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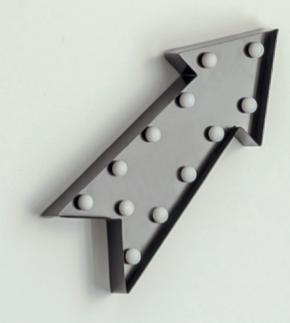
Your partner for digital commerce



Wirecard Expe

To increase customer loyalty, it is important to offer the most popular local payment methods, from traditional ones such as credit cards to modern options such as Alipay. Merchants need to 'think global, act local' when it comes to payment options.

Martin Osterloh, VP Sales Digital Entertainment, Wirecard





What makes

01/ digital commerce special

The world we live in today is digital—and this trend is disrupting the retail sector as well. Almost everything sold in brick-and-mortar stores is now also available online. Many products and services have also been digitalized: Music is available for download instead of on CD. We stream movies instead of watching them on DVD. Gaming is an online activity. Even our books are digital. We work out at home using an app instead of at the gym. And gone are the days when we printed or received tickets by mail. Today we buy our event tickets online and save them right on our phones.



Merchant

New, lucrative source of income

Easy to reach a global market

More cost-effective, e.g. due to no storage or shipping necessary

This trend offers many new opportunities for merchants and more convenience for customers. But what's different about digital commerce? It encompasses the sale of goods that no longer exist physically, but are instead saved, purchased, and consumed digitally, like music, video on demand, games, e-publishing, etc. Digital commerce is an emerging market—after all, there are many compelling factors driving its growth, both on the merchant and the customer side.

What makes the sale of digital goods stand out? One feature, for example, is the immediate completion of the order and delivery of the product. Whether as a code for an online game, a magazine subscription, or an audio book, once customers have purchased and downloaded or activated these digital goods, they can usually use them immediately.

On a global scale, annual sales of digital media grew by 16 percent between 2017 and 2020, to 162 billion U.S. dollars. According to forecasts, sales are expected to reach roughly 183 billion U.S. dollars by 2024, i.e. an increase of an additional 13 percent. In this context, the USA accounts for the lion's share of total sales, followed by China, Japan, the United Kingdom, and South Korea.¹ Double-digit growth is also expected in the following segments of the digital market:



Customer

Convenient and easy shopping experience

Available at any time and immediately

One-click purchases, e.g. while gaming online

E-entertainment

The gaming sector is responsible for a significant portion of sales in digital commerce. In 2019, 1.8 billion gamers around the world spent approximately 83 billion U.S. dollars on console downloads, browser-based games, codes, and in-game extras—and this figure is rising. While the United States tops the list in many other areas, China is the leader in the gaming sector. Chinese gamers spend around 26 billion U.S. dollars on and in online and mobile games.²

Special areas of interest include role-playing fantasy gaming or e-sports. In India alone, the number of gamers is expected to rise to 440 million by 2022.³ From a global perspective, the e-entertainment market varies greatly: In China, video games account for 81 percent of total digital media sales.⁴ Similarly, in Russia, video games account for 64 percent (i.e. 1.6 billion U.S. dollars) of the total market (2.5 billion U.S. dollars).⁵

B2C: Streaming

In terms of user numbers, digital music is almost on par with online games. Nearly 1.5 billion people generated total sales of 14 billion U.S. dollars in this segment in 2019. More than a third of this figure (5.2 billion U.S. dollars) was generated in the United States, followed by China (988 million U.S. dollars) and the United Kingdom (814 million U.S. dollars).⁶

¹ Statista. 2020. Digital Market Outlook. Digital Media worldwide. https://www.statista.com/outlook/200/100/digital-media/worldwide.

² Statista. 2020. Digital Market Oulook. Video Games worldwide. https://www.statista.com/outlook/203/100/video-games/worldwide.

³ Statista. 2020. Online gaming in India. Number of online gamers in India. https://www.statista.com/statistics/1064010/number-of-online-gamers-india/.

⁴ Statista. 2020. Digital Media China. https://www.statista.com/outlook/200/117/digital-media/china.

⁵ Statista. 2020. Digital Market Outlook. Digital Media Russia. https://www.statista.com/outlook/200/149/digital-media/russia

⁶ Statista. 2020. Digital Market Outlook. Digital Music worldwide. https://www.statista.com/outlook/202/100/digital-music/worldwide.

The video-on-demand segment has comparatively few users, but generates a remarkably high amount of revenue. In 2019, sales totaled almost 33 billion U.S. dollars worldwide, with 15.5 billion U.S. dollars generated in the United States alone. Sales generated here significantly eclipse those of other countries in this segment as well—in China, this figure stood at 2.8 billion U.S. dollars, in Japan at 1.8 billion U.S. dollars, and in the United Kingdom at 1.5 billion U.S. dollars.

B2B: Software solutions

As a subsegment of cloud computing, the software-as-a-service market has been growing for years. This includes CRM solutions, project planning tools, and ERP systems for companies. Sales here more than doubled within three years, from around 48 billion U.S. dollars in

2016 to 100 billion U.S. dollars in 2019. The SaaS market is expected to grow to as much as 151 billion U.S. dollars by 2022.8

E-fitness and e-health

Growth has also been impressive in the e-fitness segment; for example, with fitness and nutrition apps or courses. Sales are expected to grow by around 8.1 percent annually until 2023, reaching a total market size of 2.7 billion U.S. dollars. In addition to the United States, China and India are among the top three in terms of sales in this segment.

The digital health market is booming too. It was expected to grow by an average of 21 percent by 2020 and exceed a total market size of 200 billion U.S. dollars by then. This is especially thanks to the mobile health sector, where average annual growth was expected to reach 41 percent.⁹

The keys

02/ to success when selling digital goods

Continued growth in digital commerce and access to global markets opens up many new growth opportunities for merchants. It also poses new challenges, however—on the one hand, international audiences demand appropriate payment options. And on the other hand, international transactions often increase the risk of fraud.

Challenge 1: Offering and managing variable payment options

Merchants can sell digital goods worldwide with just a few clicks. Neither a warehouse nor shipping is required to deliver them within seconds to customers in Asia, Europe, or the United States. Payment preferences can, however, often vary considerably from country to country.



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Every merchant should make the digital shopping experience as convenient as possible for their customers. Offering the payment methods popular in a region and ensuring that the checkout process is always smooth are proven to have a positive effect on conversions.

Martin Osterloh, VP Sales, Digital Entertainment, Wirecard



⁷ Statista. 2020. Digital Market Outlook. Video-on-Demand worldwide. https://www.statista.com/outlook/201/100/video-on-demand/worldwide

⁸ Statista. 2020. Public cloud application services/software-as-a-service (SaaS) market revenues worldwide. https://www.statista.com/statistics/505243/worldwide-software-as-a-service-revenue/.

Statista. 2020. Projected CAGR for the global digital health market in the period 2015-2020, by major segment. https://www.statista.com/statistics/387875/forecast-cagr-of-worldwide-digital-health-market-by-segment/.

So if you want to steadily expand your customer base, you should offer the most popular local payment methods, from traditional ones like credit cards to modern options like Alipay. "Think globally, act locally" also applies to payment options. It is absolutely essential, however, to integrate each individual payment option into the processes so that it functions reliably and quickly and allows customers to check out securely.

Challenge 2: Successfully preventing cart abandonment

For an online store that generates roughly 100,000 U.S. dollars a day, for example, a one-second delay in page loading time can reduce annual sales by even as much as 2.5 million U.S. dollars. 10 It's clear that every second counts, especially when it comes to selling digital goods. Consumers simply expect to receive and be able to use their e-book or streaming service immediately. If this isn't the case, the abandonment rate increases accordingly. Content, navigation, design, and the overall user experience on the e-commerce site—similar to fast loading times—can also have a positive impact on the abandonment rate. Merchants that improve in these areas will boost their sales even further.

Challenge 3: Simultaneously managing fraud prevention

Being forced to wait for Being made to wait for a verification process that is manual or one that isor one that is based on fraud rules can also cause customers to abandon the purchase process and switch to the competition, where the transaction is completed immediately.

Merchants of non-digital goods have it a little easier in this respect, as they can use the time before shipping the goods to conduct a more thorough analysis. This means merchants need to balance simplicity and speed with security, because a checkout process that is too simple makes life easier for fraudsters.

This is why companies that sell digital goods often spend five times as much on fraud detection as companies that sell physical products.¹¹

Challenge 4: Collecting enough data for buyer verification

Sellers of digital products often have less data such as a verified shipping address available to verify the identity of their customers. This means fraudsters can impersonate legitimate customers and do damage with stolen passwords or credit card numbers alone. As a result, the rate of fraud, identity theft, and theft of credit card data is particularly high. In addition, stolen digital goods don't have to be stored or delivered to a real location. Instead, they can be digitally reproduced in large quantities and immediately offered on illegal or even legal marketplaces. Effective fraud prevention is therefore crucial—for customers and merchants alike.

Challenge 5: Eliminating false positives

While the decision on whether to approve or reject a transaction must be made quickly, there is also a risk of making the wrong decision—either approving customers who shouldn't be allowed to complete the transaction in the first place or rejecting those who accidentally or unjustifiably fail to pass the test. These "false positives" are actually good customers. So the goal is to prevent this loss of sales and customers.

How merchants can

03/ protect themselves against fraud risks

Online fraudsters actively search for the weak points in merchants' security systems.

They exploit the fact that speed and convenience are so crucial to customer satisfaction in digital commerce. Customers shouldn't notice any disruption during the transaction, but at the same time, the merchant must be protected sufficiently against fraud—not an easy task. In this case, it's important to find a good balance between customer experience and prevention on the one hand and fraud protection and risk on the other.

To effectively reduce the risk of fraud, merchants are advised to make the most of and analyze the data they collect with each order. This includes, for example, data on goods or services ordered in the past, the card used for

payment, the location from which the order was placed, or the device that was used. Data comparison is, however, only one way to improve the acceptance and security of payments. In fact, there are a number of different ways of achieving a balance between user-friendly checkout and optimal fraud prevention.

Fraud prevention requires the combined use of different methods and control techniques specific to each customer.

If online merchants combine different methods and use payment systems tailored to their needs, they can significantly optimize their fraud prevention measures and minimize losses due to payment fraud. Proven tools include, for example:



 $^{^{10}} Sean\ Work.\ 2019.\ How\ Loading\ Time\ Affects\ Your\ Bottom\ Line.\ https://neilpatel.com/blog/loading-time/.$

¹¹Ravelin Guide. 2018. Fraud Detection for Digital Goods. https://www.ravelin.com/blog/the-impact-of-fraud-in-digital-goods.



Wirecard Expert

To Reconciling all of the various aspects of digital commerce is certainly no small feat. But today, there are versatile solutions available to help merchants achieve both a positive shopping experience and comprehensive fraud protection.

Boris Bongartz, Head of Sales, Digital Commerce, Wirecard



3D Secure and 3D Secure 2.0

This authentication method used by the Visa and Mastercard networks determines whether the credit card is being used by the legitimate cardholder. 3D Secure 2 has been in use since April 2019.

Address verification service (AVS)

This verification method compares the address information entered by the customer with the address data held by the credit card scheme.

Blacklists

A list of negative data that is automatically identified when a transaction is attempted and subsequently not accepted.

IP/BIN verification

A verification process in which a customer's current location or Internet access point is determined based on their IP address, while the bank identification number (BIN) is used to match the card-issuing bank and the country of origin. This can be used to approve or reject certain combinations of countries.

Device fingerprinting

Detects characteristics of a device used for making online purchases, allowing a user to be identified across multiple visits.

Velocity checks

A frequency check in which transactions are reviewed for recurring patterns within a defined, short period of time.

Customized solutions

The payment process shouldn't distract from the overall customer experience. As long as the payment page is integrated into the design of the website in a visually and functionally appealing way and the site offers the most popular payment methods, users will not notice any discontinuity and continue to fill their carts and make purchases.

Artificial intelligence

High transaction volumes, big data, and modern computing power make fraud more predictable and fraud patterns easier to identify. As a result, artificial intelligence also has the potential to further improve risk decisions. Systems can make reliable, data-based assessments of the trustworthiness of a payment and automatically reject it if they detect the risk of fraud—and learn on top of that.

A business intelligence interface also offers the ability to review the efficiency of all methods used and measure their impact on the success of the company. It makes the fraud prevention system transparent and reveals how fraud statistics are changing over time.

As a result, merchants can proactively monitor the success of their prevention measures and the security of their online business.

_{04/} The balance between simplicity and security

In order to achieve business success, anyone that sells digital goods needs to find the perfect balance between a simple and fast payment experience for their customers and effective and fast fraud prevention.

If prevention methods are used in a targeted manner and regularly fine-tuned, merchants

will not only be able to maintain, but also increase their sales. The ability to easily reach a global audience and the elimination of logistics and warehousing in combination with the right payment strategy and appropriate fraud protection open up enormous potential

Wirecard:

05/ your partner for digital commerce

As a driver of innovation in the field of digital financial technology, we know what's important in digital commerce. We provide you with established payment and prevention tools and much more, allowing you to enjoy personalized fraud protection and offer your customers an ideal payment experience. Our portfolio includes our own software solutions and partnerships with national and international service providers such as credit agencies. When you work with Wirecard, you'll always be perfectly positioned to sell your digital goods worldwide.

One integration—multiple payment solutions

Enable your customers around the world to pay with the method they prefer.

Whether credit card, PayPal, or WeChat Pay—with only one integration, you'll gain access to the most important payment methods for your digital business.

Fraud prevention

Always remain one step ahead of fraudsters thanks to efficient and personalized fraud prevention. Our fraud protection offers everything you need to detect and prevent attempted fraud early on in the sales process.

Reporting and analytics

Our reports allow you to keep track of all current figures and processes at all times. We customize them completely to your needs and clearly present key performance indicators (KPIs) such as the fraud rate, the acceptance rate, or the number of chargebacks.

Value-added services

In addition, you can also offer your customers attractive additional services and set yourself apart from your competitors. Value-added services such as customer loyalty programs with coupons and discounts create satisfied customers and repeat business. You can also

take advantage of innovative solutions like virtual call centers for in-game support or solutions for increased customer loyalty. The security of your data and that of your customers is our top priority, which is why we only use secure servers located in Europe.

All of these measures are designed to achieve a single goal: We want to provide your customers with the best possible shopping experience in which the payment process isn't a disruptive factor, but is instead perfectly integrated into your online shop. At the same time, fraud protection needs to be a top priority. With solutions from Wirecard, you'll achieve the perfect balance between security and simplicity and between customer satisfaction and fraud prevention.

About

06/ Wirecard

Wirecard (GER:WDI) is one of the world's fastest growing digital platforms in the area of financial commerce. We provide both business customers and consumers with a constantly expanding ecosystem of real-time value-added services built around innovative digital payments by using an integrated B2B2C approach. This ecosystem concentrates on the areas payment and risk, retail and transaction banking, loyalty and couponing, data analytics and conversion rate enhancement in all sales channels (online, mobile, POS). Wirecard operates regulated financial institutions in several key markets and holds issuing and acquiring licenses from all major payment and card networks.

Wirecard AG is listed on the Frankfurt Stock Exchange (DAX and TecDAX, ISIN DE0007472060).

Visit us at www.wirecard.com and follow us on Twitter @wirecard and Facebook @wirecardgroup.

Further information on Wirecard solutions for digital commerce is available at www.wirecard.com/digital or by sending us an email to: digital@wirecard.com



