combination of content engineering with a flexible publishing engine.

THREE STEPS TO OPTIMISED PUBLISHING ARCHITECTURE:

**STEP 01**
Set up a content engine as a central management platform to guarantee high-quality data for various channel-specific systems like newsletter modules or web CMS.

**STEP 02**
Integrate a central publishing engine that in addition to data also delivers perfectly suited pre-designed content blocks in HTML, PDF, Adobe InDesign and similar formats.

**STEP 03**
Establish a central template library that can be re-used by all systems and across all channels and media. Channel-specific features are modelled as variations.
CENTRAL CONTROL OF PUBLISHING WORKFLOWS:

➢ Automation: data + automated population + template = output
  For digital, flow-based formats that are based on rule-based output up to 100 %.
  ➢ Example: a) Automated delivery of PDFs to website management systems.
    b) The rule-based output of a price list in PDF format.

➢ Blockbuilding: data + composing + template = output
  For page-based formats that require a manual compilation of individual building blocks (composing) resulting in an automation level of 80 to 90 %.
  ➢ Example: a) Fast populating of advertising inserts in the whiteboard with automated output in the target formats.
    b) The composition of landing pages, where grid positions are partially populated manually while remaining content goes to a flow-based overflow area.

➢ Manual Design: data + template + creative design = output
  When creating high-end unique publications, the focus is not on layout automation, but on the fast integration of released data – in an ideal case already pre-formatted. This usage of pre-formatted data can result in savings of up to 50 % even for demanding creative layouts.
  ➢ Example: a) High-end special advertisement, for which the complete creation is manual, but based on existing editorial data, images and tables.
    b) Creatively designed collage of images and texts in completely free layout patterns.
**Population of layouts**

For sophisticated, often costly print production, the success of the individual projects rises and falls with a compelling data supply. Predesigned layouts are placed in a design tool, like Adobe InDesign, as reusable templates with standardised content in order to be manually processed further. The provision of content in a form previously laid out brings first and foremost notable time savings.

**Composing**

A key component of the publishing engine is the composer. The main characteristic of media production is no longer found in the completely free design of contents, but instead in its compilation into defined modules and blocks. Thus page templates, in pre-defined sizes and designs with fixed or free grid positions, are part of the standard portfolio for the publishing engine. These templates simply have to be selected and placed in any desired sequence. The content itself is placed in the composer either on grid positions or in a flow area – basically in a connected chain.

An example for visualisation: In the course of a time-restricted promotion, a poster is to be produced. For this purpose the advertising editor selects the template “Campaign template large” and changes the colours and pricing using various parameters. Completely manual entries and design configurations are not required.

**Where the composing process makes sense**

The added value of a blockbuilding approach isn’t measured by individual factors such as the print run or the variety of variations; rather it is a product of two decisive key figures: the number of publications per year times the number of variations per publication. Before this backdrop, composing can make sense in the most varying of scenarios:

- Weekly campaigns with 52 publication deadlines per year, that run completely with no variations.
- Monthly presentations of new products that are optimised for different target groups.
- A single brochure which is published just once, but is to appear adapted for more than ten regions and ten different target groups in more than a hundred variations.
Handling variations with composing:

➢ For variations that result from deviations to the rules, for example:
  ➢ Specific market cannot sell selected product
  ➢ Content not suitable or blocked for a target group
  ➢ Topic is not interesting to addressee and was deselected

➢ For variations that have been editorially defined and actively set by the editor, for example:
  ➢ Target-group-optimised exchange of text blocks
  ➢ Hiding content from certain target groups
  ➢ Displaying other content and products based on the region
  ➢ Swapping of complete pages for defined target groups
  ➢ Optional web-based adaptation by markets, distributors, regional offices or the sales representative

Automated rendering
Automated rendering of media products always lends itself to the situation when cost efficiency and speed are the driving factors instead of design. This approach is used primarily in implementing HTML or PDF-based formats but can also be used in combination with graphics applications like Adobe InDesign for print products. With automated rendering, context-optimised documents such as customer-specific proposals and price lists are done in real time and on the fly.

Other added values of the publishing engine
A special benefit of the publishing engine is the comprehensive visualisation of a wide variety of functions such as:

➢ the visualisation of complete workflows or single steps within the workflow

➢ the definition and delegation of corrections and tasks via a visual layer directly into the layout

➢ the visualisation of translations and corrections that are delivered via the composer

➢ the simulation and preview of variations, for example different page sequences.

The publishing engine supports configuration-based series production with its extensive composing functions. As a result the editorial processes are consolidated and more efficient, while the reusability of the content is increased significantly.
The advantages:
consistent customer experience across all channels

The recipe for success for a first-class customer experience exists primarily in combining currentness, consistency and relevance with an unmistakable design. This mix can only be optimally managed across all channels with an intelligent publishing engine in order to ensure that quality and creativity do not suffer, even due to high cost or time pressures.

A central advantage of the publishing engine is the variety of its areas of application. These range across the channels from the production of weekly advertising inserts to the publication of social media entries on widely available platforms like Facebook and Twitter. The fact that they can use well-known programs like Adobe InDesign to complete standard tasks, for example creating templates, is especially pleasing for editorial users. The integration of a publishing plug-in into InDesign supports the creative design of the usual layout application. Training-intensive orientation is not required for the web-based composer, the centrepiece of the publishing engine. Here pages and grid spots can easily be populated with items by dragging and dropping from the lists.

General cooperation
The functions of the publishing engine make it easier to not only train individual employees, but also to support efficient team coordination. These features include the visualisation of complete workflows and individual work steps, a tool for defining and assigning corrections and tasks using a visual layer directly in the layout, and previewing different variations in the composer. For elaborate print projects, the population on the whiteboard is done at the same time as the finalisation in the layout program – content and planning data will be updated on an ongoing basis. Furthermore, there is the opportunity to locally correct publications, to translate them, and to rework them. If, for example, regional employees are included in the design, adjustments can be made directly in the layout.
Range of applications
The range of applications for the publishing engine covers three focus areas:

- **Traditional media** like handouts, leaflets and inserts or product brochures for a variety of target groups, regions and markets, however always based on the same design and issued once or several times weekly.

- **Sophisticated formats** like newsletters that are designed by editorial users; brochures for which the different variations are optimised for target group and region; direct mailings and e-mails that are compiled specifically for important customer groups.

- **Special media** like PowerPoint presentations that are custom-tailored to the customer, target group or context: whitepapers in PDF form that are issued in a variety of versions for different industries, target groups and regions and always optimally adapted to the customer journey; context-specific contributions on social media platforms like Facebook or Twitter.

Flexible automation
A broad, significant benefit to the publishing engine is its high degree of adaptability for the automation of individual publishing processes. Thus it supports high volume formats of series publications, and also simplifies the production of sophisticated special media that are output in a wide range of versions and at the same time convey their creative enhancement with selected editorial content. The degree of automation can be selected depending on the application scenario.

Modern publishing relies on four strong pillars: standardised processes, integrated system environment, consolidated content basis and pronounced yet flexible automation mechanisms. The publishing engine runs reliably in the background and connects all of the aspects critical to success under one user-friendly interface. Thus companies benefit from cost efficiency and high life cycle speed while never losing the consistency of their messages and a clear brand image – for a customer experience that is not only affordable, but also unique across all communication channels.
The benefits of the publishing engine at a glance:

- **Consistent messages:** The solid basis of standardised content modules creates the foundation for publishing consistent content across all communications channels.

- **Design flexibility:** The (partially) automated provision of standard content creates more leeway for the creative processing of sophisticated or widely differing formats.

- **Variety of application options:** Thanks to high system flexibility, the publishing engine supports high-frequency mass formats as well as sophisticated special media with a high degree of variation.

- **Variable degree of automation:** Depending on the scenario, the publishing process can be fully automated or partially automated. For contextual adjustments, the content module “on demand” is available.

- **Maximum cost efficiency:** Differing degrees of automation guarantee the optimal use of resources and thereby faster product cycles with higher publishing quality.

- **Pronounced planning certainty:** Visualisation of tasks, workflows, and versions gives a quick look at the status of the project.

- **High degree of user-friendliness:** The publishing engine plug-in plugged into the customary layout application guarantees quick learning without a great deal of training effort just as much as the intuitively operable composer.

- **Architecture from a single source:** The harmonised and fully integrated system environment is reliable, low maintenance and future-proof — and therefore extremely cost-efficient in operation.