By undertaking a focused automation project, Vodafone is realizing tangible benefits such as reducing manual steps and time in allocating network resources for enterprise voice services with a new voice resource management (VRM) tool. It also created a culture more accepting of change and the potential of digital.

A Step in the Digital Transformation Journey: Voice Resource Management Automation

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Introduction

Vodafone, one of the world's largest telecommunications operators, provides consumers and enterprises with fixed and mobile services. It currently operates in over 25 countries and has grown the business in recent years through a combination of acquisitions and an expanding digital services portfolio.

A key strategy for the company is migrating enterprise voice services customers onto the Vodafone VoIP platform from its array of legacy systems, accumulated through a series of acquisitions. Vodafone set out to improve the migration process by automating some of the steps involved in provisioning new customers. The customer provisioning journey involves many steps and the technology challenges are quite complex, so tackling the entire process was too much to address in one project.

Vodafone initiated a digital transformation project to focus on one key step of the provisioning journey, voice resource management (VRM), which involves improving the speed and accuracy of allocating network resources for digital voice.

Vodafone engaged its partner Tech Mahindra to assist in designing and implementing a technology solution to automate the VRM step.

SOLUTION SNAPSHOT

Organization:
Vodafone, a multinational telecommunications company based in the United Kingdom

Challenge:
Transform the provisioning process to provide new digital and automated provisioning for enterprise IP voice services as part of the introduction of a new voice network to:
» Improve the speed and accuracy of the enterprise IP voice services provisioning process
» Expedite the decommissioning of legacy IT systems

Solution:
Working with Tech Mahindra to automate the VRM step of the provisioning process

Project Duration:
Ongoing

Benefits:
» Improved customer experience and service delivery
» Created culture of change/transformation
» Repurposed resources to new digital services
Objectives

By focusing on VRM automation initially, the Vodafone project team could start with a manageable project that didn’t require a large investment of money and people and had the potential to provide a small success in the digital transformation journey. The team defined a clear set of project objectives that included internal and external goals:

» Deliver the best possible service to customers during and after the provisioning process
» Create a total digital experience for customers as a key business differentiator
» Provide the right tools to the operational teams to allocate network resources faster and more accurately
» Reduce the time and effort to provision VoIP services to eventually achieve zero-touch provisioning
» Increase the speed of migration to VoIP to decommission legacy systems sooner

Implementation

The existing process for resource allocation was mostly manual and involved several teams across the customer provisioning organization. Once a request was received, the process included more than a dozen touches as the request was handed off from one team to another. This process resulted in a single request requiring an average of several days to complete and the needed resource being allocated in the network. The Vodafone project team, along with Tech Mahindra, worked with the Vodafone VoIP VRM team to redesign the process.

Vodafone’s key stakeholders were included in the early stages of designing the new processes and eventually became champions of the new system. The Tech Mahindra and Vodafone teams designed and implemented the new automation solution and provided training on the new process and tools to the impacted teams. Members of Tech Mahindra’s team also played a key role acting as ambassadors to help communicate the messaging around the digital transformation project inside Vodafone.

Initially, the Vodafone project team worked with the members of the network resource allocation team to design the new processes for automation. However, during the project, it became clear that other areas could benefit from this technology. Thus other teams involved in service provisioning, such as support, service assurance, and operations, were engaged to learn more about the new automation tools and processes being developed for VRM.

The engagement of these additional teams in the provisioning process not only provided them with a better understanding of the automation project but also opened their eyes to the potential benefits of digital transformation projects in their own areas. Before this engagement, some people in these groups lacked an understanding of or a belief in the impact of digital transformation. Afterward, they were active supporters of the VRM automation project and interested in learning how to design similar provisioning projects of their own to improve productivity and provide a better experience for Vodafone customers.

Challenges

For any large organization, implementing change of any scope is difficult. Vodafone had its own set of challenges to manage during the design, implementation, and operational phases, including:

» Extensive, disparate legacy IT systems due to multiple acquisitions
» Large, multinational company structure with different lines of management and communication
» Introduction of change in processes across multiple organizations

» Resistance to change within impacted organizations

A key challenge during the project’s implementation involved engagement of the correct teams in the organization. Initially, only the network team was included in the project because of its limited focus on the network migrations. However, as the design of the VRM automation project matured, it became clear that redesigning the processes around network migrations not only impacted the network team and its existing processes but also affected other teams involved in the lengthy provisioning process.

Not having input into the design had caused organizations outside of the project team to be reactive to the proposed changes. To address this issue, the membership of the project team expanded to include all of the organizations that would be impacted by the VRM automation changes.

**Benefits**

Although the project is ongoing, its greatest benefits so far have been the drastic reductions in the number of steps and the time required to allocate network resources as part of the provisioning process. For example, a process that previously included over 30 handoffs between different people and teams is now completely automated. As a result, Vodafone can deliver a better customer experience, including improving commitments in service-level agreements (SLAs).

Following these improvements, customers are beginning to show interest in potential new digital services, the benefits of self-service offerings, and the advantages of an improved digital experience with the future vision of zero-touch provisioning.

Within Vodafone, a shift is evident from a cultural point of view as people who were once resistant to change are now asking to be more involved as they see the success of the VRM automation project. Teams are working in more agile and collaborative ways, exchanging ideas across groups.

Another key benefit is the opportunity to involve people from the impacted groups in learning new tools and being part of designing and building new digital experiences. These people have valuable experience that can be leveraged to develop critical new services that will be the growth engine for Vodafone’s future digital businesses and market leadership.

**Methodology**

The project and company information contained in this document was obtained from multiple sources, including information supplied by Tech Mahindra and questions posed by IDC directly to Vodafone employees.

Members of Tech Mahindra’s team also played a key role acting as ambassadors to help communicate the messaging around the digital transformation project inside Vodafone.
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Randy Roberts is Research Director of IoT & Telco for IDC Market Research, Asia Pacific, and he is responsible for the research and business development activities with Communication Service Providers and IoT players in the region. Randy is based in Kuala Lumpur, Malaysia.