

Ollie O'Donoghue

teknowlogy Group, September 2021

Commissioned by





INTRODUCTION

The COVID-19 pandemic impacted every business and institution across the globe as organizations struggled to implement new ways of working and delivering products and services in a way that is safe for both employees and customers. Many during this period turned to new technological capabilities to restore some semblance of normality to existing functions, while others launched new projects to meet changing customer needs.

In the public sector, the need for change was profound. Institutions and government bodies faced unprecedented demand for existing services – such as unemployment subsidies – while healthcare organizations battled with the direct impact of the pandemic. Indeed, according to teknowlogy's latest CXO survey, public institutions in Germany raced to create new digital business models, optimize processes, and improve the digital customer experience as services shifted to online alternatives. And with core communication channels under increasing pressure – over 300 billion emails were sent globally through 2020 – much of these improvements focus on enhancements to existing communication channels heavily utilized by citizens and consumers.

Outside of managing this shift to digital environments and refocusing resources to meet unprecedented demand, we also saw the public and healthcare sectors race to implement solutions that, in some instances, had never been tried before.

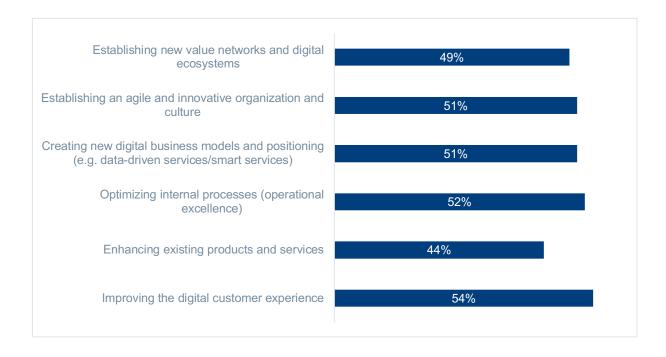
In this case study, we will examine a specific example of a public sector organization working with technology experts to build a solution supporting a vital COVID-19 vaccination program in a particularly challenging environment.

Over

50%

of public sector organizations in Germany believe creating new digital business models and improving the digital customer experience are major goals for them in the two years following the COVID-19 pandemic.

- PAC CXO Study, Germany, 2020





ARCHITECTING A UNIQUE SOLUTION FOR AN UNPRECEDENTED CHALLENGE

Let's set the scene. By the end of 2020, almost a year since the COVID-19 virus swept the globe, a series of effective vaccines started to roll out of production facilities. And governments worldwide raced to implement systems that would enable them to bring the vaccine to their citizens as swiftly as possible.

For the Bavarian Ministry of Health, this meant creating a system from scratch. One that would comply with one of the world's strictest regulatory environments and would ramp up to serve millions of citizens on an incredibly short timeline – in just a few short months.

Due to the nature of the health system in Germany, ministries and state governments have a limited direct role to play in the provision of health services – and so this new system would be an unprecedented foray into the delivery of health services. A move that would require the creation of a system to meet a very specific goal – rolling out the vaccine.

Ultimately, the solution designed was both complex and highly effective, enabling the ministry to roll out the vaccine at pace and scale, and while we could focus on a raft of carefully designed capabilities that enabled this achievement, for this case study, we will examine one of the most critical capabilities – the management and delivery of communication services.

One of the most significant challenges presented to the project team working on the vaccination system was the core requirement to communicate critical information to citizens, such as vaccine eligibility, appointment confirmations, reminders, and follow-up communications. Satisfying this requirement may seem "By flattening out communication logistics challenges, with their secure and reliable solutions, Retarus was able to help a critical public health project deliver real value to citizens in an increadibly short timeline."

Ollie O'Donoghue,
 Senior Analyst,
 Teknowlogy

simple, but there are several significant challenges specific to the unique environment presented by the program. The first is information security and confidentiality. By its very nature, the vaccine program would rely on critical patient and citizen data. Security, then, is one of the foundational requirements for any communications tool.

The next challenge to overcome is a symptom of both this regulatory environment and the organization of healthcare providers in the region. It effectively meant the starting point for the team when embarking on the project was as if they were starting from scratch. The administration has little to no experience in creating the structure and system needed to manage and organize the provision of healthcare services. They had nothing in the way of infrastructure or registration services, for example. And, more pressingly, because of strict regulations on personal and patient data, the ministry didn't have a library of data to kickstart the project with.

Another challenge is ensuring the mass communications – that at its peak would entail hundreds of thousands of outbound emails and SMS messages – landed in the right inbox. And, more pressingly, were read and understood by recipients.

At its peak, Retarus managed millions of individual communications a month throughout the vaccination program in Bavaria.

For this critical part of the process, the team selected business communication and workflow specialist, Retarus. According to executives working on the project, Retarus had the solution and experience necessary to rapidly scale up a secure and reliable communications solution to enable them to meet their tight timeline.

Furthermore, a vital part of the process is to ensure the vaccine communications and the subsequent registration of services reach the right people. For this, according to executives who selected Retarus, their system of personal identification via SMS feedback was robust and supported the other safeguards built into the system, such as every login by an employee working in the vaccination centres going through retarus' SMS-based two factor authentication process.

While fraud risk was judged to be relatively low, Retarus' solution enabled the program to move forward at speed and with greater confidence in the integrity of the data before it was assessed and checked in person at the vaccination centers.

There were other vital functions Retarus' solutions were also used for, including follow-up communications that ensured compliance with strict regulatory guidelines. One example is the need to delete data 21 days after the second vaccination is completed, which Retarus was able to communicate to patients with advice.

"In a very real sense, we had to start from scratch. We had to create something entirely new, that would build security and reliability into its core, and all while working towards a tight timeline in very challenging circumstances."

- Dr. Robert Aures,
Bavarian State
Ministry for Health
and Care



By providing a swift solution to overcome critical communications like this, Retarus formed a vital part of the fabric of the program and enabled the rest of the project team to focus on the direct delivery of vaccines to the public.

SPEED, SCALE AND RELIABILITY – THE KEY BENEFITS OF THE PARTNERSHIP WITH RETARUS

This ability to bring a tried and tested communications solution to the engagement made Retarus an indispensable partner for the team working on the vaccine program in Bavaria. According to executives, this was critical for the project's success; from the moment they pulled the team and partners together, they knew they were experienced professionals – and didn't have the slightest concern that they were working with anyone who couldn't get the job done.

This confidence enabled the program to move at a speed that was, frankly, exceedingly ambitious given its starting point. Specifically, with little to no infrastructure, data, or experience in the space, the ministry was able – with its partners support – able to stand up a system that enabled the rollout of vaccines to citizens in one of the most challenging business environments in history.

When discussing the project with executives from Accenture, who crafted the overall system and pulled Retarus in to support the communications tasks, there were several key benefits. Crucially, the fact Retarus' system is already well documented – with a track-record of adding value on a range of use cases – enabled the team to build the solution into the project quickly and easily. Retarus also had an expert integration team on hand to support Accenture as it combined different solutions to create the overriding system.

The team was also able to support new challenges as they emerged – pulling in expertise from elsewhere in the business – such as supporting whitelisting requirements and working with Telecom firms to ensure SMS messages reached the right targets.

All of these factors combined presented an important value proposition. If the project team were to attempt to build their own communication solution from scratch, it would have taken much longer, and as the project started almost immediately with a tight timeline, this simply wasn't possible.

It's also important to recognize that while the speed and scale of the project was daunting in itself, the constraints caused by the COVID-19 pandemic presented additional challenges. Project teams that were used to working side-by-side had to shift to building virtual teams and collaborating from home offices. Partners who would have spent time drawing up plans together had to do so with limited physical interaction.

Nevertheless, by working with experienced professionals across all partner teams, they were able to overcome what seemed like insurmountable challenges. And even concerns around system failures and issues with load balancing – reasonable

"Retarus were able to bring a solution that could immediately solve major communication challenges – and its maturity meant we could build it into the project quickly and easly."

> Jan F., Executive Director Product Engineering, Implementation Team

concerns given the amount of vaccination requests anticipated at launch – were unfounded, with limited issues with the process from the start. Nevertheless, the team moved forward working on an iterative process with the overarching goal of rolling out a vaccine in the most effective way possible.

At the time of writing, the latest data has seen the program support the rollout of over 15 million vaccinations – a huge achievement for the team given the authorities involved had never implemented a similar system or program in place before. And while the future of the program is uncertain – with the option to continue running the service for booster vaccinations, or to fold the provision of services into existing healthcare constructs, there's a clear message to read from the outcome of the project: With the right team and partners in place, it's possible to overcome vast challenges and deliver real tangible value through technology.

PAC VIEW: BUILDING AN EXPERT TEAM OF PARTNERS IS KEY TO SUCCESS

The importance of bringing in the right partners with the right capabilities is a critical takeaway from this case study. The team was able to create a solution from scratch for a complex challenge in one of the strictest regulatory environments and one of the toughest business environments in history.

Retarus' role in this story is significant. The firm's ability to bring a ready-to-run solution capable of managing one of the most challenging aspects of the project meant the rest of the team could focus on the core mission objective: rolling the vaccine out to citizens swiftly and effectively. Crucially, given the complexity of the task ahead, executives running the program were able to leave this vital task in the professional hands of the experts.

As more of our lives are organized digitally, we can expect the need for trustworthy, secure, and effective communication platforms to become exceptionally valuable in both the public and private sector. Indeed, many of the citizen and consumer habits formed through the pandemic will be hard to shift – from remote working, to shifting more emphasis on digital healthcare alternatives. In many ways, then, this project forms something of a proof of concept for more ambitious engagements – in which government bodies, healthcare providers, and private organizations seek to meet growing demand for digital alternatives to services that historically have been conducted in-person.

We can expect this trend to push leaders across sectors to examine how they manage their communications – and in this environment, Retarus' capabilities and ability to meet challenging obstacles head-on with flexible solutions will be in high demand. Moreover, the capabilities demonstrated by Retarus' solutions extend into critical challenges experienced by enterprises across a wide range of sectors. From solving compliance challenges in financial instituions, to supporting outreach in the retail sector – and as more workflows move into digital environments, reliable and scalable communications solutions will be essential to success.

"Given the circumstances surrounding this project, it's one of the most vital deployments of our solutions. And shows how flexible and mature communications platforms can help drive real business value."

Sören Schulte,
 Product Marketing
 Manager, Retarus

ABOUT RETARUS

With its outstanding solutions and services, intelligent infrastructure, and patented technology, Retarus manages communication for companies worldwide. Retarus' state-of-the-art technologies, highly available data centers, and innovative cloud messaging platform offer maximum security, maximum performance, and business continuity. With experience in steering information flows at the enterprise level, Retarus ensures that information is transferred securely and reliably to the right place, at the right time, in the right format—since 1992 and with now 15 subsidiaries on four continents. More than fifty percent of all EURO STOXX 50, DAX 40 as well as CAC 40 and 25 percent of S&P100 companies rely on Retarus' services. Our long-standing customers include Adidas, Bayer, BNP Paribas, Bosch, Continental, DHL, DZ BANK, Fujitsu, Galbani, Goldman Sachs, Honda, Linde, Puma, Sixt, Stellantis, Airlines Zeiss. T-Systems, Singapore and More information: www.retarus.com



ABOUT TEKNOWLOGY GROUP

teknowlogy Group is the leading independent European research and consulting firm in the fields of digital transformation, software, and IT services. It brings together the expertise of two research and advisory firms, each with a strong history and local presence in the fragmented markets of Europe: CXP and PAC (Pierre Audoin Consultants).

We are a content-based company with strong consulting DNA. We are the preferred partner for European user companies to define IT strategy, govern teams and projects, and de-risk technology choices that drive successful business transformation.

We have a second-to-none understanding of market trends and IT users' expectations. We help software vendors and IT services companies better shape, execute and promote their own strategy in coherence with market needs and in anticipation of tomorrow's expectations.

Capitalizing on more than 40 years of experience, we operate with a network of 140 experts.

For more information, please visit <u>www.teknowlogy.com</u> and follow us on <u>Twitter</u> or <u>LinkedIn.</u>



