



Success Story

Redeban migrates their real-time
notification infrastructure to the cloud



CARRERA 20
33-15




Redeban S.A. is Colombia's leading company in electronic payment and correspondent banking transactions, holding a national market share of 56%. With a wide coverage of over 530,000 authorized payment points, the company has a strong national presence in more than 1061 municipalities.

Their customers are divided into two major groups: large retailers, including chains and commerce in general, and the country's top banks.

Among their wide range of solutions, the company provides real-time processing of bank notifications, handling a quarter of all transaction banking notifications in Colombia.

Since 2008, **Redeban** has been using **LIMSP© Critical Events Gateway** from Latinia deployed on-premises, which helped them keep up with service demand in a sustained way until 2021.

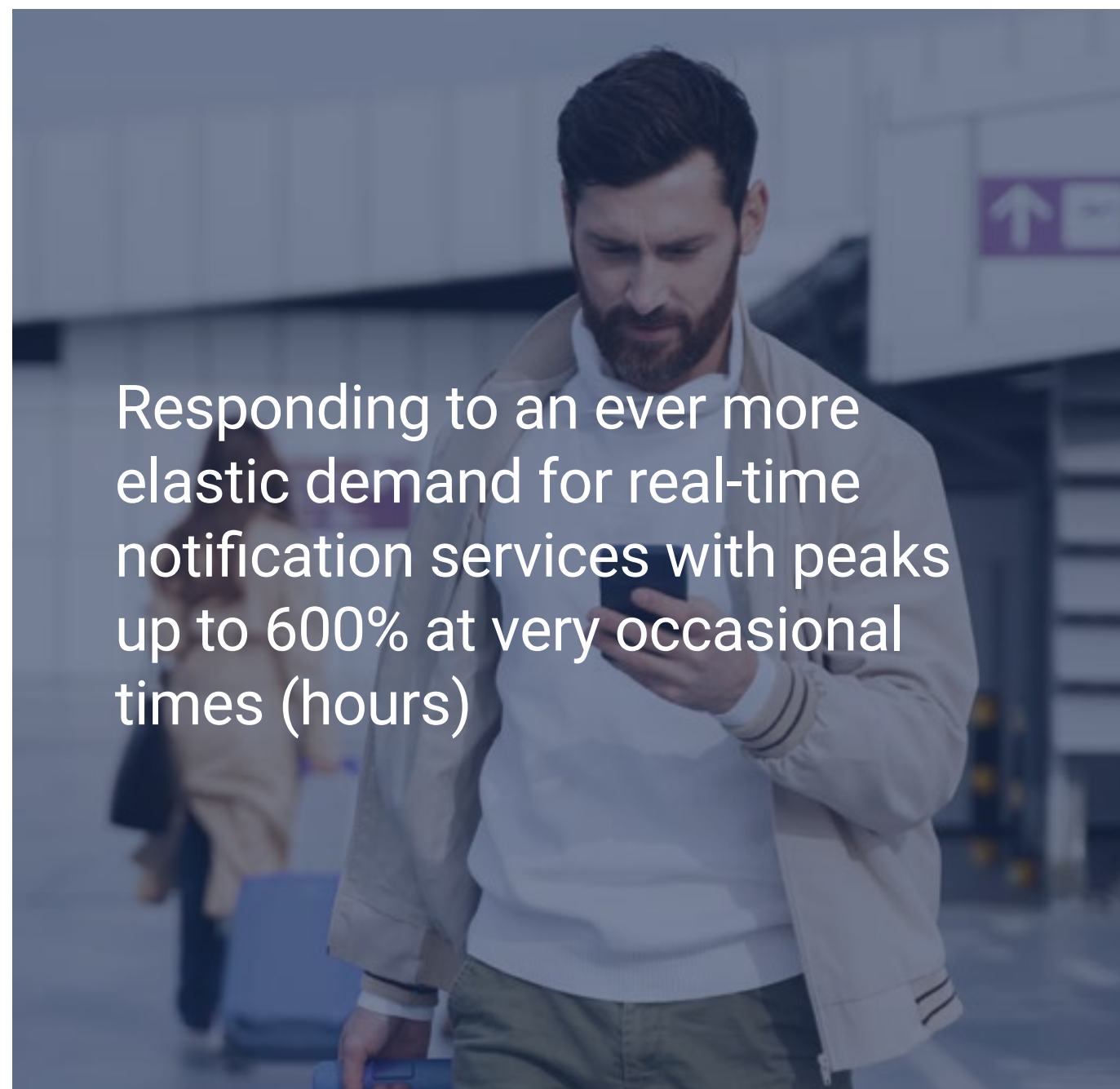


A group of people walking and shopping, overlaid with a blue digital network graphic. The text is centered over the image.

Redeban holds a 56% of the transaction banking processing market in Colombia



The Business Need



Responding to an ever more elastic demand for real-time notification services with peaks up to 600% at very occasional times (hours)



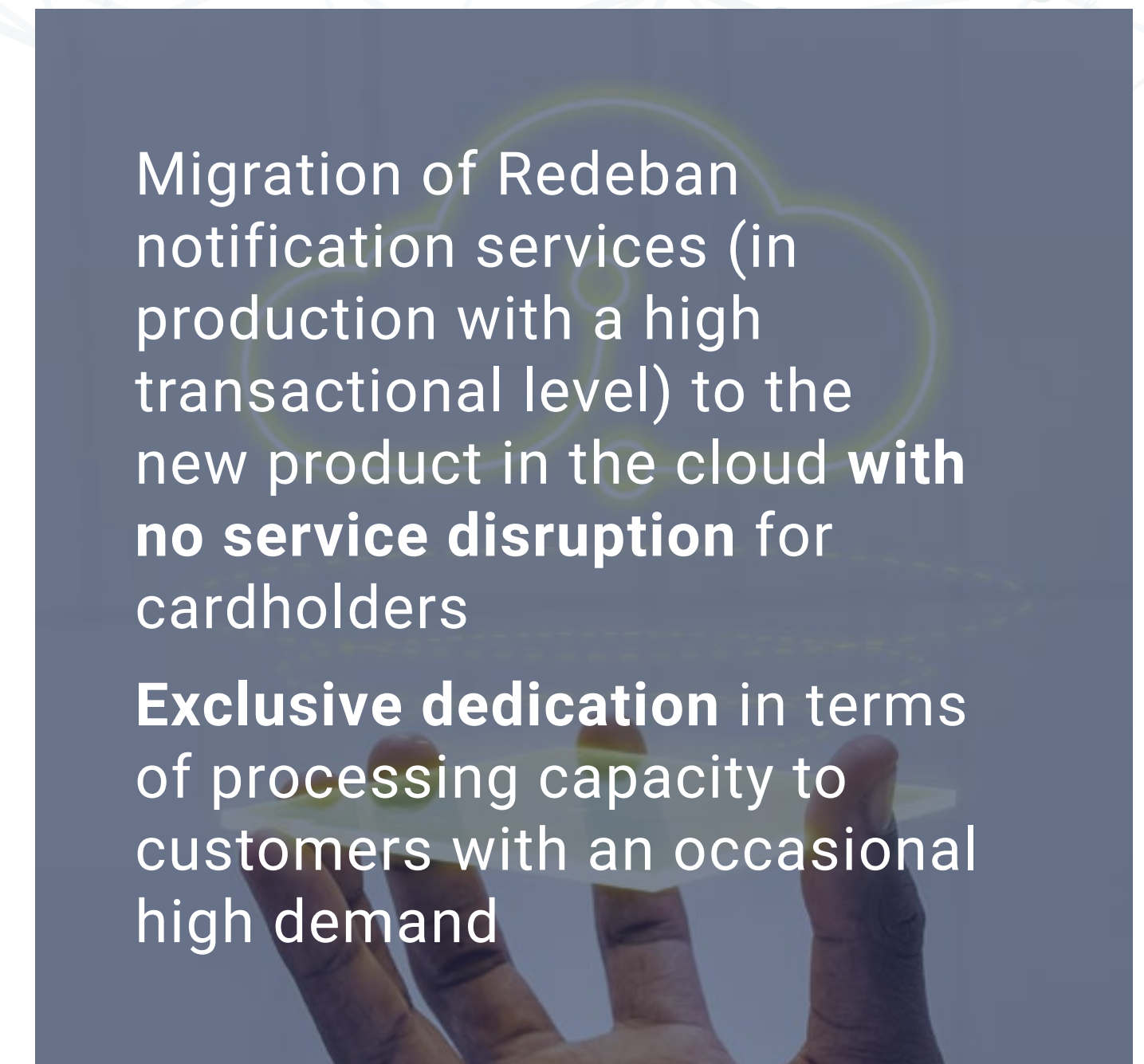
The Solution



Deployment of Latinia Container Class LIMSP© Gateway 4 in a new cloud infrastructure for the provision of real-time notification services



The Challenge

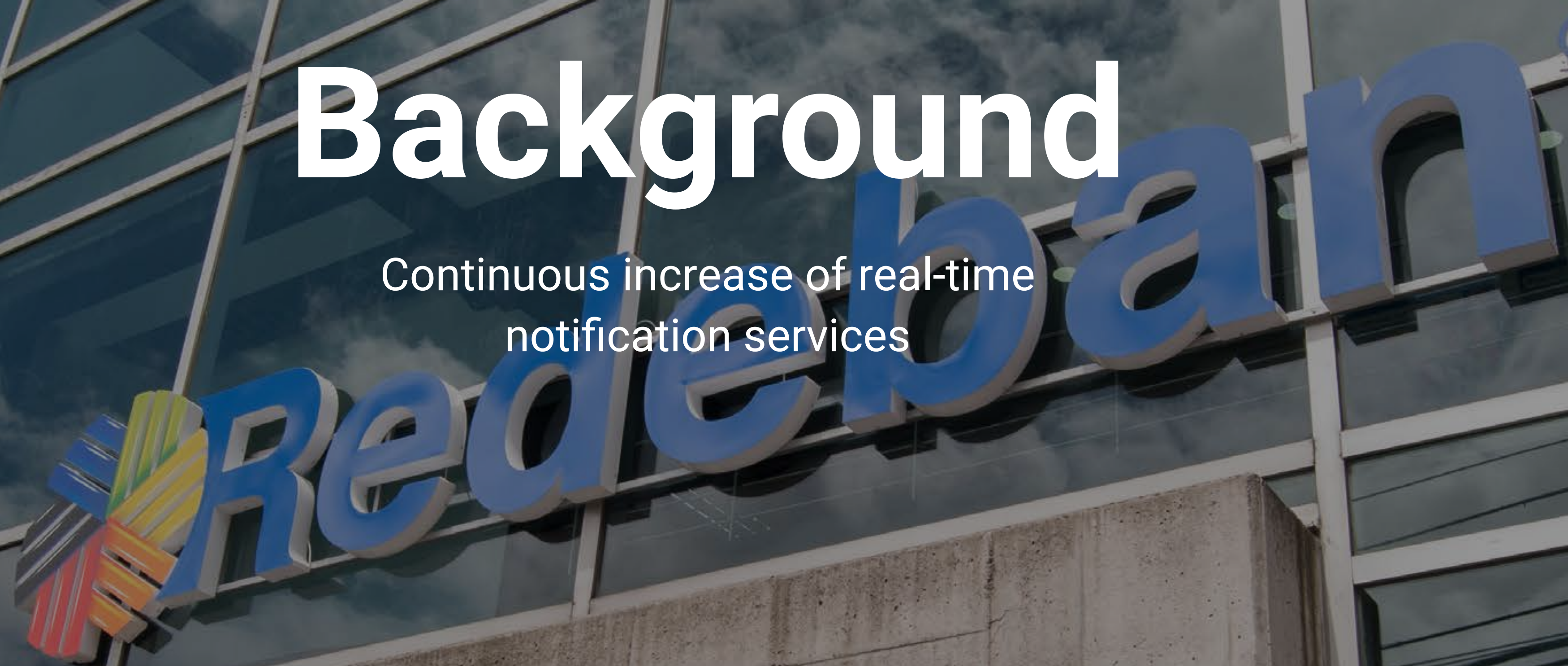


Migration of Redeban notification services (in production with a high transactional level) to the new product in the cloud **with no service disruption** for cardholders

Exclusive dedication in terms of processing capacity to customers with an occasional high demand

Background

Continuous increase of real-time
notification services



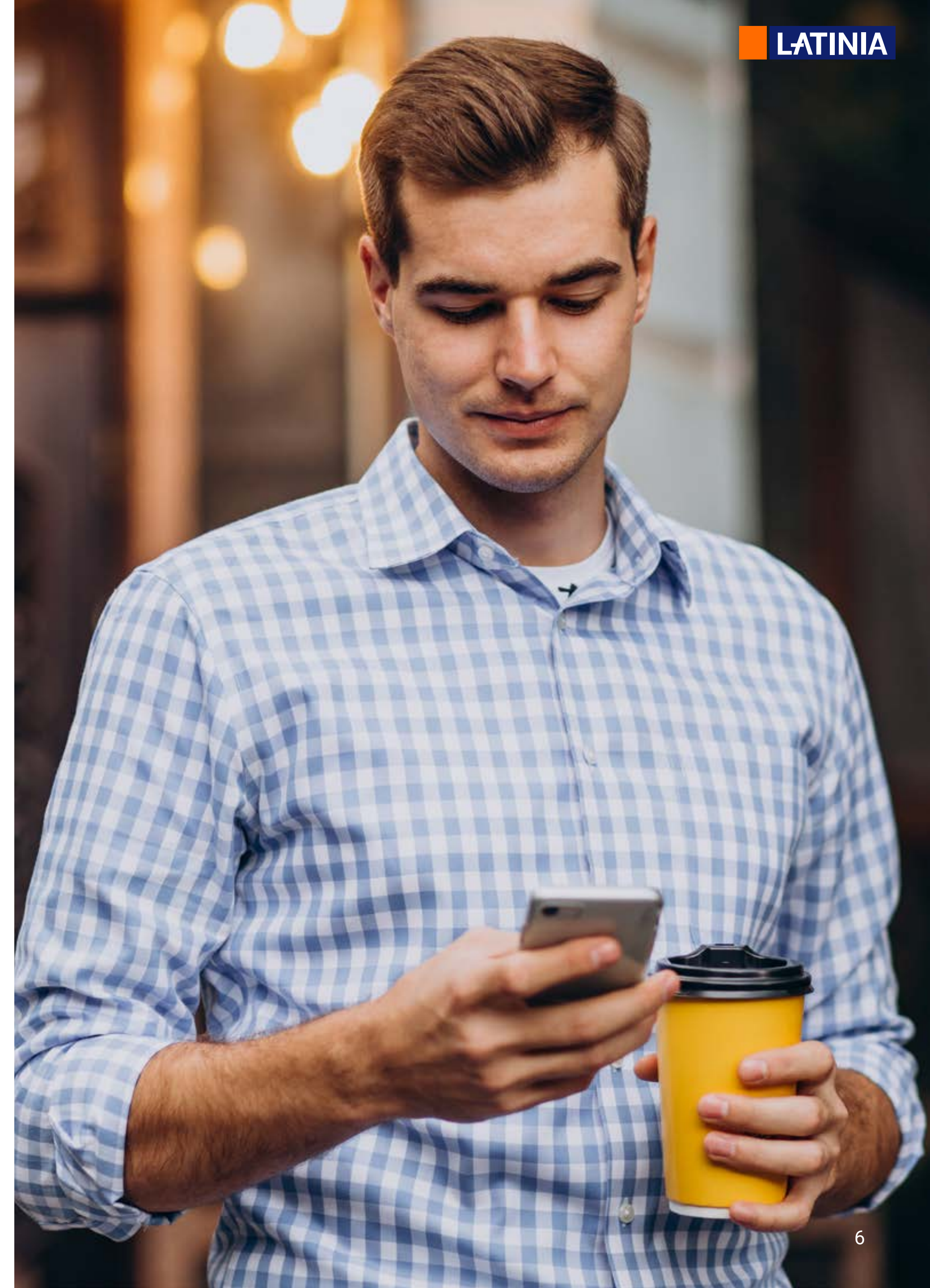
Background

Banking notification services have been growing steadily for over 15 years based on an expected demand that Redeban covered with an on-premises infrastructure, which had to be expanded as the volume of notifications increased to guarantee a high quality service. Banking notifications are of critical nature, so immediacy is an essential requirement..

LIMSP© Gateway v3.9.5 Enterprise was installed on two Oracle Weblogic© Enterprise clusters in eight mission-critical category servers. Oracle RAC was used at the database level, while connectivity was managed through the connection of ten mobile operators and over twenty financial entities.

However, with the growing relevance of bank alerts in customer service experience, **Redeban** evolved towards an ever unpredictable and elastic demand.

The challenge was no longer just to meet a demand which constantly increased month after month; **Redeban** had to be able to withstand six times the demand, as requested by the financial entities, while maintaining notification delivery times with the same level of service quality - that is, ensuring that the notifications reach the end customer immediately.



Background

At Latinia's Customer Success area, we maintain a close relationship with our customers to understand their needs and enable them to use our products more efficiently.

"Redeban's needs had changed dramatically, so we concluded that they should evolve to the new Container Class LIMSP® Gateway for its deployment in cloud. Apart from the cloud's inherent benefits, there were immediate benefits in terms of costs, since this version is supported by open source products replacing third-party licensed products. From Customer Success, we assisted **Redeban** with the business case development: the numbers were clear and the decision was taken fast," stated **Juliana Ortiz, Head of Customer Success at Latinia**.

Certainly, "facing an ever more elastic demand from a traditional on-premises infrastructure was totally unfeasible in terms of profitability without affecting service quality. Moreover, this coincided with a situation of technological obsolescence of the infrastructure on which Latinia's product was deployed," claimed **Germán Daza, Head of Emission Solutions at Redeban**.

For **Luis Alberto Leguizamón, Senior Manager of Special Projects**, "after comparing costs between repurchasing new machines and third party software on premises or adopting cloud deployment, the second option was favored, especially in terms of projection. Although the initial investment was high, the remainder costs were much more transparent, easier to cover and to justify."



Luis Alberto Leguizamón
Senior Manager of Special
Projects at Redeban

Juliana Ortiz
Head of Customer Success
at Latinia

Germán Daza
Head of Emission Solutions
at Redeban

Redeban was faced with the challenge to withstand a six times higher demand, while maintaining notification delivery times with the same level of service quality

The Project

The greater the challenges, the
greater the achievements



The Project

Migrating an infrastructure in production ensuring service continuity

The challenges in the implementation of this project were multiple, since it was not about starting from scratch, but rather migrating the technological infrastructure of a service in production with a high volume of notification traffic without putting service continuity at risk.

One of the most distinguishing features of this project compared to a classical on-premises project is the lack of a traditional “installation” stage, thanks to the unattended product deployment capacity (infrastructure as code), which considerably reduces project timeframes (environment symmetry, human error avoidance).

Commissioning of the cloud infrastructure was influenced by third parties - i.e. financial entities and mobile operators. Migration to the new infrastructure had to ensure continuity of service.

Thanks to exhaustive planning and support from the entire technical team, operational risks were avoided and the migration did not affect the service.

The project required involvement and coordination of cloud expert teams from Redeban, Professional Services, Operations and Software Factory from Latinia



Our planning efforts were directed to mitigate risks and to define a very efficient rollback procedure - which, fortunately, was not necessary. Everything was oriented to avoid any disruptions to the service,” stressed **Paola Betancourt, Project Manager at Latinia**



Germán Daza, Head of Emission Solutions, claimed: “Migration was very satisfactory. With the new platform in operation, we can certainly support our goal to become the first processor in Colombia and create new business opportunities”

The Result

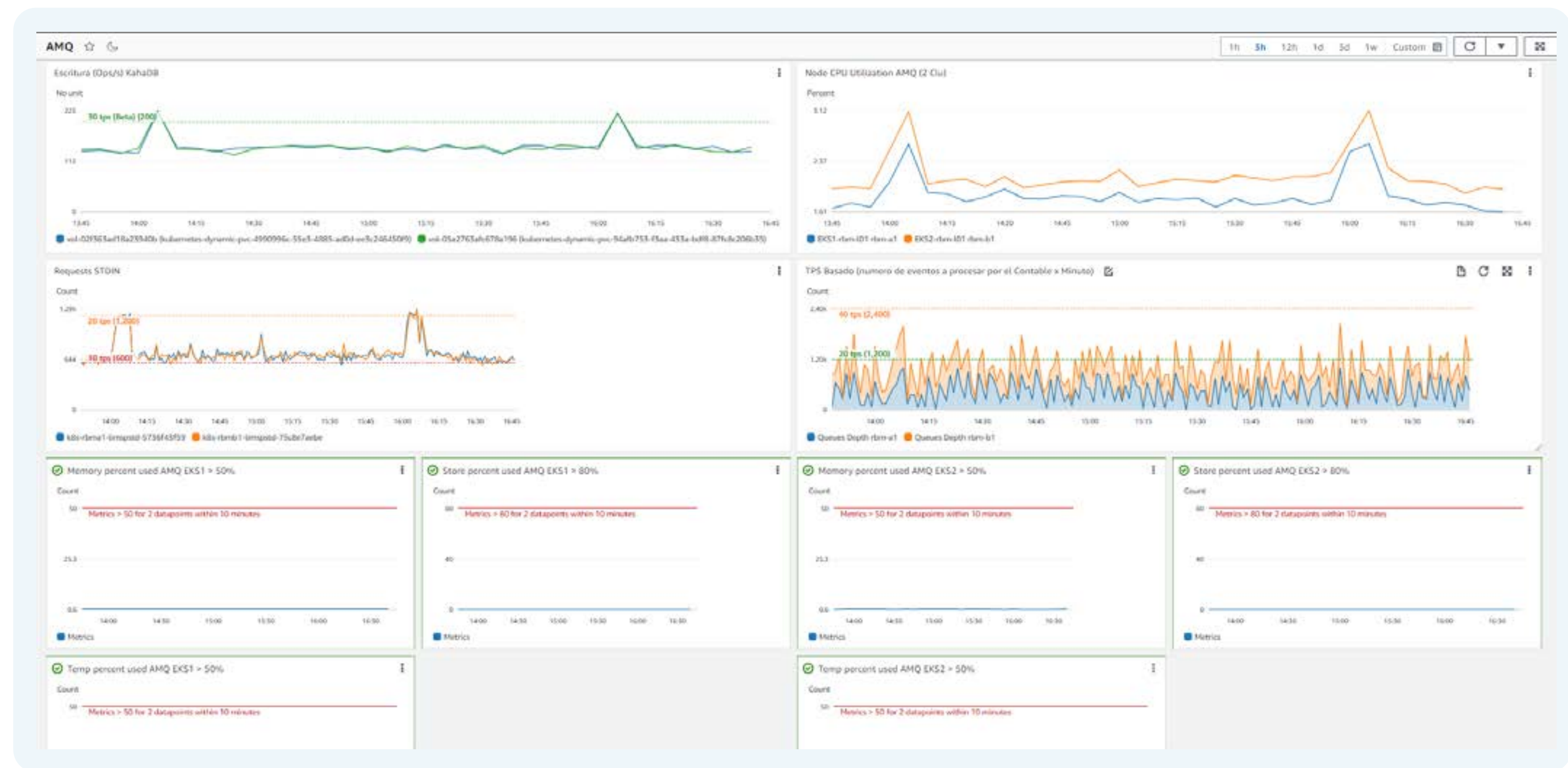
Goal accomplished,
assured success



The Result

Redeban currently provides real-time bank notification services from its cloud infrastructure

- **Redeban** has evolved from a static and monolithic stack with traditional architecture towards a new cloud elastic architecture based on microservice SaaS components.
- LIMSP© Gateway 4CC (Container Class) is deployed on various Kubernetes clusters using the resources supplied by the cloud provider in SaaS mode in terms of infrastructure (machines), storage spaces and different services required by the product such as the database, balancers and Kubernetes.
- The management and availability of the cloud infrastructure and services are handled by the cloud provider who sets a range of control panels (Dashboards) for monitoring and alert programming associated with different infrastructure metrics.



Redeban currently provides real-time bank notification services from its cloud infrastructure

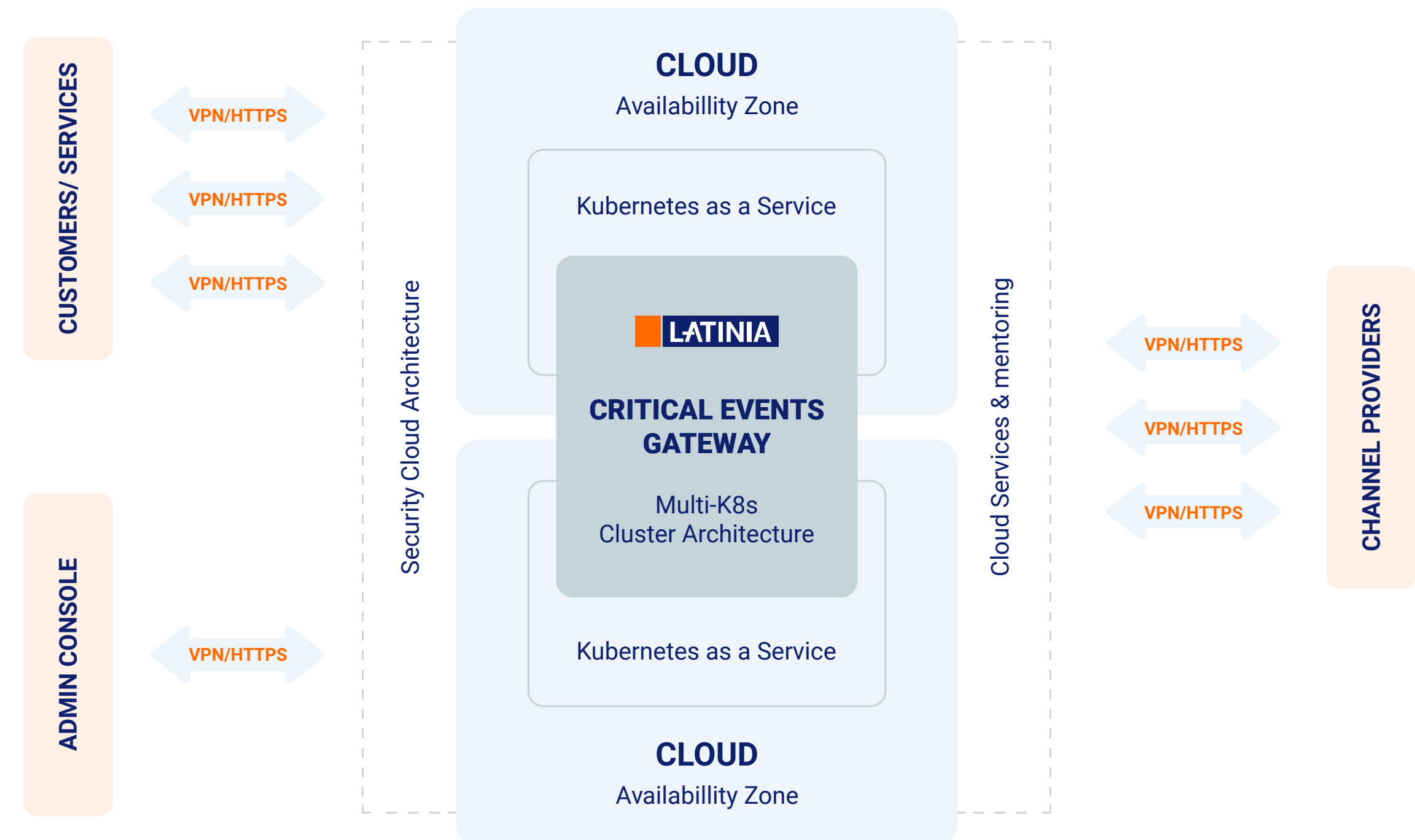
The Result

Monitoring

- Functional and operational management of health infrastructure is carried out with the monitoring tools provided by the Kubernetes orchestrator and the proprietary cloud monitoring services. These tools allow to monitor metrics on file system sizes, queue depths, CPU and memory use, DDBB use, and to generate alerts on them. LIMSP® Gateway can integrate with ELK-type standard platforms for streaming monitoring of traffic, events and metrics of your choice.

Continuous Update

- Dockerized distribution of the Product provides for a continuous update (rolling updates) that helps **Redeban** to reduce efforts and time compared to the updates carried out in an on-premises architecture. The company can also enjoy the benefits of the latest release in terms of functionalities, security and performance. Finally, the all-in-one distribution of the Product provides for a vertical integration of third-party products, and thus avoids any related administration costs.



"Migrating on-premises applications to the cloud goes far beyond that a simple application movement. The Container Class version of Latinia products is the result of a comprehensive reengineering with the aim of maximizing the benefits of a cloud-native microservices-based architecture, which enables our customers to take full advantage of cloud infrastructures - i.e. service orchestration, auto-scaling, among others," highlights **Marc Alcón, Chief Technical Officer at Latinia**

Benefits for Redeban and their Customers

- ✓ **Prompt response to changing market needs**
Modular architecture based on cloud-native microservices on orchestrators fully adapts to the business load needs in an elastic way with the best market practices based on auto-scaling.
- ✓ **Higher resilience and security**
Service availability in **Redeban** on-premises infrastructure was guaranteed by node redundancy. In the Cloud, availability is supported at different levels - i.e. microservices, Kubernetes clusters and infrastructure - achieving higher resilience than a traditional on-premises infrastructure. By providing this new service with an identity of its own, it was possible to use a higher level of control and audit layers over the resources and accesces.
- ✓ **Competitive and quality service**
The smart use of resources based on the actual business demand, together with a more automated and efficient management, allows Redeban to offer a competitive service while providing a consistent high quality for any demands.



**Prompt response to
changing market needs**

**Higher resilience
and security**

**Competitive and
quality service**

Economic and Service Impact



Readeban®

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Economic and Service Impact

Better service with reduced costs



20%

Higher service quality by reducing the processing time for each notification by 20% at transactional peak hours



0.02 sec

Cloud infrastructure achieves a processing level of 0.02 seconds per notification



30%

Achieved reduction of 30% on infrastructure costs

Economic and Service Impact

Higher operating efficiency



80%

80% time reduction on product update tasks, providing a continuous update cycle to the customer - thanks to product improvements - under reduced operating costs



94%

In the most critical cases, service restoration time after a disruptive incident has been reduced by 94%

Economic and Service Impact



According to **Luis Alberto Leguizamon, Senior Manager of Special Projects**, “Cloud migration was not an option, but a necessity to provide continuity to the service while ensuring our high levels of quality offered through the years. The scalability offered by the cloud allows us not only to adapt our infrastructure to the needs of our customers at all times, but also to dedicate specific resources to a particular bank with very specific needs or levels of demand. From now on, **Redeban** is able to face any future demand scenario with the highest quality and security standards.”

The Key Actors



Luis Alberto Leguizamón

Senior Manager of Special Projects
at Redeban



Germán Daza

Head of Emission Solutions
at Redeban



Marc Alcón

Chief Technical Officer at
Latinia



Paola Betancourt

Project Manager at
Latinia



Juliana Ortiz

Head of Customer Success
at Latinia

Acknowledgements

We would like to thank the entire team at Redeban who prepared and provided all the data and KPIs for this case study. We would also like to thank all the Latinia employees who participated in this document.

About Latinia

37
customers*

14
countries*

20
years
of exclusive specialization in
the finance sector

Real-Time Decision (RTD) software product manufacturer specialized in the analysis of transaction banking events and customer intelligence data, as well as critical notification processes.





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