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digital signage yearbook 2015 | 16

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Dear valued reader

The year 2014 saw some major movements in the digital signage market - and that's continuing in 2015, with numerous new projects, many personnel changes, a change at the top of the software list and new market players such as Acer and Google.
At the same time, the industry is facing major challenges in the shape of political and economic uncertainties in Russia and Greece and, significantly, the weakness of the Euro against the US dollar. Despite that, however, 2014 saw the EMEA digital signage achieve double digit growth - and we remain positive that we'll see similar levels of growth this year too. The reasons for our optimism are diverse. Digital signage is progressively becoming a standard; new players are bringing new life and new ideas; and marketing departments and creative agencies are increasingly discovering the benefits of digital signage.
Not to be forgotten are the industry's highly motivated and passionate advocates. Digital signage is an emotional communication solution, and that excitement needs to be ignited while accompanying end-users in the digital transformation process. We're seeing high levels of enthusiasm in our industry – and that's why we're looking to the future with great anticipation.
With our new Digital Signage Summit (DSS) conference series - co-produced by invidis consulting and Integrated Systems Events (ISE) - we will strengthen our international reach. That starts in Munich in September, and will expand to Russia and the UAE.
This English yearbook edition complements the established German issues for digital signage ("invidis Digital Signage Jahrbuch 2015/16") and Digital out of Home ("invidis DooH Jahrbuch 2015/16"). As usual, all issues can be downloaded for free at invidis.de.
We would like to thank all the market participants and companies who helped us prepare this yearbook by providing data and information. Enjoy this comprehensive guide to the EMEA digital signage market.

Best wishes

Florian Rotberg

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The Digital Signage Market EMEA

Growth is variable but mostly strong, competition is intensifying, and DooH is on the rise – but who will be the winners?

The EMEA regions recorded growth that was a more-than-healthy of 25% in 2014, mainly driven by digital transformation projects in brick and mortar retail. After years of hard sales and persuasion, digital signage has become an established digital media channel in the retail space - not only for shiny elegant flagship stores, but also for mainstream retail concepts with hundreds or even thousands of stores.

Large format displays, small signage and mobile devices are standard in most retail shop fitting concepts. The installed base - newly installed displays as well as upgrades - are adding economies of scale to suppliers as well as customers. Budgets for content creation don't change if a network doubles in size;

even costs for network management and other services experience substantial benefits with growing networks.

Of course, market growth in the EMEA region varied widely in 2014. For example, professional display sales (32" and larger) contracted in Turkey and Poland. On the other hand, sales boomed in the Middle East, UK and Spain with above average growth of more than 30%. Slightly below average growth of approximately 20% was recorded in Denmark, Italy, Sweden and France – obviously, sometimes from low bases, as certain markets like Spain or Italy experienced very tough years in the past. But: the digital signage business is proving to be attractive across the board.

DACH almost stagnant – but now back on track

Even Europe's largest display market in Germany, Austria and Switzerland grew marginal compared to the whole of EMEA, total digital signage revenues recorded a 14% growth.in 2014. However, development in 2015 is back on track and in line with the region. Being very conservative, Germany is not easy when it comes to digitalisation and the usage of displays for information and advertising. The low growth of display sales in a very positive general economic market shows that digital signage is still not mainstream. Some customers are still uncertain about the benefits and ROI of digital signage - but the upside potential for the three German-speaking countries is very high as Germany, Austria and Switzerland have a very strong base of brick and mortar retail stores.

This is making it increasingly attractive to relatively new market entrants like iiyama, Toshiba, Acer, BenQ and others. Many of these newcomers are opening bases in Germany and are trying to capture market share, challenging established supply chain relationships. For second tier vendors like Philips, Sharp or Panasonic, that means additional pressure to secure vendor relationships with the main systems integrators.

Competition is not only driven by new display vendors, but also by systems integrators and software suppliers. The question remains: who will drive the consolidation process, which has been picking up tremendous speed in 2014? Within the digital signage sector, we are convinced that even more new suppliers will soon enter the market - and this time, not in the shape of small, innovative start-ups, but companies that are well-established and financially powerful with an international eco- and partner system and very well established customer relationships. Digital signage will never be their core business, but it complements existing IT and service offerings. The blue chip players are driven by their customers to offer the full range of services, and digital signage is an excellent field of growth. The new players are aiming to take a front seat in the market, moving from backend solutions to direct customer touchpoints at the frontend.

Global projects bring in blue-chips

Customer demand for global projects is driving the rise of blue-chip players in the market. Changes started gradually in 2014, but we expect this development to pick up pace in 2015/16, mainly by mergers between, and acquisition of, established digital signage systems integrators.

In the meantime, the digital signage business is being pushed by high profile events like Euro 2016 in France, the FIFA World Cup in Russia 2018 and Expo 2020 in Dubai. The main demand will be driven by pan-European digital transformation projects across most customer-facing touchpoints. Omni-channel retail concepts, marketers' urge to control each aspect of their campaigns and to gain new, valuable customer insights are the main push for professional displays – small and large - in public spaces, whether it is online, mobile or at the point of sale or information.

So who will be the winner with this kind of development? Not the myriad of software companies. Only very few specialists will survive – for example, digital agencies who understand customer needs and are able to adapt omni-channel concepts to local and cultural needs.

Hardware – as in all other markets – will become mainly a commodity. Prices will eventually drop, further unlocking new projects. Before hardware prices continue to fall, we will experience substantial price hikes in 2015/16 due to the unfavourable Euro/US dollar exchange rates in the eurozone. However: in the medium to long-term, hardware will be just a commodity, and only a few companies will be able to create a sustainable flow of revenues.

Key to success

The key to success in digital signage is customer understanding and care and the customising of frontend and backend software.

Digital out-of-home (DooH) is a different story. As investment is much lower than in previous years, and quality in media and measurement is a must for network operators, the DooH business case is finally working! Advertising sales increased substantially (more than 20% YoY growth rate in Germany) and customers are willing to spend money on DooH. Multiscreen campaigns spanning online, mobile and public video (DooH) are unlocking the potential of digital out-of-home.

Soon, we will see the first booking and ad-serving platforms connecting demand and the supply side in DooH. Legal limitations in the different countries in EMEA will, of course, shape the business on an individual basis - but DooH as a premium digital communication channel is established now.

Image: F. Rotberg / invidis

2015 Trends and Drivers

The market continues to grow, but is challenged by exchange rates, globalisation and new profiles of digital signage provider.

2015 will be another year in which the digital signage market will see double digit growth. If the economy remains as strong as in the first half of 2015, most European markets will grow faster than in 2014. There are obvious uncertainties in Russia and Greece, but their impact on digital signage should remain geographically limited.

A more significant influence on the development of digital signage is the continuing weakness of the Euro versus the US dollar, with the unfavourable exchange rate forcing display vendors especially to raise prices by up to 10%. For the first time for more than seven years, display prices have risen, and fierce competition in the display segment is putting additional pressure on margins - especially as most long running project contracts guarantee fixed prices which don't include exchange rate-related changes. Similarly, the cost of media players, as well as other AV/IT-components, will rise moderately due to the strong US dollar.

Other exchange rate-related challenges are being faced by Swiss-based integrators and service providers due to the strong Swiss franc. As a result, Swiss integrators have strengthened their focus on the small but lucrative domestic market and scaled down their exposure in the euro zone. Service pro-

viders with high labour input especially are losing competitiveness in international projects.

Pressing issue
As the industry grows and matures, consolidation is becoming a pressing issue. Digital signage projects are increasingly global and require systems integrators with large, international operations and access to competitive project financing. End users expect innovative financing options; even blue chip customers are looking for options to offload digital signage investment from their balance sheets.

International IT systems integrators and service providers historically unrelated to digital signage are increasingly entering the market. These are typically global enterprises with a technology and digital transaction background. In the past, they seemed reluctant to invest in digital signage as demand was too low and lacking large scale opportunities. International blue chips are also bringing ERP, CRM, e-payment/transaction competence to the market, offering digital signage to corporate end users to leverage big data, analytics or other highly database-driven communication.

Digital signage is becoming more and more a fully integrated information, communication, retail,

building automation or digital media solution. Hardware is becoming a commodity and is less in focus – current concepts are predominantly hardware-agnostic. Social media content components are currently a 'must have' in most digital signage concepts, and there is a good reason: displays make an efficient public touch point for social media. Near-live Twitter feeds or Facebook postings are an excellent content addition and provoke customers to interact.

An immense driver for fully integrated digital signage is shop fitting. Retail design, furniture as well as light and communication designs are incorporating digital media from scratch. That means that sufficient space for service access, cables and future-proof design are much more often considered in the design and planning phase.

More dynamic

In addition, projects tend to be much more dynamic than in the past. Most projects will see considerable add-ons during the typical 5-8 year lifespan. Customer expectations, global trends and emerging technologies are more likely to be integrated/ attached to existing concepts. Usually, a network operator cannot wait till a new digital signage generation is being rolled out.

Integration of on/offline activities like click and collect or the opposite concept of the extended shelf are becoming very common. Unfortunately, most of the concepts fail miserably as the user experience - including the user interface - is not adapted to the new environment. A webshop design just doesn't work on a large format display on the retail floor. Appropriate virtual shelves need to be positioned as close as possible to the point of decision (changing rooms and so on).

RFPs and tenders are tending to be set up with a more global reach, sliced into separate working packages. Primarily, customers are striving for group-wide and global standardisation of digital signage as well as conference / facility management. The time is over when most projects were launched locally without connecting to essential databases. Partly, tenders are separated into plan, build and run blocks. We don't believe sliced responsibilities will offer additional advantages to the customer. Technology advances very fast, and demands from customers are continuously changing: therefore, a competent systems integrator should be in the driver's seat.

DIGITAL SIGNAGE TRENDS 2014/15

Increasing demand for...

72 %
...**videowall displays** with narrow bezel and dedicated videowall functions

...**sun-light readable** large format displays
61 %

49 %
...large format displays with **integrated media player**

45 %
...**small display sizes** under 20" with professional LFD services

79 %
...integration of **mobile end devices** in digital signage installations

...LFDs with **touch functionality** (integrated or as an accessory - e.g. frame)
70 %

DIGITAL SIGNAGE IN EMEA 2014

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SHARE OF EMEA
in %

Donut chart values: 18, 16, 11, 10, 8, 6, 6, 4, 4, 3, 2

Markers: 6, 1, 2, 5, 4, 7, 10, 3, 11, 8, 9

Legend
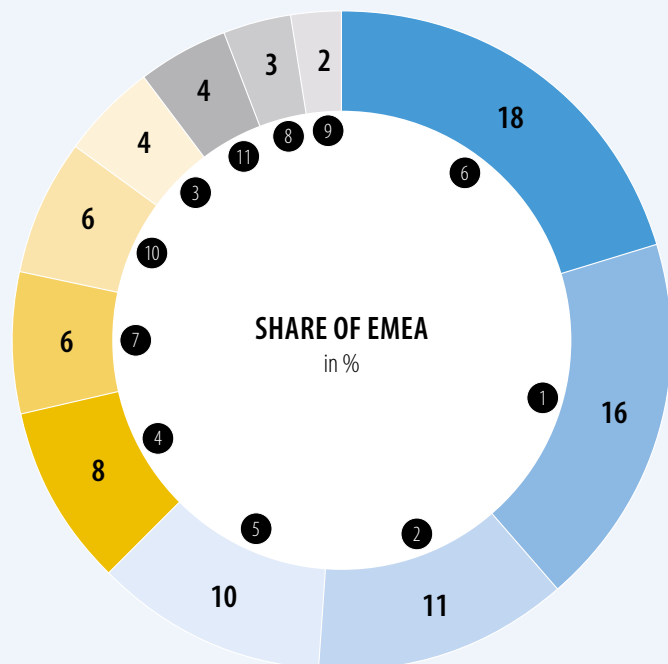
1. UNITED KINGDOM & IRELAND
2. FRANCE
3. SPAIN, PORTUGAL
4. BENELUX | BELGIUM, THE NETHERLANDS, LUXEMBOURG
5. NORDICS | SWEDEN, DENMARK, NORWAY, FINLAND, ISLAND
6. DACH | GERMANY, AUSTRIA, SWITZERLAND
7. ITALY
8. POLAND
9. TURKEY
10. GCC | SAUDI ARABIA, BAHRAIN, QATAR, KUWAIT, UAE
11. RUSSIA

BENELUX | BELGIUM, THE NETHERLANDS, LUXEMBOURG

TOP-3 TARGET MARKETS
RETAIL
CORPORATE COMMUNICATION
DOOH

UNITED KINGDOM & IRELAND

TOP-3 TARGET MARKETS
RETAIL
SHOPPING MALLS
CORPORATE COMMUNICATION

FRANCE

TOP-3 TARGET MARKETS
RETAIL
CORPORATE COMMUNICATION
BANKING

SPAIN, PORTUGAL

TOP-3 TARGET MARKETS
RETAIL
CORPORATE COMMUNICATION
SHOPPING MALLS

GROWTH 2013–2014
in %

Bars: >30 (6), >30 (4), >20, >10 (1), >10 (11), >-10 (8), +/- 0 (9)

Markers order: 6, 1, 2, 5, 4, 7, 10, 3, 11, 8, 9
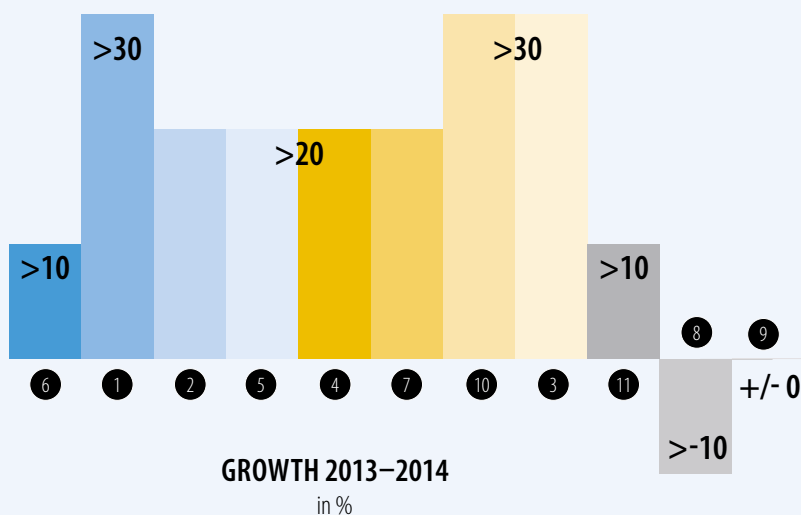
TOP MARKETS FOR PROFESSIONAL DISPLAYS

NORDICS | SWEDEN, DENMARK, NORWAY, FINLAND, ISLAND

TOP-3 TARGET MARKETS
RETAIL
CORPORATE COMMUNICATION
EDUCATION

POLAND

TOP-3 TARGET MARKETS
RETAIL
TRANSPORTATION
CORPORATE COMMUNICATION

ITALY

TOP-3 TARGET MARKETS
RETAIL
CORPORATE COMMUNICATION
SHOPPING MALLS

DACH | GERMANY, AUSTRIA, SWITZERLAND

TOP-3 TARGET MARKETS
RETAIL
CORPORATE COMMUNICATION
BANKING

TURKEY

TOP-3 TARGET MARKETS
RETAIL
PUBLIC
EDUCATION

RUSSIA

TOP-3 TARGET MARKETS
RETAIL
CORPORATE COMMUNICATION
SHOPPING MALLS

GCC | SAUDI ARABIA, BAHRAIN, QATAR, KUWAIT, UAE

TOP-3 TARGET MARKETS
RETAIL
SHOPPING MALLS
DOOH

Image: F. Rotberg / invidis

Ten Top Trends

The digital signage world is changing, and will continue to change. We identify the forces that will shape the market in the future.

The digital signage world is changing, and will continue to change. We identify the forces that will shape the market in the future.

The digital signage of the future will look similar to today but building on various platforms. Invidis has identified 10 top trends in our outlook for digital signage. All of them are already shaping signage today, but their influence will rise significantly.

It is essential to understand that large displays can be very effective and attention-grabbing if they initiate an impulse. Digital signage needs to trigger a call to action. Buy now, act immediately, join today or simply like us on Facebook. All these actions are measureable and add value for the network owner.

① New display sizes 43"/48"/49"
New generation display fabs are able to produce larger mother glass, and new slightly larger display sizes will replace existing sizes. Many change for fully integrated displays and certified shop fitting modules. 32" will remain the entry level for large format displays, followed by 43" (replacing the 40-42"size) and, on the upper end of the 40"-50" range, sizes will be 48"/49". The additional inch brings more hassle than benefits for existing projects.

We will, though, see further size growth in the coming years as new generation fabs come online. Therefore, it is recommended to design digital signage to

be future-proof with "blende". At the top end of the range, displays will grow up to 120" (Sharp). But: we have already reached certain practical limits – such as the height of doors – with 84" displays. Displays larger than that will encounter challenges in transport, installation and swap-out.

② **Consumerisation (tablets, media player, Android and Chrome OS)**
Consumerisation of IT hardware also influences the digital signage industry. The widespread use of consumer tablets for small signage installations is just the beginning. Even iPads are not designed for 24/7 use. Many systems integrators use standard consumer tablets for door signage or small signage in the retail environment.

Professional media players are being increasingly replaced by small form factor (SFF) PCs designed for office use. Reliability, heat management and services don't cover professional usage, but digital signage projects with 12-hour/five days a week operations will most likely run on these platforms for two or three years.

Android and Chrome OS – two operating systems tailored to consumer use – are also gaining ground. Simpler digital signage installations run on these platforms.

Social media has taken the consumer world by storm. Now, it is also becoming an essential feature for most digital signage concepts. Professional displays are commonly used as social media public touchpoints (Twitter wall) or as a simple multi-screen CMS (Facebook posts will also be displayed on large format screens). In addition, social media accounts are used as an alternative access to registration in interactive concepts.

③ **Media Asset Management is the new CMS**
The biggest impact for change in the digital signage industry is the trend towards separate digital asset management platforms. These omni-channel solutions enable a larger enterprise organisation to manage media assets in a central platform regardless of media channel. Photos are uploaded only once in large resolution and middleware converts the asset automatically for each media channel - full resolution where needed, small for mobile websites

etc. The most compelling benefit of media asset management systems is the central dashboard to publish assets across all platforms simultaneously, or to withdraw/exchange old, outdated assets with a key stroke when a new product is launched.

Functions are being moved from the CMS to the central platform, reducing the need for a full-blown digital signage CMS. The CMS of the future will be a light version of today's, just focusing on digital signage-specific features such as scheduling and play-out. The introduction of Ayuda by Ströer Germany is a good example. A new, powerful, extended ERP is taking over the integral functions of the CMS.

④ **Hardware and CMS agnostic**
The digital signage solutions of the future will not only be more hardware-agnostic, but also CMS-agnostic. Leading digital signage integrators like Seen Media have already changed their processes. New templates and editorial workflows are programmed in HTML5; they work regardless of what CMS the customer chooses. The agnostic approach also enables digital signage integrators to playout content on various screens like online or mobile.

The trend for YouTube content also widely benefits digital signage. Creative agencies are learning to produce new video campaigns not just for TV (sound and deep pockets are a prerequisite). Video production for YouTube follows other market laws. Even videos for online need to be adapted for digital signage, but it is much simpler than converting TV content.

⑤ **Global is the new local**
In the early days of digital signage, most projects were designed as local installations. A positive return on investment was a far cry away. This has changed. Head offices are consolidating their various digital signage island solutions and are tendering global solutions. For most enterprise customers, digital signage has proven itself at the PoS/PoI. Now, it needs to be planned, built and run on a global scale most efficiently.

Challenges are global service concepts as well as a fine-tuned editorial hierarchy level for contributing and managing content.

6 More connected

Digital signage projects have always been connected to existing systems - but the boom in omni-channel with a seamless user experience is accelerating this trend.

XML-based web interfaces are the de facto standard for connecting external data to digital signage systems. Dynamic signage connects to back office systems, enabling transactions through ePayment/ eWallet solutions or integrated RFID/iBeacon for interactivity.

7 Not necessarily stand-alone - displays can be everywhere

Displays are not limited to 16:9 LCD panels. Almost everything can be a display of projection. media façade, mirrors, glass panel with integrated LED stripes.

Embedded signage is the fasted growing digital signage sector. Scales, vending machines or pay trays – dynamic information can be displayed on many screens from small to very large.

8 Digital signage complements business critical systems

Successful digital signage concepts have always been driven by marketing, with the support of IT. Dynamic information is mostly driven from the central CRM platform (marketing).

But: more advanced scenarios utilise ePOS and ERP data to drive content on public screens. A live connection to inventory management (availability of products) and prices (current prices) is essential for a positive return on investment. Retail departments are the driving force behind this kind of dynamic content.

Another approach is building management solutions. Managing lights, temperature (air conditioning) and other facility management solutions is central to large infrastructure operations.

9 Ownership of digital signage will often be outsourced

Installing and operating a digital signage network is not in all cases a function of an organisation. The key asset of digital signage is IT, which is very often outsourced to an external partner. This will also become more common, as CAPEX for large networks can be substantial. DooH networks are the first to outsource digital signage technology.

In-store radio and in-store TV are the next level of outsourcing. Electronic shelf labels or digital menu boards are business-critical and the most unlikely category to be outsourced.

10 Effective signage follows established processes

Successful digital signage concepts are always based around one simple strategy: digital signage follows existing communication processes and should not require radical changes in daily routines.

Before designing a new digital signage concept, it is an absolute necessity to analyse the needs of all stakeholders, define content workflows and decide what role digital signage should play in the communication mix.

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Growing specialisation

The DACH digital signage market continues its double digit growth with falling hardware prices compensated by higher end equipment.

With growth rates of 14 percent, the DACH digital signage market experienced slightly more sluggish growth than in the 2014 calendar year. Nevertheless, it is valued at some 762 million euros. As before, digital signage is a market sector that is growing disproportionately, as two examples show. If the development of the DACH digital signage market is compared with general economic growth in the three countries, it can be seen just how much momentum still exists. The economy grew by 1.6 percent in the same period in Germany, by 1.3 percent in Switzerland and by 0.3 percent in Austria. In comparison with other sectors also, digital signage accounts for above-average growth rates. According to Gartner, IT spend in 2014 rose worldwide by 1.9 percent to some 3.7 billion US dollars. Market researchers are predicting growth of 2.4 percent in 2015 to more than 3.8 billion dollars.

No wonder, therefore, that companies also turned time and again to this market in 2014. This can be seen especially in acquisitions by companies from to-date unrelated sectors: for example, the Gundlach Group acquired ISS, and Cancom bought Didas. This has a positive impact on customers, since generally smaller digital signage providers are placed on a sounder financial basis as a result. The development is likewise advantageous for digital signage companies, because buyers usually establish additional services from their stock business and furthermore gain access to a new customer base.

In addition to acquisitions, mergers and new players, the sector is also growing in terms of employee numbers, with 250 to 300 new positions spread across around 50 percent of the companies in the sector.

Hardware: slow growth

The entire sector is still split into three areas: hardware, software and service. However: even though more than 50 percent of the entire added value in the digital signage market still comes from the hardware sector, it is growing at a slower pace than other areas with sales increasing at a more sluggish rate.

The trend in relation to displays clearly demonstrates this. While, in terms of numbers, manufacturers achieved an increase of 12 percent in 2014, the bottom line is that this only translates to revenue growth of 4 percent. Illustrating that trend with a concrete example makes it even clearer. In 2014, a professional display cost 1.250 euros - an average value 8 percent below that of the previous year. The further proliferation of entry-level devices and small signage displays is exacerbating the effect. This is compensated for, however, by high-quality devices

DIGITAL SIGNAGE MARKET GERMANY, AUSTRIA, SWITZERLAND 2009-2014 (IN MILLION EUR)

YEAR	INTEGRATORS	DISPLAYS	SOFTWARE	MEDIA PLAYER	DOOH	OTHERS*	TOTAL
2009	112 €	106 €	15 €	15 €	67 €	15 €	330 €
2010	135 €	100 €	18 €	19 €	96 €	21 €	389 €
2011	174 €	132 €	21 €	26 €	117 €	26 €	496 €
2012	186 €	157 €	24 €	30 €	145 €	31 €	573 €
2013	210 €	183 €	30 €	39 €	168 €	36 €	666 €
2014	235 €	190 €	35 €	44 €	218 €	40 €	762 €

* Contains Content, Hardware, Consulting, Media.
Note: All information comes from company reports or estimations by an advisory board.
Source: Meko Ltd, invidis consulting GmbH „invidis Digital Signage & DooH Yearbook 2015/16"

– for example, ultra HD screens and large format displays in excess of 70 inches, which together account for a quarter of all professional displays sold. Strong growth in 60- and 70-inch variants was striking. Large sizes are also affordable on a large scale. Added to this, the technology for largely trouble-free operation is mature.

The entire display market is split 25/50/25: attractively priced entry-level models (value line) account for 25 percent and mid-range models for 50 percent. The high-end area with top-class models in turn accounts for a share of 25 percent.

All special display segments are currently realising extremely positive margins, including certain touch technologies that are heavily in demand such as PCAP (projective capacitive) high brightness screens as well as video wall models with narrow bezels. Manufacturers who specialise in this area, such as iiyama or Dynascan, are reaping the rewards here.

The top three producers of displays remain unchanged. Samsung continues to lead the field, although the manufacturer only recorded modest growth in 2014. The lion's share of the growth was accounted for by the Koreans with small signage displays. NEC remains in second place, followed closely by LG. It also recorded slight growth overall in 2014.

Software: fascinating sector

The area of software – representing 15 percent of the added value – is one of the most fascinating sectors at present. We explain the market movements in this sector in greater detail in the software article in this issue, including a change at the top: Grassfish has taken the top spot from Scala. As on the hardware side, the market for entry-level solutions has also grown while, on the other side of the coin, highly specialised and high-margin solutions continue to be in demand. Software providers increased their revenues by 17 percent on average in 2014. The traditional players are having to be more innovative owing to the appearance of display manufacturers as full-service providers, who are now well established with their own software (Samsung with MagicInfo), as well as IT providers with their current focus on digital signage.

Multichannel is one area where these traditional players could make their mark, for example. While the trend to date has been for smaller multi- or omnichannel roll outs on the project side, more and

DIGITAL SIGNAGE IN DACH 2014/15

SIZE MATTERS

43" - 49"   40" - 42"   50" - 59"
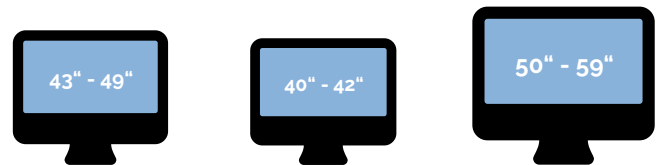
Top 3 display sizes by quantity sold

43" - 49"   50" - 59"   70" - 84"
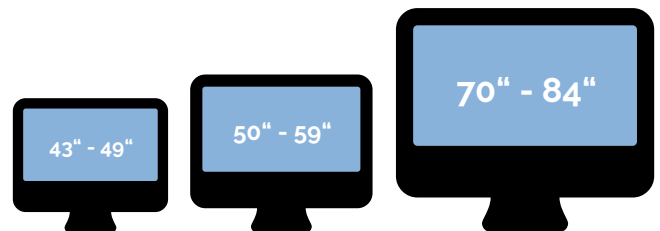
Top 3 display sizes after growth by quantity sold

LONERS

77 %
of all media players run one display
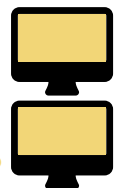
23 %
run two or more displays

WINDOWS DOMINATES

65 %   **18 %**   **9 %**   **6 %**

Market share of operating systems in digital signage installations (by number of projects)

RATHER OUTSIDE

78 %
External

14 %
Slot-in (OPS etc.)

8 %
Built-in (SoC etc.)

Types of media players in digital signage projects

more large flagship stores are being equipped accordingly. It may only be their single flagship store, as with the Dessous label Hunkemöller , but, with Media Markt and Saturn, we are also seeing two large consumer electronics chains each looking to the possibility of a flagship store. Added to this are shop-in-shop installations in a small amount of space, where appropriately connected software has to display the numerous variations of the product range. A nationwide project has been under way in Germany in this area since 2014 at sports brand Tao.

Services: strong added value

The services area now accounts for more than a third of the value-added chain, amounting in total to 35 percent. The aspects that come under the technology label – in other words installation, operation and maintenance – account for 20 percent of the DACH digital signage market and integrators can point to an increase in sales of 12 percent in 2014. However, as with the entire market, they too have felt that the mood has been more subdued in comparison with the previous year. Large parts of the market are moving, in general, towards the customer. Distributors are increasingly attempting to take on the role of integrator and offering consultancy and technical services - often also with direct business, and are therefore competing here with integrators. The display providers are, to an extent, also entering this competition.

Content services account for 15 percent of the added value. Creation continues to be a niche, with only a small number of specialised and experienced providers in this area. The established digital agencies are expected to enter the fray in the future, being called upon by established customers to create digital signage content. Digital agencies often take on the task of programming special apps for interactive applications, and it is only a matter of time before these agencies turn with greater intensity towards digital signage.

In order for the market players to continue to grow, they have to tackle the innovation drivers without losing sight of their everyday business. Roll outs with hundreds of players, multichannel projects with special software or exclusive, long-running maintenance contracts: all of these exist and are desirable. In reality, these projects are inaccessible to market newcomers. The established players, on the other hand, are tending to further specialise or diversify, regardless of company size.

RANK	COMPANY	MARKET SHARE
**TOP 10 VENDORS PROFESSIONAL DISPLAYS GERMANY, AUSTRIA, SWITZERLAND 2014 (BY REVENUES)**
1	Samsung Electronics	42,0 %
2	NEC Display Solutions Europe	18,5 %
3	LG Electronics	18,0 %
4	Data Modul Weikersheim	4,5 %
5	Philips Professional Display Solutions	4,0 %
6	Sharp Electronics	3,5 %
7	Panasonic	2,0 %
8	iiyama	1,0 %
9	AG Neovo	1,0 %
10	Sony	1,0 %
-	Others	4,5 %

Source: Meko Ltd, invidis consulting GmbH „invidis Digital Signage & DooH Yearbook 2015/16"

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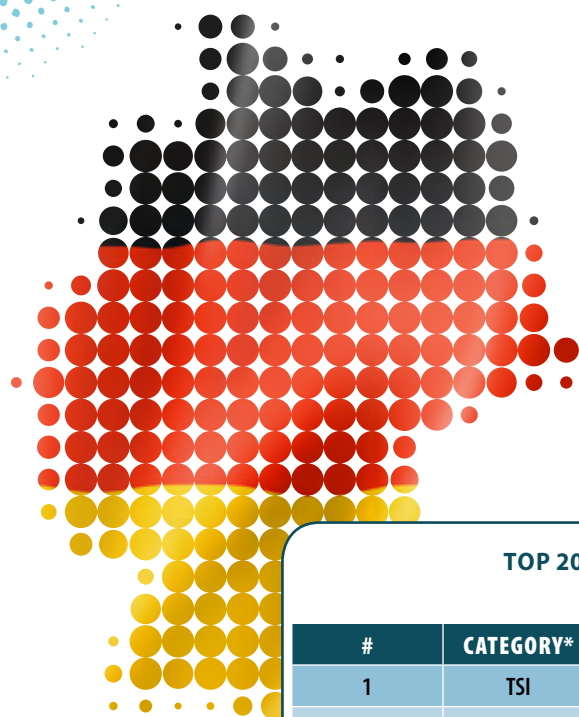
TOP 20 DIGITAL SIGNAGE INTEGRATORS GERMANY 2014
(BY REVENUES)

#	CATEGORY*	COMPANY	REVENUE
1	TSI	T-Systems International	20-25 M EUR
2	TSI	CANCOM DIDAS	10-15 M EUR
3	TSI	xplace	10-15 M EUR
4	TSI	NORDLAND systems	10-15 M EUR
5	FSI	SEEN MEDIA	5-10 M EUR
6	TSI	heinekingmedia	5-10 M EUR
7	FSI	Radio P.O.S.	5-10 M EUR
8	FSI	ICT	2-5 M EUR
9	TSI	Media-NEL	2-5 M EUR
10	FSI	netvico	2-5 M EUR
11	TSI	InoNet Computer	2-5 M EUR
12	FSI	PMS Perfect Media Solutions	2-5 M EUR
13	FSI	MuSe Content	2-5 M EUR
14	FSI	NEXGEN smart instore	2-5 M EUR
15	FSI	echion Corporate Communication	2-5 M EUR
16	FSI	komma,tec redaction	2-5 M EUR
17	FSI	iPOS24 / Interactive Point of Sale	2-5 M EUR
18	FSI	Cittadino	1-2 M EUR
19	TSI	Gundlach Intelligent Solutions	1-2 M EUR
20	FSI	Neo Advertising	bis 1 M EUR

* TSI: Technical Service Integrator; FSI: Full Solution Integrator
Note: All information comes from company reports or estimations by an advisory board.
Source: invidis consulting GmbH „invidis Digital Signage & DooH Yearbook 2015/16"

TOP 10 DIGITAL SIGNAGE INTEGRATORS AUSTRIA 2014
(BY REVENUES)

#	CATEGORY*	COMPANY	REVENUE
1	TSI	Kapsch BusinessCom	2 - 5 M EUR
2	FSI	feratel media technologies	2 - 5 M EUR
3	FSI	Pichler Medientechnik	2 - 5 M EUR
4	TSI	Panatronic	1 - 2 M EUR
5	FSI	NarComm DACH	1 - 2 M EUR
6	TSI	SoLo IT Solutions & Consulting	1 - 2 M EUR
7	FSI	DMS Digitale Mediensysteme	bis 1 M EUR
8	TSI	Wincor Nixdorf International	bis 1 M EUR
9	TSI	DATAplexx	bis 1 M EUR
10	FSI	IT.PARK Service & Technologie	bis 1 M EUR

* TSI: Technical Service Integrator; FSI: Full Solution Integrator
Note: All information comes from company reports or estimations by an advisory board.
Source: invidis consulting GmbH „invidis Digital Signage & DooH Yearbook 2015/16"

TOP 10 DIGITAL SIGNAGE INTEGRATORS SWITZERLAND 2014
(BY REVENUES)

#	CATEGORY*	COMPANY	REVENUE
1	FSI	JLS DIGITAL	10 - 15 M EUR
2	TSI	Invertag	10 - 15 M EUR**
3	TSI	Westiform	5 - 10 M EUR
4	FSI	Habegger	5 - 10 M EUR
5	TSI	Kilchenmann	2 - 5 M EUR
6	FSI	ESAG	2 - 5 M EUR
7	TSI	Bison IT Services	1 - 2 M EUR
8	FSI	screenIMAGE Systems	1 - 2 M EUR
9	TSI	SwissScreen	1 - 2 M EUR
10	TSI	AVS Systeme	1 - 2 M EUR

* TSI: Technical Service Integrator; FSI: Full Solution Integrator
** Contains hardware revenues
Note: All information comes from company reports or estimations by an advisory board.
Source: invidis consulting GmbH „invidis Digital Signage & DooH Yearbook 2015/16"

invidis CONSULTING

DIGITAL SIGNAGE MAP 2015

INTEGRATION & DISTRIBUTION

FULL SOLUTION INTEGRATORS

GERMANY
Cittadino
echion
heinekingmedia
ICT
iPOS24
komma,tec redaction
Mood Media
MuSe Content
Neo Advertising
netvico
NEXGEN smart instore
PMS Perfect Media Solutions
PrintScreenMedia
Radio P.O.S.
SEEN MEDIA
Stüber Systems

AUSTRIA
Digitale Medien Systeme
feratel media technologies
IT.PARK Service & Technologie
NarComm DACH
Pichler Medientechnik

SWITZERLAND
ESAG
Habegger
JLS DIGITAL
screenIMAGE Systems

HARDWARE

DISPLAYS

AG Neovo
Barco
BenQ
DATA MODUL Weikersheim (Conrac)
DynaScan
Elo Touch Solutions
eyefactive
Eyevis
iiyama
LG Electronics

MMD (Philips)
NEC Displays
Panasonic
Samsung Electronics
Sharp
Sign Point
Sony
Toshiba
Viewsonic

SOFTWARE & CONTENT

SOFTWARE

~sedna
AMX
BroadSign
Cittadino
dimedis
dZine
easescreen
engram
eyefactive
Four Winds Interactive
friendlyway
Grassfish
heinekingmedia
Innoforum
komma,tec redaction
Macnetix
mdt Medientechnik

Mood Media
Navori
Net Display Systems
netscreens
netvico
Online Software
Provisio
SalesTV
Samsung
Scala
screenFOODnet
Smartsign
STiNO eyevis
vfree.tv
Videro
Wondersign

GERMANY ǀ AUSTRIA ǀ SWITZERLAND

TECHNICAL SERVICE INTEGRATORS

GERMANY
AHA-Systeme
AV-Solution Partner
BEN HUR
CANCOM DIDAS
Diboss Deutschland
Gundlach Intelligent Solutions
heinekingmedia
InoNet Computer
Media-NEL
NCR
Nordland Systems
Telefónica Germany
T-Systems International
xplace

AUSTRIA
DATAplexx
Kapsch BusinessCom
Panatronic
Sycube
Wincor Nixdorf

SWITZERLAND
AVS Systeme
Bison IT Services
Invertag
Kilchenmann
SwissScreen
Westiform

DISTRIBUTORS

GERMANY
ALSO
Arrow
Avnet
Christiansen
Delo
Ingram Micro
ITZ
Kern&Stelly
Kindermann
Littlebit
Maverick
pilot Computerhandel
syscomtec
Vitec Imago

AUSTRIA
ALSO
Ingram Micro
Maverick
Omega
SoLoIT

SWITZERLAND
ALSO
Ingram Micro
Inputech
Littlebit
Maverick
MobilePro
Telion

MEDIAPLAYER

ADVANTECH
AOPEN
Concept
Congatec
Fujitsu
Giada
IAdea

InoNet
Kontron
Lionsdata
Littlebit
smilplayer
spo-comm

MEDIAPLAYER + SOFTWARE

Acer
BrightSign
Onelan
SpinetiX
STEP Electronic
ZOTAC

MOUNTINGS

Audipack
Chief
Hagor
peerless AV
PeTa
SmartMetals
SMS Smart Media
Solutions
UNICOL
vogel's

CONTENT AGENCIES

3Sixty:TV
baermedia
Cittadino
Digitale Medien Systeme
echion
JLS DIGITAL
komma,tec redaction
MuSe Content
Neo Advertising
Oestreicher+Wagner
Online Software
pilot Screentime
PrintScreenMedia
screenFOODnet
SEEN MEDIA
Visual Art Germany

CONTENT LICENSING

Adversign Media
AFP
Airmotion
BlueFox
dpa
N24
n-tv
Promiash
Sky Deutschland
Thomson Reuters

Image: F. Rotberg / invidis

Western Europe

SMBs accounted for 75% of all projects, while retail was the dominant vertical in a market that continues to grow.

The digital signage installed base in the main Western European markets is very advanced. Western Europe, as defined by invidis, includes UK and Ireland, Belgium, Netherlands and Luxemburg (Benelux) and Germany, Austria and Switzerland (DACH). The UK and Germany remain the largest markets in Europe with a higher dynamic in the UK in 2014.

Most potential lies in digital transformation projects in retail and other vertical markets. Most shops, branches and all other brick and mortar outlets need to have, in one way or another, digital strategies integrated into them. 'Seamless user experience' remains the ultimate goal – even while most retailers are still struggling with more basic challenges such as integration of digital touch points in back office systems (ERP, CRM, ePOS).

The introduction of digital media asset management systems and full retail solutions are the most prominent systems currently driving integrated digital signage installations. Typical examples include digital menu boards in quick service restaurants or virtual shelf solutions in retail.

In addition, new display platforms like electronic shelf labels are becoming more relevant in today's retail concepts. Integration of mobile devices and low energy Bluetooth infrastructure (Apple iBeacon and Google Eddystone) is almost standard in flagship stores and show rooms across the region. We also see more customer journey concepts covering digital signage, in-store radio, scent, building automation and LED lighting.

Another noteworthy development is the strong increase in indoor LED video walls, especially in larger flagship stores and high end audience environments. High brightness solutions are also becoming more popular in shop front installations, as well as in sunlight-flooded shopping malls.

DACH: SMB and retail drive digital signage

According to the Digital Signage Business Climate Index (DBCI) in Germany / Austria / Switzerland, the small and medium business sector is responsible for most projects, while the retail vertical market generates one fourth of all revenues. Three quarters of all digital signage projects in 2014 were small and medium installations with up to 50 displays. Smaller projects have a higher margin and can be carried out successfully by most players in the market. Only

12 per cent of digital signage networks are larger than 100 displays. Falling hardware prices have created high demand for easy-to-use digital signage solutions in the SMB sector. Large projects generate high revenues, but discounts increase with the quantity of hardware used - and tear into the margin. Moreover, only a few market participants can sustainably carry out projects with over 100 displays. Retail is, with approximately one quarter of all digital signage revenues, the biggest vertical market. Customer engagement, marketing and ambient installations are becoming increasingly common, not only in most high street retailers, but also in small and medium businesses. Important trends are the full integration of signage by shop fitters and the high demand for shop window signage.

Benelux: a very positive situation

The digital signage market in Benelux can look back on a satisfying 2014. In spite of the volatile general economic and political situation, growth in the past year was stable with a very successful fourth quarter. In 2014, between 50 and 70 new jobs were created in the digital signage market in Benelux. In general, there is high demand for qualified personnel. A growth strategy and re-structuring means that demand for personnel on a management level with new qualifications is very high (e.g. key account and

project manager). Increasing expansion in vertical markets is leading to demand from digital signage companies for more professionals from different industry branches.

UK and Ireland: small rules

In the UK and Ireland, a recent survey conducted by AV Magazine indicated that retail is, as in the DACH region, the dominant market with 87% of respondents saying it is very important. Second in the ranking was a tie between internal communications and sports/leisure/entertainment. Growth appears to be coming from smaller networks - again, as in DACH - featuring fewer than 25 screens, which some believe comprise close to 70 percent of retail projects. There is, notes survey author Peter Lloyd, evidence of customers turning away from the AV channel and towards IT companies, and the AV channel is responding with innovative support and training programs

In 2015, retail (POS) will again give important impetus to the digital signage industry throughout Western Europe. "Smart" solutions and the keywords 'omni-channel' and 'mobile integration', 'interactivity' and 'outdoor/high brightness' will continue to stay in focus. Moreover, entry level products catering for the small and medium business market will have a strong impact on revenues.

Image: F. Rotberg / invidis

The Mediterranean: Demand on the rise

Markets are rebounding in the south, with retail, transportation, hospitality and DooH leading the growth charge in France.

In contrast to 2013/14, all Southern European markets from Portugal to Spain have more or less recovered from the economic downturn. Although growth is coming from a low base, demand is picking up in Spain, France and even in Italy.

The French market – the third largest in Europe - grew 9% in 2014 to 224m euros according to invidis research partner Digital Media Observatory (Observatoire du Digital Media, by Digital Media Village / SIDEV). As in most markets, technical digital signage as well as full service integrators remain at the very heart of the market and generated 17% of this value. Roughly a quarter of a million professional displays are currently installed in France, of which 50.000 displays are mainly used for digital out-of-home.

Digital Media Village has identified solid upside potential for vertical digital signage solutions in retail, corporate and public spaces. However: more and more e-commerce players have set their focus on the market, with digital signage features being added to existing retail platform solutions incorporating back office and communication functionality.

Corporate deployments growing

Corporate networks continue to grow with both internal and external communication. Many new corporate digital signage installations are already incorporated into architectural concepts at the design phase. Displays are an integral part of lobbies, showrooms and other public touchpoints on large corporate campuses. Most notably, the new corporate lobbies of SFR and Total show how signage and lighting can be a main architectural statement.

Digital signage in retail - the leading vertical market - is driven by installations in store fronts, flagship stores and innovative store concepts in general, which almost always comprise displays and interactive experiences. Digital menu boards and store directories in shopping centres are almost a 'must have' in new shop-fitting concepts in France. 2013 and 2014 were marked by the efforts of shopping centres to offer innovative and experiential concepts. Digital plays a central role in these strategies, which aim at positioning brick-and-mortar retail against fast growing e-commerce offerings. Note-
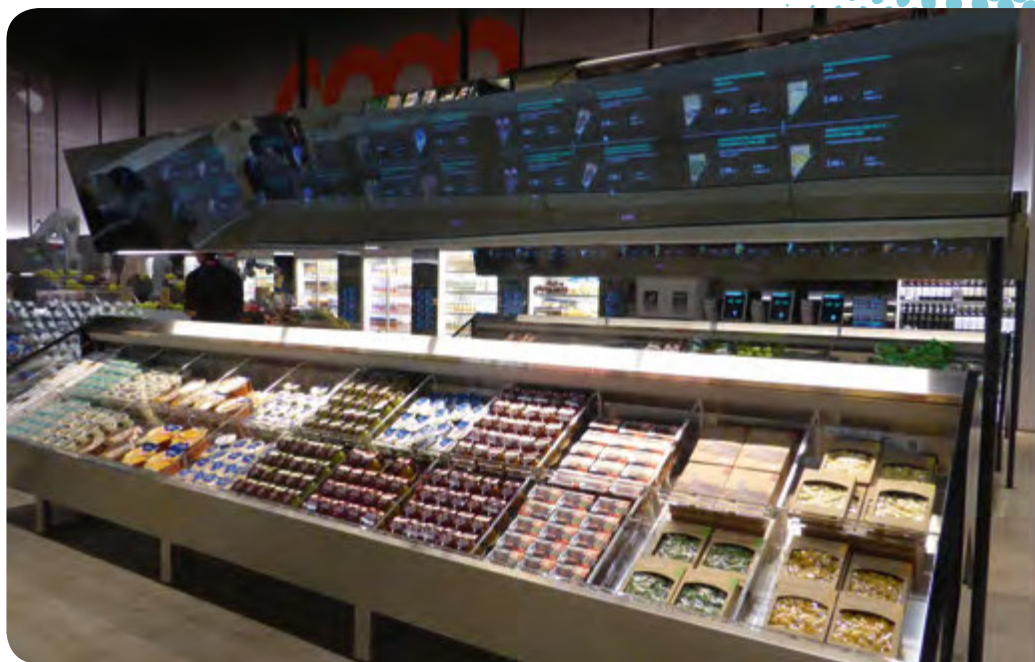
Image: F. Rotberg / invidis

Image: F. Rotberg / invidis

worthy projects have been 4 Temps with Digital Dream (Unibail), Qwartz (Altarea-Cogedim) or Terrasses du Port (Hammerson).

The transportation sector is also replacing static information with digital. Out-of-home led the way in transportation with the transformation to digital. Live traffic information, bus and train schedules as well as way-guiding installations are now replacing printed information offerings. Investments have been undertaken by infrastructure operators at railway stations, Connexions bus stops or Aéroports de Paris.

Hospitality leads the way

Gearing up to the Euro 2016 European Football Championship - being held in France – stadiums are also upgrading with LED screens and digital signage networks. Demand for these projects, though, is not nearly as high as the growth in hospitality projects. Digital welcome boards, event directories and digital concierge solutions are becoming more popular. They all need direct access to hotel management systems.

DooH has been a strong driver for many years in France. Since 2010, large OoH media owners have been playing a central role in the digitisation of the physical space. JCDecaux, Clear Channel and their peers are claiming massive success now.

Premium locations with very high frequency are the main playground of big OoH players, and well established. Main venues are airports (JCDecaux), shopping centres (Clear Channel, Instore Media, JCDecaux) and transport (MediaTransports) in French train stations and the Paris Metro.

Outdoor signage in public spaces seems to be the playing field. As of 2014, 550 advertising LED boards were in operation across France. For regulatory reasons (historic buildings etc.) only very few are within the big cities. The most notable recent initiative is the installation by JCDecaux of 55 screens in La Defense / Paris (the largest business area in Europe). The outlook for 2015 and the following year remains upbeat. Retail and corporate will be the main drivers for digital signage, and the biggest trend for DooH will be outdoor on large LED boards and bus shelters.

Italy has seen difficult times for digital signage as well as DooH. But, as the general economy is gaining traction again, demand for display-based retail and advertising projects is also rising once more. In general, major Mediterranean markets are all on the upswing again.

Image: F. Rotberg / invidis
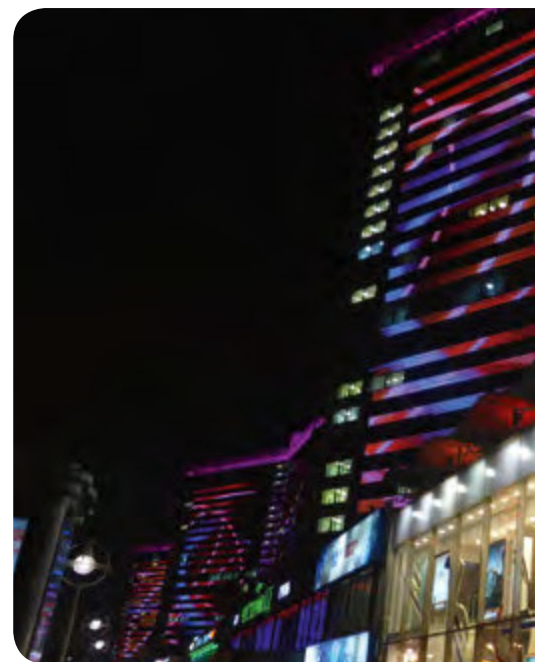
CEE & Russia: No longer the Wild West

Russia's emergence from crisis sees the digital signage market rebound and order restored as new projects come online.

Since summer 2014, Russia has been experiencing difficult times. Low oil prices and, especially, Western sanctions in relation to the Crimea conflict, brought the Russian Federation into its second economic crisis in the last 15 years. This serious downturn, together with the highly volatile ruble, has made a serious dent in demand for digital signage. Interest rates peaked around 18% at the height of the crisis, basically wiping out refinancing for retailers. But: a year later, the economic situation has improved again compared to December 2014. The exchange rate is back to a more moderate level, and interest rates have dropped to 12%. Compared to the euro zone, however, this is still enormously high. The digital signage industry in Russia has suffered on many fronts: demand for projects came to a halt, costs for components and software rose by double digit numbers due to the weak ruble, customers weren't able to finance projects due to lack of available bank loans – and, last but not least, the Ukraine market disappeared within weeks.

Improved outlook
But in summer 2015, the outlook improved again. Larger digital signage tenders are back in the market and Digital out-of-Home especially seems to have become an established part of out-of-home at the second attempt. Notably, Gallery Media and Russ Outdoor (JCDecaux) are investing heavily in LED media walls along Moscow's streets and in relevant cities across the country.

DooH hasn't been a success story in Russia prior to 2015, and display-based networks are still very rare. But LED boards are experiencing a second chance - and that in the midst of a serious economic crisis. Gallery Media, the number two company in the Russian out of home market, has installed 50 LED billboards within half a year. Some of them are double-sided, many feature a static face on the back. Digital out-of-Home has experienced a roller-coaster ride in the past 15 years; OoH was the Wild West after the end of the Soviet Union. New billboards, lighted signs and LED boards were set up without

Image: F. Rotberg / invidis

Image: F. Rotberg / invidis

regulatory permission on historic facades, along the river and simply everywhere with enough traffic. Moscow was plastered with billboards.

Dramatic change

This has changed dramatically in the past three years since a new major took over power. The cityscape has been cleaned; basically, all illegally-installed billboards have been removed. Today, Moscow has lost probably more than 2/3 of all the advertising faces in its public space.

The clean-up hit all players – large as well as small - as regulations for billboards are now interpreted much more strictly than at any time before. In hindsight, though, the shakeout was a breakthrough for DooH. Availability has been greatly reduced, digital faces offer day parting and enable media buyers to spend budgets very efficiently.

Besides Gallery Media, market leader Russ Outdoor is also upgrading its digital portfolio. The JCDecaux subsidiary has installed eight digital LED boards– named Supersigns – along Moscow's ring roads. The new digital faces have similar dimensions to US highway billboards. Russ Outdoor's Supersigns are taken from JC Decaux's global tool box, enabling the subsidiary to benefit from the global know-how of the group.

A main challenge remains, however, and is very similar to that faced in Europe: creative concepts are mainly driven by media owners and not by creative agencies. A lot of education is necessary to unlock the potential in Russia.

Demand dip

Growing demand for DooH can't obviously compensate for the dip in demand for regular digital signage projects. That's especially true in retail banking: the sector hardest hit by the economic crisis won't return to its former glory any time soon. It remains to be seen, therefore, how the market will develop in the upcoming year. A major risks lies in a further escalation of the Ukraine conflict.

Digital signage projects have, however, developed noticeably, catching up with European standards. Even though omni-channel hasn't taken off as in more mature markets, connectivity with mobile and more advanced content is also becoming the norm. The surrounding CIS states are very small markets compared to Russia and are not very relevant in regard to digital signage demand in general. That being said, single projects - especially in markets along the Silk Road - are noteworthy, like the more than 900 floor displays at a museum in Astana, capital of Kazakhstan.

There is, though, lots of digital signage demand beyond Russia and the CIS in the CEE region. Poland remains by far the most important market in Central and Eastern Europe. The large domestic market, well developed retail and shopping centre market and government-initiated infrastructure projects are driving demand for signage solutions. Hungary remains a challenge, whereas the Czech Republic and Slovakia are closely connected to Austria. Many Austrian retailers and retail banks are bringing digital signage to the region.

Image: F. Rotberg / invidis

Middle East: Eastern promise

The Middle East market is, unsurprisingly, dominated by the UAE and Dubai, and is unlike other markets in a number of important ways.

Demand for digital signage remains very strong in a very positive non-oil sector economic environment. Even though the overall economic situation in Saudi Arabia and the other GCC countries is suffering due to lower oil prices, the general outlook remains very positive. The service sector in all major markets (AE, KU, QR, SA) is growing faster than any European market. Drivers of investment are major events in the coming years like Expo 2020 in Dubai or the FIFA World Cup 2022 in Qatar. Investment in commercial real estate (office and retail) and transport infrastructure (airports, train, metro) will drive demand for digital signage at an even faster pace. Invidis believes in the upside potential of the region to develop over the next three years to a top five region in EMEA behind Germany, UK, France, and the Nordics.

As well as display vendors, more and more software suppliers are setting up offices in the GCC region. Scala is leading the category by opening a dedicated office in the UAE for the wider region. Other companies continue to rely on local distribution partners or focused eco system partners (systems integrators with a strong market footprint). Dubai and the UAE remains the most important entry door for the region: virtually all components for the GCC region are channelled through the UAE. Also, most agencies are located in Dubai, which is the reason for most players to locate regional resources in Media City and other free trade zones around the largest city of the UAE.

Focusing on "Wow!"
In general, digital signage projects are more focused on a unique "Wow!" effect - larger, brighter, flashy. Typically, scale and ROI issues are not as high on the agenda as in Europe. The reason for this is obviously the small regional markets, with the exception of Saudi Arabia. But even there, only the major metropolitan areas are the focus for most non-oil sector investments. Most projects rely on traditional server architecture; cloud solutions are still not very widespread. LED media walls as media façades are very common. Retail, banking and transport remain the main vertical markets for digital signage solutions, the most prominent being shopping malls and airports.

In the Middle East, digital signage at the point of in-

Image: F. Rotberg / invidis

formation (PoI) often complements staff and doesn't replace personal information as in the more mature markets in Europe. As labour costs are lower than in Europe, digital media doesn't offer a cheaper alternative. But the demand for multi-language information – especially Hindi and Chinese - is very high in the region. Digital signage and kiosk systems are a great addition to standardised information services, especially at airports, exhibition centres or in shopping malls.

A general driver for digital signage is the need for multi-lingual content. Information and advertising is often displayed in Arabic and English – and in tourist hot spots or exhibition areas, even in Chinese, Hindi and Russian. The main driver for digital marketing, though – including large format displays – is multi-screen communication. Even though seamless user experiences are still an exception, connecting mobile devices and fixed displays in public areas is driving digital in the region. The penetration rate of mobile is one of the highest in the world, e-couponing is widely accepted and the usage rate of social media is very high, with Facebook and Twitter the leading platforms across the Middle East.

Content a challenge

Content remains a challenging task in the region. Creative agencies in the region are getting more and more interested, but the general knowledge and interest is still comparatively low. Most digital signage and DooH screens just show advertising visuals derived from international campaigns or local

stills. Adaptation of internationally-led campaigns is important in conservative markets like Saudi Arabia. The use of template-based content beyond in-store (digital menu boards) is still quite low. Even local news, complementing advertising campaigns, is not very popular. Advertising and sales uplift at the point of sale are the main drivers. Shopping malls are usually happy with basic store directories: only a few exceptions, like Dubai Mall, feature smart and category-searchable digital signage listings.

Augmented reality (AR) or virtual reality (VR) campaigns gain a lot of media attention – but are still rare. What's really hindering more local content are the small markets: real estate campaigns are often limited to a metropolitan area. FMCG, regional media outlets (mostly TV) and travel are a few of the advertising categories which book campaigns in more than one country in the region.

Other markets beyond the GCC are also worth looking at, the most important being Egypt which is back on the digital signage map after years of political instability. Large infrastructure investments are currently being developed. Retail – especially shopping malls – is upgrading existing facilities or developing new sites. Due to the large domestic market, Egypt has the potential to develop again as a top market for digital signage in the coming years. Lebanon remains the only market of the other Middle East countries to stay on the radar, but demand is limited and often managed through the UAE. In regard to out-of-home, Beirut remains one of the main drivers in the region.

Image: DHL Innovation Center (Image: Grassfish / Deutsche Post DHL)

Software: All change in the Top 30

Scala outmanoeuvred by software heavyweight Grassfish, while Samsung makes a spectacular entrance into the market.

The race for top spot has been decided: Grassfish is now the market leader for digital signage software in Germany, Austria and Switzerland. The Austrians succeeded in selling more licences in the DACH region in the 2014 calendar year than Scala, its competitor from the Netherlands/U.S.

The reasons for this development can be attributed, among others, to Scala's sales and pricing policy, which is determined in the U.S. While direct and indirect business has always been traditionally operated in parallel there, this has not been the case to date in these parts. However, with Scala now applying the direct strategy throughout Europe, many partners have become unnerved and even angered. The upshot of this is that alternatives are being sought that can be offered in parallel. Competitors are, of course, delighted with this - including Grassfish.

Yet another plus point for Grassfish is that the software offered is an out-of-the-box solution that can be used in many projects without adaptation. For this reason, Grassfish licences are more attractive than those of Scala. The downside, however, is that customers have to make compromises in terms of user experience and functionality – which they do often enough so as to reduce project costs. This sales argument, which is well received by customers, is at the expense of their own added value for the resellers. This is because changes to the software can only be made by Grassfish itself: accordingly, the majority of added value ends up with the provider in Vienna.

Out-of-the-box versus open architecture

Second-placed Scala, on the other hand, offers its partners an open architecture, which allows extensive customising by the reseller. This is a distinct advantage for the partner because it means it can then generate the majority of the added value itself.

It remains to be seen which concept will prevail in the market in the medium-term. In order to satisfy all customers, Grassfish has to develop and maintain appropriate capacity for customising purposes. This is an entrepreneurial risk that lies fully with the provider and, if it does not succeed, there is a risk that dissatisfied customers will switch to the competition.

Rivalry between sales models

Scala management should consider in turn whether, and to what extent, the American philosophy of direct and indirect sales can be established successfully in Germany. If both companies cannot overcome their respective weaknesses, a third party could come away smiling in the end. This would be a provider that offers open, customisable software with sufficient development capacities that is distributed exclusively via qualified partners.

Important international players continue to try to gain a foothold in the DACH market. Examples here include Smartsign, Four Winds Interactive, Signage Live and others. It's not just Invidis that's seeing it: it is also being observed by the market players themselves.

"The sector will be characterised by essentially more and different providers from different areas in the next 24 months," says Klaus Hofmeier, Area Sales Manager DACH at Scala.

Samsung jumps to 12th place

Not far down the line, and the next revolution has occurred in the market: Samsung has made a spectacular entry into the Top 30. The manufacturer was able to jump to 12th position with MagicInfo.

With the advent of SoC-based hardware solutions, it became clear that Samsung could offer an interesting alternative. The software has reached a level in terms of user comfort and functionality that makes it suitable for digital signage applications, and the application area for MagicInfo has expanded considerably through the special video wall editions in particular.

The software works with Samsung displays, but is not limited to these. The manufacturer is distributing the solution actively in projects – and with demonstrable success; the first major projects with MagicInfo were implemented in 2014. The MagicInfo licence model is that the customer acquires a lifetime licence, and integration partners take on the task of hosting and software maintenance, and therefore participate in Samsung software sales.

Which market players use the solution? Pro AV and IT resellers in particular, as well as agencies, are using MagicInfo in projects. Specialised digital signage integrators will continue to use their traditional software to perform customisation. However, if customers only want standard functionality without software customising, established integrators

will also be able to offer MagicInfo in the future. This means that there is a new software provider who can influence the market enormously.

The market is adapting

Another means of winning market share is through the sale of OEM licences, either with full or restricted functionality. Grassfish has been successfully practising the latter for a number of years. For

TOP 30 DIGITAL SIGNAGE SOFTWARE VENDORS GERMANY, AUSTRIA, SWITZERLAND 2014 (BY LICENCES)

#	COMPANY	LICENCES*
1	Grassfish	20,000 - 29,999
2	Scala	20,000 - 29,999
3	mdt Medientechnik	20,000 - 29,999
4	Online Software	10,000 - 19,999
5	Pichler Medientechnik / easescreen	10,000 - 19,999
6	Net Display Systems	10,000 - 19,999
7	~sedna	10,000 - 19,999
8	screenFOODnet	10,000 - 19,999
9	BroadSign	10,000 - 19,999
10	heinekingmedia	10,000 - 19,999
11	komma,tec redaction	5,000 - 9,999
12	Samsung / MagicInfo	5,000 - 9,999
13	STiNO eyevis	5,000 - 9,999
14	netscreens digitale Schaufenster	5,000 - 9,999
15	Cittadino	5,000 - 9,999
16	Videro	5,000 - 9,999
17	dimedis	5,000 - 9,999
18	netvico	2,500 - 4,999
19	SalesTV	2,500 - 4,999
20	BrightSign	2,500 - 4,999
21	SpinetiX	2,500 - 4,999
22	Macnetix	2,500 - 4,999
23	friendlyway	2,500 - 4,999
24	Navori	1,000 - 2,499
25	Mood Media	1,000 - 2,499
26	Innoforum	1,000 - 2,499
27	Four Winds Interactive	1,000 - 2,499
28	engram	1,000 - 2,499
29	eyefactive	1,000 - 2,499
30	Smartsign	1,000-2,499

* Number of active software licences 31st December 2014
Note: All information comes from company reports or estimations by an advisory board.
Source: invidis consulting GmbH „invidis Digital Signage & DooH Yearbook 2015"

Image: F. Rotberg / invidis

example, the CMS licences are used in appliances such as ATMs, weighing machines and other equipment. Software providers, such as Stinova or Online Software AG, are following similar paths and doing so successfully.

Moreover, there is now a reasonable number of specific solutions for vertical markets, such as QSR, brokers and travel agencies. Some 20 percent of all licences are those for industry-specific solutions with optimised functionality for dedicated vertical markets. OEM licences have a market share of some five percent. Apart from specialisation, a stronger division of the market into low-cost and high-end solutions is evident.

On the low-cost side, solutions are available based on Android hardware - but also SoC solutions from the display providers. On the high-end side, tailored solutions are being offered that are created specifically in accordance with customer requirements. Apart from the actual customising, these require intensive groundwork with the customer. Consultancy by the integrator or an independent third party makes sense in this case.

Hosting is generally handled by the end customer itself. Costs play a major role here especially, for example, if the existing in-house IT infrastructure is already adequate. Security considerations also play a role, because IT security is coming under increasing scrutiny by German companies in recent years since the NSA scandal.

Software and agencies

Even if direct sales are prevalent, between 50 and 60 percent of developers also offer their software via distributors. The hope is to tap indirectly into new markets via AV and IT system houses. Software providers are increasingly also trying to win creative agencies as partners. This is a difficult endeavour, however, because they do not sell digital signage strategically; rather, they do so generally and/or opportunistically. Around 70 percent of software providers also use a vertical sales strategy working through service providers in special sectors. Sales were increasingly promoted in 2014 in the newer channels, such as agencies, in particular. Direct sales also continue to play a major role, however.

Operating systems and multichannels

From a technical perspective, the sector is not so experiment-friendly. Take operating systems for example: Windows is still the most commonly used with a share of 65 percent – even if Microsoft's share has declined slightly in recent years in favour of other platforms. Linux and Android are the next most popular with a share of 10 percent each, followed by Apple iOS at five percent. This distribution is, however, due also to customer demand.

Windows still offers the best ratio of advantages to disadvantages for most installations. The openness of the system, its usability and security are convincing factors. There are adequate numbers of other established operating systems for special installations where added security (Linux) or lower costs (Android) are determining factors. Apple, on the other hand, occupies a market niche. Security or individual user preferences are key factors here primarily.

While the talk everywhere is of big data, cross- or

multichannel and retail analytics, many software providers are still experiencing difficulties in this sector. The marketing strategies of software providers do not tire of explaining how important digital signage is in this context. Yet, in reality, what is generally lacking is the simple connection to third-party software that is used for these purposes. Digital signage software providers are continually trying to accommodate such functions in their own CMS instead of seeking partnerships. However, this approach will not work.

One only has to look at omnichannel projects, such as the temporary Metro shop, eBay and PayPal in Bremen or at roll-outs at Saturn and Media Markt. Channel-wide solutions are, meanwhile, also being installed in the DACH region. If providers are innovative in this respect, they can differentiate themselves further from the competition.

"2014 was characterised by the first real channel-wide implementations in retail. The merging of customer communication and distribution channels became a real business model," says Jürgen Berens, CEO of Online Software AG from Rautenfeld, with conviction.

Outlook for the software

The software licence business is continuing to develop positively. However, there are too many comparable software providers battling for too few large projects, thereby driving down the price level further. Companies specialised in the area of industry solutions have it easier. The target market is familiar and the required functions, as well as IT and software landscape, are uniquely defined. This constitutes ideal conditions for sales.

Nevertheless, universal software solutions will also be needed in the future. Price, usability, functionality, development capabilities, services and references will continue to be decisive. These are topics the established providers have to work on.

Image: Hirmer

Videowalls: No loners here!

Individual screens are a rarity today, especially in retail, with video walls now available as entry-level and high-end solutions.

Individual screens are a rarity today, especially in retail, with video walls now available as entry-level and high-end solutions.

Shops line the famous shopping street in Munich, the Kaufinger Straße - and more and more of them are using video walls. Apollo Optik, one of the major optician chains operating nationally, is among those who have opted for a video wall - even if it is the smallest configuration possible of 1 x 2.

A new easiness has arrived on the scene. Video walls can be found in the best city locations, in shopping centres, in company headquarters, at trade fairs, in museums and elsewhere. What has been the case for so long in large cities like Hamburg, Munich or Berlin is now also taking off in smaller cities. There are a number of reasons for this – notably, that the price of screens is falling in general. Anyone needing two, four or 16 displays will benefit from this, and implementations with 50-inch displays and larger are the result. In addition, because bezels have become nar-

rower in recent years, almost seamless video walls can be achieved with fewer screens while the size of the area for development remains constant.

No more witchcraft

The installation of a video wall in 2015 or 2016 is no longer solely the preserve of so-called experts. This is because providers are continuously simplifying the installation, operation, playing and optimisation of video walls. The devices offer more functions, which allow even less well versed integrators to install high-quality video walls for customers.

Increasingly specific solutions are also emerging on the part of the supplier industry, and this is happening at all levels. This is true of the software, for example, which allows content to be designed especially for video walls: software can be used very effectively today to indicate the exclusion of seams, for example. Numerous service-friendly systems are now available in the case of mounts, which ensure

HD content – and, of course, all in real time. Both the software market and the hardware industry offer high-quality, high-end solutions, including special H.265 decoders for hardware accelerated playback of native 4k content, multiscreen graphics cards and special controllers. If budget and demand allow for it, video walls can continue to be a playground for technology geeks and detail-loving customers and service providers.

The maximum can be delivered here in terms of look and feel and interactivity. Add-ons for bezels so as to also visually eliminate the final seams, or touch systems that allow metre-long video walls to be upgraded for interactivity mean that, essentially, anything is possible.

At the entrance and inside

Long-standing industry laws cannot be overturned. In the retail sector in particular, it is all about efficiency and space saving. Video walls are installed in entrance areas or deep inside the shop. At the entrance they are used as attention-grabbing media to increase shop footfall. While video walls in shop windows are not uncommon, variants with sunlight-compatible displays have very rarely been seen to date. This is set to change in the future, because prices for this device class are likewise falling. Bright screens are essential for ensuring that sunny positions are also suitable for digital signage.

When used inside, the aim is to draw customers further into the shop. There are two classic variants of this installation: on one hand, the prototypical installation at the "end" of the shop - in other words, on the wall opposite the front face. On the other hand, video walls are often used in POS zones. As these areas are being designed increasingly generously, the video walls installed here also tend to be wider. Take C&A, for example, in the Munich Riem Arcade, where 20 screens are installed at two cash desks in the more modern 3 x 4 matrix and 2 x 4 matrix - or at Hunkemöller, where the classic 2 x 3 variant was chosen for flagship stores such as the one in Düsseldorf. Video wall and POS: that works.

A new trend has emerged in the retail sector: initial projects are already under way where video walls are being used to digitise an entire product range, almost like a virtual shelf.

Content: what's in is in

Image films are typically displayed on video walls,

simple alignment and allow screens to be retracted by applying gentle pressure, meaning that video walls can be used at many locations.

In terms of hardware, it is not just in the area of displays that much has been accomplished. Media players with a range of high-quality outputs and special graphics cards for control are also no longer a rarity. Special, redundant media player implementations are available for using several screens in a video wall in the case of business-critical applications.

The playful or artificial has tended to lose its dominance. Video walls are less frequently constructed as pieces of artwork now than was the case a few years ago. Installations with displays in different sizes and different orientations have come from the world of fashion – at least in the retail sector. Such video walls are now more likely to be found in the corporate environment.

High end over several levels

Daisy-chaining is not always the answer: there is still a need for high-quality solutions in vertical markets, such as in the area of fashion. Take Munich's prominent men's outfitter Hirmer, for example, which installed a video wall with 45 screens in its original store, extending over the five floors of the central stairwell. Flight Information Display Systems (FIDS) are also installed in large configurations at German airports, such as in Munich. The largest FIDS wall in Europe to date can be found here and operates round the clock. Each individual screen features full

while current promotions are not found as frequently. The reason for this is that video walls are relatively expensive and viewing time is short. Because production of high-quality content for large-format applications costs a lot of money, customers tend to use existing full HD content – as provided, for example, by brands in the area of fashion retail. Accordingly, the content changes less often than on individual displays.

Interactivity continues to be a niche topic. Interaction is technically more complex than with individual displays; moreover, acceptance among customers is not as high owing to the lack of privacy.

Investment in quality is greater on the customer side in the case of video walls. Besides narrower seams, this primarily involves precise calibration of the displays – as is increasingly evident – for ensuring optimal image quality. This is labour-intensive, but is used more and more frequently to safeguard investment. With the increased proliferation of ultra HD displays, calibration in general is gaining in awareness and importance, which will further fuel the trend towards a precise image with video walls. This applies for all vertical markets - and more than ever for the retail sector and in the corporate domain. This is especially the case for the visibility of large companies. They still want to impress their customers at the entrance with large and impressive content. Apart from sheer size, a CI-compliant appearance on each individual screen of a video wall is also an essential element here.

"You are not alone"

It has very quickly become evident that video walls made from LC displays are no longer alone. The growing LED signage area is ensuring that its "baby sister", the LED, is being encountered increasingly often in retail applications.

With the fall in prices for LED modules and the desire to communicate effectively to the outside world, they are being used increasingly often for large-scale displays - although a compromise is made here between pixel pitch and price, which impacts the optimal viewing distance. LEDs are being used progressively more often for installations in shopping zones, but also as an ambient image area in shops. Young fashion brands are an example of the latter in recent years: Karstadt Sports has been using LED signage in its shop windows since the beginning of 2015.

Image: Rendering / Interbrand

Tenders: Prepare – then tender

A successful project needs the structured recording and assessment of customer needs – including individual requirements.

Planning a digital signage project poses a major challenge for many managers. Even though digital (production) elements are viewed presently as an important aspect of communication, customers have little experience that can be drawn on during planning. It is therefore advisable to create a digital signage project in a structured way and to call on professional assistance so as to save time and potential problems in advance.

A digital signage system consists of a technical and a purely content-related component. Both parts overlap considerably, which impacts all project participants and the concept. This has to be considered in the run up to a tender.

Project sovereignty

A digital signage project often starts out in the IT department because the basis for it is an IP-based network of media players and playout devices, which is monitored and controlled centrally by a CMS. The communication strategy has to be defined first of all in order to identify precisely how the overall system is to be constructed and operated. Accordingly, it is important that concept sovereignty is located in the department that is responsible for the content-based operation of the digital signage system over the term of the project.

Depending on where and for what purpose the digital signage system is to be used, this is generally a

department such as marketing, sales, facilities management or corporate communications. The IT department, which is responsible for operation from a technical perspective, should be involved early on – but in such a way that the creative phases are not restricted, but rather are implemented in the form of a continual feasibility review in the framework of the company's prescribed IT guidelines.

The basic concept

Too many cooks spoil the broth. This saying does not apply for digital signage projects. Because very different objectives are bundled in a communications concept, the specialist knowledge of the various corporate departments must be available. Yet: simple brainstorming is not enough, as there is too great a risk here that the concept will be weighed down and therefore the technical feasibility endangered, or that costs will go out of control.

An approach that has been proven in the past is to record and reconcile the wishes and expectations of the individual departments in workshops. The wishes and expectations can then be assessed and prioritised as well as summarised. This basic concept is the nucleus of the digital signage project: it contains all essential communication objectives, as well as a definition of the responsibilities and technical guidelines.

It is recommended to involve experts as early as the creation stage. The experts moderate the concept design and, owing to their extensive market know-how, can incorporate and assess current digital signage trends in the form of best practice applications as well as the resulting technical challenges.

Based on the approved basic concept, the technical requirements are now detailed and recorded in a function specification. This describes all the application scenarios involved in operating the digital

signage solution, and contains a detailed description of the digital touchpoints to be installed along the customer journey. The function specification is approved by all specialist departments involved, ensuring that there is a common understanding in relation to the project implementation.

The tender

The tender represents a consolidation of the results of the basic concept and function specification, with the goal of outlining as detailed a picture as possible for potential providers, which covers all aspects of the project. In detail, this involves:

- Prepare – then tender
- A successful project needs the structured recording and assessment of customer needs – including individual requirements.
- Communication objectives and derived key performance indicators (KPIs)
- Measurement and analysis of KPIs
- Target groups and customer journey
- Type and functionality of all touchpoints
- Functional requirements with respect to the central Content Management System
- Content creation/provision
- Processes and releases
- User roles and rights
- Program planning and presentation as well as automation
- Software usability as well as UX (user experience) design
- Software integration into existing systems
- Hardware and software requirements
- Network infrastructure
- Security and scalability
- Operating concept
- Rollout and installation
- Service and support
- Documentation and training

This information is summarised thematically in a structured way and prepared in the actual tender documentation for the potential providers. If necessary, the individual components are split into lots. The awarding of a contract by lots means that the services are split by quantity (partial lots) or type and specialist area (specialist lots).

The shortlist

Experts should draw up a shortlist of providers in order to keep costs within the established parameters for the customer. This selection is generally based on the references that the providers have in the market, as well as on the size of the digital signage project. It has proven useful here to search for a combination of prime contractor and specialised digital signage provider. The prime contractor acts as the first point of contact for the customer and ensures smooth operation over the term of the project. The digital signage provider – usually a smaller, agile company – takes on the role of the expert and chooses the appropriate hardware and software. This ensures that the customer gets an overall solution that covers all requirements.

The selection process

Together with the tender documentation, the providers on the shortlist receive an invitation to present their solution. In order to allow them to prepare for the appointment, it makes sense to provide them with materials for creating content. Four hours should be planned in for a presentation, which should be split such that only the departments of relevance on the part of the customer in the particular instance have to be present.

The provider is assessed according to different weighting criteria following the presentation. The assessments are summarised in a matrix so that a statement can be made on the quality of the solutions presented. There are generally three providers remaining after the assessment, with equivalent solution proposals. Purchasing can now enter negotiations with these providers.

The basic prerequisite

The basic prerequisite for a successful digital signage project is the structured recording and assessment of customer requirements. Individual requirements have to be taken into account here. Such requirements include in particular specifications of IT processes for operation and budget limits.

Customers generally look for standard software. However, individual requirements usually demand basic adjustments. In order to fulfil everyone's expectations and arrive at an optimal solution for the customer and provider, extensive knowledge in the area of digital signage is essential.

It is therefore advisable to buy in external consultancy in order to optimise the process in the run-up to the tender.

Media Players: High expectations

Whatever you want in size, price class, design: media players can be external devices, built into monitors, sticks or VESA-mounted.

Expectations surrounding media players are high. They have to be able to reproduce all the content that creative minds come up with in the course of a digital signage project, whether on an individual screen or, best of all, several at the same time. They should never break down; they should cope with sudden blackouts; they should perform unquestioningly in dusty, hot or cold environments; they should include top-class remote maintenance functions; and they should be small and compact. And, at the same time, they should offer high availability and an attractive price tag.

In an ideal scenario, the media player is an all-in-one device suitable for every purpose. But what is the reality?

High quality and availability

Professional media players are characterised by long product life cycles and platform stability, high-quality components and a universal service concept. By using high-quality components, which are often available over many years, providers can offer warranty extensions of up to five years, even if the player is in operation 24/7. Identical or equivalent components are generally available for replacement purposes over the lifetime of the project. It is important in this context that the components are compatible with the operating system and the software components and the design do not change. This is because media players are often built into furniture, where there is only limited space and leeway.

Image: F. Rotberg / invidis

Guaranteed variety of functions

Because digital signage projects differ greatly with respect to their technical requirements, manufacturers offer complete customisation of the equipment in addition to the standard configurations.

The provision of two independent full HD outputs is now established as the standard. Anyone needing more will find media players with up 24 independent full HD outputs. In terms of connection options, there is everything the heart desires - LAN and WLAN, legacy port support, manifold mounting options that extend right through to DIN rails and so on.

Media players can also be configured entirely without fans and moving parts, substantially increasing reliability.

Remote maintenance functions are especially important for administrators. The devices therefore inherently offer a watchdog function and wake-on-LAN, as well as administration and remote systems. For example, Intel vPro technology offers comprehensive management functions for PCs, such as full

hardware inventorying. as well as the option to analyse and control PCs even if the operating system has crashed.

Individual products and services

Individualisation of media players is mostly determined by project requirements. Some manufacturers offer such a service with a minimum quantity of one piece in a built-to-order (BTO) approach. The players are then constructed individually for customers. Furthermore, there are fewer unwieldy customising options: for example, players with the customer's own logo and packaging; configuration with a master image produced by the customer; as well as services, such as warehousing, which allows customers to request a system within 24 hours, including dispatch to an agreed delivery location.

For those with more demanding requirements, some providers help by offering completely new developments, including the necessary certifications – but only in the case of large volumes.

Outlook

The more customers engage with the topic of digital signage, the more complex the projects - and therefore the demands placed on media players.

Providers are seeing a trend away from the all-rounder product towards different product categories. These range from simple, cost-effective players, such as Android products for single-screen solutions, to very elaborate high-performance players for video wall installations and interactive solutions. The more intensive use of ultra HD displays - and therefore the ability to reproduce 4k content - represents the current hurdle that high-end players have to clear. Connection via LTE and UMTS is easier, and these technologies are increasingly in demand. Developments by chip manufacturers, most notably Intel, ensure that the players consume progressively less power, and therefore require less cooling. This leads to very small, compact designs and consequently to passively cooled micro-PCs.

The question as to which particular media player is right for a customer cannot be answered in a generalised way. It is always a combination of technical requirements, service – and, inevitably, price. The providers are very well positioned and can satisfy all customer preferences. Customers must simply know what they ultimately want.

The Digital Signage Summit Series

The Digital Signage Series of conferences are a trio of regional events held in Europe, Russia and the Middle East which explore the business, technology and strategy of the Digital Signage and DooH (Digital out of Home) marketplace.

The Digital Signage Summit Series is co-produced by invidis consulting and Integrated Systems Events. invidis consulting is a research and communications business specialising in digital signage and Digital-out of-Home (DooH). It launched the Digital Signage Conference in 2007 in Munich. The first event attracted 50 people. The 2015 edition will have over 400 delegates in attendance. Integrated Systems Events is the producer of the Integrated Systems Europe trade exhibition. Launched in 2004, ISE is Europe's largest tradeshow for the professional AV and electronic systems industry.

In early 2015 the two organisations signed a joint venture partnership with the specific objective of developing the Digital Summit brand across the globe. This has move has seen a renaming of the signature Munich event in September 2015 (from DSS Munich to DSS Europe); consolidation of the established Russian Summit in October and the launch of a Middle Eastern Summit in Dubai in November.

According to invidis consulting MD, Florian Rotberg the link-up with ISE in February 2015 has created momentum for the Digital Signage Summit brand: "Involvement with ISE allows us to take it to the next level," he said. "We expect more international visitors at the Russia event, and we are launching the MENA Summit later this year. We are able to leverage the events expertise of ISE and our content. This makes it an ideal partnership."

The events are designed to encompass a comprehensive mix of business conference; hands-on workshops; exclusive presentations; comprehensive networking opportunities and a vendor and service supplier exhibition area.

The Digital Signage Series of conferences are curated and chaired by Rotberg, a recognised expert on the international Digital Signage and DooH business.

For each summit the content focus is designed to reveal a roadmap showing the rapidly changing international Digital Signage and DooH industry and what this might mean for your business. For example, new technology is being introduced to systems integrators which and resulting in the lowering of capital expenditure and the optimisation of operational expenditure. In addition digital media, well established at the Point of Sale, is quickly evolving due to the implementation of Omni-Channel concepts.

In terms of attendee, the Digital Signage Summit Series is targeted to appeal to the full Digital Signage value chain of professionals with the objective of bringing together them all together under one roof. These include: - vendors; integrators; end-users; network providers; software suppliers; agencies and content providers.

A significant factor in the attractiveness of the well-established Digital Signage Summit Europe event is that attendees can learn about the latest business trends and technical advances in Digital Signage and DooH. In addition, they can be also take part in the debate around formulating industry-wide strategy through participation in workshops and making use of the unique networking opportunities that the event provides.

The dates of the Summits are as follows:

OVAB Digital Signage Summit Europe
Hilton Hotel, Munich; 10-11 September 2015
http://digitalsignagesummit.org/europe/

Digital Signage Summit Russia
Expocentre, Moscow; 28-29 October 2015
http://digitalsignagesummit.org/russia/

Digital Signage Summit MENA
Conrad Hotel, Dubai; 16 November 2015
http://digitalsignagesummit.org/mena/

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Successful coupling

Digital-out-of-Home is growing increasingly in popularity as an ideal complement to other media - but many challenges remain.

Digital outdoor advertising is still on the rise, having recorded a growth in sales in 2014 in the German-speaking market of some 30 percent. Between 250 and 300 new positions were created; agencies recorded significantly more customer requests; and practically all the market players succeeded in increasing their revenues. DooH is the most important growth driver in outdoor advertising and modernises the somewhat outmoded image. Nevertheless, digital outdoor advertising has not developed into what many had expected –namely, a separate media genre. The past year in particular has shown that DooH has positioned itself as a link between classic outdoor advertising, advertising at the point of sale, TV and online. It connects these media together naturally and fluently. Florian Rotberg from Invidis Consulting terms this "the new normal".

Despite this, DooH has to define itself so that it can be understood and marketed strategically. It has often happened in the past that all screens in the outdoor area, in shops or publicly accessible rooms, were all thrown into one pot - but DooH only includes permanently installed screens that can be viewed by several people at the same time. While tablet-based networks, for example, are an interesting approach, not so digital outdoor advertising in reality.

Quality not quantity

All the agencies surveyed for the yearbook include DooH as a fixed element in their media planning. Of all the market players surveyed, 80 percent indicated that they had more repeat customers than one-time customers. In comparison, this figure was just 65 percent in 2013. What is particularly satisfying is that budgets provided exclusively for DooH increased significantly.

The large network providers discovered and clearly defined their own strategies in the past year. While Ströer is focusing on connecting DooH or public video and online video, JCDecaux is promoting digitisation of outdoor advertising. Both market leaders are faced with serious competition from networks that have been bundled by marketers. The best example of this is Goldbach Media, which is now active in the entire German-speaking market with a new subsidiary in Munich.

80 percent of networks were expanded in the past year, but only in terms of the locations. The number of screens was reduced slightly, in comparison. Class not mass prevails. "The roll out wave has not come to a halt; rather, practically all top frequency locations have simply already been acquired indoors," explains Thorsten Ebbing, CEO of Kinetic Worldwide Germany. "The trend is therefore towards expanding digital roadside spaces."

Large new networks are not really expected, though. Market players are certain that the expansion of existing networks and the connecting of DooH and online will provide for further growth in the coming three years.

DooH has to be competitive in order to prevail in the media mix against other moving-image media. The relatively low thousand-contact price (TCP) of one to five euros certainly helps.

Creative catch-up

Despite all of the positive developments, many challenges still remain. The relevance of the medium may have increased, but not yet adequately. Further awareness has to be raised here with agencies and advertisers. The lack of standards - or rather, the lack of acceptance by all market players in relation to determining coverage - is still a major failing. Reporting is likewise a point of criticism, with dissatisfaction expressed by all agencies without exception.

The creative implementation of campaigns also needs

DIGITAL OUT OF HOME GERMANY, AUSTRIA, SWITZERLAND 2014/15

Digital outdoor advertising is on the rise, with a recorded growth in sales in 2014 in the German-speaking market of some 30 percent.

MARKETED NETWORKS

32

MARKETED DISPLAYS

13,200

MARKETED LOCATIONS

3,200

PERCENTAGE DOOH IN RELATION TO OOH 2014

12 %

GROSS ADVERTISING REVENUES DOOH 2014

€26 million

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to be optimised. Many opportunities offered by digital outdoor advertising remain untapped because of lack of knowledge or awareness on the part of the creative sector. "We are still undergoing a learning process," states Andreas Prasse, Board Member for Sales & Marketing at Wall AG. "This is why we started our creative agency offensive in May 2014. We support training for talented individuals and offer lectures and workshops among other measures."

Mobile is now indispensable

Interaction is a good example of unused potential. Only 25 percent of all interactive campaign inquiries were implemented, with demand low in any case - and this, even though more opportunities are opening up. "DooH networks essentially already offer interactive potential, for example via QR, Bluetooth, beacons or NFC," says Carsten Ehling, Managing Director of It Works. "The future combines technologies, content and services and thereby creates relevant added value for the target groups."

Touchscreens – long the means of interaction – are becoming increasingly fewer. This is because screen dimensions are growing in digital outdoor advertising, and advertisers want to reach and be seen by their entire target group at 84 inches – and not interact with individuals: this can be done today using the mobile phone. The aim is to address customers personally, any time and anywhere. "The popularity of touch will soon reach the maximum value of 100 percent – as everyone will soon be using a smartphone with a touchscreen. The major challenge will be to ensure these different screens interact better with each other," believes Nicolas Adolph, Head of Digital Competence at APG. "Whether this will be achieved with iBeacon or some other technology remains to be seen."

Despite all of the challenges, the outlook for the future is more than positive. The market players expect that DooH share of the outdoor advertising market will increase significantly once again. The expectation is for a doubling by 2018 from around ten percent at present.
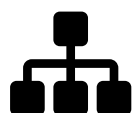
Image: Ströer

Infotainment – or really just advertising?

Digital-out-of-Home has many guises and market leaders are following different strategies.

Without question, the outdoor advertising market is becoming increasingly digital. The digital share grew by around two percent to ten percent in Germany in the past year. However, network operators are following completely different paths: this is particularly evident with the two German top dogs, Ströer and Wall.

The Berlin-based JCDecaux subsidiary has been aggressively pursuing its digitisation strategy for the past year, and in this context has also established its new "Digital Underground Berlin" (DUB) network. This network is based on digital City Light Posters (dCLPs), which were installed at key traffic junctions of the Berlin underground, the U-Bahn, and clearly illustrates the different approach Wall is taking in relation to the topic of DooH: the company is focusing on digital posters with pure advertising content. "Wall-Decaux is one hundred percent focused on the advertising message – staged in as eye-catching a form as possible," says Andreas Prasse, Board Member for Sales & Marketing. Hardly surprising, then, that

the outdoor advertiser has mainly occupied those spots in the outdoor area that are dominated by passers-by. Content generally makes no sense here. JCDecaux's sister companies - Gewista in Austria and APG in Switzerland - are following the same path as Wall in Germany.

The cityscape is going digital

Cityscapes are set to change in the coming years as a result of the digitisation of outdoor advertising media. This is because every time a city marketing contract is renewed, the outdoor advertisers specify and promote digitisation. The latest example is the equipping of all bus shelters along the pedestrian Mariahilfer-Straße in Vienna with dCLPs by the JCDecaux subsidiary Gewista.

"The planned digitisation of CLP networks in major cities by marketers this year is a very important and necessary step in the right direction from our perspective," believes Thorsten Ebbing, CEO of Kinetic Worldwide Germany.

Image: Gewista

Yet despite all the digitisation efforts, Wall is still focusing heavily on long-proven outdoor media. "However, the basis for successful and high-coverage Out-of-Home campaigns will continue to be classic City Light media," explains Prasse.

Market leader Ströer is proposing a different direction. The Cologne-based company is likewise expanding its digital portfolio significantly - but is focusing on moving-image content and program loops. Information and entertainment are also shown, rather than pure advertising - and, what's more, customer advertising and content can be linked, thus leading to completely new advertising forms and messages. "The share of spots will tend to increase in general. Virtually static posters with animated wipes will disappear," believes Kai-Marcus Thäsler, Managing Director at Posterscope Germany. "Content curating will also reach DooH, with the result that hybrid forms will emerge continually in which the content will be part of the advertising communication."

Fluidly from medium to medium

As with Wall, content at Ströer will be conditioned by the positioning of digital media. This is because the Cologne-based outdoor advertiser primarily addresses its audience in waiting situations through its presence at railway stations. The longer retention time, and therefore attention span, requires absolutely diverse content.

And this is not the only major difference. Ströer is now no longer talking about DooH, but rather about public video, because the Cologne advertiser is increasingly bundling marketing for online and digital outdoor advertising. Moving-image content from the web world will be extended to the public domain and also mobile devices. "Publishers expect targeted, individual marketing concepts: mobile advertising, online moving image and public video bundled," explains Alexander Fürthner, Managing Director at Infoscreen. "It is becoming increasingly important for campaigns to be aligned with individual communication measures along the customer journey."

Only limited flexibility

While WallDecaux is therefore focusing on digital expansion and modernisation of the existing outdoor advertising world, but at the same time remains committed to the classic poster, Ströer is looking to moving content – and primarily a mix of public and individual communication.

This is also evident in time slot-based marketing. While Ströer is looking at other moving-image media here, and allowing different bookings depending on the time of day, this is only possible to a limited extent with Wall. Classic outdoor advertising still remains the guiding factor here. While customers can adapt their motifs to the time slots, they still, despite everything, have to book a specific period - for example, a week. But again, it is anticipated that things will change here with the advance of digitisation and the newly emerging booking platforms.

Image: Gewista

Customer-friendly synergies

A lot is happening in marketing. Not only are networks being bundled, but also different channels – and successfully, too.

For a long time, the key message was to establish and also market Digital-out-of-Home as a completely independent medium. This view is increasingly changing as DooH is subsumed into other digital media in terms of its content design, campaigns, and also marketing, and develops interfaces accordingly. DooH complements, links and extends other media. Advertisers are now becoming significantly more open to digital outdoor advertising. DooH is appearing with increasing frequency in the media mix; dedicated budgets are being allocated and most have an understanding of the possibilities offered by digital outdoor advertising. Primarily, however, customers want to address their target group precisely and if possible across a variety of screens.

"Nothing has changed as regards the strengths of a tailored media mix. However, DooH ideally complements screen strategies – TV, web, mobile – and is also being planned in accordingly on a more frequent basis," explains Nicolas Adolph, Head of the Digital Competence Centre at APG.

Book where it makes most sense
The desire for regionally delimited campaigns is also constantly increasing. This is because they reach the precise target group and therefore attract the most attention. "Some of our customers like to use the option of adapting their campaign strategically to one location by means of ambient DooH networks, such as King Channel, POS or Campus TV," says Thorsten Ebbing, CEO of Kinetic Worldwide Germany.

Network providers are, meanwhile, enabling regional advertising through to the booking of individual touchpoints. It is therefore no longer necessary to use an entire network; rather, advertising customers can place their campaigns where they have the maximum effect. "Different spots can be broadcast by default depending on the weather or time of day

or regional circumstances," explains Alexander Fürthner, Managing Director at Infoscreen GmbH. "This will be well received and used by our customers."

The best examples of this are video walls from Ströer at the central train station in Hamburg, which were initially part of the station network as lighthouse installations. Now, they can also be booked separately. DooH is therefore pursuing a booking logic as was already typical in classic outdoor advertising. Whether individual surfaces or regionally localised bookings, everything is possible and the marketers are flexible. "We have been familiar with geographical implementation with ooH for many years," says Adolph of APG knowingly, "and it will also be used even more actively with digital campaigns, thanks to the flexible range of applications, so that implementation can be planned as harmoniously as possible in line with the objectives."

Many networks, many formats

A clearly discernible momentum has also prevailed elsewhere in the area of marketing over the past year. Catchphrases like programmatic buying and real-time bidding are kicking up lots of dust, but also offer opportunities. Market leaders Ströer and Wall in Germany have been faced for the first time with

a powerful competitor in the form of the marketer Goldbach Media.

Goldbach, which has primarily been active to date as a marketer in Switzerland and Austria, has also been active in the German market since the start of 2015. Just as with APG and Gewista, it is Goldbach's declared goal to tackle the market leaders in Germany. The approach being followed by Goldbach Germany is a good one: it is bundling a wide variety of networks, and in this way can offer customers appropriate coverage and options. Also on board in Munich is the industry expert Winnie Karst as DooH Managing Director at Goldbach Germany.

The bundling idea is not new, but Goldbach Media is an old hand in the DooH sector and a corresponding force in the market. There should, therefore, be some movement in the market thanks to the increased levels of activity. Goldbach, however, has just one problem: the technical requirements of the bundled networks are so diverse that the seemingly simple booking process frequently turns out to be very complicated in reality. For example, a spot has to be supplied in the most varied of formats. All marketers who bundle networks have to find a solution to this as soon as possible in order to spare the nerves and resources of their customers and to remain attractive.

Image: Ströer

It is noticeable, from looking more closely at the individual marketers, that many are offering the same networks - although four out of every five marketers surveyed for the present yearbook indicated that they offer half of their networks exclusively. On the other side of the coin, however, only 30 percent of all networks surveyed are connected to one marketing platform. This will almost certainly change soon, since coverage and contacts are essential aspects of success. And: the bundling of smaller networks is certainly a viable option in this respect, which a strong player like Goldbach will again press ahead with vigorously.

Moving-image media are merging

What is primarily interesting is that Goldbach Germany is pursuing a similar multiscreen strategy to the German market leader Ströer. While Wall is focusing mostly on digital posters and solely pushing the integration of mobile media, Ströer and Goldbach are following a different approach. They are combining all moving-image media – through to the TV, in the case of Goldbach Germany.

"This is giving rise to intelligent customer journey packages, which in combination with the digital outdoor advertising screens are achieving a lower TCP, though net coverage - especially in the mobile, mod-

ern target group - is increasing," says Horst Brunner, Unit Director Digital-out-of-Home at Goldbach Media, Austria. "Campaigns can therefore be booked especially easily and conveniently by the agencies, and the underlying concept is clearly discernible for advertising customers: I reach my target group at the right time and at the right touchpoint." All that is missing are intelligent products and studies for logically accompanying target groups over the course of the day with multiscreen products. "From my point of view, therefore, the focus is not on developing new networks, but rather positioning intelligent products in an attractive way for the agencies and end customers in order to achieve the best results."

Ströer has started in the past year to create a separate booking platform in order to resolve this problem, which promises to be flexible and customer-friendly. "Competitive pressure between the different media can be re-weighted as needed if daily reporting shows that more or less advertising pressure is needed on the digital monitors," says Fürthner. "Ad server control allows us to also optimise a moving-image campaign automatically in such a way that the spot is broadcast more frequently on the public screens in a region with a lower click count."

Ströer has been developing and expanding its display-based, moving-image network in Germany

Image: Ströer

since 2010. In addition, the Cologne-based company has entered the online marketing sector and has been bundling these business areas in marketing for the past year. The logic behind this is that online video campaigns can extend the public domain flexibly and, above all, simply. Ströer has therefore not been talking about Digital-out-of-Home for some time, but rather about public video. Even mobile terminals are included in the strategy. What is new is that advertising and content can be linked, thereby allowing the advertising messages to reach the public more effectively.

"We are experiencing a large demand for moving image. Multiscreen combinations, in particular, are heating up the business. A dovetailed campaign across several media and advertising channels not only increases the attractiveness, but also the efficiency of a campaign," says Infoscreen boss Fürthner. "We attribute a leading role to the topic of video – therefore also public video – in the future also in our portfolio."

DooH is enticing car manufacturers and TV broadcasters

Advertising spots for moving image are especially limited online. Customers want more presence and coverage for whichever extension into the public

domain is optimally suited. Ströer has therefore succeeded in convincing many customers to run media and screen-spanning campaigns.

Take eBay, for example. "The ad server was connected to eBay's merchandise management system for this purpose. In line with the product categories in the frame spots, the products were filtered dynamically from a feed on the part of eBay, made available on the basis of product availability and competitive pricing and loaded by means of the ad server into the advertising media," explains Fürthner. "The traffic on the product pages has significantly increased as a result."

The success of the multiscreen approach is also reflected in the distribution of advertising sectors. Moving-image enthusiasts in the automotive and entertainment and leisure sectors booked significantly more digital outdoor advertising time, with automotive practically doubling the number of bookings. Entertainment and leisure, which includes TV channels, for example, appeared for the first time in the top ten in 2014. This is without doubt because of the success of the entire DooH market, but is also due to a large extent to the massive moving-image initiative by Ströer. With Goldbach Germany as an additional driving force in this sector, there are almost certain to be more shake-ups again in the coming year.

Image: F. Rotberg / invidis

Automatic = good?

Programmatic buying has many advantages, but scepticism engendered by lack of transparency and comparability is high.

While Digital-out-of-Home is increasingly in demand as an advertising medium, the booking aspect still often represents a challenge for agencies and customers. Programmatic buying is adding momentum to the marketing of digital advertising.

This involves a means of marketing and booking advertising space that is popular in the online sector, and especially in North America. The space is purchased automatically via a booking platform (see boxes). The concept of real-time bidding, or the auctioning of advertising slots - which is often referred to in this context - is an aspect of programmatic buying.

One major advantage is obvious: automatic booking allows customers to address their desired target groups precisely, avoid scattering losses and therefore increase the efficiency of their campaigns. "In the online area with one-to-one communication, programmatic buying means that contacts are handled in real time. There are only a few milliseconds from the time a page is viewed to when the advertising content is delivered," says Alexander Fürthner, Managing Director of Infoscreen. "This is not possible in this form in the outdoor area with one-to-many communication."

Scepticism is still high

A lot of changes are therefore needed for programmatic buying in the Digital-out-of-Home area. Reporting and proof-of-play have to be improved, for example, and have to work satisfactorily for everyone concerned. "Programmatic buying is closely linked with real-time data based on movement patterns of target groups," says Kai-Marcus Thäsler, Managing Director of Posterscope in Germany. "This inevitably also involves location-based targeting, which requires much greater flexibility than currently exists on the part of the provider, however, for controlling the individual screens."

Programmatic buying could also well work, though, in modified form for DooH. Some existing booking platforms and systems already offer it as part of their solutions – and it works. Whether Ayuda or Broadsign/Vistar, programmatic buying is gaining ground and is now accepted in North America.

There is still scepticism in the German-speaking market, however, if not concern about the margins. The large outdoor advertisers in particular prefer to stick to the familiar. "The starting point for our strategy in the case of digital advertising also is a consistent Out-of-Home logic," says Andreas Prasse, Board Member for Sales & Marketing at Wall AG. "The booking processes and contact partners have only changed to a minor extent in this respect."

Utilisation could increase

If advertising space is to be booked automatically, all data has to be available transparently and in an absolutely comparable form. Standards have already been defined, but many networks are still shying away from comparability and disclosure of their data and standardised formats. "Most providers allow time slots to be booked, in the same way as automatic central purchasing. What is lacking, however, with these aspects is the automated multi-screen delivery of standardised advertising media. This is only possible with standardisation, a central database and use of ad server tools," explains Horst Brunner, Unit Director, Digital-out-of-Home at Goldbach Media, Austria. Proponents are hoping that programmatic buying could finally be a powerful driver of standardisation. There are also other consequences of automatic booking. Customer relationships and existing processes are changing as a result; sceptics fear disruptions. And not only that. The threat of falling prices is still a major cause of concern for many players in the market. This is because it is clear that, if all networks can be represented and booked comparably and transparently, it will also increase pressure on prices. On the other hand, however, programmatic buying promises greater network utilisation, especially if real-time bidding ensures that even the last spots are allocated. The DooH booking platforms that currently exist, such as Ayuda or Vukunet, could provide a decisive boost, if not ultimately the breakthrough for the spread of programmatic buying.

Support from the world of web

"Special agencies require corresponding interfaces to assessment, planning, purchasing and reporting systems or ad server platforms to allow management of campaigns across networks as well as targeting - both on a location basis and in accordance with the needs of the target group," says Carsten Ehling, Managing Director at It Works.

What is interesting is that companies from thus far unrelated sectors could step into this breach. Both AOL and Google want to automatically market the entire digital media offering - two large online companies, therefore, who could again add important momentum. The benefit to DooH here is the cross-media approach such as, for example, Ströer is already pursuing. Digital outdoor advertising will not be marketed independently in this case, but rather bundled with other screen media. This could make DooH distinctly more attractive again and once more increase the number of bookings in the coming years.

Programmatic buying – what's behind it?

Programmatic buying comes from the world of online marketing and is already established in North America. The first DooH platforms are also using the marketing tool here. What is involved is the automatic booking of advertising slots to which additional data is linked, such as region or target group, at a particular time of the day. Advertisers can therefore run their campaigns much more efficiently.

TOP 30 DIGITAL OUT OF HOME NETWORKS IN GERMANY 2015
(BY NUMBER OF DISPLAYS)

#	NETWORK	OWNER	MARKETER	CATEGORY	DISPLAYS	LOCATIONS
1	Media Markt-TV [1]	Media Saturn Holding	United Ambient Media, red blue	Retail - Electronics	30,000	255
2	Saturn-TV [1]	Media Saturn Holding	United Ambient Media, red blue	Retail - Electronics	18,000	151
3	Medimax (EP) TV [1]	Medimax (EP)	United Ambient Media	Retail - Electronics	8,000	115
4	TV-Wartezimmer	TV Wartezimmer	TV-Wartezimmer, United Digital Screens	Healthcare - Doctor's Office	5,700	5,700
5	Viewento Edeka-TV	Viewento	Viewento	Retail - FMCG	3,887	438
6	Berliner Fenster	Berliner Fenster	mc R&D, Omni-Media, Goldbach	Transport - Public	3,768	1,106
7	Autobahn-Channel	Tank & Rast	Sit&Watch, United Digital Screens, Goldbach	Retail - FMCG	3,186	345
8	Digital Touchpoints POS REWE	Cittadino	Cittadino u,a,	Retail - FMCG	2,404	458
9	Mall Video [2]	Infoscreen/Ströer	Infoscreen	Shopping Mall	1,761	73
10	King Channel	Burger King	United Ambient Media, piranha media	Leisure - Restaurant/Bars	1,586	522
11	McDonald´s TV	McDonald's Deutschland	United Ambient Media	Leisure - Restaurant/Bars	1,400	855
12	Digital Touchpoints POS LOTTO	Cittadino	Cittadino u,a,	Retail - Lottery	1,400	1,400
13	Neo Advertising EDEKA TV	EDEKA	Neo Advertising, Cittadino, reflexmedia	Retail - FMCG	1,366	249
14	Münchner Fenster [3]	MVG	mc R&D, Goldbach	Transport - Public	1,340	84
15	Fahrgast TV Nürnberg	VGN	Omni-Media, busSpot	Transport - Public	1,043	301
16	Apovid [3]	Apovid	Apovid, Goldbach, United Ambient Media	Healthcare - Pharmacy	1,036	675
17	Brand Views	Brand Views	Brand views, United Digital Screens	Leisure - Restaurant/Bars	1,021	278
18	Fahrgastfernsehen Hamburg	Hamburger Hochbahn	Infoscreen, Omni-Media, public broadcast	Transport - Public	1,008	504
19	fahrgast tv Leipzig	Leipziger Verkehrsbetriebe	videowerkstatt,net, mc R&D, Omni-Media, Goldbach	Transport - Public	1,007	304
20	real,- Shop Kontakt	echion	echion	Retail - FMCG	1,000	265
21	Station Video [2]	Infoscreen/Ströer	Infoscreen/Ströer	Transport - Station	996	161
22	Fahrgast-TV mobil Hannover	üstra Hannoversche Verkehrsbetriebe	X-City Marketing, mc R&D, Omni-Media, public broadcast	Transport - Public	864	144
23	Intersport TV	Das Mediativ	Ridotto	Retail - Sports	651	321
24	Westpoint Media	Westpoint Media Deutschland	Goldbach	Shopping Mall	545	23
25	Kaufland Instore-TV	Kaufland Warenhandel	reflexmedia, Goldbach, TIP Werbeverlag	Retail - FMCG	520	187
26	CinemaxX-TV	CinemaxX Entertainment	United Ambient Media, af+medien, United Digital Screens	Leisure - Cinema	510	34
27	Digitales Schwarzes Brett	heinekingmedia	United Ambient Media, United Digital Screens, Verner & Friends	Government	498	498
28	docspot,tv [3]	Zeitsprung Infotainment	Zeitsprung Infotainment	Healthcare - Doctor's Office	450	405
29	INFAHRT TV	DVB AG	Format Media, mc R&D, Omni-Media, busSpot, Goldbach	Transport - Public	418	83
30	Cinema 3DOOH	United Entertain	United Digital Screens	Leisure - Cinema	350	60

1) TV sets on the retail floor included in marketing.   2) Daily numbers, status week 17 / 2015.   3) Network is being rolled out. Completion expected by the end of 2015.
Note: The table is based on company information (report/rate card). Period of survey April/May 2015.
Source: invidis consulting GmbH „invidis Digital Signage & DooH Yearbook 2015/16"

TOP 30 DIGITAL OUT OF HOME NETWORKS IN SWITZERLAND 2015
(BY NUMBER OF DISPLAYS)

#	NETWORK	OWNER	MARKETER	CATEGORY	DISPLAYS	LOCATIONS
1	Media Saturn Instore-TV [1]	Media Saturn Holding	Goldbach Media Switzerland	Retail - Electronics	5,000	25
2	MeITV [1]	Migros-Genossenschafts-Bund	Goldbach Media Switzerland	Retail - Electronics	4,242	101
3	passengertv	Livesystems	passengertv / Goldbach Media Switzerland / Publicitas	Transport - Public	3,161	1,991
4	Manor Food [2]	Manor	Goldbach Media Switzerland	Retail - FMCG	656	33
5	Neo Advertising Digital Shopping Media [3]	Neo Advertising	Neo Advertising	Shopping Mall	653	47
6	Migrol / Shell Zapfsäulen [4]	Salescreen	Goldbach Media Switzerland, Neo Advertising	Pump Stations	594	89
7	Valora Instore-TV	Valora Holding	Valora, Mediabox	Retail - Convenience	477	172
8	Healthcare & Beauty Channel	Excom Media	Excom Media	Healthcare - Pharmacy	450	450
9	CanalPoste	Die Schweizerische Post	Die Post, Goldbach Media Switzerland	Retail - Stationary	381	251
10	Tamoil Zapfsäulen und Shops	Tamoil	Goldbach Media Switzerland	Pump Stations	282	50
11	APG|SGA Traffic	APG|SGA	APG|SGA	Transport - Public	273	169
12	Neo Advertising CoopPronto TV	Neo Advertising	Neo Advertising	Retail - FMCG	204	204
13	Adscreen Kinofoyer	Publicitas Cinecom	Publicitas Cinecom	Leisure - Cinema	195	32
14	Clear Channel Play Zurich Airport [5]	Clear Channel	Clear Channel	Transport - Airport	142	1
15	Amscreen Forecourt Network Switzerland	Amscreen Group	Goldbach Media Switzerland	Retail - FMCG	123	123
16	APG|SGA Shopping ePanel	APG|SGA	APG|SGA	Shopping Mall	77	10
17	Neo Advertising Airport Genf [6]	Neo Advertising	Neo Advertising	Transport - Airport	86	1
18	Moving Ads (Mountain Railways)	Diverse	PR&W, Goldbach Media Switzerland	Leisure - Sports	61	17
19	Neo Advertising Palexpo Coverage	Neo Advertising	Neo Advertising	Trade Shows	61	1
20	impact Mountain	Boutique Film	Boutique Film	Leisure - Sports	60	8
21	APG|SGA Rail ePanel	APG|SGA	APG|SGA	Transport - Station	54	9
22	Migrolino Convenience Stores	Kilchenmann	Goldbach Media Switzerland	Retail - FMCG	40	40
23	Clear Channel Digital Shopping Media	Clear Channel	Clear Channel	Shopping Mall	34	6
24	APG|SGA Rail eBoard	APG|SGA AG	APG|SGA	Transport - Station	28	12
25	Woche-Pass Plus	Bison IT Services	Woche-Pass	Retail - Shop Window	23	23
26	Clear Channel Digital Branding Media	Clear Channel	Clear Channel	Transport- Airport	18	2
27	APG|SGA Mountain ePanel	APG|SGA	APG|SGA	Leisure - Sports	14	3
28	APG|SGA City ePanel	APG|SGA	APG|SGA	Transport - Public	10	10
29	Neo Advertising Luxury Sport	Neo Advertising	Neo Advertising	Retail - Sports	9	2
30	Neo Advertising Luxury TV	Neo Advertising	Neo Advertising	Shopping Mall	8	5

1) TV sets on the retail floor included in marketing.
2) 12" displays at the cash points.
3) Coop, Migros & others.
4) 15" displays at the petrol pumps.
5) Contains the sigle networks Flight Information Media, Baggage Claim Media, ad-e-motion.
6) Contains the sigle networks Airport Boarding, Airport Shopping, Airport Welcome, Airport Branding Zone.
Note: The table is based on company information (report/rate card). Period of survey April/May 2015.
Source: invidis consulting GmbH „invidis Digital Signage & DooH Yearbook 2015/16"

TOP 30 DIGITAL OUT OF HOME NETWORKS IN AUSTRIA 2015
(BY NUMBER OF DISPLAYS)

#	NETWORK	OWNER	MARKETER	CATEGORY	DISPLAYS	LOCATIONS
1	Media-Saturn TV [1]	Media Saturn Holding	red blue, Goldbach Media Austria	Retail - Electronics	7,050	47
2	y-doc	y-doc	y-doc, Goldbach Media Austria	Healthcare - Doctor's Office	905	905
3	Wien lokal INFOSCREEN	INFOSCREEN Austria	INFOSCREEN, Gewista	Transport - Public	614	177
4	Vita TV	VITA Wartezimmerfernsehen	TV-Wartezimmer	Healthcare - Doctor's Office	545	387
5	Graz lokal INFOSCREEN	INFOSCREEN Austria	INFOSCREEN, Gewista	Transport - Public	530	97
6	Linz lokal INFOSCREEN	INFOSCREEN Austria	INFOSCREEN, Gewista	Transport - Public	498	144
7	Gewista Digital Media [2]	Gewista Werbegesellschaft mbH	Gewista	Transport - Station	381	7
8	Gesundheits-TV	SMG Screen Media	y-doc, Goldbach Media Austria	Healthcare - Pharmacy	290	196
9	Innsbruck lokal INFOSCREEN	INFOSCREEN Austria	INFOSCREEN, Gewista	Transport - Public	282	105
10	Apomotion	Herba Chemosan Apotheker-AG	y-doc, Herba Chemosan	Healthcare - Pharmacy	200	170
11	Flughafen Wien Giga-Pixel-Wall	Flughafen Wien	Flughafen Wien	Transport - Airport	165	1
12	flatscreenadz	flatscreenadz	flatscreenadz	Retail - Shop Window	150	27
13	monitor werbung	peakmedia	peakmedia	Retail - Shop Window	150	130
14	sitour Ski Network	feratel media technologies	Sitour Marketing	Leisure - Sports	150	10
15	Flughafen Wien Gepäcksbänder	Flughafen Wien	Flughafen Wien	Transport - Airport	120	1
16	SCHOOL Screens	Coffe2watch	Goldbach Media Austria	Education	120	120
17	BUS Screens Salzburg	Stadt Salzburg	Goldbach Media Autria	Transport - Public	120	80
18	Intersport Austria TV	Das Mediativ	ridotto, Goldbach Media Austria	Retail - Sports	103	45
19	TV-Wartezimmer	TV-Wartezimmer	TV-Wartezimmer	Healthcare - Doctor's Office	102	102
20	Digilight	Digilight	Digilight, Goldbach Media Austria, ÖBB	Transport - Station	96	38
21	UniScreens	MIP Media in Progress	MIP, Goldbach Media Austria	Education	82	12
22	oruvision	oruvision	oruvision	Leisure - Tourism	67	67
23	AD-IN-MOTION GmbH	AD-IN-MOTION	AD-IN-MOTION, Goldbach Media Austria	Retail - Shop Window	65	34
24	KINO Screens	United Cinemas International Multiplex	Goldbach Media Austria	Leisure - Cinema	63	3
25	Amscreen Forecourt Network Austria	Amscreen Group	Goldbach Media Austria	Retail - FMCG	62	62
26	CAT INFOSCREEN	INFOSCREEN Austria	INFOSCREEN, Gewista	Transport - Public	60	3
27	Shopping Mall-TV (SCS)	Aeneas	Aeneas	Shopping Mall	60	1
28	Klagenfurt INFOSCREEN	INFOSCREEN Austria	INFOSCREEN, Gewista	Transport - Public	42	21
29	railscreen mall	ÖBB	Goldbach Media Austria, ÖBB	Shopping Mall	31	2
30	MIETAUTO Screens	Europcar	Goldbach Media Austria	Car Rental	9	9

1) TV sets on the retail floor included in marketing.
2) Network is being rolled out. Completion expected by the end of 2015.
Note: The table is based on company information (report/rate card). Period of survey April/May 2015.
Source: invidis consulting GmbH „invidis Digital Signage & DooH Yearbook 2015/16"

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The successful integration of complex digital signage systems depends on many factors and requires special knowledge. In order to minimize risks such as poor installation or support, OVAB Europe determined universal minimum standards for categories such as hosting, operation, on-site service and Content-/Tech-Support.

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OVAB Europe is the neutral and independent representation of interests for the European digital Out-of-home and digital signage industry. It is our mission to raise the awareness and to establish the digital Out-of-home communication as an independent and accepted media within the media landscape.

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Facts about …

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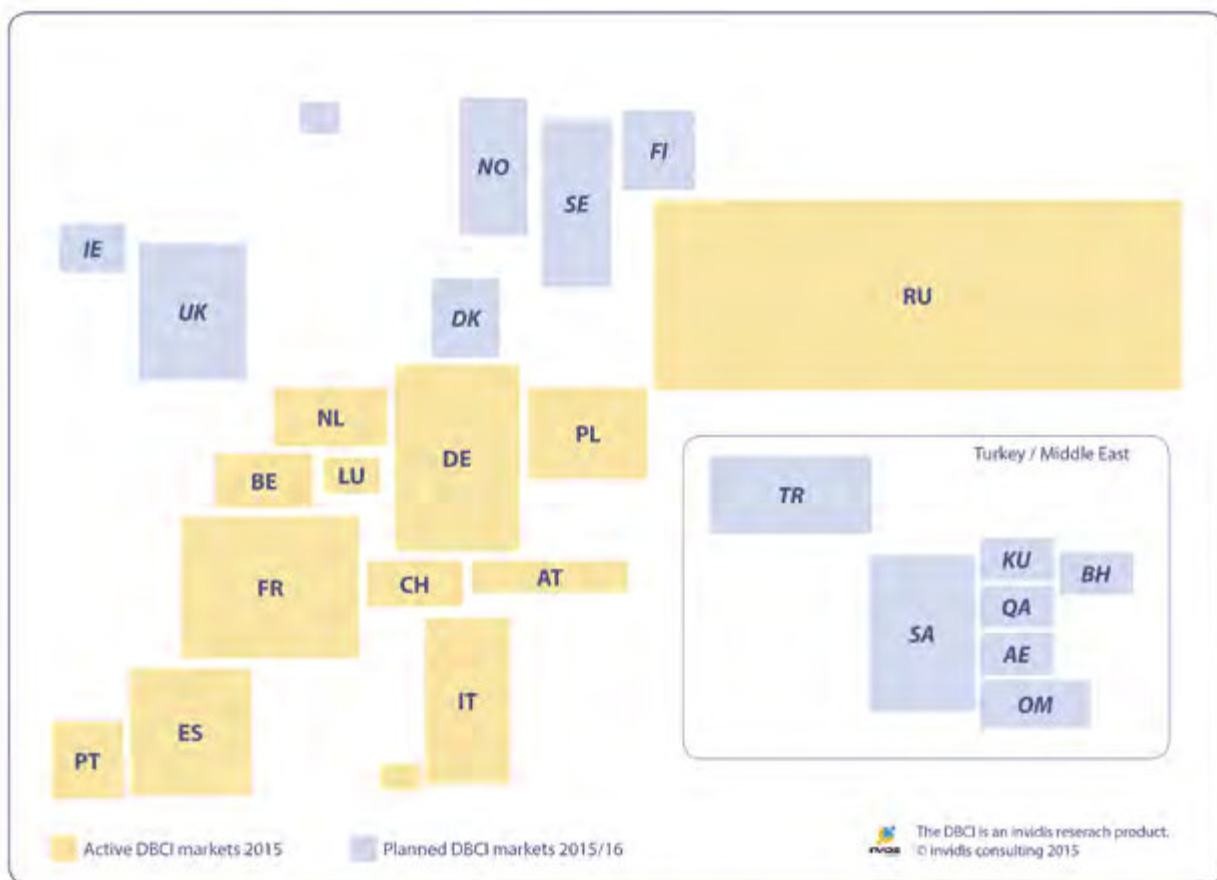| France	Italy	Poland	Switzerland	Germany

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DooH industry

OVAB Europe Digital Signage & DooH Business Climate Index | DBCI

Active DBCI markets 2015   Planned DBCI markets 2015/16

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Expert consulting

**invidis consulting provides support in all matters relating
to Digital Signage and Digital out of Home.**

Headquartered in Munich, invidis consulting GmbH is one of the leading European consulting companies for Digital Signage and Digital out of Home.

This is primarily down to the employees who know the market in detail. The Digital Signage market was still in its infancy when invidis consulting was founded by Florian Rotberg and Oliver Schwede in 2006. The company was quick to recognise the potential of Digital Signage and soon began specialising in it as an IT consultancy.

invidis consulting has now been operating in the market for more than nine years. Unlike other IT consultants, the company defines Digital Signage as a means of communication. From that perspective, Digital Signage needs a communication strategy, a concept and the technology to match. The medium is therefore looked at holistically.

invidis consulting has meanwhile established a permanent base of seven employees in total and is supported by freelance consultants, editors, graphic artists, programmers and partners.

The core team is made up of consultants, analysts, market researchers, engineers, system architects, project managers as well as marketing and communication specialists who have different focal areas of consulting and qualifications and can be assembled into teams to meet the customer's needs for the project in question.

invidis consulting's employees have an excellent knowledge of the Digital Signage and Digital out of Home market and play an active part in shaping it. The company is one of the founding members of the industry association OVAB Europe and for years has been committed to establishing standards, which were successfully introduced last year.

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Theresa Amann, Oliver Schwede,
Jörg Sailer, Christine Koller,
Florian Rotberg (l to r)
(Image: Anette Mayerhofer)

invidis consulting is a renowned European consulting and communication company for Digital Signage and Digital out of Home.

Facts about invidis consulting GmbH:
- Founded by: Florian Rotberg and Oliver Schwede
- Year founded: 2006
- Company headquarter: Munich
- Employees: seven permanent employees plus freelance consultants, analysts, editors, graphic artists and programmers

invidis consulting is split into the areas of Consulting, Research as well as Communication & Events.

invidis Consulting	invidis Research	invidis Communication

invidis Consulting
- Market entry strategies
- Strategic positioning
- Sales strategies
- Market and competition analyses
- SWOT analyses

invidis Research
- Single and multi-client studies on products and markets
- Industry studies
- Development and surveying of the Digital Signage & DooH Business Climate Index (DBCI)
- Compilation of annual Digital Signage provider performance ranking
- Compilation of annual DooH network index

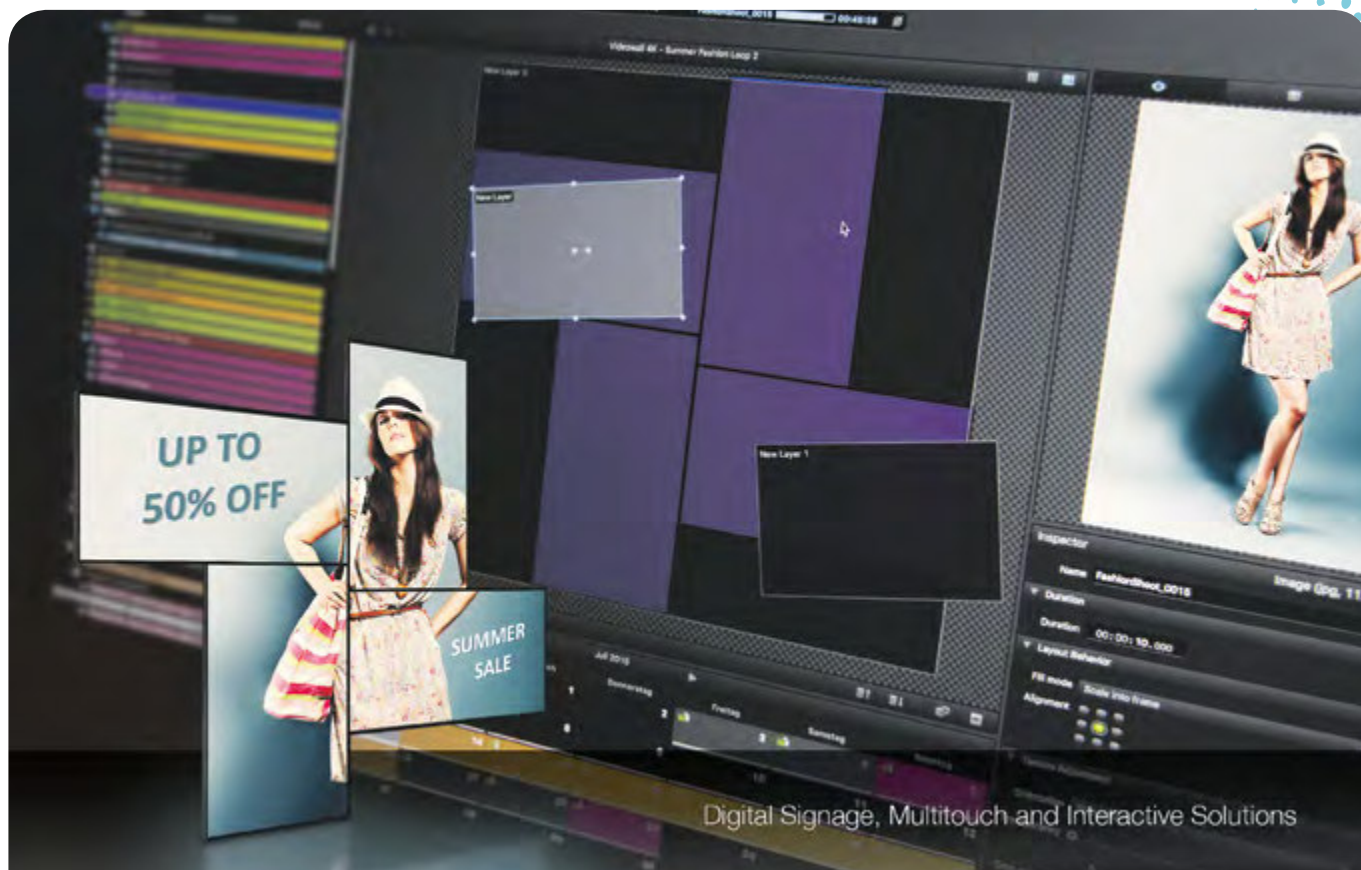**invidis Communication & Events**
- News portal invidis.de
- invidis newsletter
- Magazines for Digital Signage and Digital out of Home
- OVAB Digital Signage Conference Munich
- Conceptual design of and cooperation in trade fairs and conferences, including in Amsterdam, Moscow and Dubai
- Marketing campaigns

Industry Overview

On the following pages you will find companies from the

digital signage and DooH industry sorted by category.

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Digital Signage, Multitouch and Interactive Solutions

~sedna **GmbH**

~sedna **gmbh** provides high-grade professional solutions for digital signage, multitouch and interactive setups. Its flagship product is ~sedna **presenter**, a world-wide leading digital signage software solution that offers a maximum of flexibility, reliability and extraordinary performance.

~sedna **presenter** makes it a breeze to create fascinating brand presentations. No wonder that ~sedna **presenter** is the primary choice on a world-wide basis when it comes to building top-quality and robust digital signage setups that operate under most demanding conditions.

Whether you want to present your brand on giant displays or on small devices such as smartphones or tablets, ~sedna **presenter** gives you a wealth of instruments to send attractive and convincing messages to your audience.

If you are looking out for the ultimate creative tool for your own digital signage projects, or want to support your customers with optimizing their solutions?
Do not hesitate to contact us today.

~sedna **gmbh**

~SEDNA GMBH

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dimedis

dimedis

The software company dimedis, founded 1996 in cologne, is specialized in trade fair- and digital signage software solutions. The customers are amongst others Messe Düsseldorf, Messe Karlsruhe, Koelnmesse, Reed Exhibitions Deutschland, Sparkasse Essen, Messe Stuttgart, Westfalenhallen Dortmund, FC Schalke 04, SNIPES, BVB, Bosch, British American Tabacco and shopping malls like mfi Arcaden Shopping, ECE and SEC.

Digital Signage Software kompas by dimedis

kompas® is one of the most powerful and flexible Digital Signage systems on the market. **kompas** offers Digital Signage users an intuitive interface built around drag-and-drop usability. More than 5.000 players in Germany alone are controlled by **kompas**, making it the driving force behind one of the largest advertising networks. The software is stable and relies on HTML5. Another part of the **kompas** family of products is the award-winning **kompas wayfinding**.
www.kompas-software.com, www.kompas-wayfinding.com

kompas
Digital Signage Software

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GERMANY

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CONTACT@KOMPAS-SOFTWARE.COM

WWW.DIMEDIS.EU

WWW.KOMPAS-SOFTWARE.COM

Photo: © Electrosonic

DynaScan

DynaScan

DynaScan Technology is the #1 manufacturer of high brightness displays. Founded in 1998, DynaScan is an award-winning industry leader in creating cutting-edge display solutions.

With thousands of installations around the world, **DynaScan** displays are the proven solution for high ambient light applications. With brightness ratings as high as 7,000 nits, **DynaScan** high brightness LCDs shine bright in direct sunlight – making them the ideal solution for outdoor enclosures, semi-outdoor, and in-window applications.

DynaScan offers the widest variety of sizes – 15 models ranging from 32"–84", in brightness levels from 2,500–7,000 nits, and are available in stand-alone and video wall configurations.

With offices in Europe, North America, and Asia, **DynaScan** is equipped for international rollouts and support. **DynaScan** works closely with system integrators around the world to deliver premium LCD and LED display solutions for retail, banking, public information, and advertising.

DYNASCAN TECHNOLOGY, INC.

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easescreen
DIGITAL SIGNAGE SOLUTION

easescreen

easescreen is an Austrian Digital Signage solution which stands for uncomplicated scheduling, editing and distribution of multimedia contents. Available in several versions, different languages and suitable for all purposes, the possibilities extend from automatically updated electronic posters in all sizes to interactive terminals to the management of large networks.

Professional display quality is based on a unique 3D-rendering engine which allows smooth text tickers, transparent superposition of all supported file formats as well as easy setup of arbitrarily positioned displays within a video wall.

Third party systems can be effortlessly integrated into easescreen due to a wide range of interfaces. Interactive presentations can be locally triggered or modified in real-time through touch screens or other input-devices.

easescreen can be precisely adjusted to meet all requirements – regardless of using it in retail, industry, transportation, healthcare or education, as guidance systems or for digital door signs.

easescreen
DIGITAL SIGNAGE SOLUTION

PICHLER MEDIENTECHNIK E.U.

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WIENER STR. 287 · 8051 GRAZ

VIENNA BRANCH:
PACASSISTR. 85/18-19 · 1130 WIEN

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Advert

Elo Touch Solutions

Partner with the leader

Elo Touch Solutions is leading global supplier of of touch-enabled technology, products and solutions. We partner with Enterprises and SMBs in industries such as: retail, hospitality, gaming, healthcare. As the company who pioneered the touch screen over 40 years ago, we now change the way people Shop, Pay, Work and Play.

We enable businesses to attract, engage, and transform the customer experience. **IDS portfolio**. With over 20 million installations worldwide, we have the broadest portfolio of interactive digital solutions. No matter the size or scale of your business, we have the modular solution that fits your environment. The **Elo** Interactive Digital Signage displays are available in sizes up to 70" in single and multi-touch versions. Using commercial-grade components only, housed in a durable chassis, the **Elo** products are designed for public environments and 24/7 use.

The **Elo** touch experience has consistently stood for quality, reliability and innovation.

ELO TOUCH SOLUTIONS

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BELGIUM

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WWW.ELOTOUCH.COM

iiyama

iiyama stands for high level proven expertise in the monitor business, a versatile display portfolio, quality and outstanding customer service.

Taking the best from our heritage of one of the first brands involved in the display industry and combining it with Vision and Technology facing the future, it is **iiyama**'s aim to continue to build the number one brand in the display solutions field. **iiyama** values customer relations, delivering trustworthy commercial advice to B2B clients and end-users allowing them to make informed purchase decisions. Serving our clients with a professional support system is always at the core of our actions. Extensive warranty options are available for both B2B and B2C clients.

iiyama's portfolio includes desktop monitors for home and business use, professional gaming monitors, protective glass LCDs, CCTV monitors, Large Format Displays and a broad range of touchscreens including open frame monitors.

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Peerless-AV

Peerless-AV leads the way in manufacturing innovative mounts and solutions for today's AV requirements. Its portfolio includes flat panel mounts, projector mounts, digital signage and video wall solutions, flat panel carts and stands, interactive kiosks, outdoor displays, wireless streaming devices and accessories. Installer-friendly and incredibly versatile, installers and integrators trust **Peerless-AV** products for use in a wide range of applications.

New additions for 2015 include:
- **Quick Release Video Wall Mounts** – Support displays up to 98" with push release mechanism
- **Xtreme™ Outdoor Displays** – The industry's only fully-sealed displays with the highest IP rating and widest temperature range
- **Trolleys & Stands** – Adaptable for a variety of free standing and mobile AV requirements
- **Desktop Mounts** – Single, double, triple and quad monitor positioning with limitless mounting options
- **Video Conference Trolleys** – Dual and single mobile display trolleys with camera mount

PEERLESS-AV

UNIT 3, WATFORD INTERCHANGE

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HERTS, WD24 4WP, UK

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WWW.PEERLESS-AV.COM

Philips Signage Solutions

PHILIPS

Whatever business you are in, it always pays to look professional. That is why, when you are choosing signage solutions, you want to choose the best. Making use of leading technologies we have developed impactful signage solutions that bring innovation to your business. Our latest generation Signage Solutions offers best in class picture performance, while focusing on convenience for integrators and total cost of ownership for end users.

Each application is unique. We developed our SmartCollection to offer you customizable solutions to meet your specific requirements. Both integrators and solution providers are offered the latest innovations, while the audience can enjoy impactful solutions.

With this broad range of professional displays we are dedicated to meet the highest quality standards and operational excellence. And you can see that commitment clearly in everything we do.

For more information about us, our SmartCollection and product portfolio please visit our website, or contact our headquarters in Amsterdam.

MMD MONITORS & DISPLAYS
BRAND LICENSEE FOR
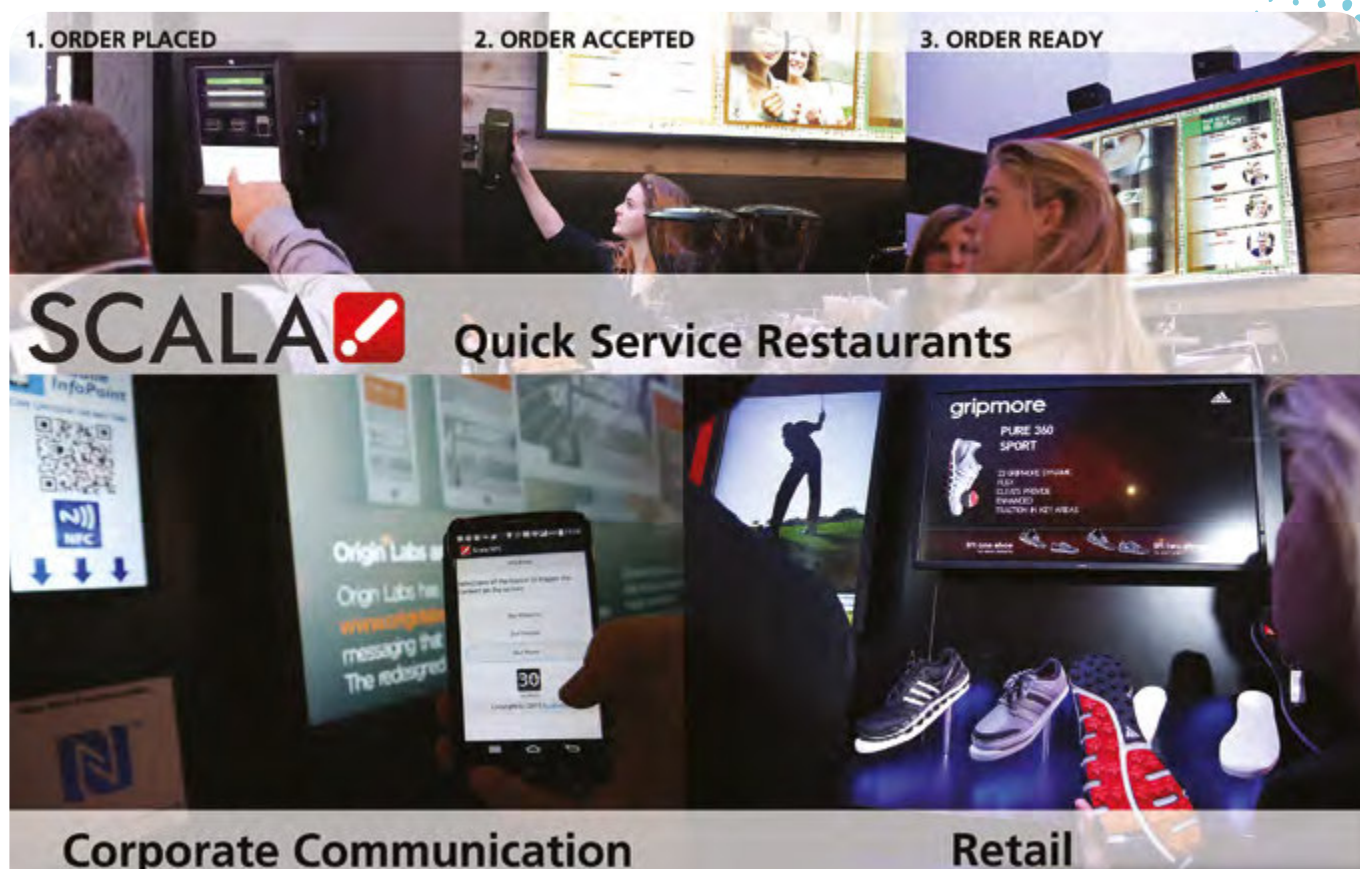PHILIPS SIGNAGE SOLUTIONS

BUSINESS MANAGER EMEA

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TIM.DERUITER@MMD-P.COM

WWW.PHILIPS.COM/SIGNAGESOLUTIONS

1. ORDER PLACED   2. ORDER ACCEPTED   3. ORDER READY

SCALA! Quick Service Restaurants

Corporate Communication   Retail

SCALA

SCALA!
COMMAND ATTENTION.

Scala solutions deliver engaging experiences by connecting networks of digital signs, kiosks, mobile devices, websites and Internet-connected devices – in both public and private environments. **Scala** provides the platform to easily create and centrally manage deployment of experiences, while retaining the flexibility to rapidly adapt to local business conditions.

Scala has over 25 years' experience entertaining, informing and educating audiences in wide-ranging industries including retail, quick-service restaurants, finance and more, as well as in private areas like corporate environments.

Scala is known for its innovation and leveraging best-of-breed technologies such as mobile and predictive analytics to create award-winning solutions that are easy-to-use yet infinitely customizable to meet our clients' unique needs. Our solutions can be found all over the globe. **Scala's** network of partners and developers located in more than 90 countries drives more than 500,000 screens worldwide.

SCALA BV

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MAKE A LASTING IMPRESSION

Sharp

As a pioneer and world leading manufacturer of display technology, **Sharp** offers a wide range of solutions for all professional applications. Displays range in size up to 90 inches, employ state-of-the-art UV^2A technology for outstanding images, high brightness, low power, reliable 24/7 operation and many advanced features, such as video wall functions, ensuring all demands are met. Our portfolio also includes the interactive white boards, BIG PAD, and advanced 4K UHD displays.

- Our digital signage displays create eye-catching images for a lasting impression, with bottom-line business benefits.
- For occasions demanding the finest detail, we offer 4K UHD ultra-high resolution monitors.
- Our IWB solutions promote creativity, productivity and effective decision-making. Different locations can also take part via the host-to-host BIG PAD functionality.

Sharp helps you communicate, collaborate and inform, /This is why: **Sharp** is the perfect solution for all professional display needs.

SHARP ELECTRONICS GMBH

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GERMANY

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Smartsign

Smartsign – get your message through

Imagine a world where no boundaries limit your ability to communicate. An omnipresent solution that elevates your business above the noise and puts you in perfect control of your message. **Smartsign** can help strengthen and extend your communication. Thousands of companies worldwide rely on our comprehensive digital signage platform to manage, publish and verify custom content across the globe. On any platform, on any device.

Smartsign was founded in 1998 and develops and sells software for internal and external communication on both screens and other devices, e.g. smartphones. The company's headquarters are in Dalarna and Stockholm, Sweden. **Smartsign Manager** is a product used in more than 30 countries. Our user friendly interface and compatibility with all kinds of file formats makes the everyday usage of **Smartsign** really efficient. Setting up a professional information channel has never been easier.

Visit our website **http://www.smartsignmanager.com**

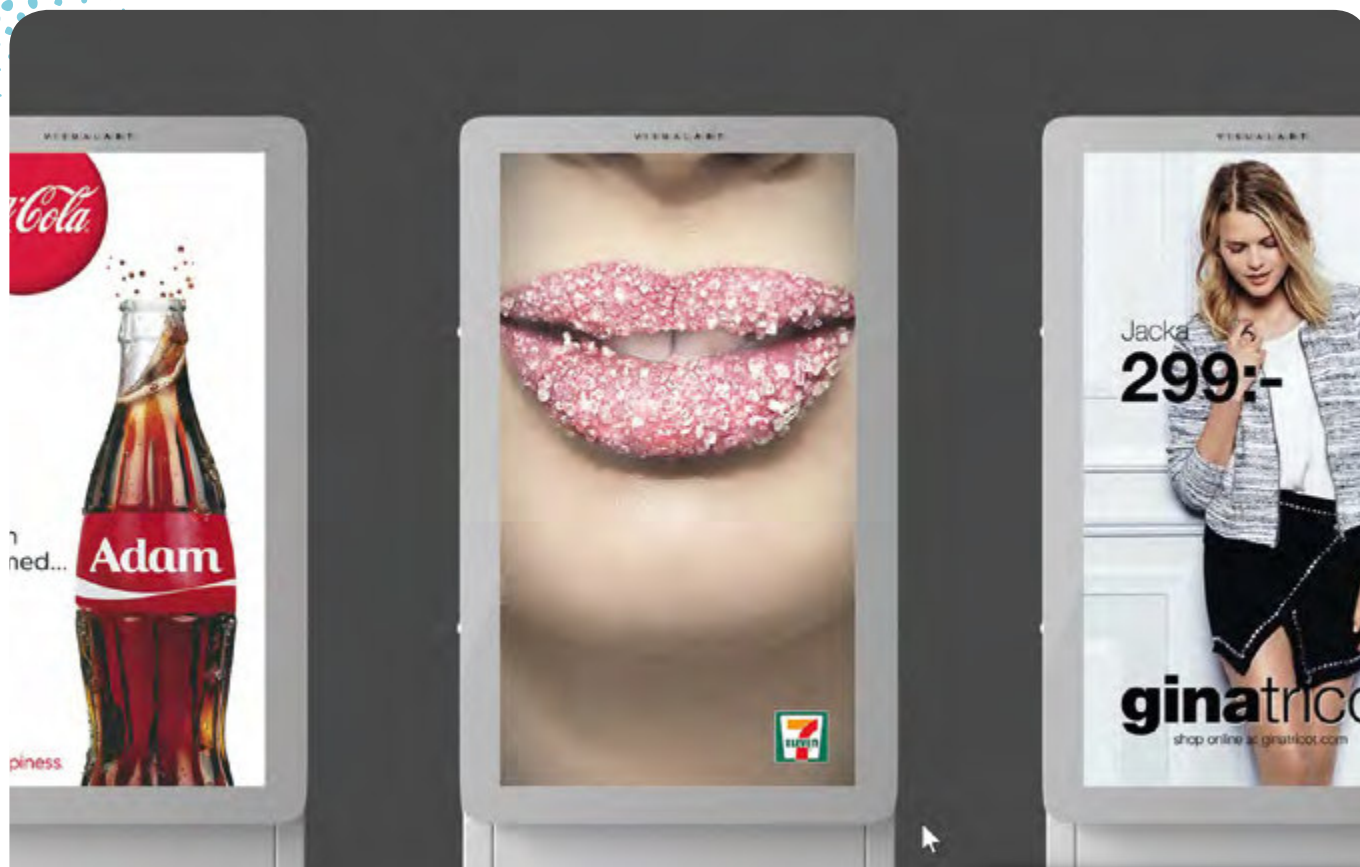**SMARTSIGN AB**

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VISUAL ART

VISUALART

Shaping the future of digital communication

Visual Art is a full service Digital Signage Agency. We deliver strategic and tactical, high impact, place based digital communication, driving the business of our customers.

Visual Art is a one stop shop for anything regarding screen based media. We create digital strategies, ROI-analysis, digital menu boards, digital signage, DOOH, mobile apps, kiosks, interactive installations, beautiful video content, motion graphics, 3D animation and digital applications that brings clients and customers together.

Visual Art combines creative talent with expertise in the application of modern technologies. Our staff consists of strategists, business developers, engineers, designers, project managers, software developers, art directors and producers.

Running networks of thousands of screens with daily updates is our specialty and we always deliver digital communication that is relevant and economically sustainable.

VISUAL ART

HÄLSINGEGATAN 45

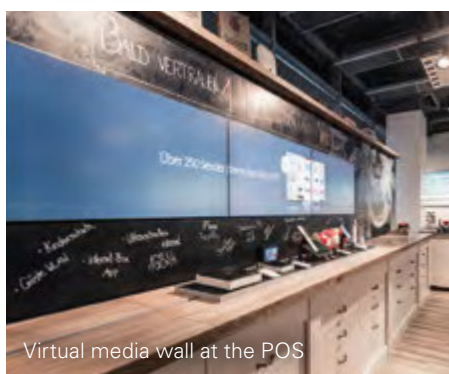**113 31 STOCKHOLM**

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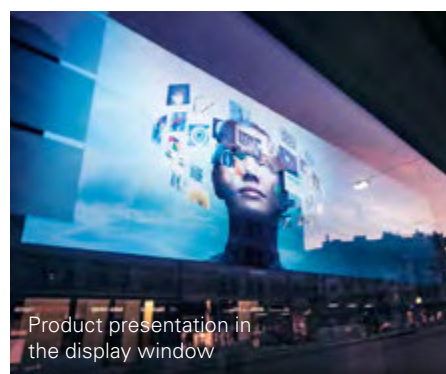**WWW.VISUALART.COM**

Virtual receptionist

Interactive solution at the POS

Virtual media wall at the POS

LED wall in the shopping centre

Product presentation in the display window

Westiform

Westiform – making your brand shine

Westiform, a family company, has been making brands shine since 1959. From classic illuminated signage to directional sign systems and from analogue POS advertising through to innovative digital signage solutions, **Westiform** provides everything, as a one stop shop.

Westiform as service provider for your project:

Consultancy/conception – Design, construction of prototypes, pilot installations, performance monitoring

Hardware – Hardware selection based upon project-specific requirements, including the supply and production of customised solutions.

Software – Checking the requirements for content management software and the selection of the most suitable system

Integration – Integration of hardware and software into an existing or new infrastructure

Installation – Using an online project managment tool to facilitate local installations including survey details, full documentation and roll-out management capability

Operation – Operating, servicing and monitoring the system as well as supporting the content management solution

westiform
visual communication

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Integrated Systems Europe

9-12 February 2016
Amsterdam, RAI, NL

MAKE US YOUR DIGITAL DESTINATION

With over 400 companies representing the world's largest gathering of digital signage product manufacturers and service suppliers gathered under one roof the annual Integrated Systems Europe exhibition is the must-attend destination for international digital signage and DooH integration professionals. ISE provides attendees with a unique business, professional development and networking experience. And with the addition of an extra show day in

2016 visitors can now ensure that they can maximise their time spent at the event, discovering innovative products, services and personal development opportunities while also having the time to forge new business relationships.

ISE 2016 – Four days, for your business, for you, for the better!

Find out more www.iseurope.org

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