CERN scientists decipher the composition of matter

Accelerators that collide particles together at nearly the speed of light enable scientists from the European Organisation for Nuclear Research (CERN) to conduct vital global research into the composition of matter. The knowledge gained from these experiments impacts the human understanding of science and benefits wider society. At any given time, 12,000 scientists from 500 universities in 100 countries are contributing to CERN-driven projects.

To enable employees and scientists to conduct their research efficiently, CERN provides a wide range of support services. Service Management Leader Reinoud Martens and his team are responsible for CERN’s tertiary infrastructure—otherwise known as business services—which encompasses roads, buildings, car parks, and green areas as well as services such as finance, HR, mobility, hotels, and the fire brigade. CERN’s IT infrastructure—including laboratories, particle accelerators, installations, and research facilities—is managed separately.

CERN seeks to create a more efficient, less complex service provision model

Reinoud discovered that the internal service provision and support at CERN was, for historical reasons, not efficiently organised. CERN’s business and IT services teams could no longer rely on multiple support groups that previously operated as independent silos. This led to confusion and inefficiencies in managing, tracking, and resolving issues. Reinoud’s IT experience led him to wonder if he could apply the ITIL system to other forms of internal service provision.

Industry: Scientific research  
Location: Geneva, Switzerland  
Size: 3,000 employees, plus 12,000 scientists

Challenge

Improve accessibility of CERN business services by integrating onto a centralised ITIL service framework, and begin to evaluate service quality for continuous improvement

Products

• ServiceNow® IT Service Management

Solution

ServiceNow consolidates CERN’s business and IT services onto a central ITIL platform for the first time and generates unprecedented visibility into 250,000 annual service requests
Thanks to ServiceNow, more stakeholders are embracing the business portal and requests are growing by 10 percent a year.

Reinoud Martens, Service Management Leader, CERN

ServiceNow helps CERN streamline access to business services for employees and scientists around the world

To make business services more readily accessible to CERN stakeholders around the world, Reinoud partnered with CERN’s IT department to centralise them onto an ITIL platform, alongside the organisation’s IT services. To facilitate the integration, CERN deployed ServiceNow IT Service Management. As part of the consolidation project, Reinoud’s team compiled a first-ever catalogue of CERN’s business services, from the provision of door mats and toilet paper to requests for repairs or renting a car.

Next, CERN used ServiceNow to split each business service into a defined series of steps. For example, if an employee raised a request in the portal for a bus to transport a group of scientists, a subtask menu would provide the requestor with information at every stage of the job, such as: request submitted, request approved, bus reserved, bus departed, bus returned to the garage, internal invoice created, invoice approved, and invoice paid.

If the bus was late, the requestor could locate the bus driver’s phone number in the system to find out what the problem was or could request help from an external contractor if no in-house buses were available. In that event, a ticket would be sent to the external service provider via ServiceNow with a quote, confirmation, schedule, and invoice delivered through the integrated workflow.

ServiceNow creates a more efficient service experience, gaining adoption that results in a 10% increase in service requests

Part of Reinoud’s role was to educate internal service groups and contractors about the new portal and drive their participation. He gives an example: “Initially, our fire brigade was reluctant to use ServiceNow and wanted to continue to inspect and control safety equipment using their own legacy process,” he says. “However, following an incident, they could see through the ServiceNow logbook exactly what happened and who was involved in handling the incident. That helped increase their acceptance of the system. Thanks to ServiceNow, more stakeholders are embracing the service portal, and requests are growing by 10 percent a year.”

ServiceNow data insights help CERN drive continuous service improvement

According to Reinoud, ServiceNow has not only helped to streamline service access and delivery, but it is providing insight into service quantity and quality, too.

“We’re now processing 250,000 requests per year,” says Reinoud. “ServiceNow Facilities Management helps us track a number of things, including the most requested services, peak request times, the performance of different facilities and their state of repair, and the scope for service improvements. For example, we now have visibility into how many kilometers our rental cars travel on average, and how they’re used. That information is factored into our planning, resulting in better availability of the fleet and reduced costs.”

CERN plans to extend ServiceNow to encompass SLAs and increase automation

In the future, Reinoud’s team plans to use ServiceNow to support the roll out of service level agreements (SLAs). He explains: “We currently use operational level agreements that are focused on service availability and
implementation. Thanks to ServiceNow, we can now incorporate quality into our agreements as well. Quality is important reputationally, and because we don’t want our researchers to be distracted by peripheral issues."

Additionally, Reinoud is considering how to increase the level of automation involved in business service delivery. He says: “Through ServiceNow, underlying processes for automation already exist. However, to automate physical services, you need the help of robots. It’s still early days for that technology, but when the time comes, I’m confident we’ll be able to evolve our offering with the help of ServiceNow.”