

CASE STUDY

The City of Espoo uses Robotic Process Automation to improve staffing administration. This is resulting in a better service to users and happier staff.



CITY OF ESPOO: SOCIAL AND HEALTH CARE

The organisation

The City of Espoo is a forerunner in digital solutions. The city is located in the south of Finland, close to the capital, Helsinki. Espoo is the second largest city in Finland, and has a population of nearly 300,000 inhabitants.

Over 3,300 health care professionals work in the city's social and healthcare services. They strive to meet the needs of the city's inhabitants. The service is actively engaged in developing innovations to improve the quality of care for all patients, to further improve the customer experience, and to future-proof the service.



ESPOO + ROBOTIC PROCESS AUTOMATION

In 2016, Espoo's social and healthcare service set an objective to improve service quality. It began by examining healthcare processes to identify and remove "waste time", i.e. the time spent away from creating value for patients. The city's homecare unit for the elderly was one of the first departments where processes were scrutinised.

The focus was on empowering the professionals working in the unit; making it possible for them to focus on their patients. This was recognised to be a key factor in the city's success in delivering excellent homecare services and enabling older citizens to live safely and comfortably at home.

The challenges faced



Time spent on administration
is time away from service delivery



Human error when creating work orders
so staffing needs are not met



Delayed work orders
were creating challenges
e.g. last-minute staffing issues

Target process

To meet its staffing needs, Espoo's homecare unit makes temporary staffing requests on a regular basis. This process consists of four steps and a follow-up process.

The temporary staffing request process:

1

Analyse the number of personnel needed for the coming work period, based on service requests.

2

Match identified needs with the personnel showing as available on the ERP system.

3

Create temporary staffing requests to fill any shortfall using internal systems.

4

Create a temporary staffing request on the external service provider's system.

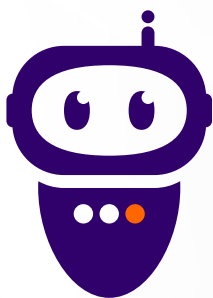
THE FOLLOW UP

Check on the staffing system whether existing shifts have been filled. When booked, add the temporary worker's details to the ticket created on the workflow management system. If orders remain unfilled within five days of the shift starting, send a notification to management.

THE SOLUTION

Digital Workforce started a pilot project to automate the temporary staffing request process in 2016. A digital worker known as “Ropsu” is responsible for overseeing the unit’s shift plan and the resourcing of nurses. If there is a shortage of workers, Ropsu starts the process of requesting temporary workers from an external recruitment agency.

A digital worker acts like any other worker. It must be taught to perform a process using the appropriate systems. Utilising the digital worker does not require any changes to existing systems. As a result, implementing a system like Ropsu is fast and painless. Since implementation, Ropsu has performed flawlessly.



The technology

Espoo’s digital employee, Ropsu, uses Blue Prism Robotic Process Automation technology in accordance with Digital Workforce’s Robot as a Service (RaaS) model.

The digital worker is based on the Digital Workforce virtual machine, which has a VPN connection with the City of Espoo. Clients of each of the required applications are installed on the virtual machine. The network disks required have been added for use by the digital worker. Finally, to send direct e-mail reports, the digital worker uses an SMTP server.

The cloud service solution used by the City of Espoo provides a flexible and easily scalable platform for the Ropsu software robots. It is possible for the customer to quickly provision new digital workers. New RPA solutions can be developed, for example, through an RDP connection.

Digital Workforce’s cloud-based service is hosted in a server room which meets the ISO/IEC 20000/27001 guidelines and safety standards, so it is extremely secure. The part of a network dedicated to the City of Espoo is isolated from the wider service. The City’s administrators can be given access to the environment at the Process Controller level; for example, to set the robot’s schedule. The environment includes separate databases and virtual machines for production and development, and the cloud service includes monitoring, maintenance and environmental management of the robot.

THE OUTCOME

Ropsu has met all goals set for it. Utilising the digital worker has improved the quality and efficiency of the temporary staffing process. By allocating human workers' time to more meaningful tasks, Ropsu has made it possible to improve other business processes.

The city's experience with Ropsu showed that when nursing staff were able to concentrate on care – the most valuable and rewarding part of their work – their job satisfaction increased. The robot was not perceived as a threat, but as long awaited help in a situation where staff time was increasingly being tied up in recurring computer-based administrative tasks.

Furthermore, Ropsu's introduction has increased the City of Espoo's understanding of software robots and their potential application.

This innovation led the City of Espoo to win the public sector service innovation award at the Quality Innovation Awards organised by Laatukskus Excellence Finland and the Mayor's Innovation Competition.

AWARDS

National Quality Innovation Award 2016

Mayor's Innovation Award 2016

International Quality Innovation Award 2017

GOING FORWARD

In 2018, Digital Workforce was selected as the strategic partner for Espoo's social and healthcare service. The goal is to introduce organisation-wide process automation. As a result, the service has already identified dozens of processes that can be automated. The city's staff will be empowered to concentrate on creating value for service users. The city has already begun moving forward to ramp up the use of digital robotic workers across its organisations.