HMRC achieves biggest ever digital Self Assessment in 2015

Capgemini System & Service Integration is a key enabler of HMRC's multi-supplier digital strategy

The Situation

HM Revenue & Customs (HMRC), the UK tax authority, has embarked on ambitious plans to digitise its business and give customers the option to deal with them entirely online. New services are enabling increasing volumes of digital transactions, including the best ever annual Self Assessment tax returns cycle, with 8.75 million online submissions by 31st January 2015. The IT that supports this is delivered by in-house teams and key suppliers. Capgemini manages integration and end-to-end operations, including the crucial role of integrating the legacy online service with the new fully-digital channel.

The Solution

The Self Assessment online application integrates with the new Multi-channel Digital Tax Platform (MDTP) and new virtual call centre that HMRC has developed. MDTP offers customers an online account for email alerts, the ability to book webchat appointments, and register with Gov.uk Verify, the identity checking service that will become the default for Government online services.

Capgemini worked with HMRC to define the user journey that linked new digital services with existing applications, from interactions with Government Gateway and login, to working out what tax is due, through to making payments or receiving a refund. When start and exit points across applications in the process were agreed, Capgemini supported HMRC implementation,agreeing non-functional operational requirements, aligning stakeholders around the phased introduction of agile projects and overseeing the day to day operation of the services.

The Results

HMRC's multi-channel digital services are the busiest in UK Government, enabling millions of transactions and making it simpler for customers to manage their tax. The IT reliably supported huge demand in the lead up to the Self Assessment filing deadline on 31st January 2015. There were almost a million online returns on the last two days, and queries contributed to 4.3 million calls to HMRC in January, 95% of which were answered first time.

Digital Self Assessment shows the success of HMRC's strategy to introduce digital services in incremental phases, focusing on user needs and linking components for a seamless customer journey. A combination of fully-digital services and services that integrate with legacy systems brings early benefits for customers while HMRC enacts fully, its digital transformation. As a result, over a million Self Assessment customers received electronic messages from HMRC rather than paper communications, and over two million customers, many of whom are small businesses, now have online tax accounts.

The digital service will be enhanced over time, for customers to file, pay and make changes across all of their taxes in a single place via their online account. In the future, digital tax accounts will replace tax returns for millions of people, while those with more complex tax affairs will be able to use their account to declare income and pay tax in year.

How HMRC and Capgemini Worked Together

HMRC is realising their vision to become a digital organisation, procuring standardised commodity services for flexible, value for money services. System and service integration ensures the new components – like the Multi-channel Digital Tax Platform on cloud-hosted technology - works effectively with the existing processing applications and the infrastructure is sized to handle projected volumes of customers.

While HMRC transitions to fully digital services, they are running new modern solutions that integrate with established technology. Capgemini helped HMRC define user journeys and technical integration requirements for HMRC Self Assessment customers - either taxpayers or accountants who act on individuals' behalf – who use straightforward web pages that cross check data and manage the process flow by linking with multiple systems behind the scenes. This requires rigorous planning; Capgemini specified development environments,modelled capacity, and prepared test scenarios which apportioned testing to relevant HMRC and Capgemini teams to carry out for individual sections and which were run simultaneously to test the end to end service. New components were introduced and tested

continuously, and Capgemini synchronised releases and managed service operations, helping HMRC achieve their customer experience objectives. Capgemini Service Operations coordinated all suppliers regardless of who their contracts are with. HMRC defined functional requirements for projects, and Capgemini provided standard templates for agile delivery into HMRC's existing estate and delivered Application Programme Interfaces (APIs) to enable new digital services to link with back-end verification and processing systems and pass results back to the Multi-channel Digital Tax Platform (MDTP). During development, Capgemini worked with the HMRC digital team on comprehensive testing which ensured customer data moved seamlessly across different systems, and, following launch, jointly monitored each element of the customer journey to spot and prevent potential problems.

To help HMRC assure the multi-sourced environment, Capgemini invested in monitoring capabilities and configured them across the integrated service to help manage operations. Analysing the end to end process to identify issues provided Capgemini with insights to identify the right architects, applications and infrastructure experts to coordinate with to drill down to root causes, assess how services could be modified, and agree changes with business stakeholders. All parties understand the role they played to ensure new services and business as usual transactions ran smoothly.

At the beginning of January 2015, Capgemini and HMRC set up Self Assessment Mission Control to scrutinise every element of the end-to-end service. It linked to control centres around the country and rapidly agreed actions to keep the service running smoothly. During the final week of filing, Mission Control was staffed 24-hours a day, and on deadline day HMRC's Chief Digital Information Officer and Director General for Personal Tax came to support the team and make business and technology decisions in the same room. At midnight, the teams celebrated the huge number of customers who had used the online service to file on-time.

Here is more detail about what Mission Control is, how it works, and critical success factors.

HMRC & Capgemini Mission Control

What: Mission Control is a high-tech nerve centre that monitors and analyses key availability, performance and business metrics for HMRC, Capgemini and suppliers to make informed decisions to manage customer service technology and business data effectively. It streams real-time information to HMRC management hubs and rapidly agrees interventions to keep the service running smoothly. The volumes for Self Assessment filing show how critical it is to scrutinise performance and act quickly to protect service: up to 830 customers file returns per minute and 0.8 payments per second.

How it works: Capgemini sets up Mission Control for additional monitoring of business critical processing during peak periods, like the Self Assessment filing deadline in January. It is a control centre of control centres, which sits above four estate-wide centres for operational management of networks, applications, security and business processes, other suppliers' control centres, and information feeds about external internet traffic. Mission Control displays details about systems and services which relate to Self Assessment, and facilitates very quick decisions that enable millions of people to meet their tax obligations.

Information feeds: Capgemini has installed expert monitoring devices that watch and analyse strategic points throughout HMRC's network. The analytics data they provide reflects the latest system state across thousands of nodes, where data flows between systems, to data centres and the cloud, and is maintained as systems change and new technology is added. This monitoring provides unique insight into how the estate is operating and provides critical information to allow rapid understating and decision making. Managed by Capgemini, HMRC also has expert, advanced boundary controls to manage and route access to the critical systems by the citizen. For additional insights, Capgemini uses complex synthetic transactions and monitors social networks and news agencies to spot comments and stories that could be relevant to HMRC services. This combination of internal and external monitoring provides a full view of the end user experience.

Expert decision making: HMRC and Capgemini experts with technical, service management and business knowledge about the key business event are based in Mission Control, to review real-time analytics on a wall of computer screens, and rapidly agree preventative action to address emerging problems. During the final week of Self Assessment filing, Mission Control was staffed 24-hours a day, and on deadline day HMRC's Chief Digital Information Officer and Director General for Personal Tax came to support the business and technology decision making team.

Critical success factors: Accurate information, and quick decision making ensures Mission Control makes the right decisions to protect customer transactions. It is set up when business and technology stakeholders agree they need to provide additional focus, over and day-to-day management, to effectively manage particularly high customer volumes. Information feeds are tailored for the relevant customer journey, and the appropriate decision makers represent the particular area of expertise. Mission Control is used for all key business events, when major new systems are launched, and to on-board significant suppliers into the IT estate. It plays an important role ensuring excellent customer-facing IT services.

How HMRC suppliers and Capgemini work together

Digital Self Assessment shows how Capgemini system and service integration is helping HMRC work effectively with a mix of both in-house and supplier teams to provide new digital services that make it simpler for customers to manage their tax.

HMRC's contract with KCOM for the new virtual call centre platform is an example of how Capgemini system and service integration (SSI) works with suppliers to provide the service management processes that enable HMRC to have a direct relationship with a larger number of suppliers than ever before. KCOM's platform links customer calls with contact centre advisers or standard answers to help questions, it provides advisers with customer details, and it links to back office systems. To help create a shared understanding of system integration and service management requirements HMRC and KCOM met with Capgemini to walk through the process. For detailed work on how different components link together, KCOM worked with a Capgemini architect on the integration elements.

The new platform was piloted in two contact centres, before rolling it out to sites around the country. During the pilot, KCOM and Capgemini reviewed how the service performed, working together to diagnose problems, tap into advice from Capgemini technical experts where relevant, and provide status updates to HMRC. The contract with HMRC is KCOM's first service-based agreement, so Capgemini knowledge share with KCOM included two weeks in Capgemini's service centre to review incident logs and apply a step-by-step process, from root-cause analysis to finding the solution to underlying problems. During the Self Assessment filing peak, KCOM set up their control centre in a room opposite the Mission Control Centre. Capgemini monitored the service, including network monitoring probes that extend into supplier data centres and cloud platforms, and KCOM monitored individual aspects of their service. Together, Capgemini and KCOM assessed how increasing customer volumes impacted performance, so KCOM could increase capacity within their supply chain, where necessary.

KCOM's virtual call centre implementation– which is one of the largest in the world - is an example of how careful planning of system and service integration requirements helps suppliers successfully launch new services for HMRC. The complexity of the integration required close architectural, system, network and business understanding to ensure the service was effective from day one.

About Capgemini

With 180,000 people in over 40 countries, Capgemini is one of the world's foremost providers of consulting, technology and outsourcing services. The Group reported 2014 global revenues of EUR 10.573 billion. Together with its clients, Capgemini creates and delivers business, technology and digital solutions that fit their needs, enabling them to achieve innovation and competitiveness. A deeply multicultural organization, Capgemini has developed its own way of working, the Collaborative Business Experience™, and draws on Rightshore®, its worldwide delivery model.

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Approved by

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In collaboration with

HM Revenue & Customs

HM Revenue & Customs (HMRC), the UK tax authority, is responsible for making sure that the money is available to fund the UK's public services and for helping families and individuals with targeted financial support.

For more information, please visit:
www.hmrc.gov.uk

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