

'EVERY ASPECT OF THIS ADVERTISING CONCESSION WILL BE STATE-OF-THE-ART'

CSDM

CS Digital Media | #3 fall 2018 | € 15,95

Fully digital, 100% programmatic and inspiring images

An impression of the
new Amsterdam metro
media network

it's
bigger
better
brighter

**THE NEXT
LEVEL OF
DOOH**



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contents

csdm

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Rijksmuseum, Dam Square, theatres and Zuidas: these are all icons that represent culture, creativity, freedom, and innovation. The manifestation of these characteristics was the Amsterdam singer-comedian Wim Sonneveld. Both in his lyrics and in his personal life, he voiced sentiment with a typically sharp Amsterdam edge. Aiming to innovate and to initiate change, he was unstoppable. This made his oeuvre so diverse and popular in Amsterdam.

CS Digital Media relates to Sonneveld's mindset and attitude towards innovation, culture and creativity. These aspects are reflected in the main subject of this third edition of CSDM Magazine: a dive into the newly acquired advertising concession. Technological innovation, with programmatic buying at its core, but also sustainability and an involvement with the city play a crucial role in the concession. Impressive images on screens link digital innovation to history, ambiance, and the sentiment of the Dutch capital. The soul of Wim Sonneveld is found in every aspect.

'On the Amsterdam canals, I have pledged my whole heart forever. Amsterdam fills my thoughts as the most beautiful city in our country. All the people from Amsterdam, all the lights at night upon the square. No one could wish more from life than to be an Amsterdammer.'

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***waiting
for
the
metro
has
never
been
this
much
fun***

wibautstraat >>



the next level in Amsterdam

280 digital screens varying in size from 75 to 98 inch, displaying content in 4K quality, on as many as 38 stations of the Amsterdam metro network. These impressive figures are all part of the advertising concession that CS Digital Media has been awarded by the municipality of Amsterdam for a maximum duration of fifteen years.

CS Digital Media will continue to establish its position as the innovative Digital Out of Home operator in Dutch metro networks. Programmatic plays a crucial role in this. In conjunction with MyAdbooker, the entire digital network on metro stations will be fully programmatic. To limit 'waste,' advertisers can buy specific broadcasting slots based on generic data. This is a first, not only for Amsterdam, but for the world!

Radjen van Wilsem (CEO CS Digital Media) discusses the challenging tour de force that his company now must face. 'The concession in Amsterdam enables us to roll out a network in which we will use all the technologies that we have developed in the last couple of years. We can elevate Digital Out of Home to the next level by creating an Online Out of Home media landscape.'

This issue of CSDM Magazine is completely dedicated to Amsterdam. Discover how we utilize programmatic buying, the metro network services, and the sustainable and social elements of the concession.

Learn about the high-quality content displayed on the screens and how this will transform every metro visit into a unique experience. From a digital art gallery to business reports of entrepreneurs, and from historical images to the 'typical' resident of Amsterdam. As a newspaper journalist put it: 'waiting has never been this much fun. Such inspiring content!'

The editorial team

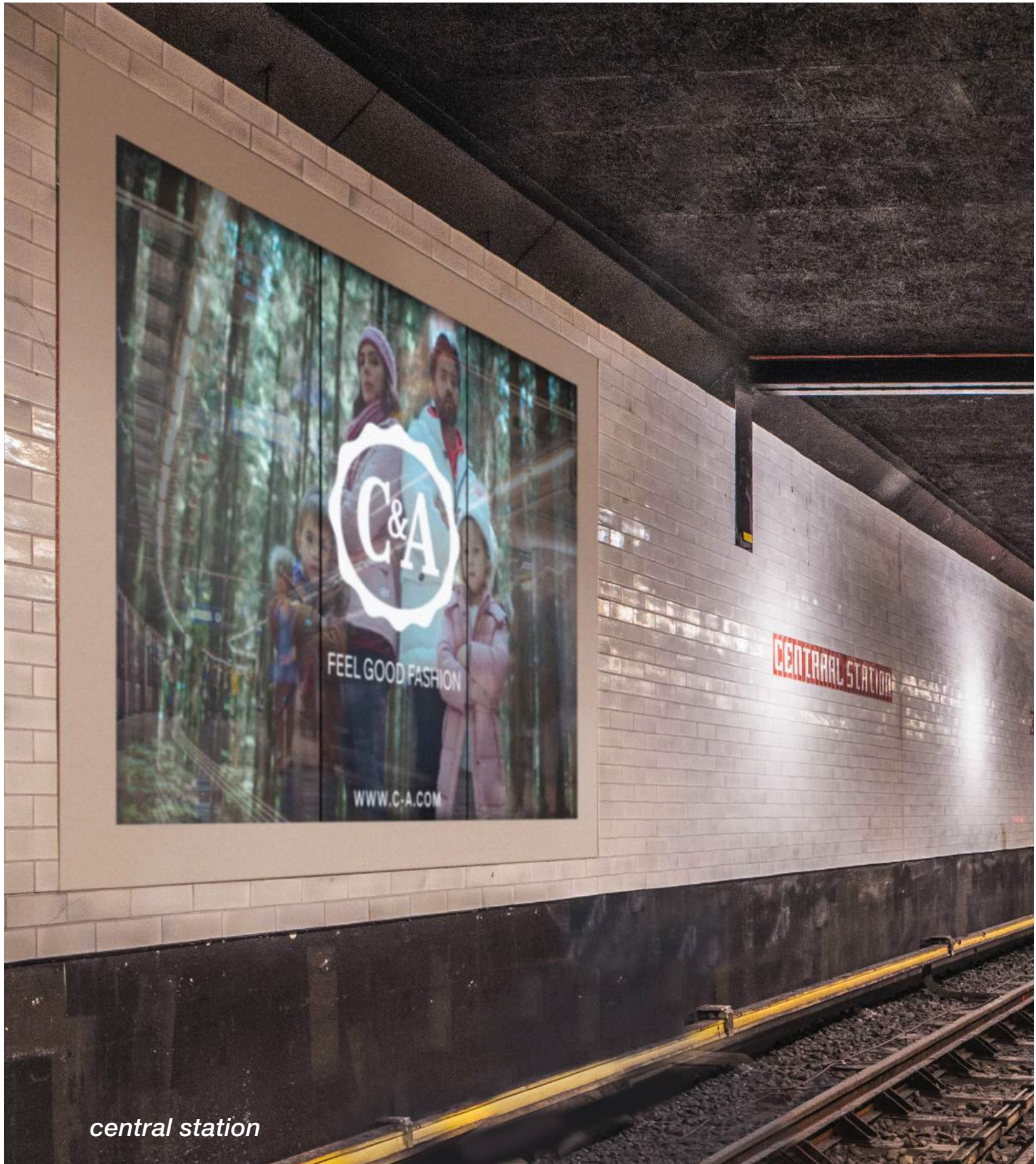
All features in CSDM Magazine are also published online in various formats. Check CSDM.online for minidocumentaries, interviews, and more.



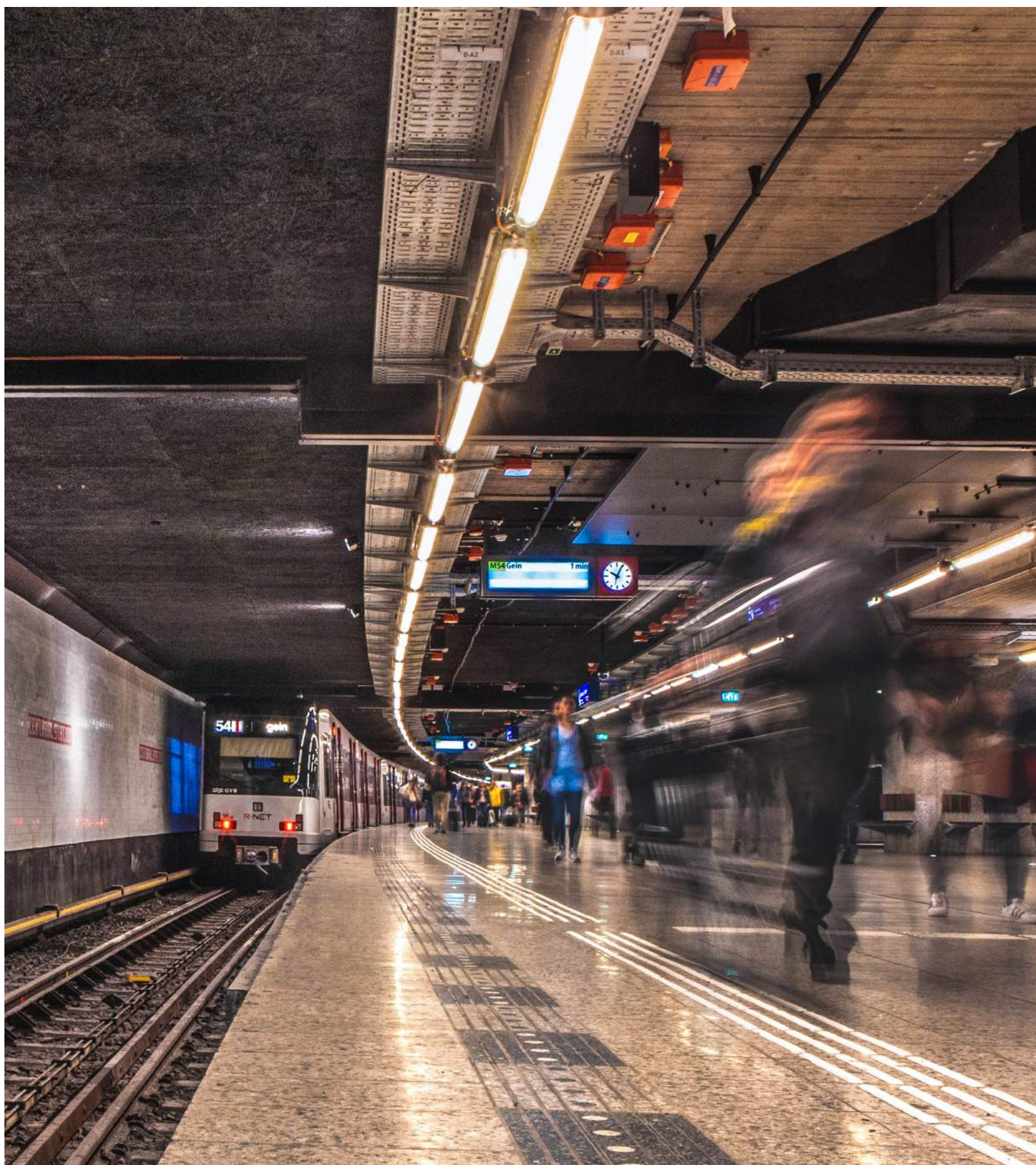
amcity
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**Welcome to
the next level in
Digital out of
Home >>**





central station





vijzelgracht

prologue

An advertising concession for this extensive metropolitan metro network for up to 15 year does not just happen. It was the result of months of hard work in development, research and conceptual thinking. At CS Digital Media, an entire team worked on the preparations.

CS Digital Media had already been awarded the East Line and the Ring Line of the Amsterdam metro network. With the North-South Line, this previous concession expired, and any advertising company could then submit a tender for the new concession. The Metro and Tram Service presented a completely reinvented design of all their metro stations in their design brief for these companies. 'This means that not only are all advertising positions situated in newly designed places, but also that all waiting facilities above ground will be renewed,' says Chief Commercial Officer (CCO) Mark Veenman. 'The combination of the renovations of all existing stations and the newly built North-South Line stations creates an outstanding metro network. Art, culture and advertising will complement each other in a thoughtful way. CS Digital Media is proud to be part of this.'

Veenman continues: 'The submissions were assessed on four elements: financial remittance, the quality of the experience, technological innovation, and the social aspects of sustainability and involvement with the city. CS Digital

Media scored well on all these subjects and was, eventually, awarded the concession for a maximum duration of fifteen years. One of the aspects that appealed most to the City of Amsterdam, was the space that CS Digital Media designated to art and culture on a completely digital network.'

Business Analyst Mark Bontekoning: 'We created the concession tender within the framework provided by the Council and added concepts that increased its value.' So how did the tender process go? Bontekoning: 'It was exciting, definitely. This is a huge long-term concession with many interesting aspects that will have a massive impact on our company. It offers us the opportunity to grow from a relatively small player in the DOOH field to a leading one.'

Art Director Sebastiaan Hendriks agrees: 'Quality-wise, it is the most important DOOH concession in the Netherlands. Think about the huge number of screens, almost 300, that will cover Amsterdam, the new technology that we will use, and the media reach of millions of travellers.' CS Digital Media CEO Radjen van Wilsem views the concession with both a healthy amount of ambition and a proper dose of reality: 'We have years of experience with the medium. Now we will take DOOH in Amsterdam to the next level.'

***we
want
to
elevate
DOOH
in
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A computer boots up faster now than a couple of years ago, but we as consumers are less patient and therefore more quickly irritated by the amount of time we have to wait. More companies, including public transport companies, are taking waiting time frustration into consideration. Pruyn: 'In the experience economy we want to decrease the perceived waiting time. Clever entrepreneurs are aware of the possibilities of smart waiting time management. Sometimes, they can even transform it into a marketing tool.'

In practice, this takes shape in the use of certain colours, scents, lights, music, temperature and furniture design, but also via infotainment and advertising on screens. According to research carried out by, among others, Dutch National Railways (NS), these elements can both decrease the perceived waiting time and make waiting more fun. Many of these environmental factors reduce stress and provoke feelings of comfort and service. In short, they make people feel at ease.

'Recent research by the digital advertiser, Kinetic, in public transport confirms these findings,' says CCO Mark Veenman. 'The most

important conclusion is that people positively perceive moving images on digital screens. If advertisements are accompanied by other content, the attention value will also increase.' People will therefore look more attentively at the screen for a longer time.

CS Digital Media's plan to increase the experience quality at the Amsterdam metro stations contains complementary elements. 'Our main goal is to transform waiting into a great experience,' says Mark Bontekoning, Business Analyst. 'The waiting time has to become as interesting as possible. We achieve this with first class content on high-quality screens. It creates a positive vibe at the stations and its surroundings. The screens, their content, the waiting facilities and the direction signs at stations all have to be state-of-the-art.'

**even
more
stopping
power**

let's talk about image let the image talk.

about content...

CS Digital Media has years of experience creating effective and original content, both branded and editorial, such as our award-winning interactive campaign around the 'Late Rembrandt' exhibition or the unique display in Rotterdam depicting 'virtual reflection of the modern city.' CS Digital Media will also be designing a number of content concepts for Amsterdam which will improve the waiting experience.

On the stations along the North-South Line as well as other relevant locations, CS Digital Media will broadcast dynamic impressions from entrepreneurs from Amsterdam and its surroundings. These are short, animated videos following guidelines provided by the City of Amsterdam and highlighting these entrepreneurs. To ensure these features are fresh and interesting, the videos will be updated on a regular basis.

Additionally, CS Digital Media launched three concepts which are valuable and permanent additions to the station and its surroundings, expected to engage both residents of and visitors to Amsterdam. Business Analyst Mark Bontekoning says: 'The municipality considers our three projects, Digital Museum, Event Podium Instadam and MijnAmsterdam as valuable additions. Of course, our experience with creating other content concepts has helped us to optimize the impact of these three. However, what we will broadcast in Amsterdam is in many ways completely new and unique, especially because of the use of specially-built units.'

The underlying goal for the content is to increase the attractiveness of the digital screens and therefore the number of people viewing the content. CS Digital Media has based its content concepts on scientific research into how the Digital Out of Home (DOOH) medium operates. Research has frequently indicated that a well-considered combination of high-quality content of both advertisement and infotainment will not only make waiting more pleasant but will also boost the impact of commercials. The German DOOH company Mediaplus conducted a neuro study and concluded that 'due to a higher level of activation, the advertisements on information and entertainment screens make an extraordinarily strong impression. The message and the advertised brand are stored

**the
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the virtual reflection of the modern city.

in the long-term memory of the viewer while the brand identity is being reinforced.' The study also showed that the neuro activation increases significantly when the advertisement aligns with editorial content.

Art Director Sebastiaan Hendrik sees an additional function of, in his words, 'enchanted and dazzling' content. 'With our content, we aim to increase consumer affinity with the DOOH medium. In other words, we want to trigger a growing appreciation for the screens. The situation in Rotterdam, also known as 'the virtual reflection of the modern city,' has taught us valuable lessons on how to enrich the waiting experience.'

A journalist from the daily newspaper Trouw wrote at the time that 'waiting on the metro has become fun.' Even more compelling, travellers would not mind missing their connection as much as before. Hendriks: 'Compared to Rotterdam, the Amsterdam content will be version 2.0. The focus of this content is mainly the rich arts and cultural domain of the capital city. The museums, the galleries, the events, the artists – both established and emerging. The 'MijnAmsterdam' concept shows the colourful diversity of the city by portraying people from Amsterdam. These will be compelling, stylishly captured images. On top of that, we will display monumental, historical video footage at certain locations. For example, at Amsterdam Central Station you will see old trains passing by, while at the Vijzelgracht you will get an impression of what that place looked like a hundred years ago.'

The vitality of the city will also be reflected in the concept 'Event Podium Instadam.' The core of this concept is live coverage from major events such as Amsterdam Pride, the Uitmarkt and Amsterdam Dance Event (ADE) on digital screens and social media. Viewers will be encouraged to

upload their own content. 'During these events, we connect the street level to the underground metro network,' says Hendriks. 'With this crowd-sourced content, the City of Amsterdam can inform travellers about real time events happening nearby.'

Hendriks expects that the third concept, 'The Digital Museum,' will attract the attention of a wide-reaching audience. 'Twice a year, one of which during the annual Amsterdam Museum Night, we will broadcast work of local video artists – both students and professionals – on the screens. It's a double win: the artists are granted huge exposure and we draw viewers to the screens with eye-catching content.' Hendriks continues: 'Yes, I did my homework. This town is a goldmine of exciting material. By sharing artistic content, we might encourage people to visit an art institution. Meanwhile, we are elevating the DOOH medium to the next level. I believe that we can truly move people with this concept, especially if we add new technology and applications. I predict the most exciting combinations that will draw people to our screens, have them send in their own video content and maybe even win a prize with their work. The sky is the limit. Amsterdam has acquired an inspiring, digital world.'

content
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making
royal
content
is art.





waterlooplein

*our screens
are fully
programmatic*

*first in
the world?*

yes!

One of the highlights of the CS Digital Media advertising concession on the Amsterdam metro network is that commercial broadcasting time will be driven by fully programmatic buying technology. This is a world first right in the capital of the Netherlands.





europaplein >>

all screens in A'dam will be fully program- matic

Programmatic technology makes it easier for advertisers to buy specific broadcasting slots on DOOH networks based on open data. This can be data concerning travel information, weather conditions, visitor numbers, or events at specific locations such as a football match or a festival. This means that campaigns will be broadcast when the required target group is present at a specific time or location. With automated triggers, contact frequencies are created for a target audience. As a result, 'waste,' which is very common with traditional advertisement buying, is minimized.

CS Digital Media has built software specifically for programmatic buying that can adapt a message to online (web, mobile). 'We want to give advertisers the opportunity to purchase all their media in the same way and, ideally, on the same platform,' says Mark Bontekoning, Business Analyst. 'It is a one stop shop for all services. It doesn't mean that linear is not

an option anymore. It is, but the booking mechanism works on programmatic buying technology.'

MyAdbooker (MAB) is an online programmatic exchange of supply and demand where advertisers and screen/location operators can find each other. Sebastian Op het Veld, Head of Programmatic at MAB: 'Amsterdam is fundamentally different from Rotterdam, where there is still a hybrid system in place. In Amsterdam, all screens and time slots will be programmatically available. Not just a couple of programmatic slots, but across the whole system. Based on price, availability and settings of a certain campaign, the algorithms behind the system decide when an advertisement is broadcast.'

Effectiveness and efficiency are the two main advantages of programmatic technology. Op het Veld thinks that this



will prepare MAB and CS Digital Media for technological innovations such as augmented reality. 'On the basis of trend analyses we try to predict what will happen so we can design our future ourselves.

Currently you see that everything is moving online because of the great connectivity, transparency and the amount of data you can tap into. Our system is set up so flexibly that we can easily anticipate this in terms of resources and locations. At the same time, we can implement our own strategic vision.'

From a technical perspective, Operations Director Roel Pennings emphasizes that CS Digital Media can showcase a new standard of network function and performance in Amsterdam. 'This new horizon offers some exciting challenges. Right here at CS Digital Media, we are continually developing new technology not yet available in the market. In addition, issues such as security, log files, data, and quality systems are becoming increasingly important. It demands a completely different mindset,

way of working and skillset. In short: way more automation in the background. We will do anything to tackle these challenges, you can bet on that!'

Pennings continues: 'Being fully programmatic means a complete dependency on our technology. Because of the real-time character of programmatic and the fusion with online, it is a fact that when there's a problem somewhere, it can hurt both our revenue and our reputation. On the other hand, thanks to our years of experience creating new technologies – such as self-supporting systems, climate controls and smart sensors – we have the knowledge and skills to set up future-proof hubs in other cities.'

Do you have any questions regarding our fully programmatic network or how it can be of value to you? We will gladly provide you with more information. Please send an email to AFP@csdigitalmedia.nl or call +31 (0)20 697 0746

**ready
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JUST DOOH

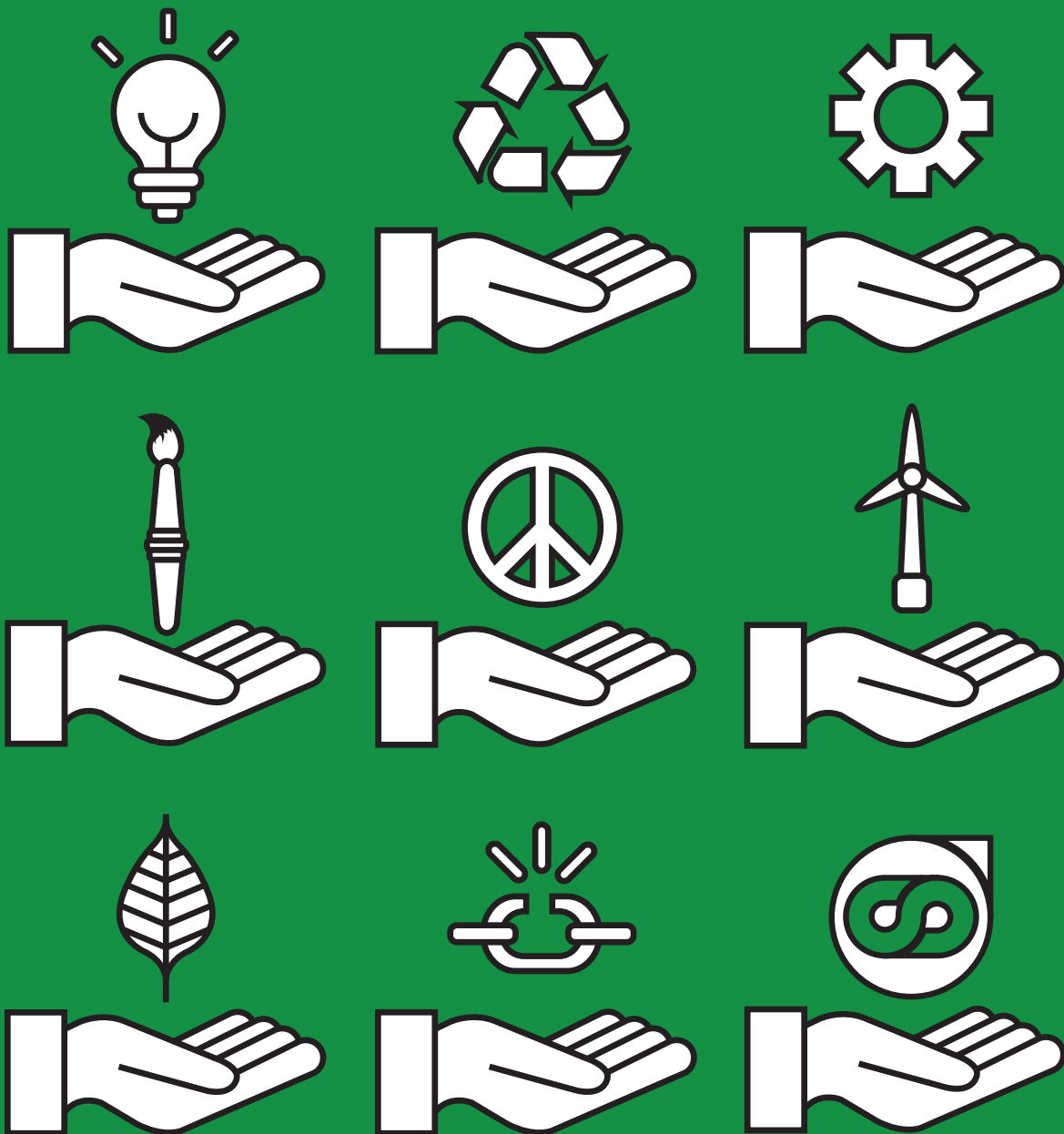
IT.



MyAdbooker is continually challenging the limits of Out of Home advertisement by looking at the digital world with fresh eyes and an innovative perspective. We develop technology for operators to give their network of advertisers access to the unlimited possibilities of Digital Out of Home advertisement.

**my
adbooker**

GREEN, SOCIAL, AND INVOLVED



CHOOSE CSDM

Innovation is the driving force behind the development of a circular economy. Achieving sustainability also requires caring for society and environment. CS Digital Media continues to consider and lead the way in all this, as it navigates through the extensive concession plans for the Amsterdam metro network advertising.

'We also pay attention to social aspects such as employment opportunities for people who have difficulty entering the job market,' explains CCO Mark Veenman. 'This includes people who are handicapped, for example, or the long-term unemployed. We also show our commitment to the city by participating in the City Swim and other activities from organisations in Amsterdam, both charitable and cultural. We offer a different rate to such institutions so that they can buy broadcasting time on our screens with a significant discount.'

Veenman: 'We believe that in this day and age, as an entrepreneur or company, you have to take responsibility for the society in which you live and work.' For a long time, CS Digital Media has been trying to set a good example, and the company has been certified by PSO Nederland, the quality certification for social entrepreneurship, with

special attention shown to people finding it difficult to enter the job market.

'CS Digital Media invests in the development of green energy, strives to be a paperless company, and aims to operate a fleet of only electric cars,' says Business Analyst Mark Bontekoning. 'We can't present all these beautiful concepts and not do the work ourselves. We start here. This way of working makes it easier to spread our message elsewhere, such as with the Amsterdam advertising concession.'

'The sustainability plan includes a wide variety of proposals in line with a complete circular economy cycle. These plans are mainly focused on maintaining a climate-neutral policy,' says Veenman. For example, dimmable screens consume a whopping 30 percent less energy and have a substantially longer life cycle. In

We offer a place to people who have a hard time finding a job

all our servers run on green energy


In addition, all CS Digital Media servers are hosted by Google and run on their green energy. CS Digital Media suppliers must also meet high demands regarding the recycling of products, including waste prevention and responsible waste processing. In the design phase for the waiting facilities, the ability to dismantle all separate elements played a major role. An important task when designing the waiting facilities was to make sure that after disassembly of the facilities in the far future, every single part could be collected responsibly to ensure complete upcycling. This means repurposing each individual part of the waiting facilities at the end of its current lifespan to produce new services or facilities such as roofs, ATMs, or shelters repurposed at sports fields sidelines.


Veenman: 'Going back to basics. That was our approach while writing our sustainability plan


regarding waiting facilities, the screens and their use, system maintenance and waste disposal. Where do the materials come from? Are human rights respected while mining these sources? Is there no child labour? Does our supplier work with non-toxic, environmentally non-polluting chrome? How does our maintenance partner ensure there are no unnecessary miles on the road? And so on and so forth. We researched every detail, checked it and wrote it down to ensure we will be playing our part in the mission of the city: to evolve into a green city. It's a comforting thought.'

the emphasis of our strategy is on social


In its plan of action for the implementation of the concession on the Amsterdam metro network, CS Digital Media formulated an extensive collection of measures regarding sustainability and social issues:

 CS Digital Media only does business with companies that work with the cradle-to-cradle principle. This means that all materials from suppliers are high quality and can be reused. Residual waste should be further separated, collected, and disposed of responsibly.

 CS Digital Media will only buy materials for screens or waiting facilities from suppliers who respect human rights and operate and produce according to international laws and regulations.

 The digital screens will be recycled at the end of their lifespan according to the International Waste Electrical and Electronic Equipment Directive.

 CS Digital Media offers job opportunities to people who have experienced challenges entering the labour market. This can be on site at CSDM locations or organised in conjunction with partners. As an acknowledged learning company, CS Digital Media offers internships in various disciplines, such as ICT, media management or the editorial team.

 Charitable institutions (to date Longfonds, Hartstichting and KWF) are offered a platform, when broadcasting time is available. Cultural institutions can buy broadcasting slots at a greatly reduced rate.



vijzelgracht

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On Saturday July 21, 2018, one of Amsterdam's most prestigious infrastructure projects of the last decade was officially opened: the almost 10-kilometre-long North-South Line. The inner city was practically closed to cars and 'Amsterdam acquired an iconic attraction for everyone: residents, tourists and commuters.'

Beautiful engineering

The opening of the North-South Line was a festive event that drew much attention and was covered by national media. The local broadcaster AT5 was present all day to report on the activities around the new stations, from comedy shows to chess matches, and from music performances to guided tours. The daily newspaper De Volkskrant wrote the first metro review: 'In our fight against the sea, Dutch people built the famous polder landscapes, dikes, and delta works. In the fight against the weak Dutch soil, Benthem Crouwel Architects have added a beautiful piece of engineering to this repertoire.'

Extension of the street

'Initially, the new metro route wasn't meant to be an architectural statement,' explains architect Jan Benthem. The main philosophy was to connect the underground world to the dynamics of the city. 'The stations are not designed as underground buildings isolated from the city, but rather as an extension of the street where they function as a public space. The architectural concept is the same for all stations: the shortest route between the platform and the street. This also applies to the stations that are over 20 meters beneath the surface. There is a flowing, continuous route which makes logical sense to travellers. Each



rokin

traveller has the same goal: to get from A to B as fast and as pleasantly as possible. All architectural elements, both inside and outside the stations, work towards this purpose. Restrained use of colour, simple materials, and a carefully considered, innovative lighting plan make these spaces feel compact, natural, and safe.

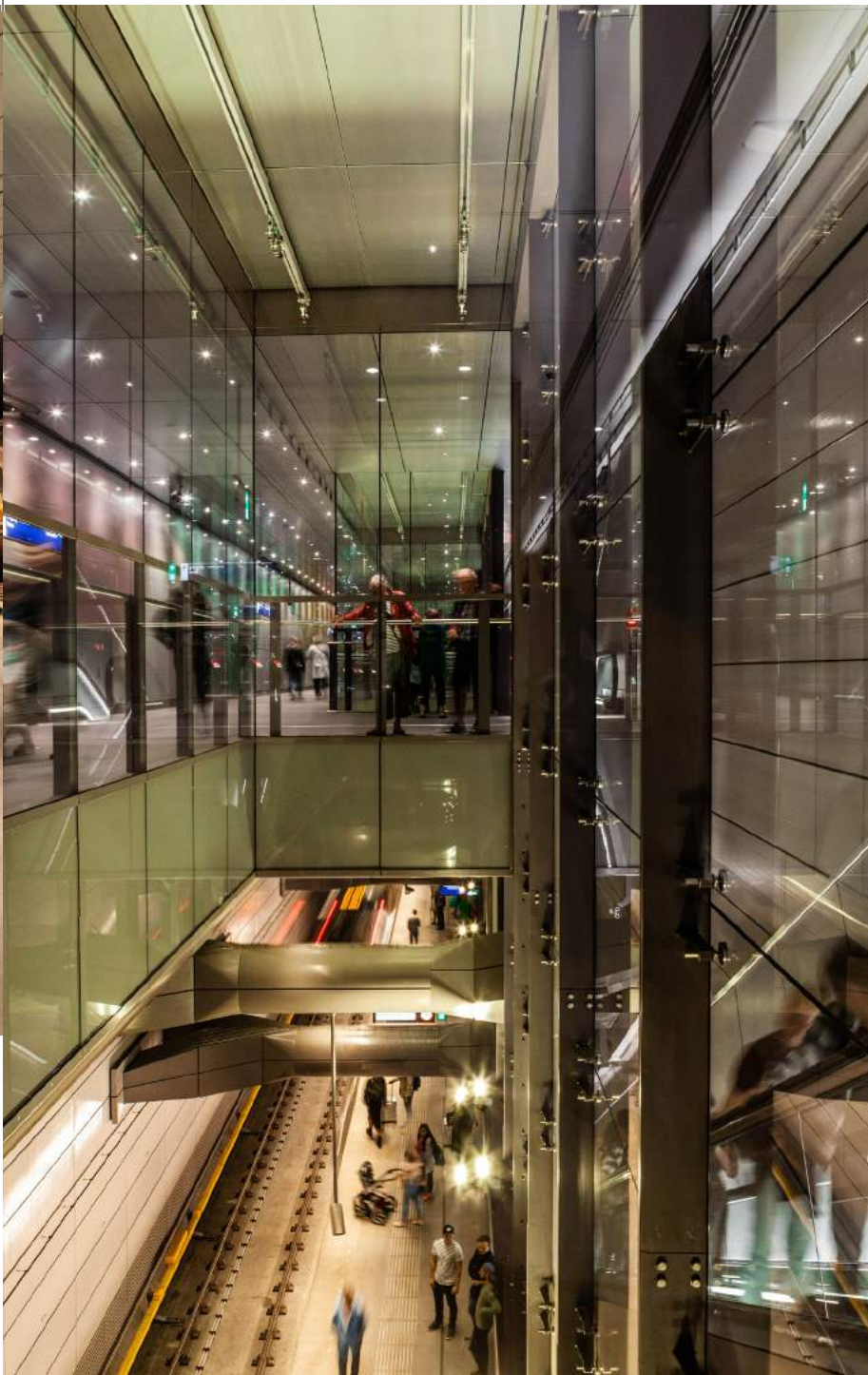
Underground museum

When Amsterdam residents are waiting on the platform, they will know what lies above them at the surface. Tourists may not be familiar with the locations, but 'at each station, they can entertain themselves with the beautiful art that reflects the characteristics of the location,' claims the architect. 'I am sure the North-South Line will become an iconic tourist attraction.' The art at the stations is not meant to be 'decorative wallpaper,' writes newspaper NRC. Well-known artists such as Marjan Laaper and Gerald van der Kaap contributed to the new metro platforms. Their combined work is just as diverse as the group of artists involved. At station Noord birds fly along

the platform, while at Vijzelgracht station you find an ode to Dutch singer Ramses Shaffy. The Rokin station displays an enormous mosaic, and Central Station presents a 'carpet of tulips.' For those less interested in modern art, there is an archaeological exhibition of all the items that were discovered during the excavation phase of the construction work. The North-South Line has the makings of an archaeological history exhibit. 'The North-South Line is like an underground museum,' said one of the first passengers. 'I think it is amazing.'

Lifeline of new connections

'A unique event.' That is what Sharon Dijksma, Secretary of Traffic and Transport, calls the opening of the North-South Line. 'This metro route is important for the city. Amsterdam North is now only five minutes from the city centre, and the RAI and the Zuidas business district are even closer than before. Plus, the stations look absolutely beautiful.' The mayor of Amsterdam, Femke Halsema, sees the North-South Line as more than just a quick connection. She



de pijp

emphasizes both the social and economic importance of the public transport network throughout the city. 'Not only was the construction of the North-South Line a technological masterpiece, but it also offers a lot of opportunities. The route links old working-class districts to new hotspots, and the bubbling inner city to the calm parks in Amsterdam North in only a matter of minutes. The North and South can merge and offer new possibilities. Without outstanding public transport – without the metro network – the growing city would be lacking a lifeline. Constructing the metro means constructing the future of our city.'

*the
North-
South Line
is an
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museum*

*the
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the stations: from travel experience to comfort

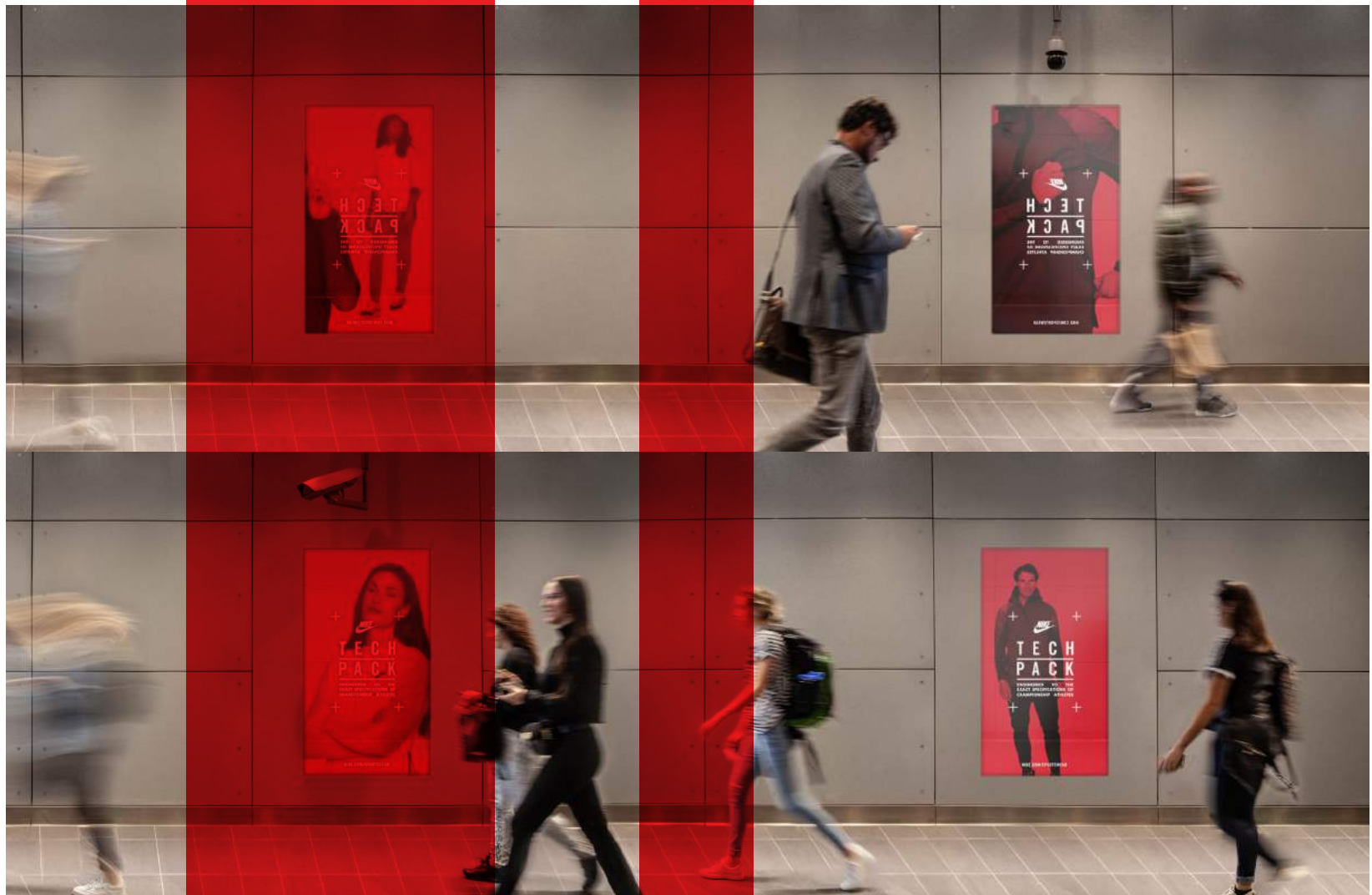
In addition to innovative technology, challenging content and sustainability concepts, CS Digital Media developed additional amenities for the Amsterdam metro network, varying from waiting facilities to security services.

'The extra services that CS Digital Media offers match the goal to improve travellers' experience,' says CCO Mark Veenman. 'Some of these will be in use right from the start, while others will be implemented in phases.' Business Analyst Mark Bontekoning adds: 'We are an ambitious company looking to highlight our strengths and capabilities. These plans are not necessarily ambitious

though: given our expertise and track record, they are completely realistic. In many cases, we have the technology and services right here in house. We also have a huge network of reliable partners and suppliers for our hardware, screens, materials, and designs in the public space.'

The latter is the case for the new waiting facilities that CS Digital Media wants to set up. According to Veenman, 'It will be an improved shelter against rain and wind and will offer comfort while the quality design ensures a pleasant ambiance.'

The advertising units in the waiting facilities will merge with the metro design thanks



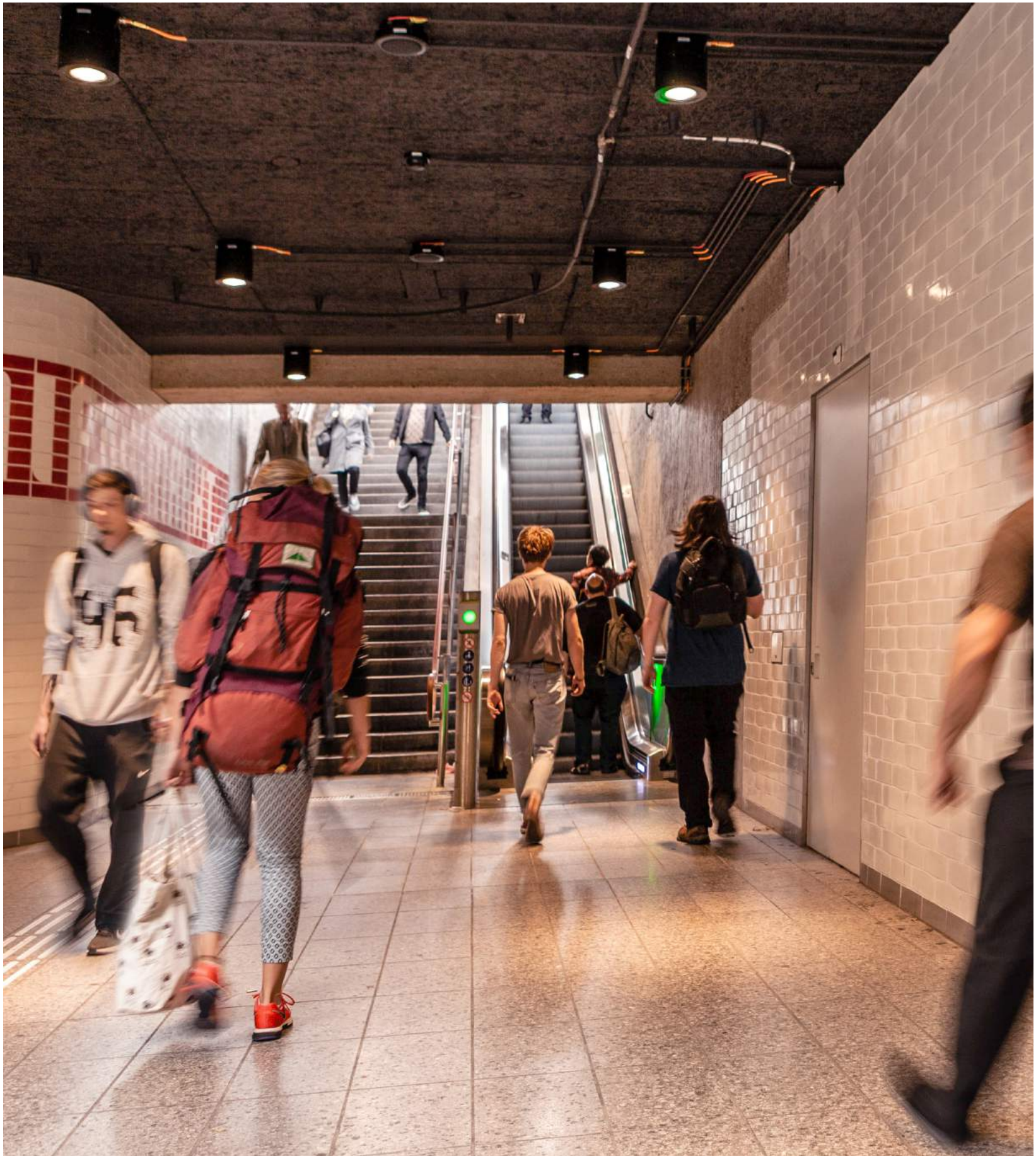
vijzelgracht

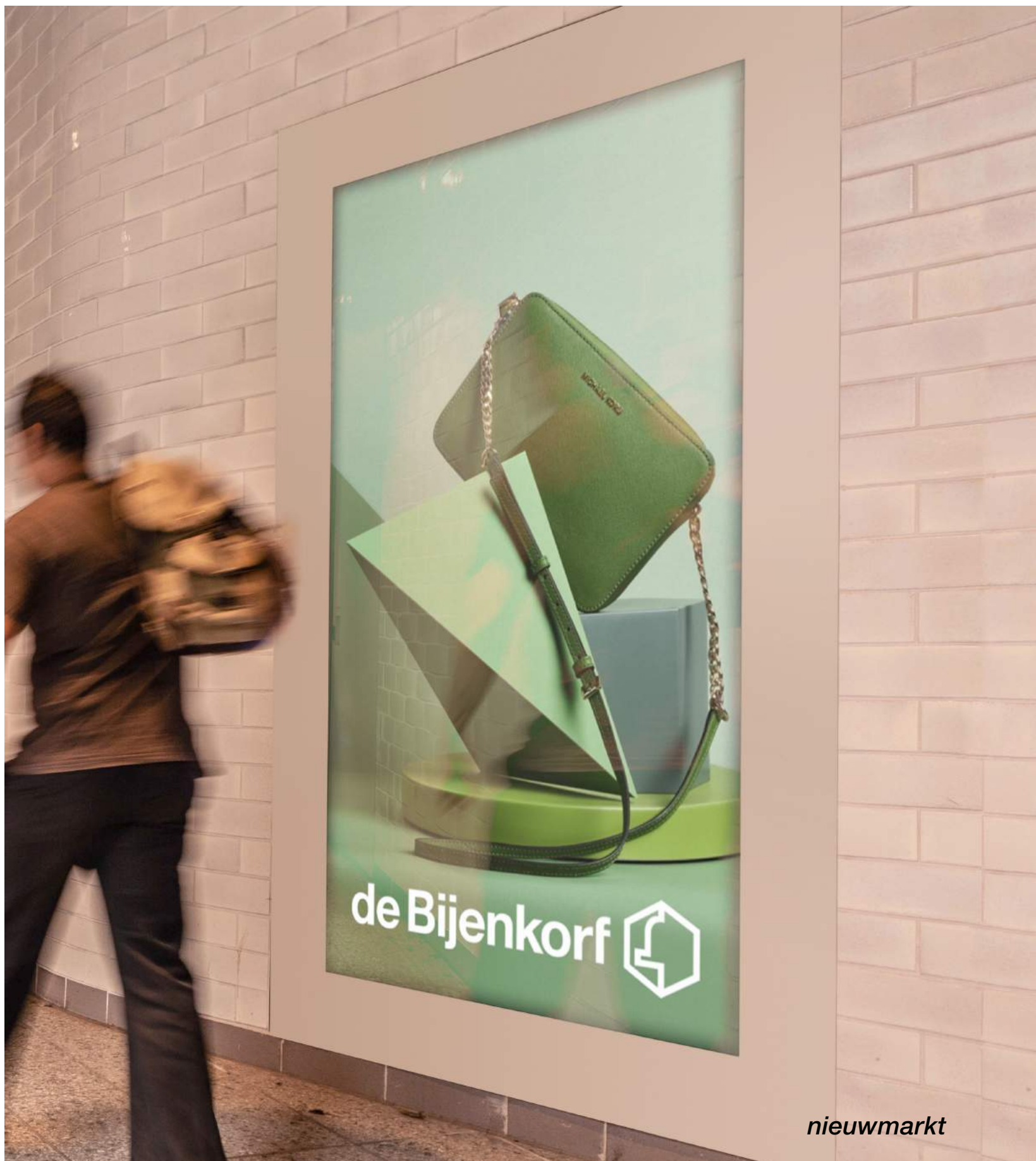
to their glass passe-partouts. Veenman: 'These elements seem like mere details, but we believe they enhance the aesthetics and ambiance of the complete metro network. The quality will of course depend on maintenance and the quick repair of any damage. The aim is to handle glass damage within two hours or lighting and graffiti damage within 24 hours.' CS Digital Media has developed a digital component to further ease the maintenance and repair process. Travellers have the possibility of reporting any damage via an online form.

Veenman adds that 'in the event of a major incident, central traffic control can utilize all

screens to alert travellers. In this way our screens are a valuable contribution to the evacuation plan and security in the metro network. CS Digital Media takes care of the screens and ensures they work properly. We work with a meticulous Service Level Agreement. The whole network is constantly monitored for any malfunctions. And again, travellers can help by easily providing online feedback. It allows us the opportunity to respond accordingly. Quality is key.'

***a
pleasant
ambiance
for
the
traveller***





nieuwmarkt

RED BULL MUSIC
presents
BOKOESAM
'NACHTVLINDER'

The advertisement features the Red Bull logo at the top, followed by the text 'RED BULL MUSIC presents'. Below this, the name 'BOKOESAM' is written in large, bold, white letters. Underneath, the title of the work, 'NACHTVLINDER', is also in large, bold, white letters. The central image shows a man and a woman in a close embrace, kissing. The man is wearing a blue shirt, and the woman is wearing a blue top. The background is dark and moody. A small yellow logo is visible in the bottom right corner of the advertisement.



ever wondered what innovation and quality look like?

<< central station

The innovative strength of CS Digital Media plays a significant role in winning the advertising concession. In 2015, the company won the AMMA Award in the category 'Best Media Innovation.' CEO Radjen van Wilsem: 'Amsterdam will take full advantage of the technology that we have been developing over the last few years in the fields of hardware, software, sales, and marketing tools.'

In the first issue of CSDM Magazine (2016), Roel Pennings (Director Operations) said: 'CS Digital Media stands out in the DOOH sector both because of our technical achievements for important clients such as Shell, ABN Amro and RET, and because of our constant need to innovate and pioneer

technology.' Since then, the company has continued to move forward, and the concession for the Amsterdam metro network shows this.

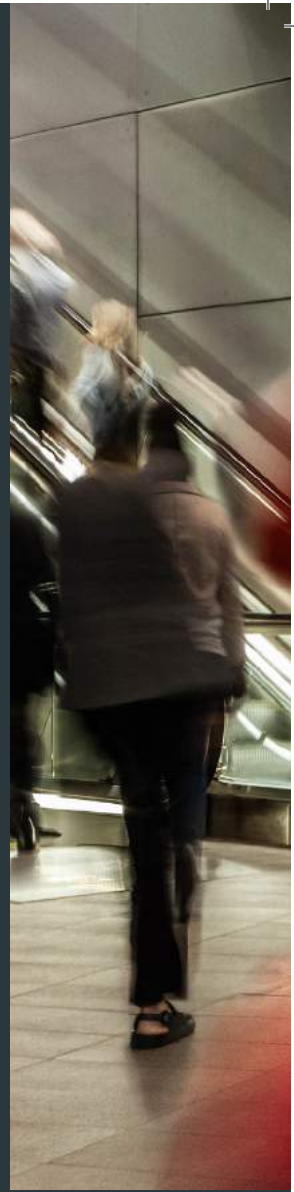
In addition to programmatic advertising, CS Digital Media also offers additional innovative and qualitative aspects with the launch of its network in Amsterdam. Business Analyst Mark Bontekoning: 'Whether it concerns the materials of the waiting facilities, the software and hardware, or our partners and suppliers; all must be state-of-the-art. This is defined

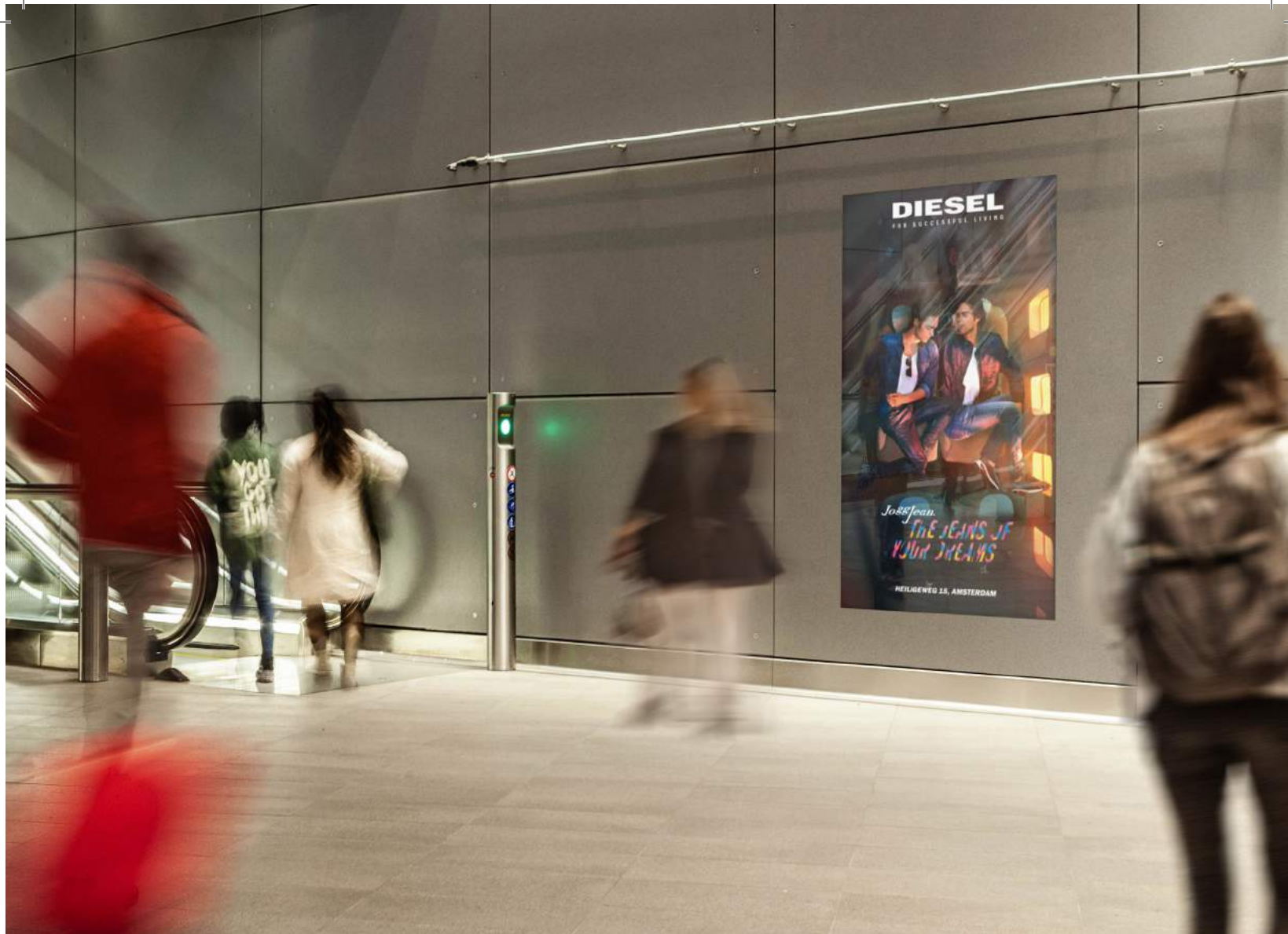
every
aspect
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will be
state of
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central station >>

in the plan that will be updated as the technology evolves. To us, state-of-the art means that all our products are completely digital. Everything must be of high quality, environmentally friendly, innovative, reliable, safe, and built for the future. The steps that CS Digital Media takes are always towards the future. This especially concerns our screens. We are already exploring OLED, the successor to the common LED technology. If this technology proves to be working, we can directly switch to OLED whenever it's time to replace the old screens. We don't make rash decisions; we are well prepared.'

CS Digital Media CEO Radjen van Wilsem explains the bigger picture of this development in the capital: 'Maintaining





and expanding the Amsterdam concession gives us the opportunity to set up a network in which all our innovative technologies in hardware, software, and sales/marketing tools can be used right from the start. We elevate Digital out of Home to the next level and create an 'Online in Out of Home' media landscape.'

'We expect our products and services to have a positive influence on travellers experience of the network,' says CCO Mark Veenman, 'and to contribute to an increased customer satisfaction for those travelling on public transport. The great advantage for advertisers is that when using our HTML5 web player for Digital Out of Home, they can reach the maximum specific target

audience reach, in spite of it being a mass medium. They can advertise on a specific location within their preferred time frame, for example the Vijzelstraat from 10am to 10pm. In addition, it is possible to extend a campaign to other media, such as the mobile phone. In other words, based on the same technology, CS Digital Media creates a level playing field in which ads can be deployed simultaneously across multiple online platforms. This will blur the lines between Out of Home and online.'



***EXPERIENCE
ONLINE OUT OF HOME***

FLY WITH US

amsterdam+r= smarterdam

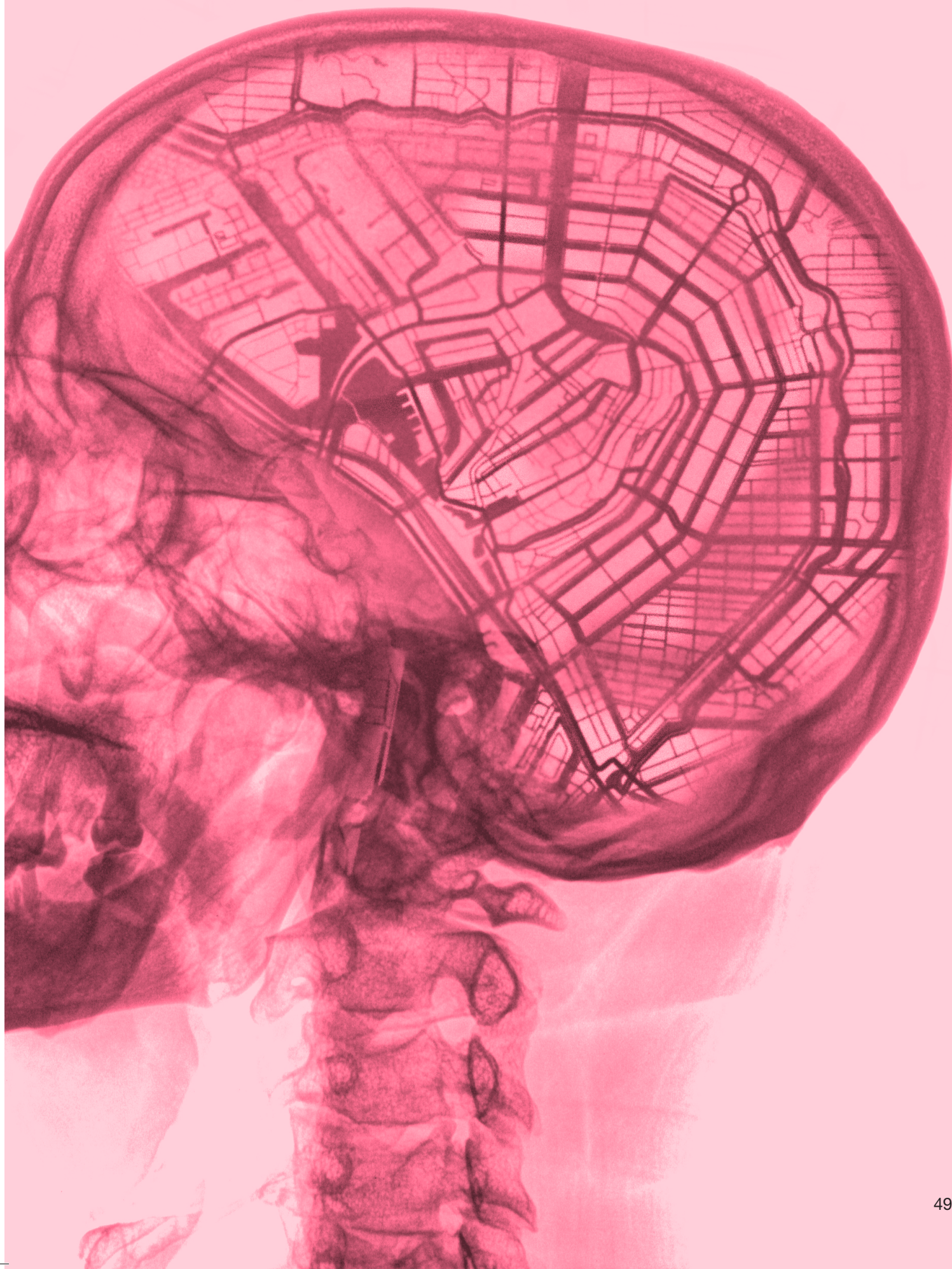
Cities such as Singapore, Barcelona and Amsterdam have been frontrunners in the development of the smart city, i.e. a city where smart technology and The Internet of Things are used for sustainability, safety, and improving overall quality of life, including Mobility as a Service (MAAS). CS Digital Media contributes to this last concept with its design for an Intelligent Urban Transport Platform.

One of the driving forces of the smart city concept in the capital is the Amsterdam Economic Board which consists of heads of educational institutions, research facilities, public authorities, and international companies such as IBM, Philips, Shell. The Board set the strategic direction for the five main issues facing the city in 2025. 'Firstly, by 2025 the Municipality of Amsterdam Region (MRA) wants to be a leader of the circular economy by finding smart solutions to preserve natural resources. Secondly, the MRA wants to set an example in Europe regarding data-driven innovation. Thirdly, it aims to extend the

lifespan of residents by on average two years. Fourthly, it strives to ensure transport in the city is emission-free. Lastly, the MRA wants to be the most successful region regarding using, preserving, and attracting talent. This is what we want to achieve when Amsterdam celebrates its 750th anniversary in 2025. That year, the city will be in the top three of the most innovative regions in Europe.'

'Working together with various partners in and around Amsterdam, CS Digital Media wants to join and integrate its networks in the smart city,' says Business Analyst Mark Bontekoning. In the first issue of CSDM, CEO Radjen van Wilsem

**we
offer
mobility
as
a
service**



programmatic makes life easier

explained: 'The technological basis is shaped by programmatic marketing. I think by 2025 we will be living in a transaction-driven society with assisted economic decisions. It might sound complicated, but it means that when I'm travelling to Belgium, for example, my device will show that everything has been taken care of, from insurance to the route. This is the core of programmatic. All these transactions that we do manually now, will be organized for us personally. In other words, programmatic makes life easier.'

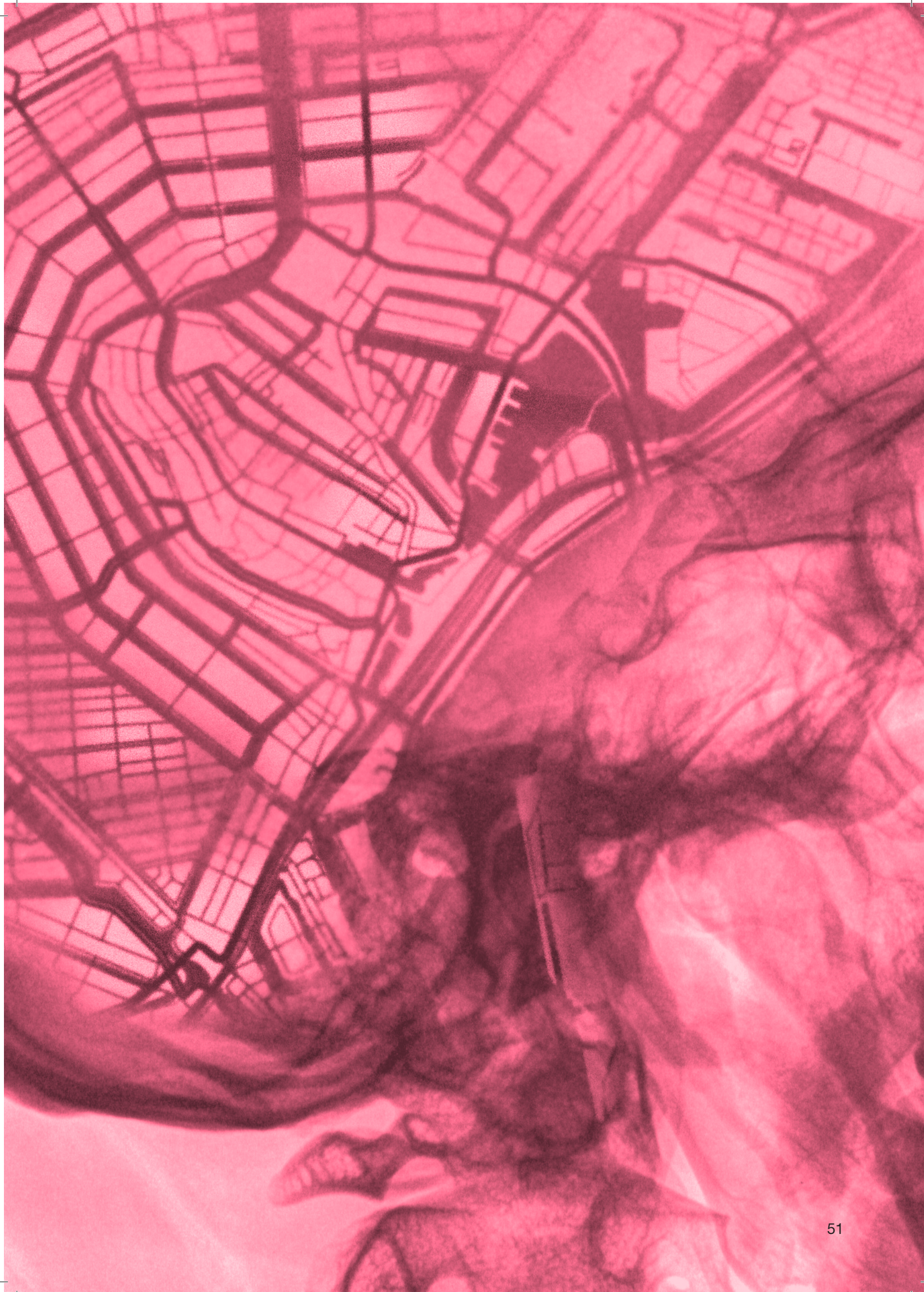
For Amsterdam Smart City, CS Digital Media has designed a mobility concept that is based on the same programmatic starting points. Bontekoning: 'It is the long-term vision that is important. Amsterdam wants part of the Smart City concept, i.e. Mobility as a Service (MAAS), to be operational before 2025. It is clear that Amsterdam is congested and struggling with various issues that can be addressed with technology. With regards to mobility problems, we envision the city connecting to the technology of the screens in the metro network. For example, we would like to offer travellers notifications through our screens and other devices offering alternative travel possibilities and other services (such as parking spaces and travel information). The working title for this smart agent system is Intelligent Urban Transport Platform.'

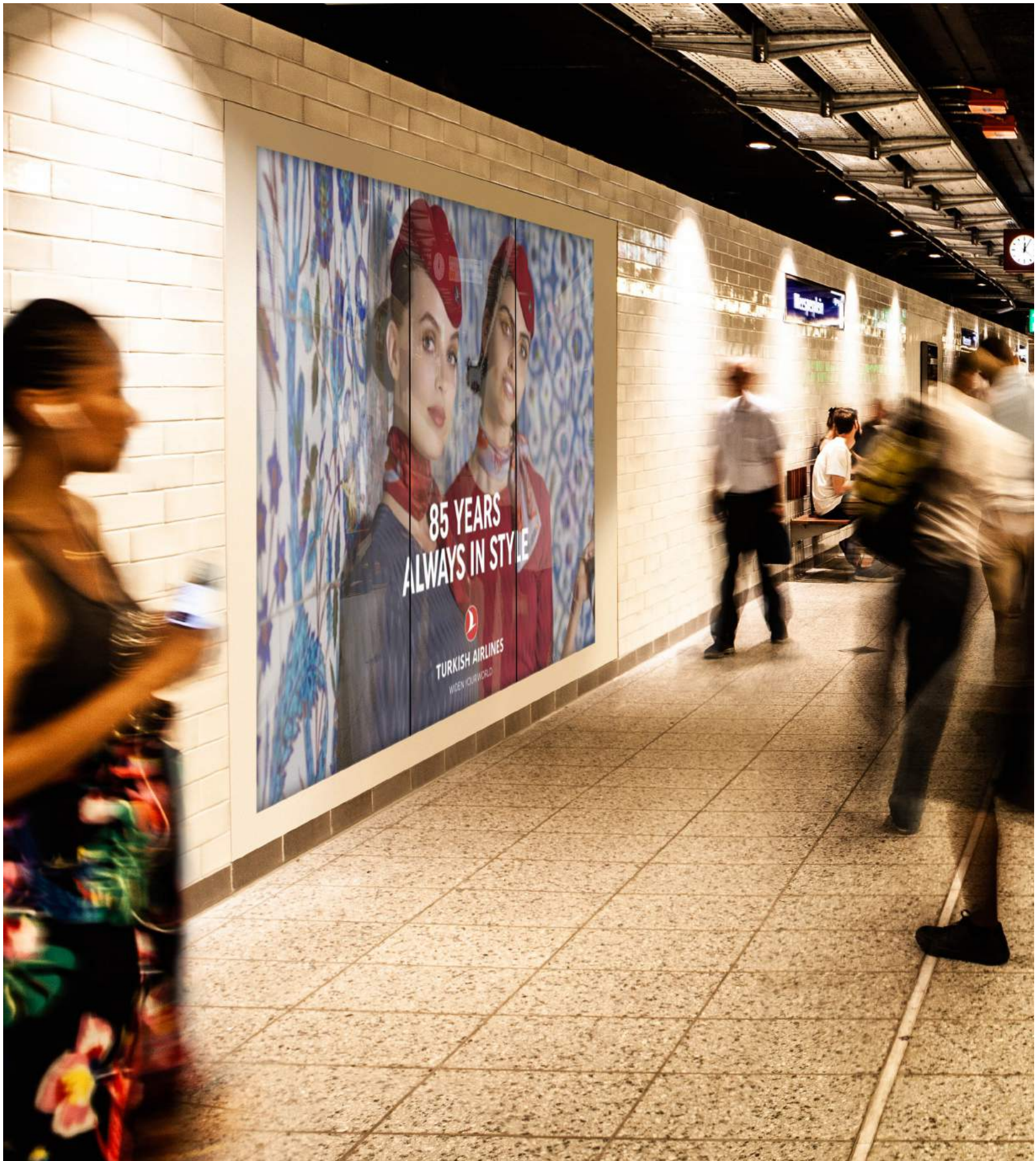
It comes down to offering personalized services to travellers using the Digital Media screens and their own device via programmatic marketing technology (smart agents). Bontekoning: 'This platform seamlessly matches the plans for the Mobility as a Service project of the Amsterdam Economic Board.'

'Smart Agents' in action: personalized digital services for travellers

'Traveller A lives in Breukelen and goes to Rotterdam by car. Finding a parking spot in the city is hard. Our tool relays data about traffic jams, parking spaces and public transport. It then sends an offer to the smart screen device in traveller A's connected car. The tool recommends that A drives to a Park and Ride (P&R) location and uses the navigation system to give the fastest route. When traveller A accepts the offer, the departure time of the first metro after arriving at the P&R pops up on the screen in the connected car. After traveller A exits the car, the same information is sent to the relevant smartphone. The specific preferences of traveller A are known to our tool. When A passes the screens on the metro platform, the information and advertisements can be adjusted to individual preferences or interests. This makes it more interesting and valuable for the traveller to look at the screens.'

[Source: concession document metro network Amsterdam, CS Digital Media 2017]





weesperplein





advertising below Amsterdam

Thanks to winning the concession for the metro network in Amsterdam, CS Digital Media has significantly strengthened its position within the DOOH market. CS Digital Media will broadcast on digital screens in three large metro networks: Amsterdam, Rotterdam and Antwerp. 'It generates an enormous range,' says Sten Ouderdorp, Media & Data Specialist at CS Digital Media.

280 screens

'We are proud that CS Digital Media will work on the Amsterdam metro network for up to 15 years,' says Ouderdorp. 'This network of digital screens will be the flagship of the Netherlands. Amsterdam has a natural pull and an international atmosphere.'

'At this moment, we have 36 digital abri screens in Amsterdam. Following a phased deployment, this number will be 280. Our screens will be set up at all 38 stations on the East Line, Ring Line and the new North-South Line. Ultra 4k quality is broadcasted on 75, 86 and 98 inch screens. The total network will reach more than four million travellers per week. Of course, this is huge. Eventually, all printed posters will disappear. All the screens will be digital.'

'The previous network in Amsterdam was often used for campaigns. Soon, CS Digital Media will be represented on all 38 stations, forming a network that is interesting for both local and national advertisers. It will also entice international advertisers who want to broadcast their campaigns mainly in capitals.'

More honest and transparent

Amsterdam will have a network with an international appearance. Not only does this network offer visibility and impact, it also offers a flexible way of purchasing campaigns using programmatic buying. That's a first!

Sebastian Op het Veld, Head of Campaigns at MyAdbooker was shocked when he started working in the world of media purchasing a couple of years ago. 'Media range is the most abstract concept within Digital Out of Home. I still don't understand what it means exactly. Operators say: 'This is the location, and this is the part of the Netherlands that you can reach from here. And when I have two screens, the range is doubled. But is it seen by more people? Or by different people? It is completely unclear. Media range is a vague concept. With programmatic buying, all these vague words disappear. The price you pay depends on the number of people that see your advertisement which makes it more honest, transparent, and accurate.'

Ouderdorp adds: 'The online media bureaus already work with programmatic buying. They are used to this way of purchasing because online is already structured so that you pay for the number of people you reach. For them, it makes sense to buy DOOH programmatically as well. When working with online media bureaus, we only have to explain the meaning of DOOH and the difference between a one-to-one and a one-to-many media message. This is doable because they are already familiar with media purchasing. Traditional media bureaus still have a linear mindset. That's quite a challenge.'

Packages and programmatic

Op het Veld: 'Currently advertisers are buying time slots. These are usually available in packages which run from 9am to 5pm, Monday to Sunday. Advertisements will appear once every couple of minutes. The whole method of buying is shifting to buying 'reach.' With a set budget, businesses can generate a specific reach. How they want to achieve this is completely up to them. If they would like to garner reach rapidly, the advertisement can be broadcast in a busy period, like during rush hour. If they want to take it slow, they can choose quieter locations or moments, which means that online media bureaus and advertisers can customize their own campaigns.'

Shift to online

Sebastian Op het Veld continues:

'Programmatic introduces a big change. Setting up a campaign in a linear way, based on time and price, will disappear. The process will

become more flexible and aimed at time and reach. Businesses will pay for the number of views per time frame, which is a much more transparent product to sell. Each location has a different value because of the reach which can be realised. For example, a complete network can reach one million. If you're only advertising at quiet stations, you will never reach this. If you want to purchase a million views from us, you will get a million views. With traditional ways of buying, you never really know for sure. With us, you can decide how quickly you want to 'spend' your million views, either in for example a week or within three days. The algorithms of the system decide where your advertisement will be broadcast.'

'The attractiveness of the screen changes and the context can vary day to day. On an average Thursday afternoon, there won't be many people at Bijlmer ArenA, whereas on a Sunday afternoon, an hour before an Ajax game begins, it will be packed. At other moments during the week, people come to Bijlmer ArenA to go shopping or work. The context shifts, which is something advertisers can work with. However, the medium doesn't change and neither does the goal of the medium. The people that see the medium, your audience, is something that you can influence. And on a positive note, in comparison to the traditional way of buying, transparency and efficiency is enhanced.'



it's bigger better & brighter our new stuff baby

State-of-the-art content needs to be broadcast on screens that do justice to the imagery. Up to now, the highest quality was Full HD 1920 x 1080. The introduction of 4K Ultra HD raises the bar.

Technological upgrade

Television and screen manufacturers have always jumped from one hype to the other. First, 3D televisions were trending, then VR glasses became popular. The next development that is taking over is 4K. This, however, does not seem to be merely a trend, but the future.

A 4K screen has four times the resolution (3840 x 2160) of a full HD screen. For years, Netflix has been working on making its content available in 4K. There is also a notable shift in Digital Out of Home. In the foreseeable future, CS Digital Media will replace all its screens with 4K screens. 'The Rotterdam metro network is our oldest network,' says Radjen van Wilsem, CEO of CS Digital Media. 'We've been present there since 2011. All digital screens in the network required an upgrade. We now have larger and better-quality screens: 75 inch and 4K. Advertisements will stand out even more.'

Ready for the future

Screens with 4K quality have a higher resolution. This means a higher pixel density. The difference with Full HD is especially noticeable when the distance between you and the screen is a distance of not more than three metres, with the details being even more subtle and the colours even brighter. The problem is that there is not that much content available in 4K quality. Netflix is on the right track, and more and more movies are being released on 4K Blu-ray DVDs, in addition to the newest game consoles offering games in 4K. For Dutch linear content, however, 4K is only just starting to catch on. 'Of course, CS Digital Media wants to switch to 4K technology right away. Over 95 percent of all our original video content is published at CSDM.online in 4K quality. We are ready for the future,' says Van Wilsem.



rokin

Experience

The entire consumer experience can be vastly improved by utilizing a 4K screen. The new Apple TV supports 4K, the iPhone X can record 60 frames per second in 4K and, within a few years, all video games will be in 4K. We cannot deny it: 4K is the new standard. CS Digital Media Operations Director Roel Pennings: 'We won the advertising concession for the metro network in

Amsterdam. Starting in 2019, we will broadcast 4K quality on the screens in Amsterdam. On top of that, we will also roll out a network in Antwerp. Spread over five stations there will be a total of 22 screens, all 4K and 75 inch. Within the DOOH sector, 4K will also become the new standard. It is also the quality that advertisers prefer.'

rethinking access to the city

It seems that digitalisation has finally overtaken globalisation. This transition forces us as a society to rethink how we live and work together effectively. Amsterdam is a busy 24/7 city and getting busier all the time. In 2016, the number of visitors to the city sky rocketed in comparison to the previous decade, thanks to digitalisation. Due to steadily rising economic growth and vanishing frontiers, a new travelling middle class from China, India, and Russia is on the rise, with access to platforms like easyJet, Airbnb, TripAdvisor and Booking.com. Europe has become an amusement park. Without careful monitoring, this growing number of travellers could get out of control.

On 21 July 2018, the North-South Line was officially opened. The day after the opening, the city simultaneously limited city centre vehicle access, parking fees sky rocketed and 'there's plenty more where that came from'

Public transport is playing an increasingly important role in the city's attempt to deal with the growing crowds. However, automobile crowding in the city is not the only problem.

First, the tourism sector in Amsterdam is growing much faster than in other European capitals, generating a 6.3 billion euro annual income revenue. By the end of 2018, it is estimated that 18 million visitors – both business and leisure – will have visited our capital. With an average growth of 5 per cent per year, the total number of visitors to Amsterdam in 2025 will be 29 million: almost 60 percent more than it is today. As Amsterdam will celebrate the 750th anniversary of its founding in that year, it will have to deal with more expected visitors than ever before.

Crowd-chasing multinationals also adapt and respond to this global digitalisation by implementing advertisement strategies only in capital cities, making them look homogenous. Roads are also increasingly congested due to the proliferation in the number of delivery vehicles for e-commerce, including online shopping.

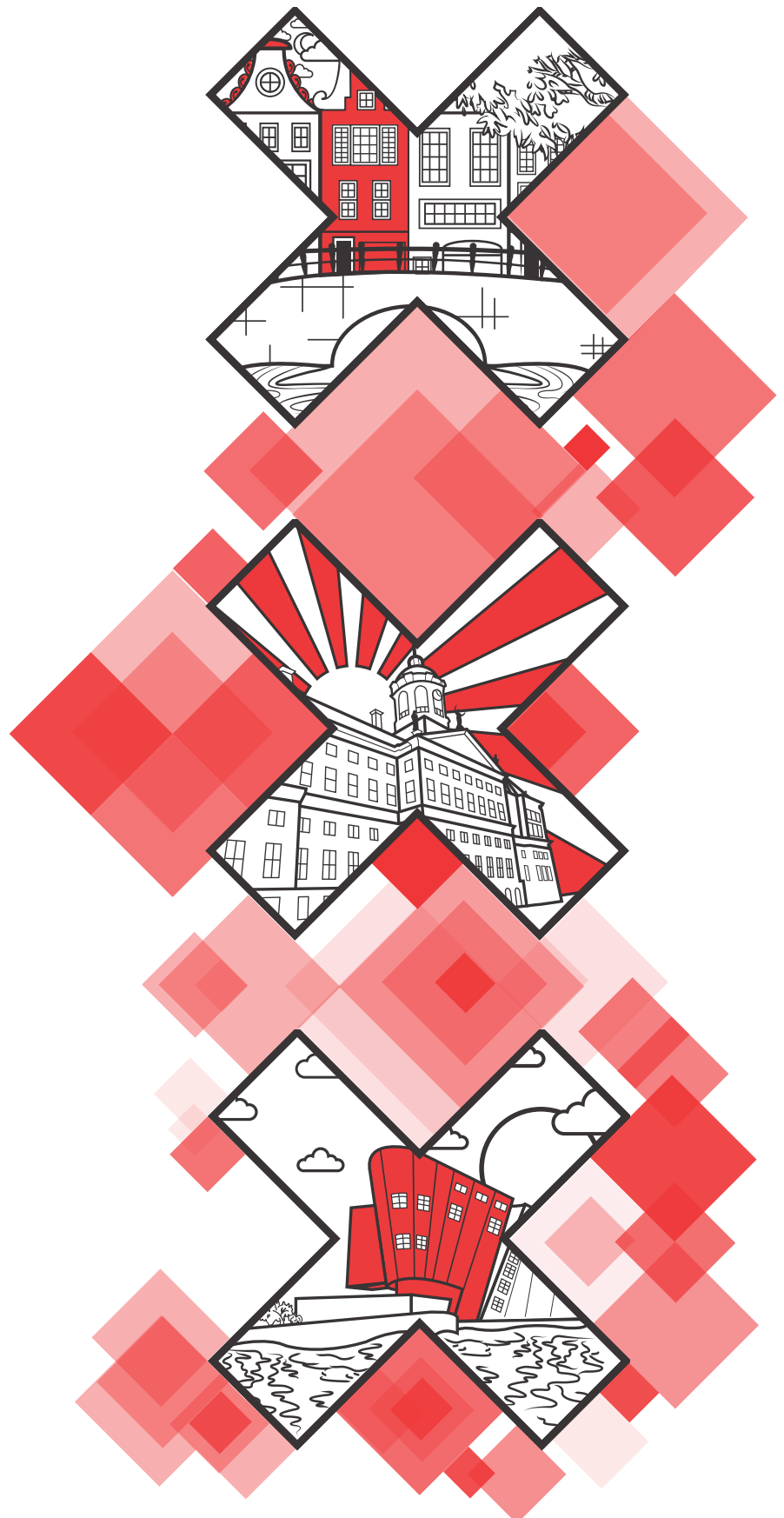
Facebook estimates that globally as many as 50 million companies of all sizes use its platform, and that 30 percent of Facebook's clients operate internationally. The rise of small and medium-sized enterprises (SMEs) in the digital world is clearly visible in the statistics. In the United States, the share of large exporting

conglomerates has fallen from 84 percent in 1977 to 50 percent in 2013. The digital platform offers start-ups a chance to reach an international audience from the beginning.

This growth and change in the economic landscape should be easier to regulate with the help of advanced digital technology. The preservation and well-being of Amsterdam's heritage requires a fundamental rethink of how access to the city is regulated and connected to price incentives. Soon enough, parking permits could be applied in addition to visitor permits which would regulate the price and volume of pre-bookings available, stating 'full' at certain times a day. Brussels started this regulation initiative in the form of implementing a low emission zone (LEZ) throughout the city and requiring pre-registration of gasoline and diesel-powered vehicles.

That is why the influence of the Amsterdam region will expand even further to the metropolitan region extending from Zandvoort and Purmerend to Almere and Leiden. We will focus on this in the coming fifteen years, during which time, I think, we will have to deal with changing political policy every four years. But we are digitally prepared.

Radjen van Wilsem
CEO CS Digital Media





next issue

CSDM Magazine #4 shines the spotlight on content specifically created for the Amsterdam screens. As well as guidelines on production and programming, this issue will answer questions such as: what role can DOOH play in a metropolis? How can content both inform and inspire? How can we connect an underground station to the streets above?

The CSDM Amsterdam edition will offer a preview of the various editorial content concepts: Faces of the City, Art Cloud, District Peek, Instadam and History of the City. These concepts feature a range of both modern and vintage images of artwork, people, events and entrepreneurs. The ultimate goal? Creating a connection between the metro traveller and the city itself, achieved by sharing all the riches Amsterdam has to offer across 280 high-tech screens.

Check out csdm.online for the latest news, reports, Q&As and mini-documentaries.





**CS
DIGITAL
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