SUCCESS CASE

BEHIND A REAL-TIME MINDSET:
THE HERMES APPLICATION

edp

INTRODUCTION

Thriving in a digital era means having a targeted multichannel communication strategy which includes all business stakeholders. When real-time communications have become a modern world commodity, EDP levels up with a new innovative messaging experience to its clients, co-workers, and suppliers - the Hermes Application.

Developed as an upgrade to the EMS application, this tool was engineered to manage all internal communications in a faster and more efficient way, giving its users full autonomy over the process.

MAIN CHALLENGES

The former messaging platform - the EMS application developed in 2011- had become an outdated software with some technical issues resulting in costly and time-consuming maintenance. Besides, it could no longer develop new features failing to address the group's communication needs.

The major problems were:

■ **Scalability and resilience** - the tool had been scaled up to meet increasing demands but was getting obsolete by the day, failing to meet real-time requirements.

■ **Reliability** - how to improve efficiency and predictability in the process of messaging delivery.

■ **Performance** - the need to increase capacity and avoid delays in the delivery process.

■ **Architecture and operation** - the platform required a new and more flexible structure.

SOLUTION

HERMES application is an advanced messaging platform that manages all the group's communication needs, regular or special, through multiple channels from text messaging, email, and mail to Electronic Data Interchange (EDI) systems. Launched in April 2018 aimed at running all communications using a rationalized resource allocation, the application gives each company access to maximum available resources while providing its users with full operational autonomy - business units can customize a framework and communication channel according to its needs.

But while the investment came from EMS canceled projects, the project turned out to have efficiency gains since it reduced costs in both OPEX (operational expenditure) and CAPEX (capital expenditure).

300 MS
Is the average time to send a communication through Hermes

5.5 MILLION EMAILS
Is the amount of emails Hermes can send per day

3x MORE COMMUNICATIONS
Sent per month than its predecessor EMS

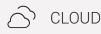### 850 THOUSAND EUROS
Less in operational costs per year

About Digital Global Unit (DGU)

Digital Global Unit (DGU) was born to help EDP Group drive transformation to digital by developing outstanding ideas that improve and optimize processes, simplifying both clients and employees' journey. Comprised of a multifaceted team of developers, engineers, designers, data scientists, and other experts, DGU works every day to turn impossible ideas into successful business projects at EDP Digital Factory.

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HERMES: HOW IT WORKS

CLOUD

Hermes is a microservices native cloud application built through the Google Cloud Platform. Designed for a PaaS (Platform-as-a-Service) serverless platform, it allows to eliminate downtimes and guarantees virtual unlimited scalability.

MINDSET

Following the shift-left mindset - which focus on problem prevention instead of detection by starting tests earlier - the project team ran several tests to validate the architecture and technical requirements allowing errors to be detected beforehand. A faster and more efficient approach that has significantly reduced development costs.

FRAMEWORK

It uses the Agile & DevOps methods based on a scrum framework - a simple way to address complex adaptive problems and create high-value products. By uniting the Agile incremental and sequential way of working (sprints) with the DevOps collaboration-oriented culture, it was possible to reduce incident screening and resolution time.

PROCESS

By introducing real-time communications, Hermes has changed the way the group communicates while helping boost the digital transformation process within the organization. The onboarding program promoted several actions such as training and technical support, always focusing on the end-users needs and expectations.

BENEFITS

- It allows **real-time operations** and manages priorities to maximize its multichannel delivery capacity to when and where is most needed.
- As a **scalable Google cloud-based application**, it manages its capacities according to the requests received through multiple channels while maintaining the same response times.
- It is a **reliable application with failover mechanisms**. It ensures almost a 100% reliability rate regarding effective communications process.
- It **can handle multiple requests** at the same time - SMS, Email, P&F, and EDI - without affecting both performance or availability.
- Its **efficient and flexible architecture** allows its users to create templates and choose new channels without hardcoding developments or IT support.

BUMPS IN THE ROAD

In a rapidly changing environment, the road to success isn't always smooth - it requires a forward-thinking mindset and a willingness to change existing habits and structures. But with a little bit of patience and new management processes, everything falls into place.
One of HERMES's most significant challenges was integrating all business apps into the new platform. While in the first four months, the team managed to move 50% of all communication traffic, it took them another year to finally complete the process. That could be explained due to a combination of lack of resources and internal bureaucratic proceedings.
Another difficulty was facing some internal resistance to this new real-time mindset - a much-needed framework to leverage the full platform capacity and ensure minimum communication delay.

RESULTS

Hermes is a fast-accurate user-friendly messaging platform that delivers reliable, effective, real-time multichannel communications. A successful business case, which resulted from the combination of a shift-left mindset, a suitable cloud technology, and a well-crafted management plan.
In the end, the new app turned out as more flexible, efficient, higher-quality, and less expensive than its predecessor, the EMS app.
It also became a catalyst for EDP's digital transformation process by promoting a real-time framework as an alternative to the traditional and less flexible batch processing architecture. By offering a more fluid user experience and encouraging process autonomy to all business units, Hermes has helped open up the organization to new innovative paths more in tune with today's ever-changing digital landscape.