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Software solutions from dimedis

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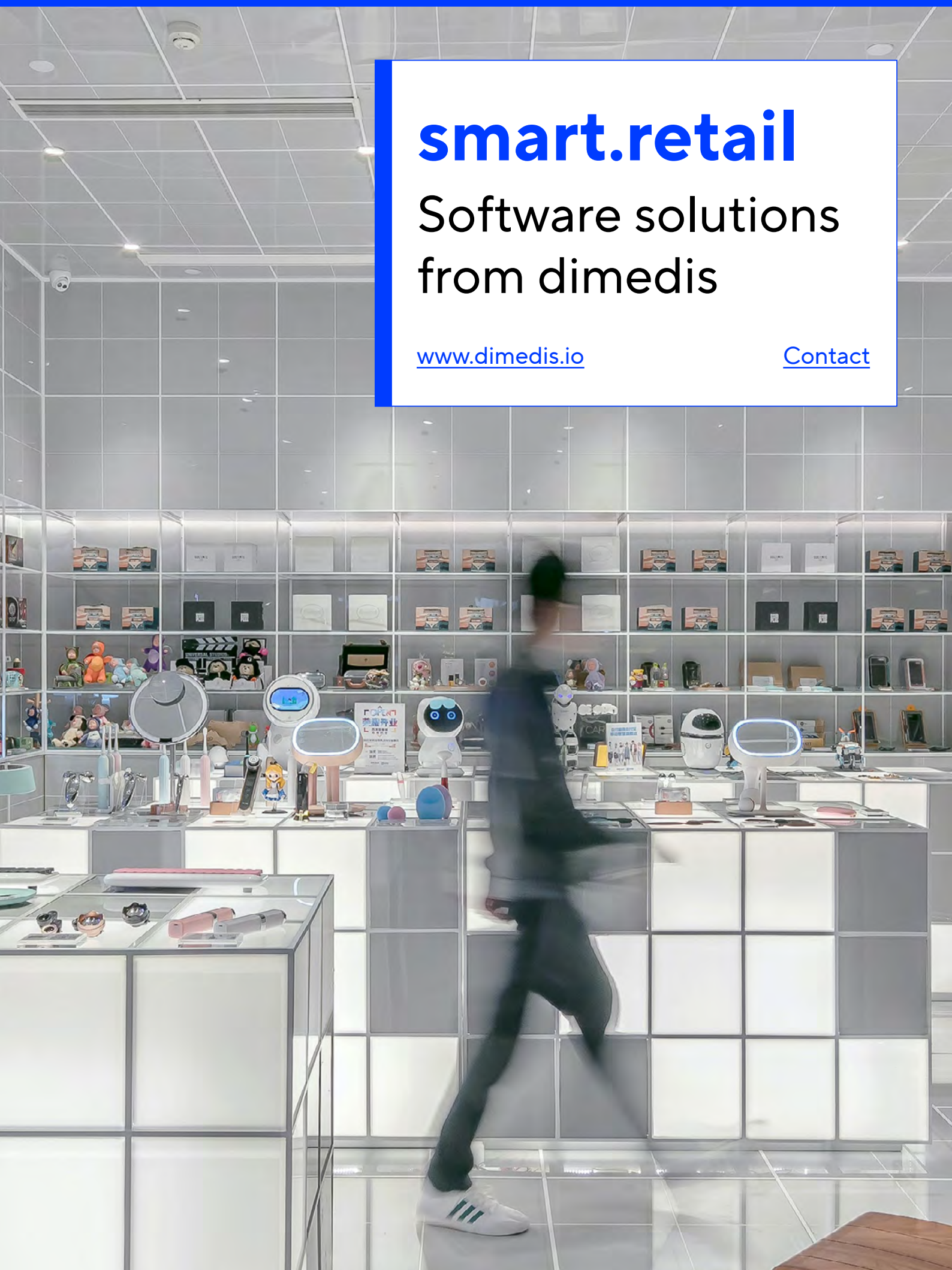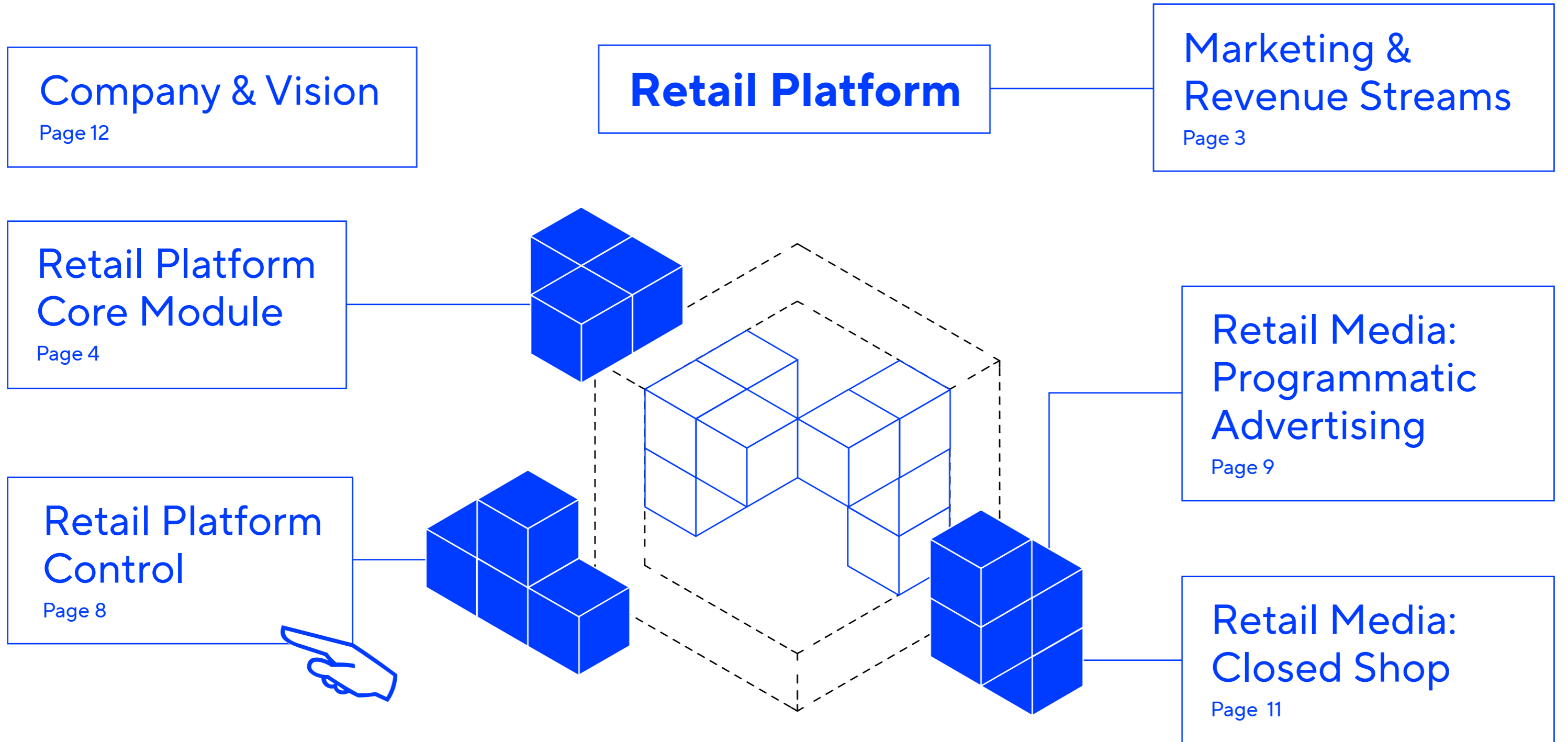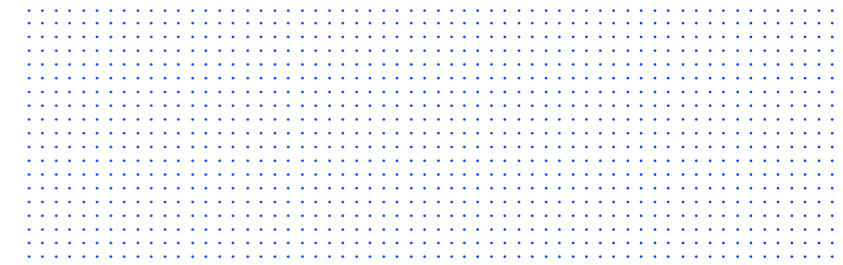
| Retail Data Platform, Marketing & Revenue Streams

The future is transparent: Digital innovations at the POS for insights about customers that were previously only possible in eCommerce.

Until now, precise data and insights into customer behavior were only available to online retailers. This is changing: Our Retail Analytics Platform helps brick-and-mortar retailers, catch up on this transparency advantage.

Data is the decisive factor to understand customers in depth and increase sales at the same time. These possibilities are now also available to retailers. For real customer insights — as detailed as was previously only achievable in eCommerce.

Data-driven transparency at the POS
The dimedis Retail Platform is a combination of different modules that continuously collect, consolidate, analyze and react to information in real time at every touchpoint at the POS along the customer journey. This data comes from various sources, such as sensors, hardware, software, POS systems and others.

Precise insights and predictions
Thanks to our modern technologies — such as intelligent state-of-the-art sensor technology and digital cash register receipts — retailers can analyze their customers in many ways, identify patterns and act on the basis of the data obtained. The system interacts directly with customers using personalized content and continuously learns from their shopping behavior in order to make valuable predictions. In this way, brand experiences can be created at the point of sale.

Data-based added value for the POS
Data is the new gold in retail. Our systems provide access to shopping behavior, walking routes, length of stay, conversion rates and customer demographics. The integration of the POS systems expands the analysis options by linking them with data protection-compliant metadata from our sensor technology. This precise database enables optimized playout via

digital signage and in-store radio and provides an excellent basis for marketing retail media at the POS.

Maximum benefit for the retail market
Our solutions go far beyond mere data collection by analyzing data and playing out results. We provide our customers with the necessary know-how and service to generate real value from acquired data.

In summary, the Retail Analytics solution supports retailers with important information on branding, store concept and shopper behavior. This allows in depth understanding of customers and targeted communication with. The result: an optimized customer journey at the POS and increased revenues.

> **Generate revenues through Retail Analytics**
>
> With the help of data-driven insights, retailers can accurately identify which measures create a feel-good atmosphere in the store and help extend the length of stay. This data also forms the basis for personalized interaction and enables digital advertising opportunities as an additional source of revenue.
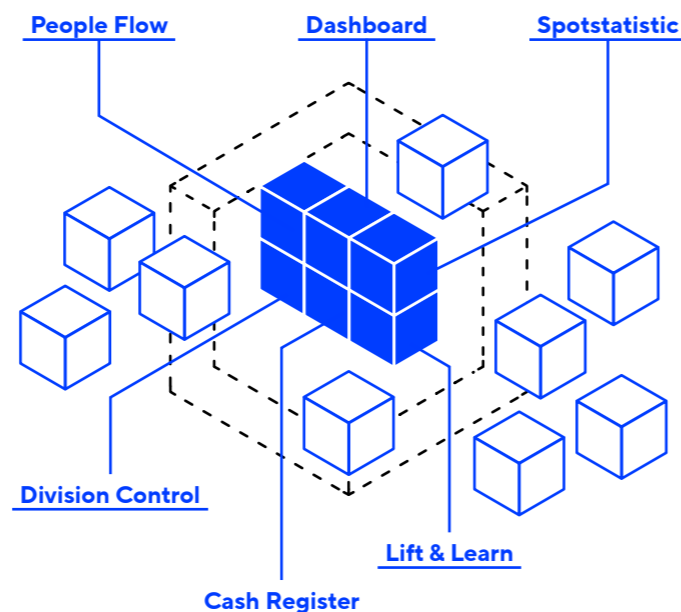
| Retail Platform Core Module

Recognizing customer behavior, Understanding contexts: Solutions for groundbreaking stores.

The innovative salesroom knows its customers as soon as they enter the store. It communicates with them constantly, responds agilely and continuously adapts to their needs based on data. In this way, stores can retain customers, increase their revenues, and develop new sources of revenue.

Our Retail Platform easily integrates into the retailer's processes. Like an invisible assistant, it accompanies the customer at every point of the customer journey. The fundamental Core Module provides deep insights into the respective customers. Here, data is collected in a uniform manner and linked with each other. This allows conclusions to be drawn on current and future buying behavior.

driven, digital advertising space is created as an additional revenue stream. The combination of all core functions provides stores with an elementary basis for generating added value, today and with a view to extensions and further benefits in the future.

height: 1.65 m
preferences: sneaker
gender: female
age: 30 – 40
mood: happy
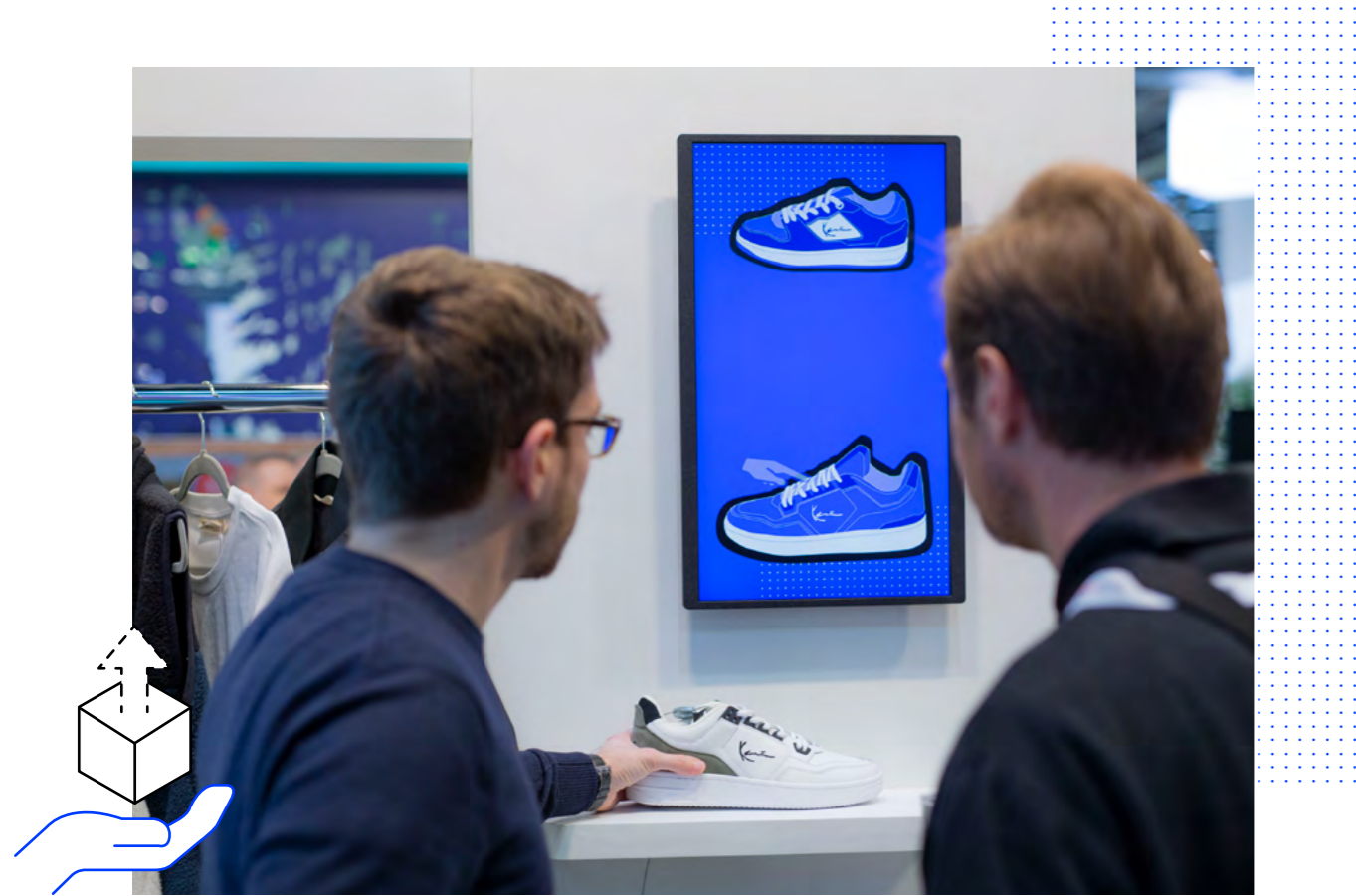
Core modules: Network House of Data

The Retail Platform consists of a core with fixed implemented modules. New tracking technologies and functions can be continuously added to this network in order to process information and target the end customer. The Core Module forms the basis for detailed data collection, analysis and derivation of actions. It increases revenues by improving the feel-good atmosphere in the store and increases sales through personalized interaction. Furthermore, data-

Retail Platform Core Module

People Flow
Dashboard
Spotstatistic
Division Control
Lift & Learn
Cash Register

Recognizing and understanding customer movements: People Flow.

A 3D sensor detects a person as soon as they enter the store. This creates a randomly generated ID to enable tracking of the customer throughout the store, even when changing floors. During the shopping experience, the retailer gains information such as current visitor counts, occupancy of defined zones, and demographic data such as gender and age. Even specific insights into customer behavior are captured, such as gaze direction and inter-

action time with selected products. All data is collected on the platform and made available for further processing. These insights form the basis for in-store analytics, to, among other things, optimize the customer journey, plan resources efficiently and implement personalized marketing strategies.

Sales figures, customer behavior and interests Link: Cash Register.

Once a customer has chosen a product, the cash register data is linked to the buyer's metadata. Cash Register creates an average persona for each product sold. This provides retailers with an overview of their sales figures as well as direct proof of whether their created target group matches reality.

Retailers can use this knowledge strategically to optimize their marketing strategy and their product range and make evidence-based deci-

sions that sustainably increase their revenues. In addition, the connection to the shopper is maintained by the shopper agreeing to the digitally transmitted receipt. The platform's Core Module collects and provides acquired data that can then be processed.

Capture and reinforce interactions: Lift & Learn.

When selected products are lifted, a sensor registers the start of interaction between a customer and the respective product. A sensor tracks eye contact and thus the intensity and duration of the interaction. This makes it clear which promotional products customers are particularly interested in.

The Core Module takes this data and combines it with information from the People Flow. This is where the benefits of the collected data begin. Product or brand information is immediately displayed on the digital signage display, matched to age and gender if necessary.

The content can inform, animate and call for concrete action. Time limited discounts via QR code on the display provide insights into the bounce or conversion rate of the in-store promotion in conjunction with the checkout.
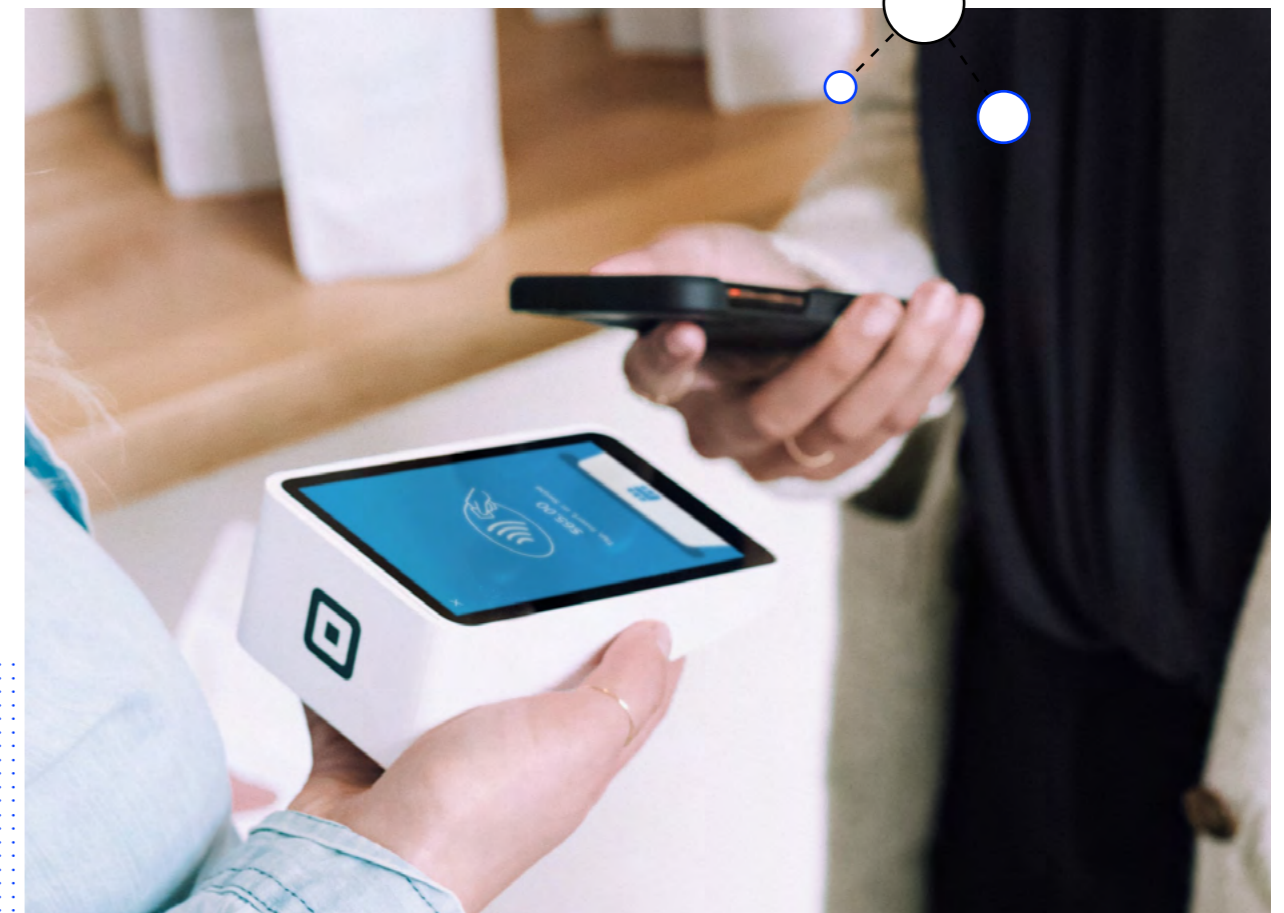
As a function of the Core Module, all data is collected on the platform and made available for further processing. In addition, the module provides supplementary information on the length of stay in the various sales zones. This supports retailers to optimally present their products at the POS and to plan effective marketing campaigns.

## Playing out and evaluating advertising messages: Spot-Statistic.

Large LED displays, interactive touchscreens and other digital signage displays attract the desired attention through moving images. They generate longer interaction times than static media carriers and aim to persuade customers to buy immediately. The spot data is linked to the digital signage software for evaluating the advertising messages with the Retail Platform connected. Retailers can see which spots had the longest play time in different sales zones and how purchase behavior was influenced. A comparison of products sold and advertised provides direct evidence of the effectiveness of marketing messages to enable targeted responses. The Core Module records and stores the data obtained on the platform. This data is then available for further processing.

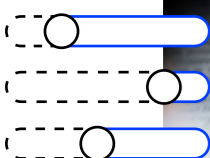### since 2005 - real know-how for digital signage

Compared to static advertising media, digital signage generates more attention, longer interaction times and an individual approach. Retailers can benefit from our outstanding expertise in this area, dimedis has been continuously developing its digital signage software „kompas" since 2005. Our complete solution offers extensive functions for controlling the digital signage network and is compatible with screens, tablets, LED and video walls from all manufacturers. kompas can be operated intuitively via smartphone and meets all requirements for successful digital advertising.
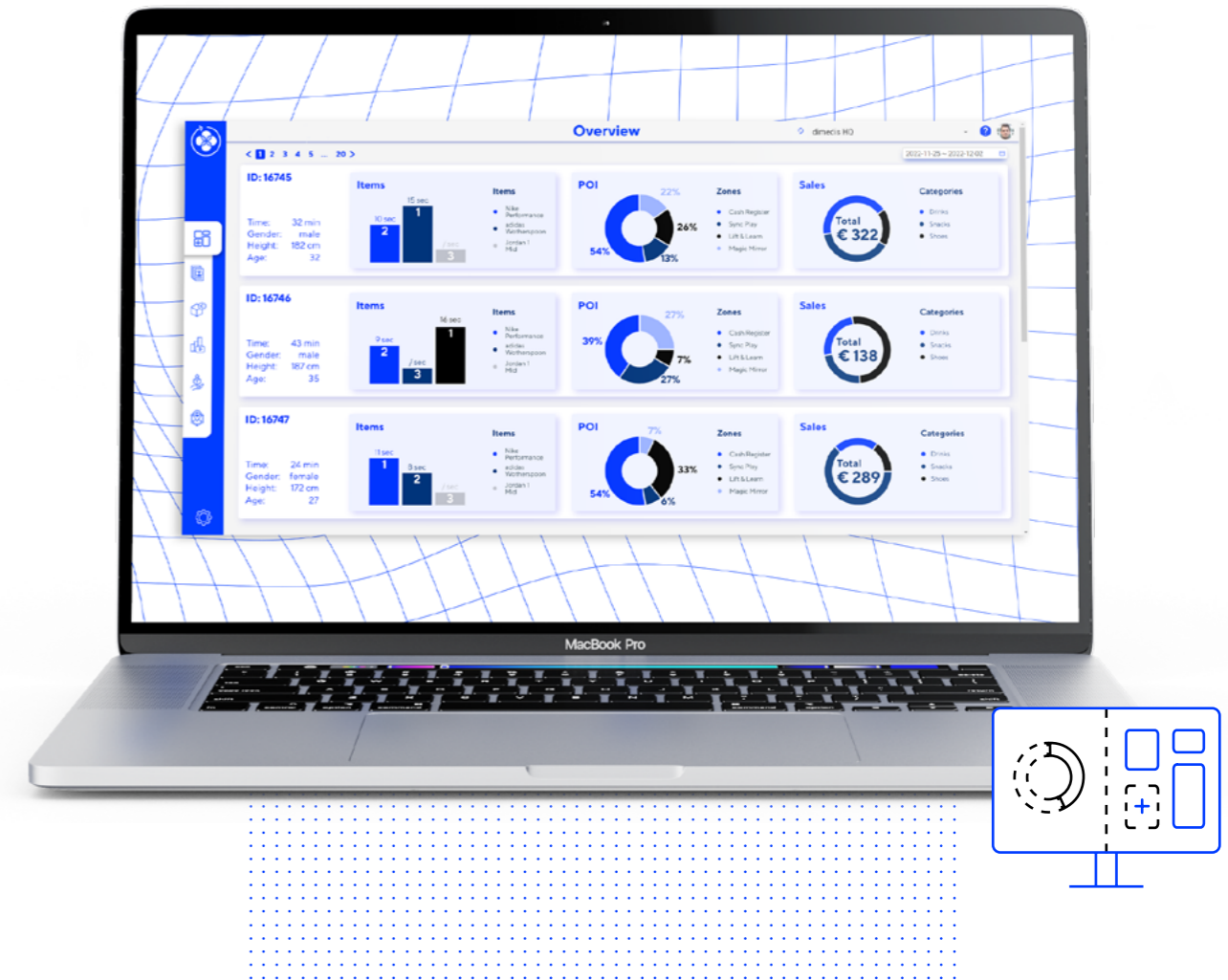
Identify and qualify insights: Dashboard.

The customer is accompanied and tracked along his personal in-store customer journey by the invisible assistant has accompanied and tracked them along their personal in-store customer journey. Now the task is to use this uniformly collected data. Our responsive dashboard presents all information in a clear, easy-to-understand, visually appealing structure. Here, according to different weighting points, the data is evaluated for further technological and human based decisions and actions. Retailers can see, for example, how many people are currently in the store, which shopping groups they are dealing with and which products they are interested in. The dashboard presents the content clearly and concisely through meaningful diagrams. The choice of chart type and a consistent design ensures a high density of information. A comparison of multiple sites is also made possible in real time.

Retail Analytics: Maximizing Benefits for Retail.

The Core Module of the Retail Platform offers all the basic functions needed to optimize the customer journey by means of data analyses and to increase sales through targeted advertising campaigns. Patterns and trends are identified at an early stage and new opportunities are recognized so that successful marketing measures can be implemented.

Modern stores can be more than just a retail space: communication spaces that offer customers unique shopping experiences. Our Core Module helps retailers simultaneously collect valuable data and continue learning through customer behavior. This enables retailers to retain customers, grow stably, and increase revenues.

Retail Analytics — secure, modular and flexible

Despite detailed data mining and comprehensive insights into customer behavior, these methods of comparative analysis and all other functions of our software solution are of course fully DSGVO-compliant and secure. Data is not stored and processed by third-party providers, but by dimedis.

Compare data and increase efficiency: Division Control.

The comparative data analyses support retailers to track the efficiency of their stores and their sales and to act proactively with targeted measures. Retailers can respond to changes in good time and stay one step ahead of potential sales drops at specific points. Division Control, for example, compares the number of visitors to particular areas in the previous week with other data from the platform in order to proactively counteract any subsequent imbalance in visitor distribution. A comparison between different stores is also possible with Division Control. This is particularly interesting if the stores are located close to each other thereby aiding decision making — for example, which target group to focus on in the respective stores.

Retail Analytics - benefits for the retailer at a glance:

Gaining insights — our solutions accompany customers in the store like an invisible assistant and collect detailed data at every POS touchpoint.

Understanding customer behavior — the data obtained are analyzed and processed to understand customer behavior and discover trends.
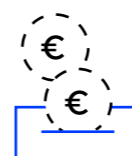
Increase revenues — through data-driven, successful marketing campaigns, higher sales are achieved through personalized interaction as well as digital advertising as new sources of revenue.

Retail Platform Control
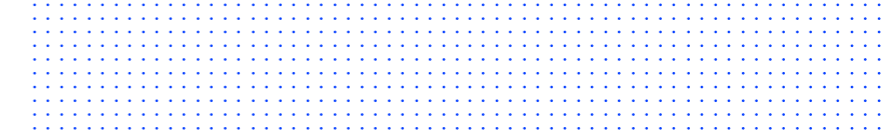
Modular extensions for amplifying deeper insights.

The system structure of the Retail Platform facilitates continuous development. Additional features provide even more precise data and insights; selected and applied according to needs and goals.
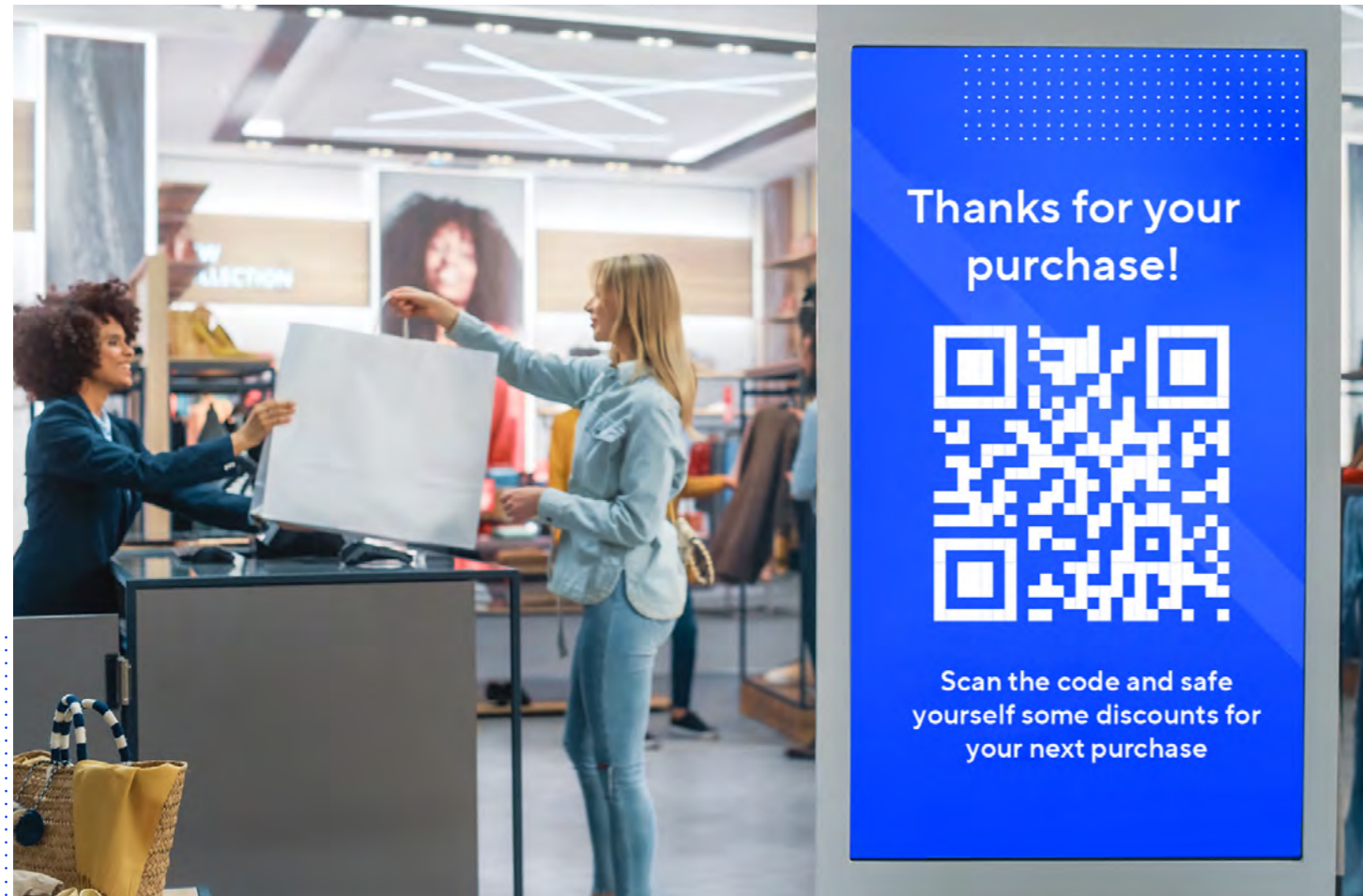
Every store visitor is unique. The Core Module offers important functions for collecting data on customer behavior and understanding it comprehensively. Our extensible modules go beyond that and utilise all the potentials of the Retail Platform. With these extensions, stores can further optimize various aspects of the customer journey and increase their sales.

For precise customer insights: Fingerprint modules

The Fingerprint Module captures the individual customer as individually and uniquely as their needs and interests are, independent of the size or architecture of the store. Unlike the People Flow module, the main focus here is on each individual customer. Our innovative technology uses 3D sensor technology in combination with image recognition to create a random, privacy-compliant fingerprint. Parameters such as height, gender, age, features such as glasses and hair color and position in the store are recorded, resulting in an individual profile during his or her stay in the store. The customer is also recognized when changing floors or going to changing rooms. This enables individual and meticulous recording of customer movements. The retailer is free to decide at which points data should be collected via sensor. The module marks zones defined by the retailer where the customer's touchpoint with the store should be recorded and analyzed. Despite being revolutionary technology hardware costs are up to 75 % lower than conventional systems.

System control for optimal shopping experiences: XP Management Module

XP Management controls and maximizes the use of other Retail Platform systems with the aim of providing customers with the most personalized and enjoyable shopping experience possible. Through the connection and communication between the platform and these systems, stores can adapt content in a targeted manner, play it out at the optimal time, and minimize wastage.

Utilizing acquired intelligence: Intelligence Module

This module helps retailers interpret their acquired data correctly and use it in an automated way. The system accesses existing information, controls all content, plans and executes campaigns. Intelligence Module continuously adapts to changing shopping behavior and enables retailers to make data based decisions for store optimization and sales growth.

| Programmatic Advertising Module & Closed Shop Module

Retail Media: Smart solutions for automated and personalized advertising in retail

Instore retail media is in a crucial growth phase. The potential of digital POS advertising is huge. Communication can take place via a variety of different in-store advertising media.

Advertiser's use cases have long gone beyond simple shopper marketing to more complex off-site activations based on first and second party data. Retailers possess something that is extremely attractive to advertisers: proprietary and high-quality first-party data located directly at the POS of advertiser's products. And thanks to the Retail Platform, the effectiveness of these campaigns can be measured immediately and transparently. Retailers offer advertisers a holistic and target group-oriented media solution.

Maximum attention at the POS

Our platform enables retailers to optimally evaluate their digital touchpoints at the POS with a wide range of functions and to tap new sources of revenue from advertisers through the sale of digital advertising space. The system accesses data on customer-specific shopping behavior and, based on this, generates proposals that are tailored precisely to customer's interests. In this way, the desired attention is aroused precisely

where sales can be made. In combination with the digital signage software, the Retail-Media module helps retailers to significantly increase brand visibility at the POS and boost their sales.

Retail Platform and Retail Media

The Retail Platform contains a core, which combines individual, but compatible modules and which can be extended through further modules. Retail Media is a module that acts in direct correlation with the insights from the Retail Platform.

Programmatic advertising: automation and new revenue sources

Programmatic advertising enables a targeted and automated playout of digital advertising spaces and times via various supply side platform systems (SSP). Advertisers, in turn, can rent digital advertising space and run campaigns on a demand side platform (DSP). Both platforms enable the buying and selling of advertising space in real time and the optimal use of advertising time. In this way, advertisers gain access to advertising spaces and the desired target group. Retailers make digital touchpoints at the POS partially available — but always retain full control of their presentation spaces.

Programmatic advertising: in practice

If an advertiser wants to present a new advertisingcampaign on screens and address a specifictarget group, it can rent advertising space in an auction process. To do this, the advertiser communicates with several SSP providers on an online trading platform for advertising. These platforms contain suitable screen providers
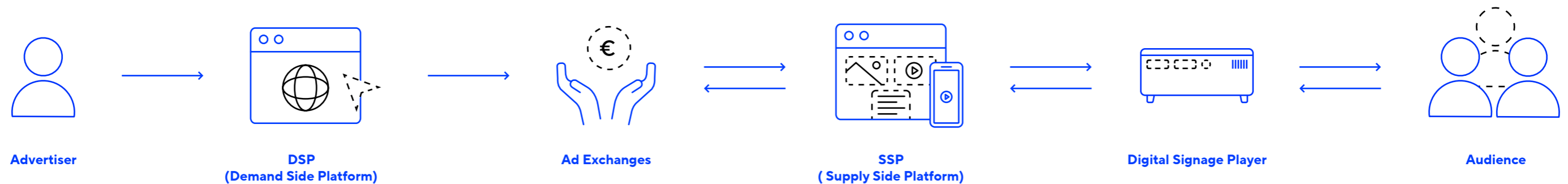
with their relevant information about the target group and conversion rates, and inform the advertiser which target group can be reached and in what quantity. The relevance of the digital advertising space is determined by the target group quality, and thus the timeframe and value of the advertising space is fixed in a real-time auction. Our software solution is one of the inventory partners of the SSP provider, where advertising content is played out. Subsequently, the advertiser receives feedback from the DSP on the success of his advertising campaign playout.

Programmatic Advertising: Marketing through Real Time Bidding

Advertiser

DSP
(Demand Side Platform)

Ad Exchanges

SSP
(Supply Side Platform)

Digital Signage Player

Audience

Closed Shop Modules: Enabeling of automated advertising campaigns

Retail Media Closed Shop gives retailers full control over their media partners and content. By integrating sensor technology, customer data can be used as a multiplier and the attractiveness of advertising space can be noticeably increased. Locations that have extensive data are particularly interesting for advertisers, as this data increases the value of the advertising space. Such data includes customer age, impressions, length of stay, average attention, and playout time.

Closed Shop: in practice

An advertiser uploads his advertising campaign to the Retail Platform and configures the frequency of playout, locations, and target group. Through communication with the Retail Platform, the value of an ad space is calculated. The impressions, age and demographic data of the target group are decisive for the price. The advertiser receives a proposal for available suitable advertising spaces in the dimedis Closed
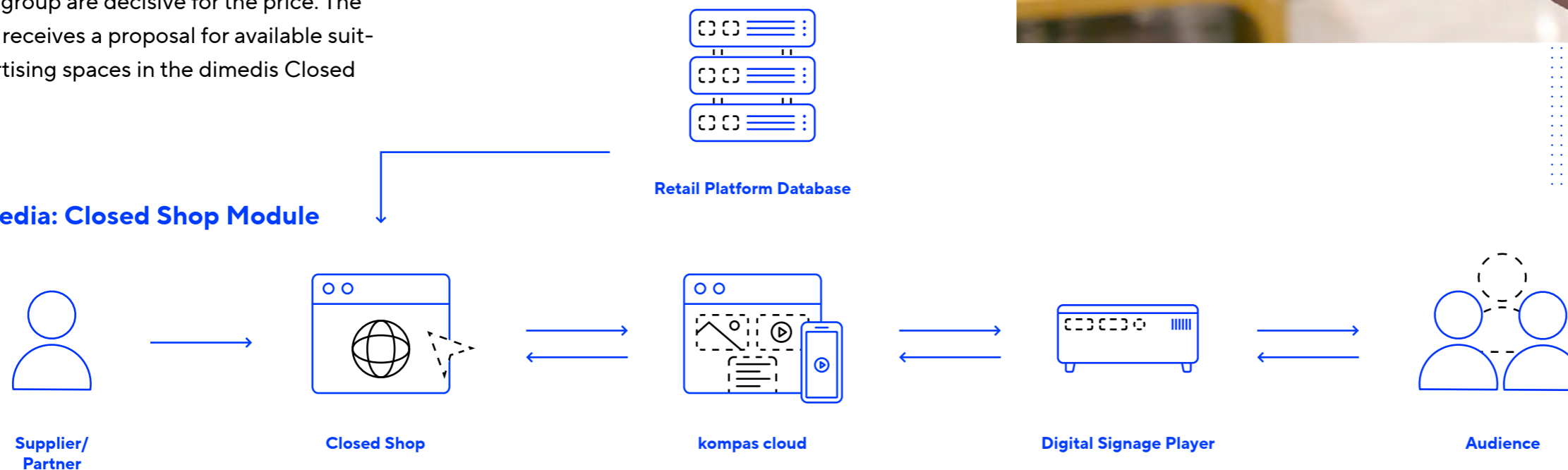
Shop Module. After approval, the advertising content is automatically played out and invoicing occurs at month-end. This process ensures efficient handling and billing of the advertising campaigns.

The future of advertising in retail

Retail Media offers retailers intelligent solutions that boost sales. Customers are addressed directly and individually at the POS. In addition, stores can make optimum use of advertising time and digital touchpoints to profit from new revenue opportunities. Overall, Retail Media delivers all functions for effective and dynamic marketing strategies of future-oriented stores.

Retail Platform Database

Retail Media: Closed Shop Module

Supplier/ Partner	Closed Shop	kompas cloud	Digital Signage Player	Audience

| Company & Vision

Shaping the shopping experience of the future together

Data from numerous touchpoints of the in-store customer journey smartly connected with each other. This is the key to the future of omnichannel retailing. We approach the customer from the analog side - with networking software solutions and minimal hardware.

dimedis has been developing software solutions for the retail industry since 1996. During this time, we have acquired extensive know-how in retail processes. Our expertise therefore lies in understanding the specific tasks of the market in detail and developing customized solutions. Through our active membership in retail and digital transformation associations, we always stay up to date and are continuously involved in research and trend studies.

We place particular emphasis on a holistic view of the market from the perspective of retailers and customers. With our development team, both local and international, we are available to our customers at any time. A lively exchange with leading technology companies enables us to select project- and product-strengthening cooperations that fit perfectly. All this enables us to deliver well thought-out, fast and stable results.

Our vision for retail

Since our founding in 1996, we have been providing software solutions to retailers, to offer their customers optimal shopping experiences. The continuous development of our products to meet the needs of the market and our holistic expertise in the industry lead to our current vision: Omnichannel Retailing — a complete fusion of all available sales channels for an end-to-end shopping experience. An invisible linking of databases, systems and processes enable optimal sales at the right place at the right time.

dimedis — smart.retail knowing your customers' data best – data platform for fair & retail experiences

| Contact

Our office
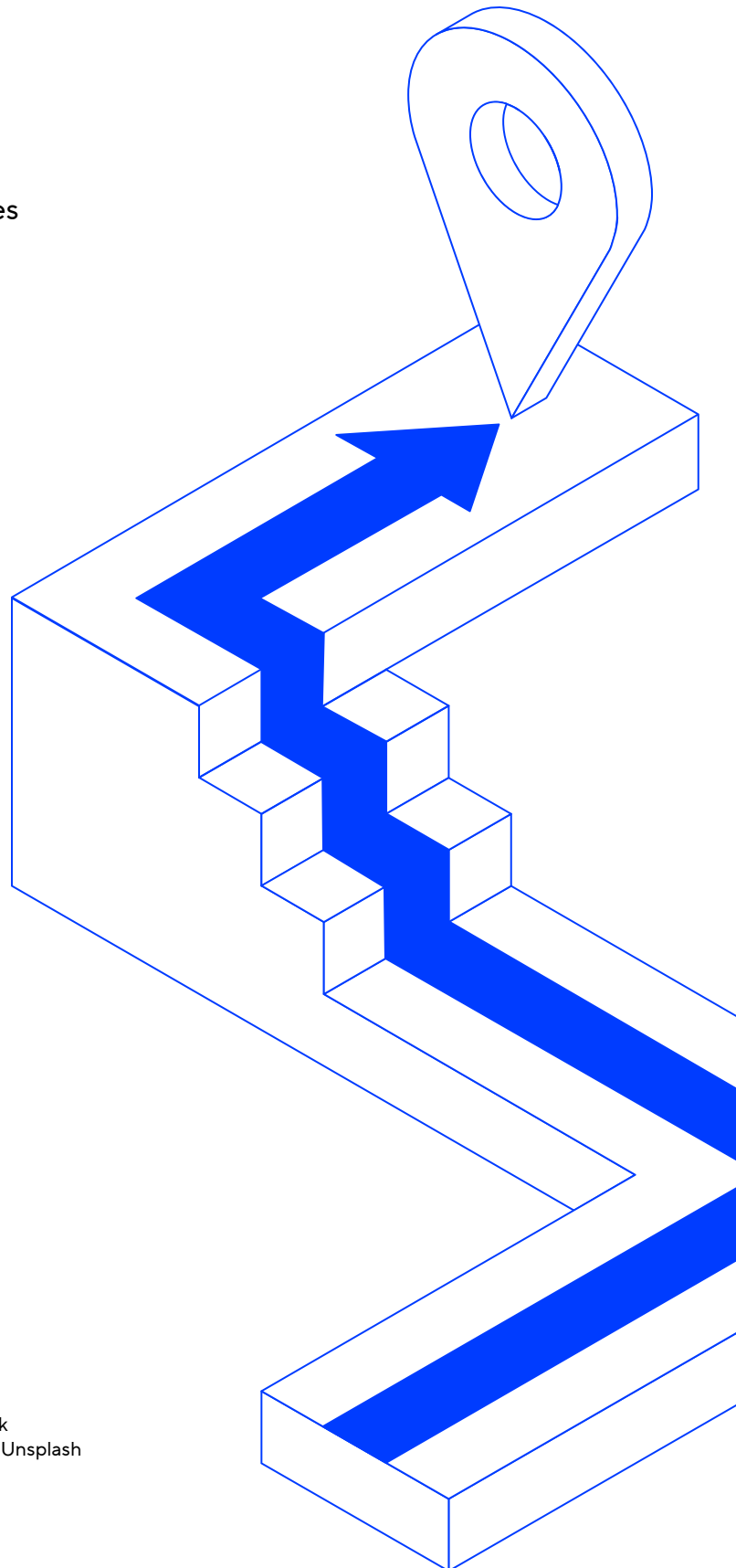Vogelsanger Straße 78
50823 Cologne, Germany
www.dimedis.io

Patrick Schröder
Head of Digital Signage & Sales
pschroeder@dimedis.de

Jürgen Kraus
Senior Retail Consultant
jkraus@dimedis.de

Sascha Printz
Retail Consultant
sprintz@dimedis.de