



**PayEx stays on top
by implementing a unique
Kubernetes payment
solution**

**Business
Services**



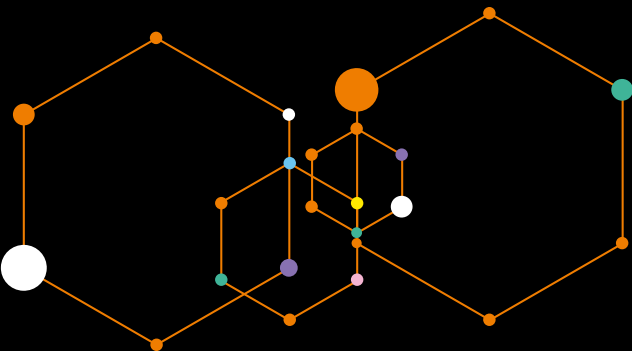
Challenges

Be faster and more secure

To further strengthen its digital offer and meet their customers' demands for modern and innovative ways to make payment PayEx was looking for a solution that could help them deploy and deliver new services in a reliable, scalable and secure way. They looked for ways to optimize and provide added business values leveraging the latest technologies while increasing efficiency and lowering their total cost of operation.

Above all, PayEx had an urge to scale their organization and deploy a new solution that could modernize their PCI DSS (Payment Card Industry Data Security Standard) service offered through their 60,000+ already deployed terminal units.

As Orange Business Services is an expert in managing PCI DSS platforms and offer their services in Azure as well as other major cloud providers, PayEx turned to them. Orange Business Services was an existing reliable and close partner for PayEx and had been hosting their PCI DSS on-premise environment in a secure way since 2011 via their subsidiary Basefarm. During these years PayEx has never had a security incident, a fact that proved proves Orange Business Services' competence in this area.

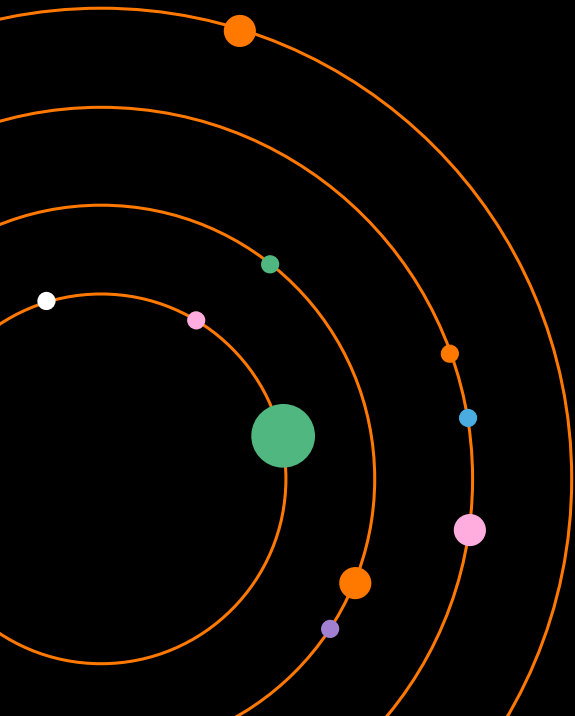


Challenges

Care and compliance

PayEx, as a financial company, is obliged to follow a set of very strict rules defined by each operating country financial supervisory authority, these conventional rules have not changed as fast as the technology. PayEx had no previous production environments in the cloud and wanted to start their cloud journey by implementing their payment terminals to a new platform.

Orange Business Services had to find a solution that could build trust and loyalty and could ensure that PayEx had all the governance routines under control.



Solution

Kubernetes in the cloud

Orange Business Services investigated different solutions to fit PayEx current structure and platform operations in a way that aligned with existing on-premise operation. The proposal offered was that PayEx should implement a public cloud solution in Azure based on Kubernetes technology. To deploy and manage the containerized applications, Orange Business Services offered a fully managed Azure Kubernetes service with Payment Card Industry Data Security Standard (PCI-DSS) Compliance for continuous integration and delivery experience with enterprise-grade security.

Platform operation in azure with PCI-DSS compliance

The architectural framework is designed to help PayEx deploy and operate the payment processing system and credit card handling solution in Microsoft Azure. This automation solution helped PayEx adopt Azure solutions, showcasing how to deploy a secure and compliant workload while adhering to the PCI DSS compliance standard.

- Two environments were established in Azure: Stage and Production. PCI-SS requirements were addressed and documented.
- Platform Operations PCI-DSS was established, and 24/7 support activated.
- First QSA (Qualified Security Assessor) test on Azure.

Market leader

After implementing this unique Kubernetes solution, PayEx not only remains a leading company in the Nordic online payment market, but they have also strengthened its digital offer and secured to stay on top continuing to create value for their customers in the future. "This solution has made a big difference for us, and what is so unique about this solution, not only for PayEx, but to our industry as a whole, is that Kubernetes technology is used in Azure with PCI DSS Compliance.

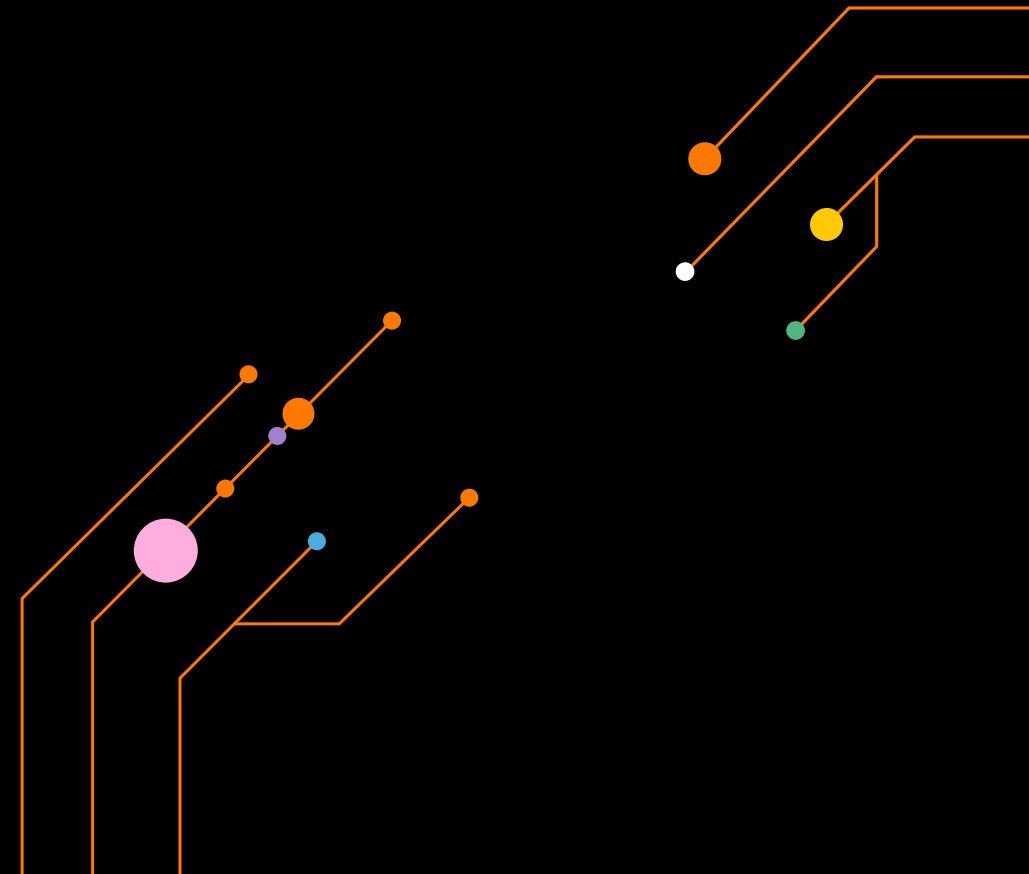
With this solution we will be able to continue to deliver secure and innovative payment solutions with high service level to our customers" – Helge Dahl, Business Architect at PayEx



Project methodology

Minimum viable product approach (MVP)

The implementation of a Public Cloud solution in Azure started with an analysis of PayEx needs and motivation for moving to the cloud. The Pilot environment test showed that the solution matched PayEx needs and requirements and PayEx went on to build a full-size implementation. Being in the forefront using a new technique, one of the major challenges during the implementation phase was to adapt the financial requirements to the cloud.





Project methodology

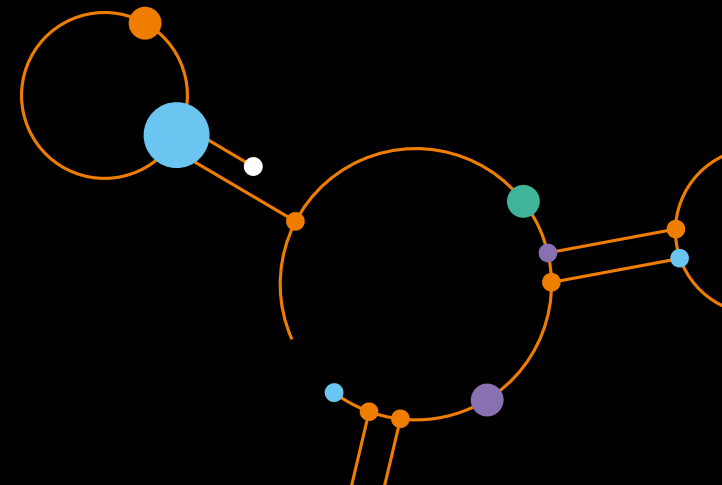
Infrastructure as code (IAC)

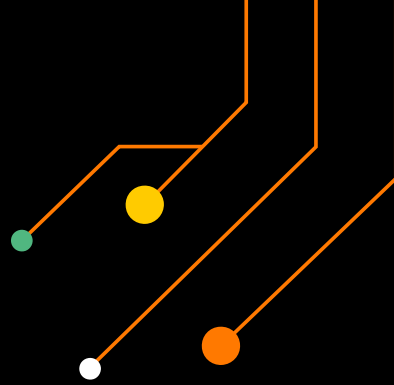
The new improved code was approved and tested in the Staged environment and PayEx was completely involved in application configuration and configuration of Kubernetes workflows in the Stage environment. With just a change in variables, a smooth, efficient shift was made from the Stage to the Production environment.

Unique partnership

Orange Business Services and PayEx worked close together with PayEx through the process. An open, transparent and trust based working methodology was implemented. This led to a successful and quick turnaround from first conception to Production environment.

Today, Orange Business Services operates and takes responsibility for PayEx on-prem environment as well as their public cloud-based environment. In doing this PayEx environment benefits from parallel resource and competence distribution.





Business outcome

Post full-size implementation, PayEx feels that the project has matched their needs and requirements, the collaboration has worked seamlessly and PayEx can deploy new services in a reliable, scalable and secure way. The advantage that comes with a cutting-edge solution like Azure Kubernetes Services is that PayEx can continue to be in the forefront. The company is seen as a modern workplace and can continue to attract and retain talented employees with the right skillset in the future. The project sees great advantages with a cloud solution compared to an on-prem solution.

“With this technology, PayEx does not have to make large investments in hardware, it is a cost-effective solution, and they can escalate horizontally”.



Our motivation for cloud and Kubernetes is mainly described by these keywords: scalability, redundancy, testability and delivery. We are still very early in this journey. Short term our customers will not really notice whether the service is provided on the cloud/Kubernetes platform or the on-prem platform. But we expect that we will be able to provide better performance, stability and quality at a higher delivery phase to our clients with this new platform.

Helge Dahl,
Business architect at PayEx



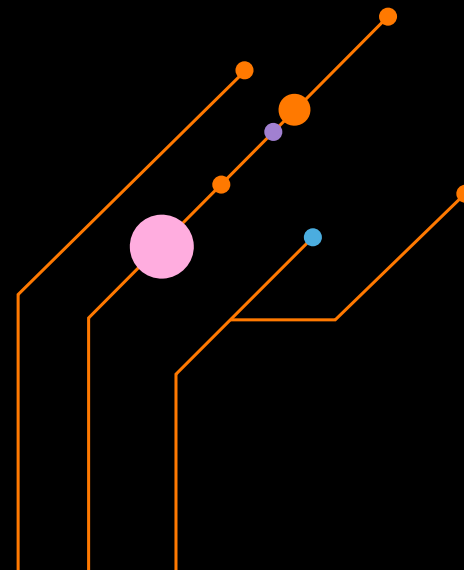
We continue to have a close contact with Orange Business Services on a daily basis since there are constant developments and adjustments to be made. This means that we put a lot of our core business in the hands of Basefarm. They take care of development, support and security. But we have been their customers for twelve years now and it has worked well so far. We have great confidence and look forward to continuing our cloud journey with them.

Helge Dahl,
Business architect at PayEx

Looking ahead

In the future PayEx will continue to implement more sensitive PayEx operations to the cloud using container technology. For PayEx high availability, stable operations and security are the most important criteria for success.

The close collaboration with Orange Business Services is expected to continually improve and strengthen PayEx services and offer to their customers.





PayEx was founded on Gotland by the entrepreneur Max Hansson in 1972. The group was for a long time one of Gotland's largest employer. Max Hansson lived by Ernest Hemingway's saying, "No man is an island", which he made his own by adding: "No company either".

Almost 50 years after the company was founded, this motto is truer than ever.

Today, PayEx is owned by Swedbank, but the entrepreneurial spirit lives on. It is one of the leading companies in payment solutions with operations in Sweden, Norway, Denmark and Finland and customers in several European countries. PayEx offer safe, sustainable and seamless omnichannel products and services that make payments easier wherever merchants and customers meet – both in-store and online. They process more than 350 million payments per year and meet customers where they want to pay, regardless of the channel or payment method.

In recent years, an increased usage of online services, such as shopping and travel has increased the use of online mobile payment. In addition, the digital infrastructure that has emerged has radically simplified the possibility of developing financial services. This development has created a demand for modern and innovative financial services and especially payment solutions.

Mission and vision

PayEx always strive to offer the latest technology and a truly digital experience to their customers who demand more complex solutions to be available in the digital channels. The company has a vision to enable people, business and society to grow.





Business Services

Orange Business Services is a network-native digital services company and the global enterprise division of the Orange Group. It connects, protects and innovates for enterprises around the world to support sustainable business growth. Leveraging its connectivity and system integration expertise throughout the digital value chain, Orange Business Services is well placed to support global businesses in areas such as software-defined networks, multi-cloud services, Data and AI, smart mobility services, and cybersecurity. It securely accompanies enterprises across every stage of the data lifecycle end-to-end, from collection, transport, storage and processing to analysis and sharing.

With companies thriving on innovation, Orange Business Services places its customers at the heart of an open collaborative ecosystem. This includes its 28,500 employees, the assets and expertise of the Orange Group, its technology and business partners, and a pool of finely selected start-ups. More than 3,000 multinational enterprises, as well as two million professionals, companies and local communities in France, put their trust in Orange Business Services.

For more information, visit :
www.orange-business.com

