



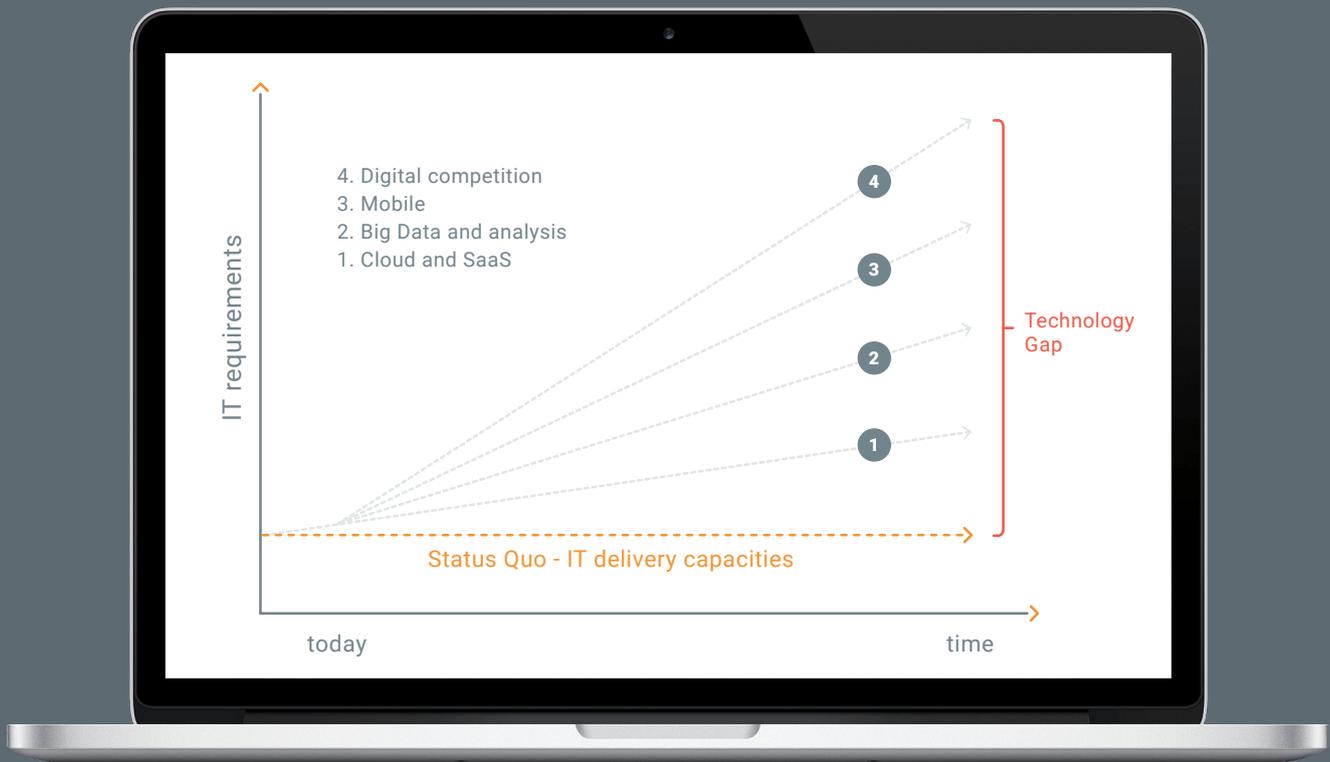
# B2X Commerce Cloud

## **How global companies master Omnichannel E-Commerce**

How digital technologies and modern platforms help global companies digitalize processes and sales, create strategic competitive advantages and enable new digital business models.

# 01 | Modern platform solutions as a strategic competitive advantage

The importance of E-Commerce is increasing rapidly in B2B business and E-Procurement. Sophisticated E-Commerce platforms are both a challenge and an opportunity to leverage and optimize the enormous sales potential. For the professional creation of tailor-made E-Commerce stores, platforms must support Omnichannel Commerce, multistore and a flexible, scalable performance. Enterprise platforms must meet high technical requirements in order to cope with complexity. To guarantee the highest software quality in the long term, the use of modern, suitable technologies is crucial.



## 01 | 1 Technology Gap: IT requirements in the future

Modern IT forms the basis for digital processes and business models. IT requirements increase with the degree of digitalization. An important success factor for companies is the provision of a powerful, flexible and service-oriented system landscape that significantly supports and improves mission-critical operational business processes.

## Sales challenges for global companies



In order to operate successfully on the market, companies must design their sales and business processes as efficiently as possible. Global companies face the challenge of reconciling local regulations, different target groups and tailor-made processes. Digital solutions and a powerful IT infrastructure support companies in meeting these challenges.

### 02 | 1 Local regulations and the impact on E-Commerce

For each global region there are different languages, local requirements and cultural peculiarities. Each country has its own customs-, tax- and pricing regulations that must be taken into account in E-Commerce and business processes.

This means that E-Commerce platforms must be able to map complex processes, rules and dependencies so that the relevant regulations can be taken into account in order management and payment, logistics and fulfillment.

At the same time, target-oriented sales require a certain flexibility for individual offers and pricing.

### 02 | 2 Appropriate approach to target audiences and (B2B) functions

Addressing different target audiences individually – such as end customers (B2C), business customers (B2B) and (sales) partners (B2P) – is another challenge. Whereas most E-Commerce systems focus on B2C commerce and provide the necessary B2C functions, B2B commerce often lacks the proper functions.

For example, the mapping of complex dynamic price scales, B2B order management with different authorization levels per employee and department as well as central invoicing are important requirements for B2B commerce. These requirements are often not met by the standard B2B features and must be developed in-house.

### 02 | 3 Sustainable IT solutions

In addition, it is becoming increasingly important for companies to deploy future-proof, scalable and flexible IT solutions that are of high quality over the long term and can be continuously developed with the business. .

Digital platforms support companies in efficient sales, automated digital processes and enable partner sales and digital business models.

## Technical requirements for enterprise platforms



### Modern IT Infrastructure

- | Software Compatibility
- | Connectivity to Business IT
- | Open Standards
- | Transparency
- | Reduced Complexity



### Highest Performance

- | Powerful Platform
- | Flexibility & Customizability
- | Scalability
- | Cloud Hosting & Storage
- | Software Architecture



### Long-term Software Quality

- | Highest Security Standards
- | Trouble-free Operation
- | Continuous Development
- | Monitoring & Support
- | Quality Management

## The B2X Commerce Cloud: E-Commerce at its best

The B2X Commerce Cloud is an API-based platform that enables digital business processes and efficient B2C- and B2B commerce from a single instance. For each global region and target group, customized frontends with appropriate product offers, prices and promotions can be created. The solution offers a wide range of features that meet B2B customer requirements in particular and

enable convenient B2B commerce. Further functionalities and services can be integrated via API interface, which at the same time enables replacing existing services if required. The platform is controlled via a single instance, which improves usability and saves IT resources and costs. Based on "Pace Layered Architecture", a powerful business service layer has been integrated for (legacy)

enterprise systems; the flexible frontend layer enables tailor-made B2B-, B2C-, B2E- and B2P multistores as well as functionalities and rules for the various target audiences. The solution is divided into two parts: In a B2B- sector as well as a B2C sector.



### B2C Commerce: Basic webshop features with customized storefronts

The B2C sector of the platform operates multiple shops with multiple languages. Each shop has its own products, prices and currency settings. All product data such as product information, images, currencies and prices (including taxes and fees) is imported from enterprise systems into the platform. To gain flexibility, promotions and discounts are managed, calculated and included in the order as additional information by the storefront. Payment is made via a payment integration and is "switched on/off" per storefront. All price, tax and shipping calculations are performed and validated by internal systems, as is the invoicing sent from an ERP system such as SAP. In addition, this sector enables special offers for employees (B2E) and partners (B2P).

### B2B Commerce: Enhanced B2B functions for business customers and sales partners

The B2B sector of the platform operates a shop in several languages for sales partners, retailers and sellers. Users must log in with a valid retailer account, there is no "anonymous" access. In contrast to B2C, all price calculations (including taxes and fees) are performed "live" by internal systems, as the prices for retailers are customer-specific. The user interface can display detailed subtotals for products according to the configuration. Each function and query on the B2B platform can be configured per customer. The Multistores have a flexible frontend that can be adapted to local requirements and rules. This also includes the flexible design of promotions and product bundles, which improve the conversion rate and shopping cart values. In addition, all interfaces such as Voice Assistant can be integrated.

# 04

## B2C vs. B2B Commerce: Demands and B2B Features

B2B customers have different requirements than private customers. For example, B2B customers are increasingly looking for long-term relationships, efficient solutions to their problems, and risk minimization. To meet these B2B requirements, a variety of B2B features have been developed for the B2X Commerce Cloud. Among the most important B2B requirements are in particular the mapping of complex dynamic price scales, B2B order management with different authorization levels per employee and department as well as central invoicing.

B2C vs. B2B	Consumer – B2C Commerce	Business – B2B Commerce
Market	Large target audience Broad market	Small target audience Narrow focus, niche markets
Focus	Marketing of brands and products Focus on products and services	Long-term, trust-based customer relationship Focus on customer relationship
Driver	Product	Business partnership
Sales approach	Entertainment Appreciation	Expertise Problem solving, risk minimization
Goal	Maximizing shopping cart value	Maximizing the value of business partnerships
Purchasing decision	Emotional Single-Step	Rational Multi-step / several persons
Sales	Marketing	Sales team

**Personalized B2B Client Pages:** Flexible, individually user-configurable page with various modules on which specific products or product groups can be displayed with a configurable quantity per target group by default. This makes it easier to find relevant products and speeds up the ordering process.

**User and Rights Management:** User "Seller" can add products to the shopping cart of assigned user "Retailer". This facilitates procurement and distribution for larger companies with several branches.

**Fast Order Entry:** Dealers can upload orders by CSV file or products and quantities by copy & paste to the B2B portal to create new orders.

**Order Templates:** Dealers can create templates for regular orders, which greatly simplifies and accelerates the ordering process.

**Automated Orders:** If retailers have less than certain stock quantities of products, automatically configured product quantities can be compiled as a shopping basket, which only have to be released by the buyer.

**Order Fraud Detection:** Function that detects possible cases of fraud. If fraud is detected, the order is either placed "on hold" pending verification or rejected completely.

The B2B features of the platform enable companies to efficiently digitalize processes, place orders quickly and conveniently, and thus act quickly and cost-effectively. The API-based infrastructure makes it easy to add or replace individual services to the platform.

The ability of the B2X Commerce Cloud to model processes flexibly allows the design of innovative business models that offer companies a clear competitive advantage. Below are some best-practice examples.

05 | 1

## **B2B Order Management**

Sophisticated user management enables the configuration of different users, roles and authorizations, so that ordering processes can be automated and significantly accelerated. For example, the user “employee” can create shopping baskets ready for dispatch for the user “buyer”; the buyer only has to confirm the order. At the end of the month, the payments for all orders are automatically sent to the invoice department, taking price scales into account. This workflow-based order management makes B2B commerce significantly faster, more convenient and more secure, both for the company itself and for sales partners and product dealers.

05 | 2

## **Multi-Split Payment**

All orders from all branches of a company are collected and sent centrally to the billing department for invoicing. Contractually agreed price scales and discounts are taken into account, enabling customer companies to benefit from favorable conditions and price advantages. Consolidated invoicing is convenient and saves both parties considerable accounting effort.

This use case was specifically used for a paint manufacturer for car paints. All independent garages can order the required paints for their garages via the B2X portal. The central billing process is based on the respective car brand holdings. The collected orders result in significantly larger order volumes per car brand, which also results in other pricing discounts due to the achievement of price scales. These advantages, combined with the significantly reduced billing effort, are extremely attractive for the paint manufacturer’s custom-

ers, which leads to continuously large order quantities and a high level of customer loyalty.

05 | 3

## **Marketplace function: Lead management turns provider into intermediary**

A marketplace function enables companies to manage leads via the B2X platform. Service providers can log into the B2X platform and view leads from potential customers. When taking over an order, the service provider undertakes to execute the order and must contact the customer within 1-2 weeks. The service providers report their services and expenses in the portal, which enables transparent proof of performance and comparability of the service providers. Follow-ups such as order invoicing, invoicing and possible follow-up orders are carried out by the service providers or the corporate sales department.

The Lead Management marketplace function was developed for a roof manufacturer. Sales partners, architects and roofers can set up a presence on the manufacturer portal and receive customer leads. A Google Maps integration allows end customers to view sales partners and distributors of the manufacturer’s products as well as architects and roofers in their immediate vicinity. The roof manufacturer not only acts as a product supplier, but also as a distributor of orders. The marketplace is very attractive for sales partners and craftsmen, and end customers are supported in selecting suitable service providers in their vicinity. With this marketplace function, the roof manufacturer has created a unique selling proposition and thus a sustainable competitive advantage.

05 | 4

## **Business Model B2E Commerce: Old Goods to Employees**

The flexible storefronts enable companies to sell discontinued product models to their own employees at favorable conditions (B2E, business-to-employer). This creates a win-win situation in which the company’s employees receive favorable special conditions and the company can sell old goods from its warehouses without great effort. The B2E model was used by the electronics group Panasonic. Electronic products have a relatively short product life cycle, i.e. they are replaced at short intervals by successor models – which makes production and warehouse planning more difficult for electronics companies. The B2E business model enables simple special sales to employees without a great deal of sales effort with advantages for both parties.

05 | 5

## **Distribution via Drop Shipment**

The B2X platform enables drop shipment, i.e. the sale of goods by traders who do not have the desired product in their own warehouse, but order the products directly on the company platform, from where the goods are sent directly to the desired delivery address. The merchants only act in an advisory and sales role, payment and fulfillment are automated via the B2X platform. This enables efficient sales, products are always available and resources and storage space are saved.



### 06 | 1 B2B Order Management

Configuration of users, roles and authorizations that automate and accelerate ordering processes ("employee" creates shopping cart, "buyer" authorizes order)



### 06 | 2 Multi-Split Payment

Orders from branches, central accounting of the parent company. This results in favorable conditions by achieving contractually agreed price scales and discounts



### 06 | 3 Lead Management via Marketplace Function

Efficient lead management by bringing together sales partners, service providers and customers via portal



### 06 | 4 Drop Shipment

Distributors can sell products that they do not have in stock. Products are ordered from the retailer and shipped to the shop or shipping address



### 06 | 5 Pre-Order

Pre-ordering of products, whereby the payment is authorized in advance and the payment data is stored for later debiting. This enables orders to be placed with later delivery dates, thus enabling larger quantities to be ordered and thereby achieving more favorable price scales



### 06 | 6 Forward Orders

Dealers can create orders for forward deliveries. These scheduled purchase orders for products and quantities offer planning security and provide dealers with the opportunity to achieve price scales



### 06 | 7 B2X Multi-Store Frontends

A global multi-store solution with customized frontends for different target groups (B2C, B2B, B2E, B2P) and their requirements and processes



### 06 | 8 Dynamic Pricing

Prices not only per customer, but also per batch. This opens up savings potential for B2B customers through higher volumes and dynamic pricing models



### 06 | 9 Reporting

All information about pricing, shopping baskets, billing and finance via one platform

# The Open Source Components of the B2X Commerce Cloud

The B2X Commerce Cloud is a modular software suite based on powerful Open Source technologies. This enables the replacement and expansion of individual components, the integration and networking of different services and systems as well as tailor-made solutions and flexible processes. With the use of Open Source technologies, one has complete control over the software code and thus over the design of mission-critical business processes.

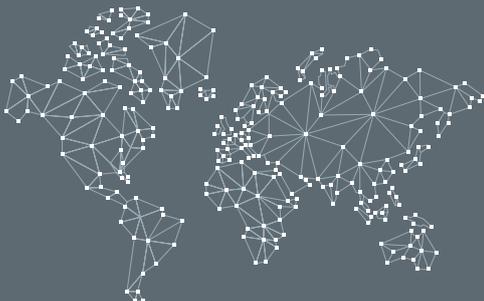


## Management Summary: Powerful B2X Commerce Cloud combines B2C and B2B Commerce

Developed by AOE, the B2X Commerce Cloud offers companies tailored frontends and features for their diverse global audiences. The platform's lean infrastructure is low-maintenance, scalable, flexibly expandable and future-proof. Since only one central platform instance is required, additional costs for infrastructure and software licenses are saved; further developments and extensions only have to be developed and implemented once. The API-based infrastruc-

ture makes it easy to add or replace individual services to the platform. In particular, the tailor-made B2B functions enable companies and their B2B customers to digitalize processes, place orders quickly and conveniently and make central multi-split payments. In this way, B2B customers experience efficient ordering processes, favorable pricing conditions and significantly simplified invoicing. This enables the company's B2B customers to act quickly and cost-effectively.

The convenient B2B functions as well as the automated digital processes represent a real competitive advantage for the B2X platform operators, enable digitalized processes and business models and thus secure the future success of the global company.



AOE develops digital business and E-Commerce platform solutions based on Open Source technologies. We specialize in the implementation of complex enterprise software applications for global corporations. We support our customers in the development of digital business models and consistently rely on agile methods. In long-term agile projects, we execute innovative solutions with automated and digitalized processes together with our customers.

In addition, AOE develops its own products such as the Open Source framework Flamingo and the Omnichannel Multi-Merchant Marketplace OM<sup>3</sup>, the leading E-Commerce marketplace for the aviation industry. Headquartered in Wiesbaden and with more than 250 employees in five countries, AOE serves global companies such as congstar, Deutsche Telekom, Heathrow, Singapore Airlines, Commerz Real, Sony, Panasonic and Frankfurt Airport.

