

Technology optimizes payments



The technology to simplify payments

The revolution in online commerce has sparked a revolution in payments. But it has also caused a landscape of confusion. Making sense of the payments ecosystem has proven a challenge for everyone who wants to fully exploit its opportunities – from merchants to payment service providers and all the way to banks.

What it takes to make an online payment

Today, small shop owners can go global just as well as a retail chain. All they need is an internet connection. Thanks to global communications and logistics, it has become easier to reach consumers all over the world and to take advantage of our increasingly unified global culture.

But even shops with a great, internationally viable product, advanced logistics and no administrative issues can – and do – get in trouble at the checkout. Why? Because they need to offer several payment methods to match the payment habits of each target country. In almost every country, providers offer methods suited to the population. But is connecting those two parties really all it takes to enable payments?

How to help people pay

In fact, there are a multitude of other topics that every player on the global payments market has to consider, too. Among them are finding the best technology to work with, preventing fraud, managing partners and customers, connecting cash flow and banking facilities, paying and invoicing suppliers as well as customers, and, for a truly efficient business, collecting data about all these processes in order to optimise every transaction that takes place.

ONPEX offers exactly this: Their solution brings together payments technology and cash flow on a single platform that enables the central tracking



“As the global marketplace becomes interconnected, merchants can reach customers all over the world.

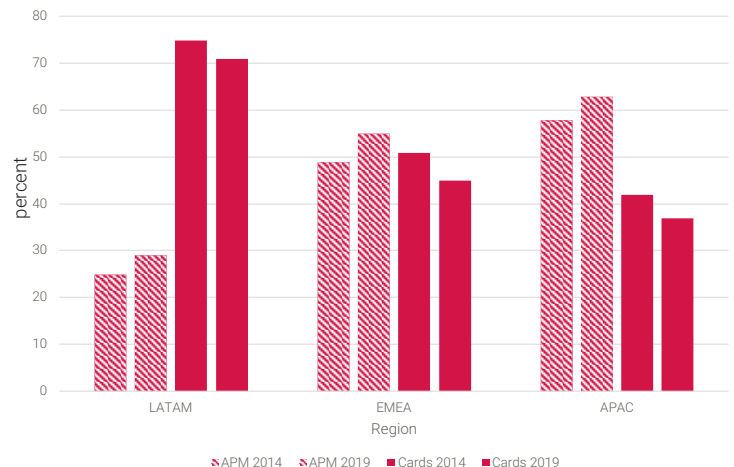
Improvements in logistics have already been made; now we need to remove a number of stumbling blocks in global payments.

Cost, time, security and efficiency are all impediments that harm the usability of international payment methods.”

Christoph Tutsch

Founder and CEO, ONPEX

Development of card and APM use by region





Everything under control with centralized systems

Payment processes have grown more complex, almost unwieldy. Keeping track and being in control is becoming an increasing challenge. How can merchants do this without having to divert attention from core business functions?

From Rolodex to Complex

Remember when businesspeople carried their contacts in an address book or flipped through their Rolodex to find the right business card? Today, businesses have mostly abandoned that practice. They use advanced CRM systems and platforms that keep all information in sync.

A business also used to have a single bank account, updated once a week, and payments were made by cheque. Today, the management of payment processes is more complex. There are suppliers and customers, bills and invoices, individual and recurring payments, and fraud and taxes. Plus, the majority of companies nowadays do — or want to — operate on a global scale.

Jeff the flower exporter

Just like Jeff, who grows flowers in Southern France and sells them to customers all over Europe in his online shop. He accepts card payments and also offers the option to pay via PayPal.

Since Jeff's business flourishes, he decides to partner with a Dutch tulip producer to grow his portfolio. By adding a partner, his business model becomes more complex, and with a new wave of Dutch customers using his shop, he now wants to start accepting iDeal. With all these changes, he begins to worry that he might lose track of all financial transactions that he has to integrate with, supervise and manage for his new partner.

Ideally, all the administrative nightmares and cross-border challenges for Jeff and all other members of the payments industry would be solved by installing a central solution. It should let them decide for themselves what kind of services they require at the beginning and which they want to add as they go.



Complex technology for simple processes

Business structures have changed, and solutions need to reflect these complex constructions. A payment solution has to reflect the structure of a business model. This requires a multi-level client tree structure, an advanced organisational feature that allows a company to fit the payment platform to its needs. With a solution that offers multi-tenant capabilities, a business can be divided into several entities. This makes a lot of sense if you are dealing with a business like Jeff's, which manages partners in the background.

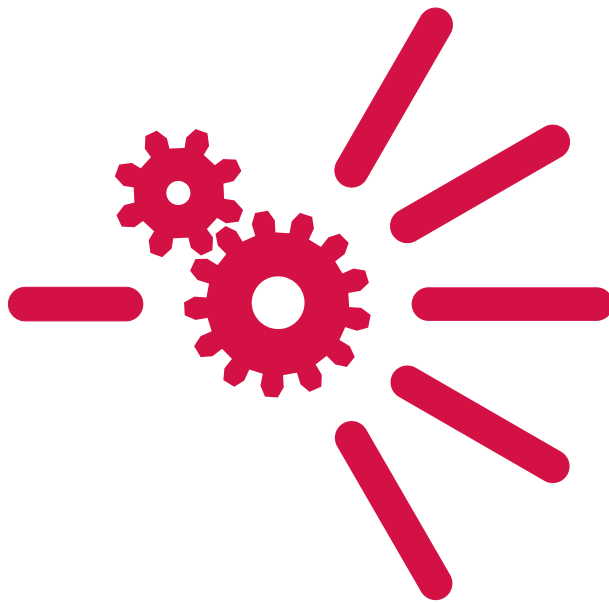
Companies comprise various departments, hierarchy levels and permissions; roles and rights of a payment solution need to be adjusted accordingly. Some rules might exist for legal reasons, while others could be to avoid administrative complications. Whatever the reason, the roles have to fit and adjust to specific needs and be allocated to the right people.

Key features of a modern solution:

- Multi-tenant capability
- Multi-level hierarchies
- Permission and policy management
- Product and contract management
- Modular white-label SaaS
- Agent and user management

Having all these features is great, yet a payment platform needs to be configured, managed and controlled. This requires a portal, also known as user interface (UI). In order to be adaptable, the application needs to be fully automated through server communication via modern APIs.

As people become increasingly mobile, the portal needs excellent usability for all types of browser technologies. It needs to have a responsive design and self-explanatory workflows. Furthermore, the UI has to be configured and designed to match a client's requirements and brand identity



Payment Gateway



Opening the gate for modern solutions

A well-designed payment platform should not only have a great look and feel, but what it should offer. We'd now like to turn to looking at this platform in action and how it can open up the doors of global markets to local players.

Conquering the world through the web

The internet revolutionised the world, and with it the concept of traditional business. Today's highly sophisticated online business models and logistics chains deliver goods to buyers around the globe. However, with modern innovations come new challenges. Selling and delivering goods to a global market means paying with global methods and in various currencies.

The previous chapter discussed the basic prerequisites of modern payment technology and an ideal payment platform. Without flexible, dynamic permission control as well as modern APIs and UIs, the acceptance of global payments would be impossible. It also showed that merchants and payment providers have to be connected in a way that fits both local payment

preferences and global cash-flow requirements. But it does not stop there: several other technological factors have to be considered to construct a successful payment value chain. A crucial link in this chain is the payment gateway. It is the central technological component of the entire payment process and connects to all others.

How to build an empire

Several Asian countries have been ruled by dynasties in the past centuries – but nothing comes close to the tea empire that Alex has built. She has successfully grown her company from her Hong Kong office and set up shop in Tokyo and Singapore. Alex accepts all types of payment methods prominent in Asia and has connections to the major banks. Her jasmine and ginger tea have become so popular abroad that she wants to expand into further territories and take her business to Europe. Since she has only been there twice, however, she does not know, how Europeans like to pay and which banks would be good partners for her.



Think local when selling global

Just like Alex, all players with global ambitions need to consider the local preferences of their global customers. They want to be able to pay for goods and services in any way they are accustomed to. Merchants want to offer all these options to their customers and therefore need to be able to process all types and forms of payments available on the market. Payment providers, on the other hand, want many clients to use their product – be it credit card, alternative payment method or bank transfer. An ideal solution for Alex would be a network that connects all possible variations of this setup in an efficient, secure, and future-proof way. This is where the gateway comes in.

The future-proof payment gateway

A payment gateway is a technical hub to which all players on the payment market can connect and through which they can feed all transactions. The key to a highly efficient gateway lies in its modularity, usability, and efficiency. In order to be truly global, it has to have vast connectivity. With

new payment methods and types entering the market daily, payments evolve exponentially. Gateways need to keep up with the market's demand and adapt quickly to constant change.

In many cases, the high level of technological complexity required to process payment transactions at high speed and low risk translates into complicated administration processes or increased vulnerability. The previous chapter explained how this can be avoided. A burning concern of all payment industry players is security. This is why payment gateways need to be connected to industry-leading fraud prevention methods, chargeback management networks, information services, and KYC tools. To ensure the security of all transactions, gateways must be fully PCI-DSS compliant.

ONPEX built one of the most advanced and innovative payment gateways on the market. It is designed to meet all those requirements now and in future.



Key features of ONPEX payment platform:

- Modular scalable
- Simple Integration with API, SDK and plugins
- Connectivity
- Multi-currency
- Connection to fraud and risk management tools
- Modular white-label SaaS
- PCI DSS-compliance

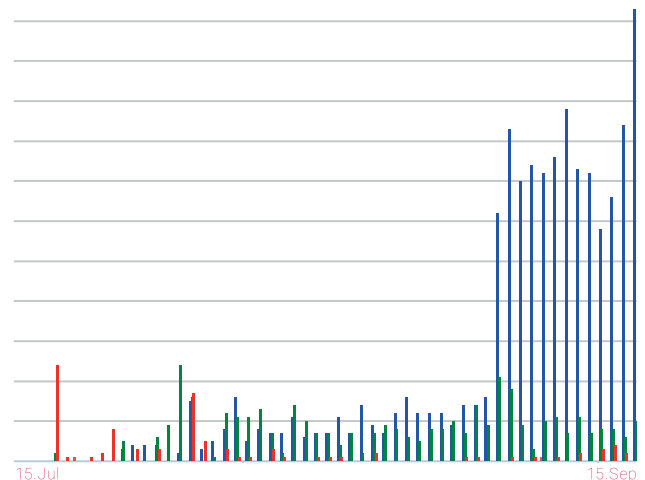
The technology easily becomes a time-saver and valuable tool for merchants, ISOs, PSPs and even banks. Payment Goblin, one of the many clients that use the ONPEX gateway, have seen great benefits for their business.

“Having deployed the ONPEX gateway we have been able to halve integration times for our merchants from an average of four days to two days.”

Justin Martin

Managing Director, Payment Goblin

Development of Payment Goblin's transaction volume per day with ONPEX white-label payment platform in 2015.





Unified Acquiring



Boarding all passengers for global payments

A contract is an agreement between at least two parties in written or spoken form that acknowledges certain terms and conditions. Any business that has to manage multiple contracts from various countries with various parties ends up with a big legal and administrative tangle that is also reflected in the business cash flow.

Jose and his Aventura travel agency

José has a successful travel agency and online booking engine in Chile. He provides access to multiple airlines, hotels, and tour operators so that his customers can create customised bookings. His business spans all across South America and every time he adds another country, his administrative load increases and becomes more complex. He needs a solution that can handle all agreements and improve his workflow. Sending contracts around the continent is costly and takes too much time — ideally, he requires dynamic forms and a ticketing system to keep track of all files.

The complexity of international contracts

José is not the only one with a complicated business structure. In the payments industry, there are a great variety of contracts, such as partner agreements, sales contracts, and contracts between a bank and a merchant. Most of these contracts represent a new client. Each client has to be set up and managed individually. Additionally, acquiring banks and payment providers require varying sets of information and documents from a merchant.

Managing these processes is a huge administrative feat that gets more complicated with an increasing number of accounts. This often results in a long waiting time for merchants before they can start processing payments, which wastes valuable time and generates unnecessary costs.

Everyone on board with boarding services!

A good boarding service has to include an application for the flexible, fast, and easy boarding of accounts. It has to allow administrators to create and compile new sets of information and data for



both, new and existing customers. The application also has to be extremely flexible so that it can be used for the initial setup of a new merchant and to create a dynamic application form.

ONPEX solution makes it possible to collect and manage data sets on several hierarchical levels through a multi-level client structure. This workflow management is also extensible to account for the requirements of external acquiring partners and payment methods. Additionally, a sophisticated ticketing system supports and ensures the seamless management and tracking of all issues.

Benefits of the ONPEX boarding system:

- Customer data creation and structuring
- Ticketing
- Dynamic forms
- Workflow management
- KYC verification
- Auto application

Thanks to these features, the ONPEX solution takes the pain out of merchant onboarding. All information required for setting up new merchant accounts can be collected. Plus, collecting all data in a certain space makes possible their in-depth analysis.

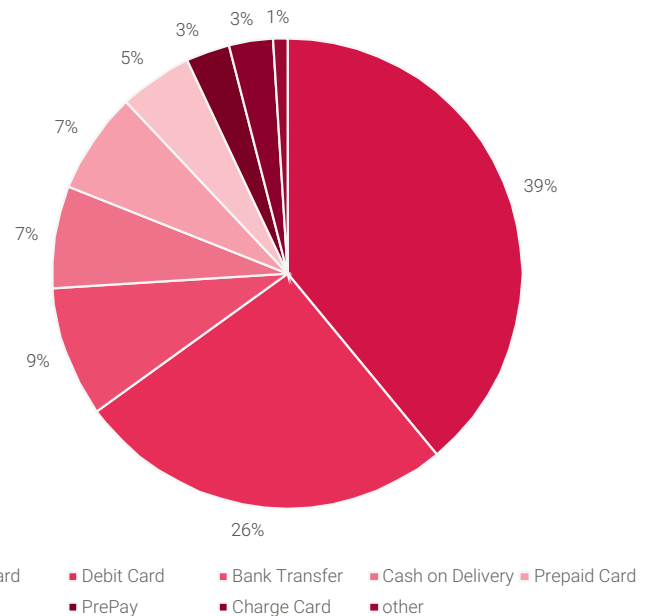
According to Christoph Tutsch, CEO of ONPEX: "One of our core business objectives has always been to provide the ecosystem with a secure payment processing platform that helps traders and PSPs to maximize merchant onboarding, customer acceptance, payment conversion, and revenue. And our clients are seeing the benefits.



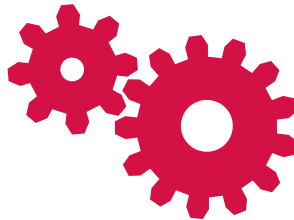
“ONPEX has taken us from an already impressive 84% merchant acceptance rate to an almost perfect 92% acceptance rate. The application also slashes merchant pre-check times and drives acceptance.”

Justin Martin
CEO, Payment Goblin

Payment methods dominating LATAM in 2014



<http://offers.worldpayglobal.com/rs/850-JOA-856/images/GlobalPaymentsReportNov2015.pdf>



Banking Gateway



Keep track of all banking procedures

As the financial complexity of businesses increases, so does the number of bank accounts and payment methods they are grappling with. Aligning the payment and banking accounts is time- and resource-consuming.

Separate worlds of payment and banking

In the old days, it was not uncommon for an everyday person to hold a single bank account throughout their entire life. Today, the possibilities and offers have changed. Many people have savings accounts, retirement funds, and international transactions spread out between various banks. If a single person has a financial complexity equivalent to four or five bank accounts, just imagine what happens in the management of business finances.

Most businesses today operate with a multitude of bank accounts. These are set up to accommodate cash flows spanning several countries, if not continents, the particular legal and financial systems of which can vary greatly. They also have to control the flow of payments in varying denominations from and to international

customers and suppliers, which leads to complex exchange rate issues.

Ade's international expansion

Take, for instance, Ade, who has just set up an online shop that sells all across Eastern Africa. With payment options such as M-Pesa, it is much easier for him to receive payments from the region. Now he wants to translate his success to the promising markets of Europe and Asia. If he wants to become a market leader in all those regions, however, he has to be able to accept and pay in various currencies and payment methods. If his only option is to set up a bank account in every country he expands into, this will tie up resources Ade can ill afford.

He also has to factor in his business cash streams that include a number of moving parts like taxes and billing models. He has to handle deposits and reserves and needs to keep his bank balance in the black. Managing these accounting and banking procedures can become a significant headache.



Modern transaction complications

In payments, this process is made even more complicated by the fact that most transactions have to be managed on two levels, namely technology and actual cash transfer. Businesses have to accommodate various payment methods in different countries. Ideally, Ade — and anyone in a similar position — should be able to find one solution that simplifies payments across the globe. Such technology has to be easy to install, adapt to his business requirements and payment methods, and should also save time and resources that can be used in other areas.

Payment transaction information is processed through payment gateways. Not all of these processes do necessarily correspond to “real” banking transactions: It is not unusual to transfer funds in batches and to leave the reconciliation to the recipient. The technical settlement, fees, and chargeback procedures differ widely between payment methods. This makes the reconciliation with the actual banking operations even harder. In order to keep pace with competitors, customer

requirements, and government demands, most businesses incur continuous high costs for a payment process they actually have to finish themselves.

Uniting the threads for highest efficiency

In this situation, an ideal solution should synchronize all “real” banking transactions and show them in an easy-to-use overview. Such a tool will also enable the automation of all management tasks. This simplifies all administrative and financial tasks of any global company, like Ade's. Unifying all bank accounts on a customizable User Interface also gives an overview of a company's entire cash flow. In addition to that, processes can be defined, automated, and tracked through all payment stages. To achieve this, the payment technology has to be connected to the banking and cash-management world. This necessitates its compatibility with SWIFT, SEPA, ISO 20022, EBICs, blockchain, and other existing or upcoming banking or trading standards and protocols.



ONPEX identified the need for this kind of streamlined funds management as one of the most pressing for both their partners and customers. On top of that, their solutions enable businesses to reconcile payment technology and bank accounts. This makes possible the efficient central management of international cash flows — for example collections and settlements — from the ONPEXaccount.

“We wanted to make all banking services easily accessible via API. Synchronizing their bank accounts with the ONPEX Payment Account enables users to see all their assets at a glance. It also simplifies cash management processes, as they can all be mapped into and coordinated from a single interface.”

Christoph Tutsch,
Founder and CEO, ONPEX



Know how to make the right decisions

Data equals knowledge. High-quality data about payment transactions and cash flow patterns means high-quality intelligence about a business. All business departments benefit from a solution that collects and analyses relevant data.

Business intelligence fuels global strategy

Globalisation is not just an abstract sociological concept that we read about in the media. For modern businesses, it is a part of every day's work. Most entrepreneurs have to appeal to an international audience to keep the crucial step ahead of the competition. And it is particularly in payments that business owners note global trends and differences.

The revolution of online trade, marketing, and communications enables businesses to connect with their customers anytime and anywhere. Companies are also engaged in researching trends, needs, and habits that can be used in the development of their business. Successful analysis of this data means successful planning for the future.

Research increases turnover

Remember Jeff and his flower shop? He now runs an international flower delivery service. He realised that his European customers order huge amounts of roses in May, as this is wedding season. Offering specials during May was an instant hit, and even though he lowered his rates, his profit increased because of the growing demand.

Recently, Jeff noticed that bouquet orders all over the world always skyrocket in early May, but the exact dates of the orders vary between some countries – namely the UK, Australia, Spain and Mexico. This baffles Jeff, and as he does not know the reason for this phenomenon, he cannot create a good offer. To do this, he needs to understand for what occasion the flower are ordered in the different countries.



What to do with all the figures

The most efficient way to do this, is to look closely at the data inherent in the payment process. An ETL (Extract, Transform, Load) process collects data from all available sources. Users can access it, transform it into various usable formats, analyse it and relate it to other information they already have. The resulting multi-level data cube can be used for many purposes such as big data mining, reporting and monitoring. It is also possible to create long-term monitoring processes that set certain data sets in relation to each other and notify the user in case of potential security breaches or money laundering incidents.

The meaning behind the numbers

Jeff did a good job analysing the data. It turns out that the flower orders were for Mother's Day, which is on May 1 in Spain, May 6 in the UK, May 8 in Australia and May 10 in Mexico. He now knows for which day and occasion the orders are placed in the specific countries, and creates a special offer at the right time in every region. He also found out that it is

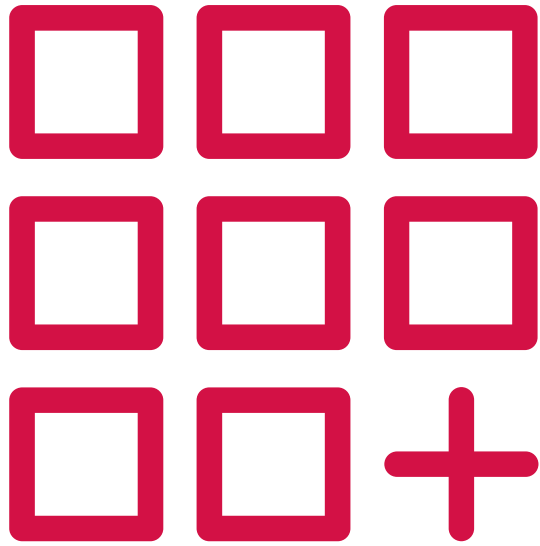
mostly men and women between 15 and 45 who order flowers on his site. Most people under 20 have it delivered to their own address; older people do not. With all of these finds Jeff adjusts his business and marketing strategy to provide offers that meet all his customers' needs.

Data analysis in payments

ONPEX' modular payment solution enables their customers to perform this kind of analysis. All data from the payment process is collected and can be transformed and analysed accordingly. Customers can use it in the way Jeff does, but it serves many other purposes, too. ONPEX partner WebShield, for instance, uses the data to look for patterns that can point at fraud.

"We are very glad to have a partner of ONPEX' caliber and vision. Protecting acquirers PSPs, ISOs and merchants from online crime is key."

Christian Chmiel, CEO, WebShield



Payment Accounts



Let's get reconciled with payments

Most modern businesses use several payment methods and have several bank accounts around the globe. But does diversity of payment methods and currencies automatically mean reconciliation headaches? With a holistic payments overview and management system, it doesn't.

Simplified systems avoid payment confusion

The complex contract structures of a modern, global business are reflected in its cash flow. It usually has accounts with several banks all over the world. Together with the use of a broad range of payment methods in various countries, this results in complicated fund transmission patterns.

Clients and partners have to be paid and invoiced according to various commission agreements, payment models and cycles. Companies also work with highly complex tiered pricing models and cannot afford making mistakes in paying commission or settlements. To keep track of all these processes is a demanding task that can bind a large part of a company's resources.

International banking headaches

Lisa is head of accounting at an Australian acquiring bank and supervises international merchant accounts. The bank accepts credit cards and cooperates with several alternative payment methods. As each payment scheme has different fees and cut-off times, the matching of transactions has become very complex. On top of that, Lisa has to consider exchange rates for cross-border payments. This complex network of factors becomes more complicated with every additional payment method the bank accepts and it gets increasingly difficult for Lisa to keep track of all projects.

Centralized systems simplify cash streams

The best way to make life easier for Lisa and other businesses dealing with such matters, is to bring all management aspects together and to operate them centrally.

In order to establish a holistic overview and management system, it has to be connected to all bank accounts and technical payment solutions



that a company uses. It also needs to enable them to manage, automate, and track all processes influencing their invoicing and payments. Pre-setting all contractual factors and applying them automatically to any transaction saves a lot of time. Such a solution streamlines and automates billing processes. It enables businesses to reconcile and simplify diverse payments models and automate all invoicing processes. It is also the only technical prerequisite for building solutions for payments, stored value, eWallets, cash-management, escrow networks, money remittance services, lending, card issuing and forex, amongst others.

Reconciliation ensures the overview

ONPEX' modular payment solutions bring together all information about technical transactions, customers, contracts and funds allocation. They enable users to manage stored value and technical payment transactions in a synchronous, reconciled view. On top of that, it combines the data with real funds flow and cash management. With all vital information in one place, it makes the management of virtual bank accounts possible.

Thanks to this sophisticated solution, banks and businesses can administrate billing models as well as calculating rates, fees and commissions. It is also possible to invoice according to previously defined contract details in multi-level client tree structures. This enables building any kind of use case in a modern, digital banking and payment environment.

“We have global ambitions and, to achieve these, want to work with partners who have a global scope. ONPEX were able to seamlessly integrate our acquiring into its white-label payment platform. Now they provide the merchant applications to attract more clients to Latvijas Pasta Banka. Together, we can demonstrate the possibilities of an innovative bank working with an innovative payment platform.”

Edgars Valmers
Deputy Head of E-commerce,
Latvijas Pasta Banka

The future of global payment technology

ONPEX unique white-label solutions cover the entire payments value chain and eliminate the need for several tools and interfaces. They are perfectly suited to banks, Financial Institutions and all players of the payments value chain. Together, they enable users to run all payment tasks from a single hub. All solutions meet the highest compliance, legal and regulatory requirements.

The ONPEX Payment Gateway provides access to a wide range of payment methods, acquiring banks, and processors.

The PSD2-compliant ONPEX Banking Gateway supports banking standards like SWIFT messaging and ISO 20022 as well as being open for other communication channels.

The ONPEX Unified Acquiring offers card and alternative payment methods acceptance in one contract including collections, reconciliation, and settlements.

The ONPEX Payment Account is a multi-currency account enabling real-time transactions and cash management and has many advanced features.

- Luxembourg-regulated Financial Institution
- SWIFT member
- PSD2-compliant
- PCI DSS-compliant
- IBAN/ BIC and virtual accounts
- Modular white-label SaaS
- One contact to the payments world
- Global presence
- Unified payment and banking solutions



ONPEX

The Online Payment Exchange