

PG. **6**

Retailers: Freedom to experiment depends on new approaches to technology

PG. **48**

In times of disruption, innovation is a life or death choice for retailers

# valtech.<sub>mag</sub>



**commercetools**

*Next generation commerce*

valtech.com

Innovation

Visionary

# Articles

PG. 06–13

In times of disruption, innovation is a life or death choice for retailers

PG. 14–19

Why companies must experiment with new digital touchpoints

PG. 20–21

Voice commerce - Many devices, many experiments

PG. 22–23

Shopping in the car: Soon no longer a pipe dream

PG. 24–25

The in-store technical revolution

PG. 26–29

Win your consumers' attention with micro-moment marketing

PG. 30–33

The who, how and why of VR for retail

PG. 34–39

Case study: Eurail

PG. 40–43

The role of APIs in the post-web era

PG. 44–47

Interview: commercetools founder Dirk Hörig

*on new customer approaches using social media, apps, chatbots and their peers*

PG. 48–51

Everywhere commerce: What we can expect beyond the webshop

# valtech\_



---

## LETTER FROM THE EDITOR

It's change that is constant

The ability to buy goods online – first introduced over twenty years ago – has fundamentally changed how we shop, how we interact with brands and how we make decisions about what we buy. But don't get too used to how things are today. As you'll see in the pages of this edition of the Valtech Mag\_, things are really getting interesting. The day will come sooner than you think when you'll use simple voice commands from within your car to buy milk and have it waiting at your door when you get home from work. You'll be able to virtually design your living space, placing furniture and fixtures in your very own home, and then ordering them from within that virtual world

In these articles, Valtech and commercetools explore a future of innovation with a vision that's nearly here. Valtech, through its amazing design and content, is utilizing new technologies like the commercetools' modern commerce platform to fast forward global brands into this new "post webshop" era. This is an era where shopping is not relegated to a traditional website – or even to a mobile phone. This is an era where beautiful content, experiences and story-telling are everywhere – phones, kiosks, automobiles, even refrigerators. To differentiate their brands, top innovators in retail now have to focus on unprecedented ways to disrupt the industry. Commerce that makes purchases seamless at every interaction is no longer important – it is crucial.

The amount of creativity and innovation surrounding retail is making for an exciting time in the industry – the connection between the offline and online worlds are like nothing we've ever seen. Long gone are days when the top e-commerce professionals



were focused on building a better shopping cart. Indeed, the best e-commerce platforms provide a very similar set of essential functionalities that create a fully responsive user interface (UI) and user experience (UX). Forward-thinking brands have an incredible opportunity to engage consumers in new ways. They can build bridges to traditional consumers and digital savvy buyers alike. They can be the first to offer new channels and new experiences. They can imagine and develop and build and change based on what their consumers enjoy.

This post-webshop era, that Valtech and commercetools are offering together, is full of excitement and is the buzz across the digital technology community. Eurail, one of our mutual customers is just getting started building what's next in the post-webshop era. They've taken a digital-traveler-first approach to their website and commerce platform. They now have a platform that offers new and exciting European destinations by rail, sea and air as well as accommodations and dining. It's just one of the innovative companies Valtech and commercetools are working with – and we'd like to work with you too.

Enjoy the articles and stories in this magazine and join us as we usher in the post-webshop era.



# IN TIMES OF DISRUPTION

## INNOVATION IS A LIFE OR DEATH CHOICE FOR RETAILERS

*“Technologies that revolutionize the way consumers interact with a marketplace also tend to reconfigure its dynamics and reshape the companies that sell into it.”*

Marketing in the Age of Alexa, HBR, June 2018

In the next decade, the winners and losers in retail will be determined by how effectively Chief Digital Officers can experiment with new business models and new channels to consumers. Thriving in a world where new technologies disrupt traditional consumer relationships and provide new entry points for competitors requires intentional, high cadence experimentation and a set of technical platforms and tools that can keep up. commercetools, in our view, is precisely such a tool. It is architected to support rapid, real world testing of new ideas.

## THE INNOVATION IMPERATIVE

Consumers are adopting new channels faster than at any time in history. They are facing an explosion of choice:

- 25 YEARS AGO** — the consumer could shop in-store or, in some cases by mail order
- 20 YEARS AGO** — a host of .com retailers introduced consumers to online purchasing and while few survived, those that did have become dominant players in their niche
- 15 YEARS AGO** — mobile browsers became usable for shopping by the most committed of purchasers
- 10 YEARS AGO** — the iPhone revolutionized mobile shopping with the introduction of custom “apps” that dramatically simplified the shopping experience
- 5 YEARS AGO** — Instagram changed the way a whole generation thinks about evaluating potential purchases

## AND THEN

*in the last five years, consumers have lived through an explosion of choice in how they purchase products*

Suddenly voice is everywhere changing consumer behaviors and threatening retailers’ traditional go-to-market strategies.

Digital assistants are being built into a broad variety of consumer devices from mobile phones to refrigerators and are increasingly becoming intermediaries between retailers and consumers. This lead one HBR prognosticator to predict, “the billions in annual spending on brand marketing will shift from consumers to AI platforms.”

Consumers are buying from within the video game experience and this is expanding beyond digital goods to include the purchase of real-world goods for delivery.

Virtual reality and augmented reality technologies have not reached mass adoption as quickly as the most ardent advocates had predicted, but there is little doubt they will be a significant part of the consumer landscape. And they hold the potential to change everything about the consumer buying experience.

THE WORLD IS  
**CHANGING**

Carmakers are actively rolling out the ability to shop through infotainment systems while on the road. This trend can only accelerate as autonomous cars reach the market

Auto-replenishment systems are just now reaching consumers but have the potential to radically change the meaning of consumer loyalty

*Further complicating retailers’ relationships with their customers is the rise of dramatic new business models:*

**Direct-to-consumer** – manufacturers are increasingly experimenting with cutting out the middleman within their traditional supply chains and building relationships directly with the end customer.

**Everything by subscription** – McKinsey reports that the subscription e-commerce market has double over the last five years and shows no sign of slowing down.

**The sharing economy** – consumers, particularly millennials, are losing the emotional connection to ownership and retailers are responding with innovative “sharing” business models

**The rise of the Internet of Things** – ubiquitous connectivity and sensing capabilities will change everything from supply chain management to customer warranty registration and machine-driven ordering of services and supplies.

**3D printing** – manufacturers are already adopting this technology en masse; if it becomes a standard home device, it will reorient the entire retailing landscape.

**Block chain** – stepping back from the “irrational exuberance” of today’s investors, there is something very real at the centre of block chain technology. And it could change everything for retailers from contracting relationships to IP ownership validation.

*That the world is changing and that the change is accelerating is in little doubt. Retailers need to be able to anticipate how technology will change their relationship with their customers and judiciously experiment with new models. Otherwise, they risk being left behind.*

## BASELINE NEEDS FOR INNOVATION

Innovation entails risk. Most experiments will fail. Retailers need an infrastructure that allows for:

Rapid, low-cost deployment of new capabilities

Simple and reliable reuse of existing investments in the exploration of new opportunities

Rapid scaling out of successful experiments to capture market share

Anticipation of or preparation for the unexpected rise of new consumer channels



## ANTICIPATING AND REACTING: THE RETAILER LIFE LINE

It is clear to most retailers that large, important changes are happening in how they interact with their consumers. What is less clear is how best to react to these changes. Many remember the .com bust as well as the boom even when new technologies are real and important, committing too early or over investing can be dangerous. Prudent retailers understand that the only path forward is experimentation. No one knows which business models will thrive in the new economy. No one can meaningfully predict how the intersection of AI home assistance, the sharing

economy and the potential of block chain will change the retail landscape. In this context, retailers have an absolute need to be able to experiment with new business models quickly and inexpensively and be fully prepared to “fail forwards.”

## THE VALUE OF MICROSERVICE ARCHITECTURES

The bottom line is that Chief Digital Officers need the ability to experiment with new channels to customer engagement, new business models and new partnerships. Monolithic commerce systems make these experiments expensive and high risk the exact opposite of what is needed for retailers to thrive. When experiments are costly in time or money innovation is stifled.

Indeed, most of modern “end-to-end” commerce platforms have evolved primarily through acquisitions of software products and smaller platforms in areas where a “monolith” buyer was at a disadvantage or where it was missing respective functionalities and features. Time to market is of the essence, and thus, over the past 10 years we observed major platform consolidations in the ecommerce technology space. Such acquisition sprees typically result in a “monolith” platform being marketed as an end-to-end, “peace of mind,” “single vendor,” type fully-functional solution. However, integrating its functional components lasts for years and it poses a major challenge for its customers; any and all upgrades or modifications to a single module or functional block of such a platform results in a major rework and testing effort across all of its parts – a very costly undertaking for a retailer.

All-in-one modern enterprise commerce platforms are expensive, even if deployed and purchased based on a revenue-share (pay-as-you-grow) model; and de-coupling just a few critically-needed functions and features from the rest of such a platform’s components is nearly impossible when the full suite is not utilized to its potential.

Hence, we started to see more and more retailers embracing the so-called “headless” or microservices-based approach to commerce technology. A “headless” commerce platform is essentially a robust scalable modern set of commerce modules and services that are deployed in the cloud. They can be called upon through a custom-build user interface. Such a front-end can be a website, a mobile app, a voice-controlled device, a home appliance. In short, regardless of a user touch point or an interface type, a very standard set of back-end platform microservices is utilized through a very comprehensive API layer of the platform.

Among the many benefits of a microservices-based platform such as commercetools, are:

- Individually consumable and priced “on-demand” type services (such as product price calls, promotion calls, order tax calculation calls, and other)
- Such platforms are typically cloud-native, designed from the ground-up utilizing best-of-breed, modern software architecture
- They are “headless”, built for omni-channel, social, IoT and numerous other user interfaces (think: in-game purchases, or in-car navigation media purchases)
- They connect to the “old” world of offline stores and customer touchpoints like kiosks, POS terminals, store displays, etc.
- There are hundreds of releases per year to grow and improve such platforms, while the underlying API’s are kept stable and backward-compatibility is assured

Technical evangelists will praise the robustness and future-proofing of a deeply de-coupled architecture. And they are correct, it drives very real benefits to those managing your technology both today and tomorrow. However, the bigger business benefits are in providing a path to agility. It buys CDOs the ability to innovate towards the future and to react to unexpected developments.



It is in this context that a microservices approach delivers very real value to Chief Digital Officers. Valtech is enthusiastic about the headless approach to e-commerce and, after reviewing available technologies, we feel very comfortable recommending commercetools to those pursuing a more agile approach to the market. commercetools provides an innovation platform that allows fast, lower-risk experimentation with new channels for reaching the customer or enables entirely new business models.

## HOW DOES THE COMMERCE TOOLS MICROSERVICES ARCHITECTURE SUPPORT INNOVATION?

commercetools supports a CDO's innovation imperative by reducing the time and cost of trying new ideas. It does this in a number of ways:

### FREEDOM FROM THE BACKEND

CDOs can roll out experiments with new business models or consumer channels without touching backend business logic, functionality or capabilities. New experimental programs can be launched without delving into the complexity of backend systems. It fundamentally frees CDOs from a central challenge with monolithic systems the requirement that if you change anything, you have to change everything.

### FASTER TIME TO VALUE

The commercetools' microservices approach gets projects live more quickly because:

- It simplifies quality assurance processes. Only the microservice being written requires testing.
- Teams can develop in whichever programming language best meets the demands of the project – all code bases can coexist happily.
- Development teams can operate autonomously – the overhead and friction of coordinating distributed teams disappears.

### FAST AND SIMPLE PARTNERSHIPS

New channels to market and business models frequently involve new business or supply chain partnerships. By design, commercetools is "API-first" it is built with ease of integration as a core design principle. For a CDO, this means that smart business partnerships will not be strangled by lengthy and difficult technical integrations.

### REDUCED PARTNER OR VENDOR LOCK-IN

commercetools grants CDOs the ability to walk away from their supply chain partnerships and entertain new partners without the barrier of years of integration activities. This flexibility translates into very tangible negotiating power, as well as simplifying paths to the exploration of new opportunities.

**"New experimental programs can be launched without delving into the complexity of backend systems."**

**"THE RETAIL AND CONSUMER GOODS INDUSTRIES WILL CHANGE MORE IN THE NEXT 10 YEARS THAN THEY HAVE OVER THE PAST 40."**

## GRASPING THE FUTURE

According to one commentator, "the retail and consumer goods industries will change more in the next 10 years than they have over the past 40." In the face of this upheaval, Retail CDOs must experiment with new business models and channels to consumers. There is no one clear path to success in the coming decade; instead, winning retailers will rely on fast, frequent testing of new ideas to identify opportunities. To do this, they need a commerce infrastructure capable of supporting fast, frequent explorations of new ideas. commercetools' microservices-based architecture is ideally suited to this task. It allows CDOs to try new ideas, quickly, inexpensively and at low risk – all of which lays the ground work for success.



---

# WHY COMPANIES MUST EXPERIMENT WITH NEW DIGITAL TOUCHPOINTS

---

valtech-

Hardly a day goes by without the appearance of another innovation for futuristic shopping. These range from personal voice assistants such as Amazon Echo and Google Home Assistant, to chatbots, AR/VR applications and social networks. But as interesting as this is from the consumer point of view and as much as it invites experimentation, what actually prompts merchandisers and manufacturers to work with these technologies? For example, why has BMW decided to integrate voice assistants into its vehicles from now on? And why does IKEA encourage its customers to place virtual furniture in their houses via an app and to plan the new bedroom furnishings by looking at them with their smartphones?

### Toilet Paper vs. Luxury Watch

It is important to understand that there are two types of products consumers purchase: discretionary and non-discretionary. Non-discretionary items are everyday necessities, which are purchased without our investing much time in their selection or building a personal relationship to them – toilet paper is the classic example. There may be exceptions, but these generally are products that must be available in sufficient quantity and acceptable quality at the appropriate place. Along with batteries and cleaning supplies, the purchase of non-discretionary goods must be quick and preferably automatic.

By contrast, there are discretionary products; items which a buyer takes much more time to select, Generally, these are things with emotional ties, such as clothing and jewelry. That is, articles that must fit an individual's lifestyle and taste, and are not just ordered on the fly. The same goes for high-priced items such as luxury goods, cars or even real estate. A person spending a lot of money generally passes through a correspondingly long decision process and expects personal service and an enjoyable experience. In many cases, a person who indulges in an expensive luxury watch from a jeweler will also appreciate discreet attentiveness and the perfection of the shopping experience.

### More Touchpoints, More Reach, More Sales

Depending on the type of goods being sold, companies use new touchpoints for different reasons. For daily necessities, it is primarily the increased reach. To be visible at exactly the point in time and in the context where the purchase desire arises, companies increase the number of selling points. Take the above-mentioned toilet paper as an example: when a customer realizes in his or her own bathroom that the paper is running out, a simple voice command to a personal voice assistant is enough to add it to the shopping list. If the shortage only occurs to someone in the car on the way to work, a vehicle with voice integration can take this order. We see the latter in the initiative by BMW. While on a subway or train, an easy-to-use app or a chatbot is probably the medium of choice. Thus the trick for merchandisers and manufacturers is to optimally support the different contexts, thus lowering the ordering bar and

ensuring more repeat orders and loyal customers. With these new touchpoints, companies provide their customers with virtual butlers, so to speak, who work quietly and unobtrusively in the background and satisfy the customer's wishes. They can collect orders and deliver goods on a weekly basis – precisely when they are at home.

Discretionary Purchases	Non-Discretionary
Special individual selection	Interchangeable
Seldom purchased	Frequently purchased
Generally high-priced	Usually low-priced
High brand loyalty and affinity	Little or no price driven
Attractive marketing	Fact-based presentation
Personal advice	Algorithms and automatic mechanisms
Shopping experience as a pleasure	Speed and efficiency

### Loyal Customers Thanks to an Improved Shopping Experience

But companies are also increasingly successful in using the new touchpoints for emotional products. Fashion is a good illustration of this. Fashion retailers have always faced the challenge of merchandising and positioning their brands appealingly. Additionally, it is no longer enough to only have a traditional webstore; they must also have a social presence. In the ideal case, visitors scroll through their Facebook timeline, find a product they like and order it with a click, touch or swipe as an impulse buy without a complicated checkout and ordering process. Influencers on Instagram and Youtube introduce new collections, which fashion aficionados can easily order at the touch of a button. Encouragement of individuality is the primary factor for this second product group. The points of contact have become

more modern – the conventional Webshop based on generic recommendations is becoming obsolete and being replaced more and more by interactive forms of individual advice in social networks for example. Behind it all, companies are investing a lot in personal contacts, rather than relying only on algorithms.

### Coolness Factor: Driving Innovations as a Provider

For brands that primarily target younger buyers, they must invest heavily and experiment with these touchpoints in order to also increase their reach and position their brand in a cutting-edge environment. This does not apply only to the fashion industry: Furniture giant IKEA is substantially increasing the coolness factor of online shopping with its augmented reality app Places, and incidentally also documenting its capacity to innovate.

This addresses another important point, because new touchpoints are exceptionally well-suited for experiments. Developing a new Alexa "skill", i.e. teaching the Amazon voice assistant a new capability, requires neither large IT teams nor months-long projects. Small teams can generally create such a program within a few weeks, test it and improve it if necessary. If the test fails, it doesn't constitute a problem, because of the low investment, and the main business – usually the customer's own conventional web store – is not in any way affected.

Often retailers act too conservatively. When a new touchpoint is created, they do not rethink their own business model. Instead they attempt to implement that which already exists, to the extent possible, exactly in terms of the new touchpoint. Take a voice assistant as an example: Will customers tolerate having the friendly robotic voice read them the long-winded texts that also appear in the Webshop? Probably not. Do customers appreciate being able to order from the company in situations where that was previously not possible? Very much so!



The issue of the context in this regard does not come up only for dealers and manufacturers: With the "Ask Mercedes" app, the Germany-based automaker is making life easier for its drivers by also explaining the control elements of the vehicle via an AR app so they don't have to search through a thick printed operating manual.

#### Digitizing and Optimizing one's Own Processes

The Mercedes app is also interesting to the company for another reason. In addition to the enhanced comfort and convenience for its customers, the automaker can simultaneously optimize processes and save resources. There is no need for elaborate, costly creation and distribution of the manual; printing and production of digital data carriers such as CDs or flash drives are completely eliminated. And if something changes in the structure or function of the operating elements in the vehicle, this change can be implemented much more easily in the app than by literally stopping the printing presses and sending out completely new manuals. Another side effect: every customer can get directly in touch with Mercedes via the app, which ideally leads to upgraded customer service.

#### Bottom Line

There are many good reasons for retailers and manufacturers to experiment with new end user devices and touchpoints. To be sure, the market is still in an experimental phase and not all technologies will be as quickly and thoroughly accepted by the mainstream as, for instance, the smartphone. But it is precisely because of this that now there are enormous opportunities for companies to gain strategic advantages over their competitors. Innovations that offer more convenient shopping can be easily implemented via new touchpoints. And because they can be used in contexts – in the car, in the subway, working in the kitchen – that were previously taboo for shopping, providers can increase their reach and develop new customer segments. In combination with a cloud-based solution such as the commercetools platform, which provides individual e-commerce services quickly and flexibly, Alexa, chat bots, social media and other new touchpoints make it possible to digitize processes, optimize them and thus save resources.

“WHAT GOOD  
IS AN IDEA IF IT  
REMAINS AN IDEA?  
TRY. EXPERIMENT.  
ITERATE. FAIL. TRY  
AGAIN. CHANGE THE  
WORLD.”

TRY. FAIL.  
TRY. FAIL.  
TRY. FAIL.  
TRY AGAIN

TRY. FAIL.  
TRY. FAIL.  
TRY. FAIL.

# VOICE COMMERCE – MANY DEVICES, MANY EXPERIMENTS



**Inputs in natural language will completely change interactions with technology. Experts around the world agree on this point. But a perfect shopping assistant is still a long way off.**

A 2017 representative survey by the PwC management consulting firm shows the dynamism in the market for voice-controlled smart speakers. It was only in February of last year that the first Echo model from Amazon became available for purchase without invitation from customers. And a few months later, 5% of the people in Germany indicated they were already using such a device. Little wonder that the giants in the IT industry are quickly attempting to position themselves. After all there is a great deal of money at stake. The companies are not so much interested in selling the hardware. Of course, the familiar mechanisms from the field of IT and consumer electronics markets will come into play here in the future. In the eyes of consumers, with each new product version, the device within their own four walls becomes increasingly unsightly until it is replaced by the next generation.

The lock-in effect is much more crucial. Whichever device is the first to respond to customer commands will immediately build up its own ecosystem. This makes it difficult for the competitor. And thus Google is also offering an intelligent speaker with its Home, while Apple appeared on the scene relatively late with its Home Pod and therefore tends to position the system based more on its audio qualities.

Many commerce managers appear to have given the nod to Amazon's innovation enthusiasm in view of its new device. A speaker that orders products on command directly from the merchandiser of

everything. At first glance that appears to be the perfect basis for selling a merchandiser's own product range. And thus an ideal solution for sales in the post-Webshop era. But there's still not a lot of buying going on.

The intelligent speakers are being positioned as assistants for daily living. In response to a voice command they can control a variety of modules in a smart home (controlling lighting or temperature), provide reminders of dates or play music or audiobooks from the customer's stock or from a streaming service. And they provide a more or less satisfactory answer to almost any conceivable question. The prerequisite, however is that the preferred search engine offers a solution, or that there is an appropriate skill that has been activated by the user. And of course, the assistant could also be used for shopping. But that is precisely what users have so far seldom done, as a survey from ComScore reveals. And there are various reasons for this.

Even though speech recognition appears to be very mature, it is simply not sufficiently developed technologically to be able to actually recognize every inflection and every pronunciation variant. Particularly if there is a lack of context. The stumbling blocks are in the details. As a practical test showed, even

a simple term like "UHT milk" can throw the speech recognition off track. And what user wants to invest more time in searching if even this simple query did not lead to a positive result? Further development will certainly lead to a better recognition rate. But all the suppliers of the relevant artificial intelligence (Amazon, Google, Apple) are dependent on this core functionality.

Furthermore, many skills are currently at a level that recalls the early days of app development for smartphones. They are being brought quickly to the market, but do not yet offer much benefit. For instance, the Real hypermarket chain has come out with an Alexa skill that can offer recipe suggestions or product news from the market, but not a shopping opportunity.

From the consumer's point of view a fundamental problem of the Amazon Echo is that the functions are rather skimpy in terms of shopping advice. And the problem from the merchandiser's point of view is the equally unclear possibilities for monetizing the development of skills. Voice input is probably suitable without many reservations for purchasing convenience products. Most customers would be willing to put a carton of detergent or a bag of espresso beans into a shopping cart without thinking things over for long. But there is very little for commerce to earn on a single product in this field. The margins are so thin that large unit volumes would have to be sold to recover the costs of developing a skill.

But even for only slightly more complicated products, a customer would want to make sure that the voice assistant actually is ordering the correct product. A light bulb for an E27 socket might be technically compatible with the lighting fixture, but will not automatically fit. The profit margins for clothing and household appliances are considerably better, but who is actually going to order a washing machine, a pair of jeans or fashionable sneakers without first seeing them?

New Echos are supposed to straighten things out. Amazon has recognized the problem of the lack of visual feedback and has enlarged its product line accordingly. The Echo Show is now offering a display, which can be used not only for film playback or video phone calls, but could also give the customer feedback on products, which is crucial before the actual purchase. The Echo Look, with a camera function that primarily focuses on the fashion purchaser, and has a "compare" function that compares different outfits, has probably already been made obsolete by the Echo Show. User interfaces that prioritize voice are necessary.

Intelligent voice systems are currently far from being able to take on the role of a salesman or a well-structured shop. The primary thing needed for those functions is more intelligence and user interfaces that are optimized for voice input and give users feedback at regular intervals. Even procuring a simple household appliance such as an espresso machine tests the limits of current skills. Portafilter, semiautomatic or fully automatic? Boiler or pot? One or two heater circuits? These are only a few of the questions that play a part before purchase. This takes regular querying and proceeding step-by-step. Delegating the selection possibilities back to the display would just create a different type of Webshop.

Voice technology has great potential. In the field of reservations, support requests and especially local searching (Siri, where is the closest locksmith branch?) voice technology will change things a great deal in the long run. But for shopping there is still much to do: Merchandisers should use API-based systems from the cloud that can access existing product information systems, and should concentrate on a good voice interface.

D

R

# SHOPPING IN THE CAR: SOON NO LONGER A PIPE DREAM

E

A

M

Connected cars, autonomous driving, the sharing economy and electrically-driven vehicles (referred to by Daimler Benz as CASE): in an interconnected world these are the major trends of the automotive industry. This is also opening up completely new opportunities for commerce: If a car is "always on" and possibly does not even need to be driven by a person, in the future, drivers and/or passengers will more and more frequently have the opportunity to do other things on board – for example shop. Cars are well on their way to becoming an important new touchpoint with consumers for merchandisers and service providers. This can be seen merely from the fact that at least three of the four GAFAs are quite openly pushing their way into cars:

- Google is linking the vehicle electric system to the driver's smartphone via the Android Auto system. The company has also been working on an autonomous car since 2009 – this project has now been subsumed into the affiliated company Waymo that seeks to supply software for various manufacturers.

- Apple CarPlay is a solution similar to Android Auto, but only for iPhone users and is controlled by Siri. At the same time, Apple would like to supply its own software for autonomous vehicles, but has evidently terminated its car project called iCar.

- Amazon is integrating its Alexa voice assistant on a large scale into cars from a variety of manufacturers. The first alliance with Ford was announced at the CES 2017; from mid-2018 BMW will equip all of its models with Alexa.

- Facebook is lagging behind. COO Sheryl Sandberg joked at the IAA 2017 in Frankfurt that Facebook is "the only company in Silicon Valley that does not want to build a car". There is still no sign of any on-board software of their own. Nonetheless, Facebook does want to cooperate with the automotive industry in artificial intelligence and digital tools.

The car manufacturers are not willing to leave access to customers in the car completely to the GAFA economy – and are working on their own solutions. The Drive2Shop solution is particularly exciting.

---

**"A modern-day person spends on average 2.5 years of his life in the car."**

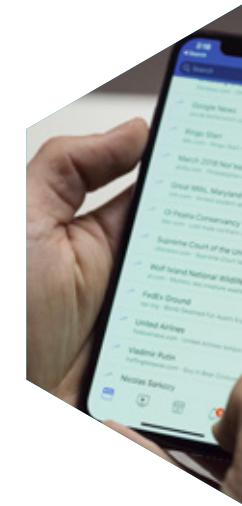
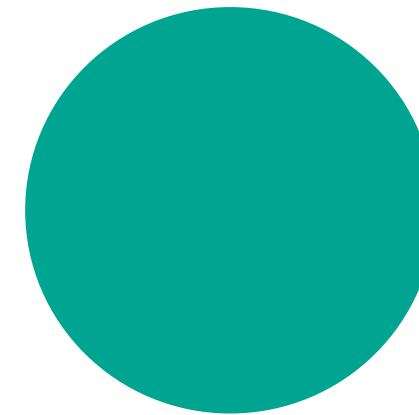
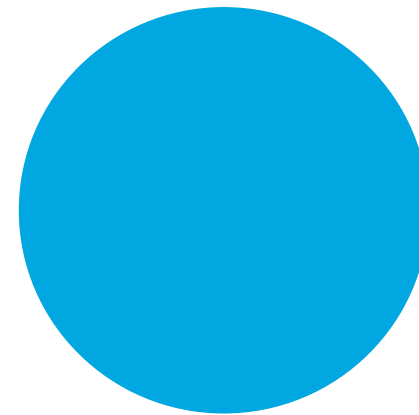
---

It was developed by the payment service provider Concardis and IAV (joint venture of VW, Continental and Schaeffler). As the name already indicates, the solution would like to turn the car into a shopping platform. The claim according to their website: "A modern-day person spends on average 2.5 years of his life in the car. The cumulative time spent shopping is another 2 years. Car commerce makes it possible to combine the two processes in an uncomplicated way and thus regain valuable time for living."

During travel in the car, Drive2Shop matches the offers of local merchandisers with the customer's wishes, which have been previously collected in the cloud or were expressed by voice input while driving. The driver can order the desired product and immediately pick it up; the car navigates directly to the merchandiser. When the customer arrives, the purchase will already have been paid for and the customer can pick it up at a drive-in window, without having to leave the car. The principle could of course also be applied to ordering for the home – or in the future directly to the car's trunk while the owner is still in the office.

While a solution such as Drive2Shop can already be implemented in connected cars, a genuine disruption could arise in a few years with autonomous vehicles, which would allow entirely new business models even beyond shopping. If people no longer need to steer their vehicles, they gain much more time for other things: in the future there could be autonomous vans with a built-in fitness studio, or autonomous travel trailers that drive us to a vacation destination overnight. A combination with the sharing economy, in which it is no longer even necessary to own vehicles but simply to request them as a "Car2Come" from a smart home whenever the mood strikes us, could unleash enormous business potential. Modern-day digital commerce systems that provide APIs so that companies can concentrate completely on their front ends are the system of choice for exploiting this potential.

# USING TECHNOLOGY TO GAIN AN UNFAIR ADVANTAGE IN IN-STORE RETAIL



*Most commentary on technology and bricks and mortar stores focus on the threat posed by e-commerce. These same digital technologies offer a new path forward for traditional retailers. Microservice architecture is a key to unlocking this value.*

The threat of e-commerce to brick and mortar retailers may have been overstated during the .com boom of the early 2000s. No one believes it is overstated today. Traditional retailers face an immediate need to innovate to thrive in a world where consumer behavior is shifting definitively to the online channel. Fortunately, the same technologies that underpin pure play e-commerce vendors can provide a springboard for re-invention by Bricks-and-Mortar retailers.

## The Microservices Springboard

Technology gives traditional retailers the potential to better engage customers, increase customer loyalty and be relevant to the digital native generation. But not all technology is created equal. Deploying the app-based tactics described below requires an underpinning infrastructure that supports fast deployment, simple content reuse and low-cost experimentation. Traditional monolithic ecommerce platforms struggle to meet these needs. In contrast, a microservices based infrastructure, such as commercetools, empowers retailers to rapidly innovate in this changing market.

## App-based approaches to reinventing retail

Customers can now virtually engage with the stores with the use of an app (installed on their smartphone or a tablet issued by the store or in one of the in-store utilities). These apps can help improve user experience and increase sales by:

**Intuitive Registration:** Managing the globalization of the brand – efficiently, is a challenge to most organizations. Technology can help them break the barriers of language and culture and allow the sales associate (SA), inside the store to focus on sales rather than peripheral activities surrounding user registration and other mundane tasks.

A customer's registration App in a language of his or her choice along with alerts and error messages will ensure that the registration process is intuitive and can be performed by the customer himself. The SA can focus on what he is best at – and that is to sell.

The App can also help the store count the number of foot falls at their store and also track returning customers. This app (if installed on the customer's phone/tablet) can also help send customized notifications to customers on discounts/festival offers and new arrivals.

**Upsell and Cross Sell:** The point of sale (POS) application can provide the SA with critical information on the customer behaviour and also

information on cross sell and upsell items that he can propose to the customer at the counter. It can also provide the store manager with intelligent information to increase sales. For ex. based on the customer actions historically; the app could assist the manager to help him decide on a flash discount valid for a limited period specifically customized to suit the customer's need.

**Endless aisle and store catalogue:** It is not always possible to have all the brand products for display within a store. Technology can help here. An application which can scan a bar code/QR code of an item can help the customer to view the available variants, colours, sizes. It can help the SA to identify how much quantity is in stock along with description of the product, info on the availability of an item online or in other stores in case it is unavailable in the current store.

**Smart-cart:** Consider a hyper-market; customer will normally walk into the departmental store which is more familiar to him/her.

Now consider a smart app attached to the cart that is voice enabled. Customer can interact with this app/ cart and get a personalized shopping experience.

This app can act as a personal shopping assistant to the customer to:

- Locate a product – which aisle? Which row?
- Offers – Inform about alternate products and deals
- Wish list – list the items that the customer may want to buy, based on his purchase history
- Customized offers – to display special offers for privileged customers
- Client Advisor lookup – CA to reach customer based on customer location in store
- Purchase History – customer can view the history of his earlier cart/basket

**Personalization of products:** Giving the customer options to customize the products to their taste either via apps or via PoS is another way to attract customers. Customers would want their names or initials on wallets or other merchandise of their choice. The store should be able to pass on this information to the factory or the appropriate manufacturer.

**CHETAN BANGALORE  
VIJAYAKUMAR**

Associate Vice  
President – Retail

# WINNING CONSUMER ATTENTION WITH MICRO- MOMENT MARKETING

*Online you have seconds to engage a potential client. Micro-moment marketing lets you make the most of those seconds.*

According to Google, people typically interact with their smartphone around 150 times a day. Posting a photo on Instagram, sending an email or chatting with a friend are all examples of short, purpose-oriented 'micro-moments'. And the last thing users want mid micro-moment, is to be interrupted by irrelevant attention-seeking by a brand.

The difficult thing is that at other times – in other micro-moments – users are open to external influences, especially when they are looking for information to help them make a choice. So how can you recognise these very different moments? And how can you make them work for you and your brand?

Supporting the four micro-moments discussed in this document requires a deep understanding of your customers' motivations. It also requires a technical platform that can effectively support omnichannel interactions. Traditional monolithic ecommerce systems can struggle to support micro-moment marketing initiatives. Headless infrastructure, such as commercetools, allows retailers to quickly experiment with micro-moment interactions.

## FOUR MICRO-MOMENTS

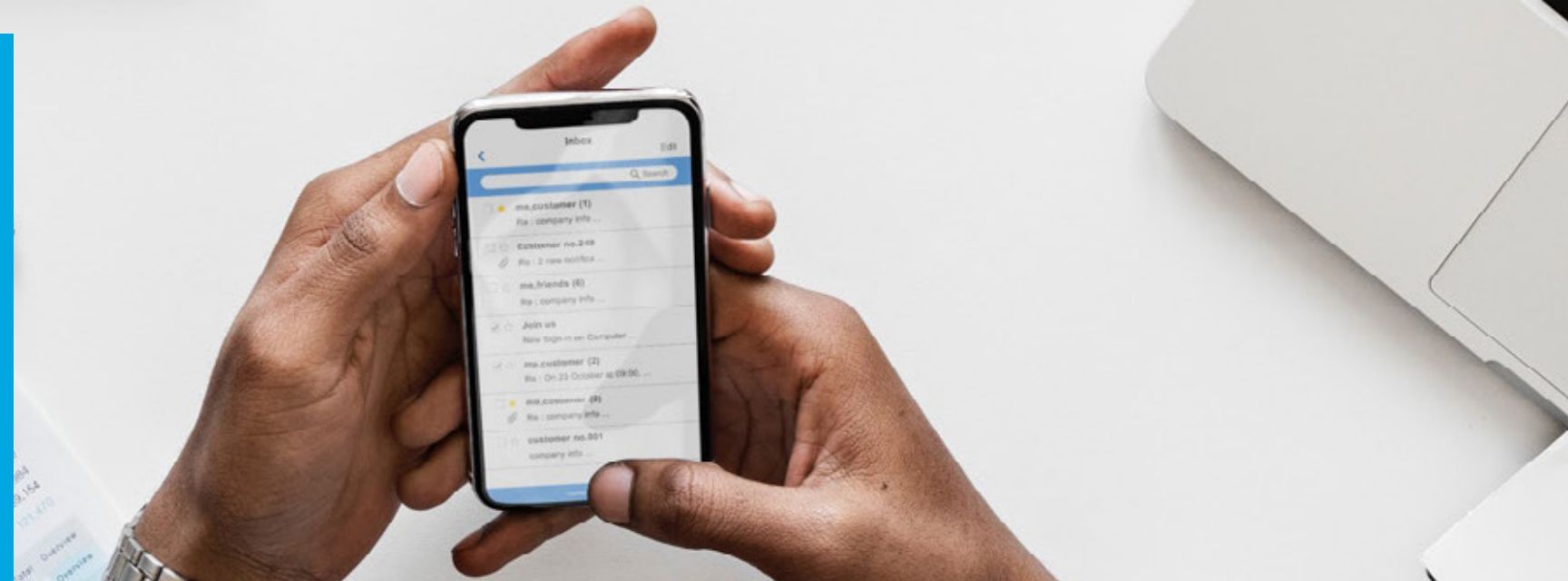
Research by Google suggests there are four kinds of marketing micro-moments:

- I-want-to-know
- I-want-to-go
- I-want-to-buy
- I-want-to-do

The type of moment is determined by the purpose, context and urgency behind it. Creating successful dialogues with your target group rests on understanding each moment and knowing how to behave accordingly. And the most important conduit is mobile.

## MOBILE PERSONAL ASSISTANT

Smartphones now play a central role in our decision-making. 91% of smartphone users use one to find information while performing a task, and 82% say they use their phone while in a shop to get advice about a purchase. Usage figures for mobile confirm this. Mobile sessions have risen 20%, while the length of each visit has fallen by 18%. You could conclude



from this that users are finding what they are looking for, but that's not the case, because between 2014 and 2015, mobile conversions rose by 29%. Extended search sessions have lost ground to fast, well-judged stimuli with a clear goal.

## NEEDS LIE AT THE HEART OF THE MATTER

To succeed in a world of micro-moments, it is vital to win your customer's consideration, and subsequent action. This means helping him or her achieve their goal. And you don't do this by pushing a generic brand message via a display ad. When push comes to shove, customers are more loyal to their needs than they are to a brand.

When asked, 65% of smartphone users say they search for the most relevant information, regardless of the brand it comes from. 51% say they have bought from another company than the one they originally had in mind, based on who provided the best information. Brand preference is less and less important. Now, this doesn't mean you should only pop up at a conversion moment, such as a purchase. Consumers are quick to see through such tactics: 69% say the quality, timing and relevance of a message influences their perception of a brand.

Instead, it is essential to dip in and out at multiple points on the consumer journey, offering as much help as possible along the way.

The three principles of a successful marketing strategy are therefore:

- 01 Be available: anticipate micro-moments among your target group and commit to being helpful when they happen.
- 02 Be helpful: connect people to the answers they are seeking, and concentrate on being relevant.
- 03 Be fast: mobile users are fickle and demand speedy and easy experiences.



## UNDERSTANDING THEIR NEEDS

Having the right mindset, however, is not enough on its own to get you across the finish line. To be there at the right time and place, and in the right way, you need to understand your customer's purpose and context. It may matter to know where someone is, what time it is and whether, thanks to it raining, she's looking for an umbrella. Faced with endless combinations of scenarios, the four phases identified by Google can help you avoid drowning in possibility overload:

### I-WANT-TO-KNOW

# 01

In this phase, someone is exploring or researching, but not yet ready to buy. They want relevant, useful information – and maybe even inspiration – to lead them through the customer journey. They do not want a hard sell.

### I-WANT-TO-GO

# 02

This is all about local relevance. Someone is looking for local shops or considering buying at a local shop. Your physical business therefore needs to be in their consideration set at that moment. Further underlining this is the fact that 'near me' searches have doubled in the last year. The same 'rules' apply to restaurants and events.

### I-WANT-TO-DO

# 03

'How to'-related YouTube searches are growing at 70% a year. Consumers are looking for help, whether before or after a purchase, so offer them the right kind of content.

### I-WANT-TO-BUY

# 04

The moment of truth: someone is ready to make a purchase and needs help deciding on the what, where or how to buy. 82% of smartphone users use their phone in the shop, and 88% of consumers who search for local shops call up the next day. But you have to be there with the right information to seal the deal.

## DO YOUR RESEARCH

With so many new insights to wrestle with, it can be hard to know where to start. But putting yourself in your customers' shoes will get you a long way. Do a walk-through of the customer journey and observe what you see. The following questions can help you:

- What are the most important searches that are relevant to your brand or industry? Try these searches yourself. Are you found? Are you happy with what you discover?
- How often do you figure in the different needs within your customer journey? And how often do you provide the right information? Do you take account of the context and purpose of the search?
- And don't forget to dig into your available data. How do visitors come to you? How do they behave? Why?

**By understanding the purpose and context of your customer and their journey, and contributing to this in the most relevant ways you can, at least one of those 150 times a day that he or she uses their smartphone is likely to be all about you. In the end, customers just want to be helped.**

# THE WHO, WHY AND HOW OF AUGMENTED REALITY OR RETAIL

In this guide, Jean-François (“Jeff”) Tremblay talks about the urgency for retailers to get cracking on their AR strategy. “Wake up and smell the coffee; it’s not virtual!” he says.

We asked Jeff to share his insights on how AR will affect retail and why he thinks there’s an urgency for retailers to develop AR for their brands; both for consumers and on the back-end.

## WHO’S DEVELOPING AR FOR RETAIL?

A profound movement is being orchestrated by the big retailers to deliver AR. Apple, Google, Microsoft, Alibaba, EBay, Amazon; retail giants are offering new augmented and virtual reality experiences to customers and announcements come out every week. It’s time for smaller brands to pay attention. The frontrunners are already in full swing and it’s important to understand you don’t need to be as big as these guys to start somewhere.

## WHY DOES RETAIL NEED AR?

There are a few facets of AR that retailers need to grasp:

## AR IS IMMERSIVE AND ENGAGING

AR can instantly provide users with an immersive and engaging experience. AR can fill in the gap that leaves customers hanging for more information, standing in a store searching their phone.

As we enter the age of the experience economy, many retailers are searching for ways to reinvent the physical store, using lights, video screens, and audio. They’re constantly challenged to find ways to deliver on personalized service. AR can compliment that. Augmented reality has the potential to become a trusted sales associate. And since AR is your trusted sales associate, it will have handled the first level questions consumers have on products and “Real” associates can focus on what they do best, upsell, cross-sell and closing the deal.

## AR IS AVAILABLE IN YOUR CUSTOMER’S POCKET

Given that approximately 87% of shoppers do comparative shopping on-site with their mobile device, it’s really about leveraging the tools they already have in-hand. With AR, you can keep customers in your ecosystem both in-store and at home. Give them them an engaging experience in store, but don’t let them down once they get home!



## AR DRAMATICALLY SPEEDS PRODUCT DISCOVERY

For all types of products from technology and electronics, to clothing and consumer goods, customers are looking for more information. They want to know, what’s behind this?

CPG is ripe for taking advantage. Take the example of a grocery store. Do you want to know the nutritional values of various foods? Where does that vegetable come from? What can I cook this ingredient with to surprise my guests? Is there a simple recipe I could try? With AR information on products in-store and in-shelf, customers are more likely to say, okay, let me grab one of those, even if they’ve never eaten it before. Using the phone, customers can point at any product and get this type of augmented information, making them more knowledgeable consumers.

...and, as we now realize, anything can be augmented!

## ARE CUSTOMERS THE ONLY ONES USING IT?

From logistics companies to high-end to mid-level retailers, it’s not only customers that are impacted with the advantages of AR. Take, for example, DHL, one of the largest shipping companies in the world. They’re implementing AR in their logistics chain. In a pilot study they demonstrated a minimal 15% increase in productivity as well as an important decrease in mistakes by using AR. The technology guides their work, so that instead of scanning bins in the aisles, they use their AR glasses, and the technology ensures the package goes to the right place. The reduction in human error is amazing.

Anyone that has online ordering can do the same on their back-end. This can be a benefit to any and all retailers.

AR can also be used as a training tool on the back-end. New associates who need to learn about the products in the store can do so using AR and VR, eliminating the knowledge gap for new employees.



It could standardize the training, and takes away the element of subjectivity in training as well as having proven better impregnation of information.

## WHO WILL BENEFIT THE MOST FROM AR?

The real winners are the customers. They’re gaining access to a much more engaging experience, by getting answer to fundamental questions about products while perusing the shelves and aisles of their favorite store.

Any brand that offers an augmented experience is going to be preferred by customers. Think about the home decoration market. Ikea is a good example of that. Their AR app, developed with Apple ARKit, already has hundreds of thousands of downloads – yet they only have about 500 out of hundreds of thousands of products available in the app but still, consumer love it. It’s just the beginning, and what’s to say about Amazon jumping in the AR commerce trend...

What’s the takeaway from the Ikea experience? They started small, but they’re going to iterate. This resonates highly for me.

## ISN'T IT BETTER TO WAIT AND FOLLOW THE BIG RETAILERS' LEAD?

I've been an advocate for iteration for a long time. I'm the first to tell you: don't wait for the killer app! It won't be tailored to you. Create an experience that's in sync with your business issues and objectives. Release at 70-80% and iterate following the learnings you gather from user feedback. It doesn't matter how big or small you are. – AR not only provides information to your customer, but it also provides the retailer information about what a customer is looking for—their behavior. There's no business size that's too big or small not to gather customer behavior information.

## IS AR EXPENSIVE TO DEVELOP?

AR experiences have a huge advantage over virtual reality. They are lower cost to develop and lower cost to deploy. You have the advantage of using your customer's hardware.

You can get started quickly. Do something for a vertical slice, product launch or for your new season. In many cases, your product is probably already digitized. You can reuse web assets you already have and just deploy them in AR. Watch the path they use to peruse, gather information to map your customer journey. This is something you can get through ecommerce sites, but you have no way of tracking in store.

## WHAT'S YOUR LAST WORD ON THE TOPIC?

AR is here. There are at least 600 million phones out there that are AR capable. Consumers are eager to have experiences. Give them some!



# EXPERIENCE



## A PERSONALIZED OMNI-CHANNEL EXPERIENCE

Eurail.com

*Eurail.com is a Dutch e-commerce company that sells rail passes for travel in one, several or all countries in Europe for a specific time period. Its two product lines are Interrail passes for people living in Europe and Eurail passes for travellers from outside Europe. The company was formed in 2006 and in 2017 sold more than 156,600 Interrail passes and 136,200 Eurail passes.*

Eurail.com has grown significantly in recent years in terms of turnover, system architecture and employees. To adapt faster to a continually evolving e-commerce landscape, and to shorten its time-to-market, the company has begun work on a future-proof online presence, asking Valtech to help it realise this.

---

# PERSONALIZED OMNI-CHANNEL EXPERIENCE

Over a series of sprint project phases, Eurail and Valtech are developing a personalised omni-channel commerce experience. The first step has involved creating an order process that turns the purchase of a train pass into a PDF that is then sent automatically to ModusLink, Eurail.com's fulfilment partner. ModusLink then prints the ticket on special security paper and posts it to the customer.

---

**Steven Fockema Andrae**  
Business Development  
Benelux, UK and Nordics,  
Commercetools

*“Eurail.com represents the kind of innovative online travel company that embraces new technology. Their new commerce platform goes far beyond desktop and offers a range of new digital sales channels. It is a very nice project to be part of – an organization that has thought in detail about how it can provide its customers with a digital journey.”*



---

# HEADLESS E-COMMERCE

commercetools is a headless e-commerce solution that integrates seamlessly with Adobe Experience Cloud to increase company flexibility. For this project, we are working with DEPT, a digital agency that specializes in the frontend of Adobe Experience Manager (AEM). Valtech focuses mainly on the backend, which runs on commercetool's cloud-based microservices and API-first platform. commercetools provides the basis for the complete e-commerce application, but individual parts such as PIM or Order Management, can be replaced by other products or a microservice. The platform's open architecture also means it integrates well with ERP, Warehouse Management or CRM systems, for example.

---

# WITH AGILE TO THE END STATION

Both Valtech and Eurail.com have worked agilely for some time, which has helped make the collaborative process smooth from the outset. The Eurail.com project involves multiple parties, locations and nationalities, and while this sounds like a challenge, in practice the combination works very well. We haven't reached our destination yet, but we have taken the first step on the road to it.



“

---

*“commercetools and Adobe Experience Manager give us the flexibility to respond quickly to changing customer needs. Valtech has helped us really well with the design of the backend. Thanks to this implementation, we can continuously optimize our sales funnel and further improve the customer experience.”*

**Roel Verhagen**  
Head of Commerce  
Eurail.com

”

---

*“The collaboration between Eurail.com, commercetools and Adobe proves the power microservices offer for commerce. The speed with which we can generate business value together is unique.”*

**Roel Verhagen**  
Head of Commerce  
Eurail.com

# TOMORROW

---

## THE ROLE OF APIs IN THE POST-WEB ERA

Interface for tomorrow's commerce: conventional Webshop software is coming closer and closer to obsolescence, because it focuses on only one thing – the online shop on PCs. But this approach is going out of style at a time when merchandisers are addressing shoppers via diverse routes such as apps, social media, chatbots, wearables and voice assistants. Instead of that, modern digital commerce platforms deliver all the solutions from the product information system to the shopping cart to order management as an API (Application Programming Interface), that is to say, an interface for programming suitable applications.



---

The API has the power to be the steam engine of the digital revolution. Ultimately, an open interface of this type allows developers to implement a given digital commerce solution in the shortest possible time on a great variety of Internet-capable terminal devices with a freely selectable programming language and any desired user interface. This is enormously important in fast-moving times like these, where many technologies that have now become part of our shared experience were still considered science fiction only five to ten years ago. Can you still remember what life was like before the smartphone? Apple first introduced the iPhone in 2007. Would you have thought two or three years ago that you would be having a conversation with the Alexa in the kitchen like a Star Trek captain with his onboard computer? Would you have considered it possible that you no longer would have to steer your car yourself in the future, but would instead be able to enjoy the landscape or shop during the drive? Soon that will be possible too.

This brave new world is precisely what APIs are needed for. Because APIs are "the underlying technology for enabling new digital commerce models in new channels – and doing so with high speed and scalability" in the words of commercetools CEO, Dirk Hörig (see pages 44-45). To give one example, if a product information system (PIM) is available as an API, it can make the existing product catalog available to a chatbot or a voice assistant in a short time. Without an API, this would be difficult and perhaps everything would have to be completely redone for each new user interface.

#### **APIs are the innovation drivers of the GAFA economy**

The fact that APIs both create new business models and can also be a powerful innovation driver is shown by the GAFA economy, that is to say, the world of Google, Amazon, Facebook and Apple. All four big players rely on public APIs on the road to becoming trillion-dollar enterprises, as marketing professor Scott Galloway shows in his book "The Four: The Hidden DNA of Amazon, Apple, Facebook, and

Google". Instead of fencing themselves in, they give developers all the tools they need to develop their own applications and mashups. There are currently clearly more than 2 million apps each in the Apple App Store and in Google's Play Store – no company in the world would have the resources to build up and maintain this number of products.

By providing APIs they externalize the innovations, and every third-party developer becomes a multiplier. This can be seen with the example of Google Maps: companies like Uber or MyTaxi use the API to put drivers in touch with passengers – a much more cost-effective solution than remapping entire cities. At the same time, the API economy means that companies are no longer dependent on a single solution provider. In point of fact, many companies in the API economy rely on a "network of different partners each having highly specialized skills that may be needed in the short term for specific transactions. These partners can be integrated automatically and in principle without a time delay and without transaction costs into one's own added value" according to the Gabler dictionary of economics.

In Germany as well, more and more companies are recognizing the importance of APIs, above all in the area of digital commerce. The API makes it possible to consistently separate the front and the back-ends: while the back-end controlled by the API contains all the business logic, data etc., companies can concentrate completely on their own front-ends, which can be implemented in a completely free surface design. Front-ends are the direct interface to the customer – and they are no longer limited in the API world: they can appear as a Webshop or equally well as a chatbot or a voice assistant. Viewed in this way, Amazon's Alexa is also a front-end, which people can no longer see but which listens to the people. The Internet of Things can also be operated much better in the API world. The automatic coffee maker that reorders capsules on its own does not have to laboriously use the web shop but can instead do this via an API – just like the water dispenser that automatically reorders water. With a cumbersome Webshop-focused system, this would be possible in the best case only with expensive "workarounds"



whereas API-based systems operate like a set of building blocks.

#### **Delivering personalized inspiration and purchasing opportunities in the appropriate context**

Even closed systems like Facebook, Pinterest or Twitter are evolving into points of sale. Buy buttons or the possibilities of marketing products via the systems in question are making the conventional checkout process superfluous. If the systems have the relevant user data – from name and address to credit card data – the entire purchasing process can be shifted onto the respective platform. Conventional integration concepts do not meet these requirements: today data can no longer be provided by an overnight export. It must be available via interfaces at any time and for a great many third-party systems. Content as a service is also turning marketing and product information into services. And modern e-commerce platforms no longer think in multichannel or omnichannel categories: e-commerce functions can be integrated via APIs into any conceivable system on any conceivable channel. E-commerce is becoming an API.

#### **Pinterest and its peers are becoming points of sale thanks to Buy buttons**

Dirk Hörig, CEO of commercetools, shares this opinion: no matter whether they use chatbots, social networks, wearables, IoT or voice devices – companies that want to be a step ahead of their competition should offer their customers personalized inspiration and purchase opportunities everywhere in the appropriate context. This can be done most successfully by using APIs and focusing on a company's own touchpoints. And these touchpoints can and should look different on a mobile phone than on the sofa at home in the evening – even if the offerings are coming from the same merchandiser.



# INTERVIEW: COMMERCE TOOLS FOUNDER DIRK HÖRIG ON NEW CUSTOMER APPROACHES USING SOCIAL MEDIA, APPS, CHATBOTS AND THEIR PEERS

---

**"The point is no longer to build a mobile-optimized Webshop, but rather to develop a mobile concept and already link in other channels."**

---

"Merchandisers have to experiment, because otherwise they cannot create a competitive advantage" says Dirk Hörig. In 2006, together with former colleagues, he founded commercetools, which has set itself the task of providing flexible cloud-based solutions for commerce and of divorcing itself from the traditional focus on Webshops. We spoke with Dirk Hörig about the post-Web era and his vision of everywhere commerce.

**Mr. Hörig, commercetools would like to become the leading provider for the post-Web era. What exactly do you mean by this?**

Commerce is in an environment in which two-thirds of the customers already access offers of merchandisers via mobile channels. This is no longer a niche segment! But on average, only one-third of sales in Germany are actually achieved in this way today. There is clearly a need for action in this regard. The point is no longer to build a mobile-optimized Webshop, but rather to develop a mobile concept and already link in other channels.

**Does that mean you advise retailers to skip the mobile Webshop?**

At this point, mobile is the major subject because it is the most relevant channel, but other touchpoints are continually growing: Voice is very much on the way up, meaning Alexa and Google Home. According to a survey in the United States, 20% of consumers there indicate that they have already placed an order using Alexa or other voice services. Another 30% – this puts us at 50% – would like to do so in the next few months. This does not mean that every order will come via voice in the future, but with this development, we have already moved well past the conventional Webshop. So people need to consider what the digital strategy for their own enterprise is in online commerce. And the technology is a segment of this that we serve with our commercetools platform.

**Agility is considered the new mantra for changing corporate processes. What is your understanding of this in specific terms?**

Agility means that I can try out things. If they don't work, I discard them and go on to the next thing. But that's only possible if the associated risk is manageable. And this is where technology is a tool to facilitate developing quickly and agilely without having to delve deeply into programming languages. The commercetools blog says that APIs are the steam engine of the digital revolution. Why are APIs so important?

Without an API, a voice assistant cannot interact with my products and my prices. Without an API, no car can order any product anywhere. Without an API, I cannot construct an augmented shopping scenario in a HoloLens, building a product virtually. It is the DNA with which these things operate.

That is why we refer to the API as the steam engine, because it is the fundamental technology for enabling new digital commerce models in new channels – and doing so with high speed and scalability. All this doesn't work without APIs. Actually, an API should be a commodity, thus a consumer product. This is how we see it and this is why we built a platform in which everything is available as an API.



**Can you briefly summarize what the most important functionalities of the commercetools platform are, which ultimately are available via APIs?**

First of all, there is the whole issue of a product catalog in a modern commerce environment. This includes designing an intelligent price structure, using it for pricing and making the process dynamic. And secondly, we focused on the topics of shopping carts and order management and being able to expand them with complete flexibility.

*"As a merchandiser you have to experiment, because otherwise you cannot achieve a competitive advantage."*

**You said in an interview with Fashion United that the goal of every merchandiser should be to reach customers everywhere in a personalized way and in the right context so as to offer them the right product. How far away are merchandisers in Germany from being able to do that?**

I believe they are only at the very beginning. In general, commerce focuses heavily on other challenges and not so much on the topic of a "different approach to customers." The point is not that I personalize everything everywhere, but rather that I find out the target groups and segments for which that pays off and how I can find suitable solutions in this specific environment. Some of them may not work. Merchandisers have to experiment, because otherwise they will not achieve a competitive advantage. There is still room for improvement.

**What should merchandisers focus on especially for 2018?**

Inspiration and user experience. From my own shopping experience, that is something I miss more and more. There's a lot that can be done in this regard and we must learn more from companies like Instagram, Pinterest, etc. There is enormous potential here that has so far been ignored by commerce. And someone who takes an interest in the topic will have a good competitive advantage.

# USER EXPERIENCE



# INSPIRATION

valtech.

commercetools  
Next generation commerce



THINK BIG  
START SMALL

# EVERYWHERE COMMERCE: WHAT WE CAN EXPECT BEYOND THE TRADITIONAL WEBSTORE

Over the past two decades thanks to the explosion of digital, shopping has moved out of the store and beyond traditional websites. With digital comes the ability to shop everywhere and at any time – from any channel or device. Retailers need to plan for website shopping, smartphones, tablets, TVs and wearables – as well as building experiences and offering check-out via voice assistants, chatbots, in car and beyond. That's the challenge of the post-Web era. Although online commerce once consisted only of an online webstore for the PC, the number of different touchpoints and relevant platforms has multiplied in recent years. Merchandisers now face the challenge of managing and operating all the different customer interfaces – and doing so both agilely and cost-effectively.

***The customer should always be at the center of everywhere commerce.***

Only if enterprises manage to think in a customer-centric manner and quickly understand new technology trends as an opportunity, will they be able to develop innovative strategies for reaching their customers at every relevant touchpoint. That is one way they can get a slight edge on the competition.

***“Go live quickly, learn and optimize.”***

This was apparent ten years ago with the emergence of smartphones and apps, and now we can see it for every new technology: consumers quickly take using new devices for granted. At the same time, they often feel as though they are participating in a public beta test, because the technologies are often still in their infancy.

***Enable Channel Adoption with APIs***

Developers of these technologies have realized the importance of an ecosystem of solutions for their new platforms and devices to ensure widespread adoption.

This is helped by the commercetools next generation digital commerce platform, delivered as a library of APIs and tools. In line with the slogan "think big – start small" this allows offerings for different touchpoints to be rolled out within a few weeks and then successively extended. This approach is being widely adopted by innovative enterprises across industries.

***Go live quickly, learn and optimize.***

Even slower adopting organizations can benefit from this new approach: "Last year we worked in great detail on a strategy to compensate for our late

entry into online competition. Our new Webshop was consciously implemented as a rapid project so that we could go live immediately, learn, optimize and continue to grow," explains Oliver Breifeld, E-Commerce Manager for Dodenhof, northern Germany's largest shopping center. Dodenhof sees the shop as the basis for an integrated digitization and would like to initiate further projects in the future that link online and off-line commerce. This objective is also the reason why the company decided on using microservices and the commerce platform from commercetools. "We believe that a sustainable commerce strategy cannot consist only of an online shop" explains Breifeld. "For example, we would like to enable digital purchases at the point-of-sale and offer employees digital interfaces on the shop floor; we do not see only the desktop or the smartphone as the front-end. That is precisely where the added value of commercetools lies."

Even if many innovative approaches for new touchpoints such as 3D glasses, voice assistants, chatbots or connected cars are still in the experimental stage today, the worst thing that merchandisers can do now is to remain on the

sidelines. Because there will probably not be a one-size-fits-all solution that will be worth waiting for. What's needed is creativity!

And it's important to remember – as the number of customer interfaces increases – the world becomes ever more complex. Not every consumer will use every available touchpoint. One segment of customers prefers physical stores, another segment wants to buy via an app and yet another one prefers to use a voice assistant for purchases. Conversely, consumers can soon become disappointed if they find that their favorite brand does not yet have an app or a chatbot. There is also an expectation of a linkage of the different channels and a "seamless experience". It should be possible to use a voice assistant to conclude a sale started at the PC. But this does not always work perfectly even in the ecosystem of a commercial giant such as Amazon. The command "Alexa, order the products from my shopping cart" does not work (yet).



**“ THE CUSTOMER  
SHOULD ALWAYS BE  
AT THE CENTER OF  
EVERYWHERE  
COMMERCE. ”**

---

**"We believe that a sustainable commerce strategy cannot consist only of an online shop"**

---

## Argentina

**Valtech Buenos Aires**  
Palermo Hollywood  
Office 202  
5692 Soler St.  
Buenos Aires City  
+54 11 6009 8282

**Valtech Buenos Aires**  
Ramos Mejía  
Office F  
Avenida Gaona 2612  
1704 Ramos Mejía,  
Buenos Aires  
+54 11 6009 8282

## Australia

**Valtech Sydney**  
Level 14, 333 George St.  
Sydney NSW 2000  
+61 2 8320 0536  
au.hello@valtech.com

**Valtech Melbourne**  
285 Lennox St.  
Richmond 3121, VIC  
au.hello@valtech.com

## Brazil

**Valtech Florianópolis**  
Rua Nossa Senhora  
de Lourdes, 110,  
Centro Empresarial Célia  
Couto Daux, 6º Andar,  
Agronômica,  
Florianópolis – SC  
+55 (48) 4062. 1301

**Valtech São Paulo**  
Fidalga, 593/603, conjunto 16,  
Edifício Módulo Fidalga  
CEP: 05432-070  
São Paulo  
+55 (11) 3825. 3843

## Canada

**Valtech Montreal**  
400 De Maisonneuve West  
Suite 700  
Montreal, Quebec  
H3A 1L4  
+1 514 448 4035  
info@valtech.ca

**Valtech Toronto**  
49 Spadina Ave.  
Suite 201  
Toronto, Ontario  
M5V 2J1

**Valtech Ottawa**  
987A Wellington St. W.  
Suite 201  
Ottawa, Ontario  
K1Y 2Y1

## China

**Valtech Beijing**  
05-R38, Room 310508  
Unit 1, Building 5, Yard 1  
East Futong Street,  
Chaoyang District, Beijing  
cn.info@valtech.com

**Valtech Shanghai**  
Room 63, 2F  
Building 1, 39 Jiatai Road  
China (Shanghai)  
Pilot Free Trade Zone  
cn.info@valtech.com

## Denmark

**Valtech Copenhagen**  
Kanonbådsvej 2  
1437 København K  
+45 32 88 20 00  
info@valtech.dk

**Valtech Aarhus**  
Værkmestergade 13,  
8000 Aarhus C  
+45 32 88 20 00  
info@valtech.dk

## France

**Valtech Paris**  
148 rue de Courcelles  
75017 Paris  
+33 (0) 1 76 21 15 00  
info@valtech.fr

## Germany

**Valtech Düsseldorf**  
Toulouse Allee 23a  
40211 Düsseldorf  
+49 (0) 211 179 2370  
info@valtech.de

**Valtech Frankfurt**  
Martin-Behaim-Straße 12-14  
63263 Neu-Isenburg  
+49 (0) 6102 884 68-0  
josef.markgraf@valtech.de

**Valtech Munich**  
Forum am Hirschgarten  
Friedenheimer Brücke 29  
80639 München  
+49 (0) 89 7007441-0  
info@valtech.de

**Valtech Cologne**  
Anna-Schneider-Steig 10  
50678 Köln  
+49 221 569 773-0

## India

**Valtech Bengaluru**  
Mass Unique, 30/ A,  
1st Main Rd.  
Industrial Sururb, 3rd Phase  
JP Nagar  
Bengaluru - 560078  
+91 80 2607 9999  
info@valtech.co.in

**Valtech Gurugram**  
# 7051 & 7052,  
Level – 07th  
Vipul Square,  
B - Block, Sushant Lok Phase - I,  
Gurugram, Haryana - 122002  
+91 124 49285122  
info@valtech.co.in

## Netherlands

**Valtech Amersfoort**  
Amsterdamseweg 43  
3812 RP Amersfoort  
+31 (0)88 648 00 00

**Valtech Amsterdam**  
Entrada 705  
1114 AA Amsterdam  
+31 (0)88 648 00 00

**Valtech Eindhoven**  
Essenstraat 1  
5616 LG Eindhoven  
+31 (0)88 648 00 00

**Valtech Utrecht**  
Kanaalweg 29  
3526 KM Utrecht  
+31 (0)88 648 00 00

## Singapore

**Valtech Singapore**  
77B Neil Rd. #03-00  
Singapore 088903  
+65 6718 0460  
sg.info@valtech.com

## Sweden

**Valtech Stockholm**  
Royal Coin  
Hantverkargatan 5  
112 21 Stockholm  
+46 08 56 22 33 00  
hej@valtech.se

**Valtech Gothenburg**  
Kungsgatan 50  
411 15 Gothenburg  
+46 08 56 22 33 00  
hej@valtech.se

## Switzerland

**Valtech Geneva**  
13 boulevard James Fazy  
CH-1201 Genève  
+41 78 775 53 70  
contact.ch@valtech.com

## Ukraine

**Valtech Kiev**  
10 Verkhniy Val St.  
Kyiv, Ukraine, 04071

**Valtech Dnipro**  
1, Hlinky St.  
Dnipro, Ukraine, 49000  
+380 0445995065

**Valtech Kharkiv**  
9, Poltavskiy Shlyah St.  
Kharkiv, Ukraine, 61052  
+380 0445995065

**Valtech Chernihiv**  
119a, Peremohy Ave.  
Chernihiv, Ukraine, 14013  
+380 0445995065

## United Kingdom

**Valtech London**  
46 Colebrooke Row  
London  
N1 8AF  
+44 (0) 20 7014 0800  
info@valtech.co.uk

**Valtech Manchester**  
Basil Chambers  
65 High St.  
Manchester  
M4 1FS  
info@valtech.co.uk

**Valtech Bristol**  
Unit 18 Keynsham Rd.  
Willsbridge  
Bristol  
BS30 6EL  
info@valtech.co.uk

## USA

**Valtech New York**  
416 West 13th St.  
Suite 309  
New York, NY  
10014  
+1 212 366 1057  
us.marketing@valtech.com

**Valtech Dallas**  
7200 Bishop Rd.  
Suite 280  
Plano, TX  
75024  
+1 469 930 4554  
us.marketing@valtech.com

**Valtech Chicago**  
15 S. Aberdeen  
Chicago, IL  
60607  
+1 872 903 4264  
us.marketing@valtech.com



---

## Germany

**commercetools Munich**  
Adams-Lehmann-Str. 44  
80797 Munich  
+49.89.99 82 996-0

**commercetools Berlin**  
Sonnenallee 223  
12059 Berlin  
+49.30.67 24 21-20

---

## Netherlands

**commercetools Amsterdam**  
Herengracht 282  
1016 BX, Amsterdam

---

## USA

**commercetools Durham, NC**  
4 American Tobacco Campus  
| Reed Building  
318 Blackwell St. Suite 240  
Durham, NC 27701  
+1.212.220.3809

offices

D I G I T A L

DIGITAL

TRANS  
FORMATION

T R A N S F O R M A T I O N

T R A N S F O R M A T I O N

# Contributors

**valtech\_**

**Randy Woods**  
SVP Marketing & Service Strategy  
Valtech North America

**Tobias Mael**  
Digital Consultant  
Valtech Netherlands

**Paul Lewis**  
Chief Marketing Officer  
Valtech Group

**Chetan Bangalore Vijayakumar**  
Associate Vice-President – Retail  
Valtech India

**Yovadee Nagapa-Chetty**  
Global Marketing Director  
Valtech Global

 **commercetools**  
*Next generation commerce*

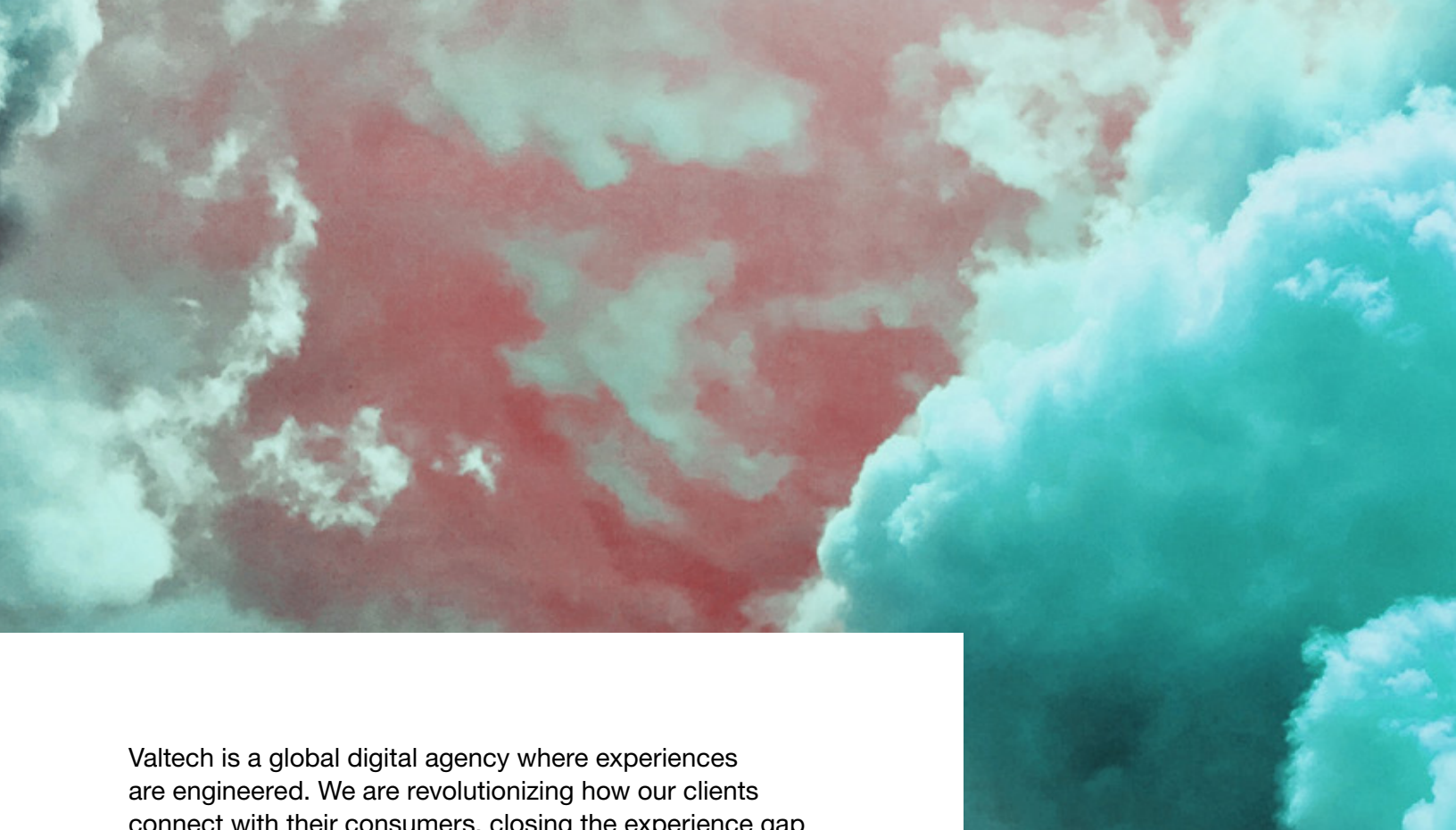
**Dirk Hoerig**  
Founder and CEO

**Dr. Roman Zenner**  
Industry Analyst

**Margaret Rea**  
Head of Marketing  
commercetools  
North America

**Andreas Rudl**  
Global VP of Marketing

**Kelly Goetsch**  
Chief Product Officer



Valtech is a global digital agency where experiences are engineered. We are revolutionizing how our clients connect with their consumers, closing the experience gap and orchestrating omni-channel customer journeys. We are innovators, design thinkers, marketers, creatives and developers spanning 5 continents with offices in 16 countries (France, USA, UK, Canada, China, Germany, Netherlands, Sweden, Switzerland, Denmark, India, Australia, Singapore, Argentina, Brazil, Ukraine). Together with commercetools, a global strategic commerce platform partner, we enable brands, retailers and manufacturers to provide their customers enhanced, shopping-enabled experiences beyond traditional websites. With a renowned commitment to innovation and agility, Valtech creates unprecedented success for our Global 500 clients while optimizing time-to-market and return on investment.

For more information, visit [www.valtech.com](http://www.valtech.com)

**valtech.**  
where experiences are engineered

[valtech.com](http://valtech.com)

 **commercetools**  
*Next generation commerce*