



Business challenge

To separate its systems from The Co-op Group, The Co-operative Bank needed to migrate 19 priority business services and hundreds of other systems to a completely new infrastructure.

Transformation

Working with IBM, the bank planned and executed a large-scale, multi-phase migration and separation program, moving all of its business-critical applications to two new, highly resilient data centers.

Business benefits:

250+
applications and 800+
servers migrated with no
impact on customer services

100%
success rate for migrations,
with near-zero high-severity
incidents post go-live

Significant
reduction in technical debt,
enabling increased agility
and resilience

The Co-operative Bank Delivering zero-disruption transformation with IBM Services

The Co-operative Bank is a leading UK provider of high street and internet banking, current accounts, mortgages, savings accounts and credit cards to retail customers and small and medium-sized enterprises, serving over 3.5 million customers.

"The transformation program we've delivered with IBM has enabled us to build an independent architecture that empowers us to take control of our IT strategy."

Andrew Bester
Chief Executive Officer
The Co-operative Bank

Share this



Driving change

When a bank needs to separate its IT landscape from a parent company or divest part of its business, every individual strand of its network must be unpicked with infinite care. If things don't go as planned, the resulting customer, operational, regulatory, and reputational consequences can be severe.

In 2015, The Co-operative Bank faced just such a situation. The bank had grown as part of The Co-op Group, a family of diverse businesses with interests in retail, insurance and other markets. The group's strategy of sharing applications, information repositories and technology management meant the bank's IT systems had become tightly enmeshed with the rest of the group's network.

As the bank became a separate entity from The Co-op Group, this strategy changed. The bank needed to reduce its dependence on the group's IT services and take control of its own IT systems. A major transformation program was required to deliver this separation effectively.

The bank recognized that the level of regulatory scrutiny on the program would be extremely high, following recent high-profile IT issues within UK banking. As a result, every aspect of the planning, preparation and execution would need to be effectively managed to mitigate risk.



Leaving nothing to chance

The Co-operative Bank's IT team knew their own applications and infrastructure, but their expertise was primarily operational. In building, maintaining and documenting their systems, they had focused on ensuring that those systems would cope with the immense pressures of day-to-day banking operations.

The transformation program posed an additional challenge. Separating the bank's systems and networks from the rest of The Co-op Group infrastructure meant migrating them to a completely new environment: new data centers, new servers, new networking, and a new operational model. The scope of these changes raised the risk of undefined

behavior and unpredictable effects. With the financial data of hundreds of thousands of customers at stake, the bank could afford to leave nothing to chance.

"While the IT separation project was vital for the future of the bank, our responsibility to our customers is always paramount," explains Chris Davis, Chief Operating Officer of The Co-operative Bank. "We had to be completely confident that we could deliver this transformation without any impact on the customer experience. That's why we chose to partner with IBM: they were the only organization with enough expertise in large-scale banking migration projects to give us that certainty."

"We had to be completely confident that we could deliver this transformation without any impact on the customer experience. IBM was the only organization with enough expertise in large-scale banking migration projects to give us that certainty."

Chris Davis, Chief Operating Officer,
The Co-operative Bank

Planning and executing the transformation

The Co-operative Bank worked with executive architects from IBM® Services™ to design a comprehensive blueprint and roadmap for the transformation program. The majority of the work would be executed in two key phases, known as the Enterprise Services program and the Separation program.

Enterprise Services program

The Enterprise Services program focused on creating two new data centers with state-of-the-art business continuity and disaster recovery capabilities, and migrating the bank's priority business services, including its core banking applications and its treasury and finance systems.

The program was organized in a series of six "waves", each containing a set of

business-critical applications that were moved to the new infrastructure, with cutovers performed over weekends to minimize the impact on the bank and its customers. The waves were planned and executed using proven methodologies that IBM has used in many other flagship financial services migration projects and that are documented in the IBM Cloud Innovate repository (now part of the IBM Garage Method for Cloud).

The waves were designed to reduce risk by creating a protective “bubble” that would insulate the applications that were being migrated. In essence, each wave began by building out the required data center infrastructure and installing a copy of the applications and data on it. The team then performed rigorous testing of the hardware, operating systems, applications, data and batch processes to ensure that the target environment would work without issues. Once everything in the bubble passed its tests, the team would proceed with one or more “dress rehearsals” to ensure confidence that the cutover event could be run successfully within the time available. Finally, the team performed the cutover itself.

At its peak, the Enterprise Services program was resourced by a team of 700 people, including more than 300 IBM colleagues. These resources were aligned with specific workstreams within each wave, such as infrastructure, application migration and testing—and the leadership of these workstreams was consistent across all six waves, providing continuity and ensuring that later waves

would benefit from knowledge gained during earlier migrations.

“IBM provided a level of migration expertise that you just can’t find anywhere else... When you hit an issue you can’t solve, you need people who can really get under the skin of a system quickly, and that’s what IBM brought to the table.”

Mark Record, former IT & Change Director,
The Co-operative Bank

Separation program

The Separation program comprised a wide range of projects to help the bank prepare for and execute its final technology separation from The Co-op Group’s infrastructure. These projects were organized into a set of independent “towers”, each managed by a separate team. The towers included:

- **Application migration**, which focused on migrating or decommissioning more than 100 applications and technical tools for monitoring and data transfer. These systems often had complex dependencies: for example, one service interfaced with over 100 data feeds, each from a different third-party provider.
- **Application modification**, which focused on a number of larger applications that needed to be modernized before they could be moved to the new data centers.

- **Data warehousing**, which focused on upgrading the bank’s large SAS analytics environment and consolidating various SAS systems to a new bank-only single instance.
- **Legacy**, which focused on taking over the infrastructure hosting and network support of a small number of non-strategic services running in existing bank-owned data centers, which are due for replacement in the near future.
- **Security**, which focused on phasing out a range of security services that the bank had been providing to the rest of the group.
- **External connections**, which focused on migrating a number of third-party virtual private network (VPN) connections to the target infrastructure.
- **IT management services**, which focused on services that had been shared between the bank and the group—for example, splitting the user directory into separate instances for each of the two organizations.
- **Network**, which focused on delivering the separation of networks between the bank and group networks. To minimize risk, the network team avoided a “big bang” cutover, and instead transitioned the bank’s landscape through seven intermediate states to prepare for the final separation.

Achieving a zero-disruption migration

Both phases were delivered exactly as planned, and the bank regards the transformation as a complete success. On the Enterprise Services program, there were no significant problems on any of the cutovers. For example, the core banking wave—the largest and most complex of the six—was completed more than four hours ahead of schedule, with zero severity-one issues after the cutover weekend. In fact, according to one member of the bank’s IT leadership team, the following day was “the quietest Monday we’d had in months.”

Similarly, after the final technology separation, which marked the conclusion of the Separation program, the bank experienced no severity-one or severity-two issues—a remarkable achievement given the scope and scale of the transformation that the bank had undertaken.

Mark Record, IT & Change Director at The Co-operative Bank during the project, worked side-by-side with the IBM team throughout the Separation program. He comments: “Above all, the project succeeded because we had the right people on the team. Our bank team brought our years of knowledge about our applications and systems, while IBM provided a level of migration expertise that you just can’t find anywhere else. With the right resources in place, we had complete confidence in the result—and

even though the project was under huge scrutiny, it was a case of trusting the process and 'letting the pilots fly the plane'."

He adds: "IBM's migration methodologies are world-class, but even the best methodology can't solve every problem in a project of this scale. When you hit an issue you can't solve, you need people who can really get under the skin of a system quickly, and that's what IBM brought to the table."

For example, during the Enterprise Services program, the team ran into an application that worked perfectly in the source environment but would not run correctly during bubble testing of a target environment that seemed to have an identical configuration. The assigned IBM Distinguished Engineer reviewed every single application and middleware configuration setting with the relevant teams, and worked with IBM product subject-matter experts as well as subject-matter experts from the bank to find the problem: an issue buried deep in the operating system, which,

once diagnosed, was easily resolved. As one stakeholder at the bank remarked at the time: "No matter what issue they encounter, this team will always find an answer."

In total, across both transformation programs, the team succeeded in migrating more than 250 applications, running on more than 800 servers. Across the hundreds of technical implementations, the team achieved a 100 percent success rate, and completed the final technology separation with almost zero impact on the business and its customers.

As a result, the bank now has two world-class data centers and a state-of-the-art disaster recovery capability, providing a resilient platform for day-to-day operations, and a solid foundation for further digital transformation in the future. Application modernization has reduced the organization's technical debt, making it easier to be more agile in developing digital services and bringing new products to market.

Andrew Bester, the bank's Chief Executive Officer, concludes: "The transformation program we've delivered with IBM has enabled us to build an independent architecture that empowers us to take control of our IT strategy. As we continue to develop new digital services and move into the cloud, we now have the technological foundation we need to deliver faster, smarter, more convenient banking experiences to hundreds of thousands of retail and business customers across the UK."

Solution components

- IBM® Services™ – Cloud Application Innovation
- IBM Cloud Garage®

Take the next step

To learn more about IBM Services, please contact your IBM representative or IBM Business Partner, or visit: ibm.com/services

Connect with us



© Copyright IBM Corporation 2020. IBM Corporation, New Orchard Road, Armonk, NY 10504. Produced in the United States of America, June 2020.

IBM, the IBM logo, ibm.com, IBM Cloud Garage, and IBM Services are trademarks of International Business Machines Corp., registered in many jurisdictions worldwide. Other product and service names might be trademarks of IBM or other companies. A current list of IBM trademarks is available on the web at "Copyright and trademark information" at www.ibm.com/legal/copytrade.shtml.

This document is current as of the initial date of publication and may be changed by IBM at any time. Not all offerings are available in every country in which IBM operates.

The performance data and client examples cited are presented for illustrative purposes only. Actual performance results may vary depending on specific configurations and operating conditions. THE INFORMATION IN THIS DOCUMENT IS PROVIDED "AS IS" WITHOUT ANY WARRANTY, EXPRESS OR IMPLIED, INCLUDING WITHOUT ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND ANY WARRANTY OR CONDITION OF NON-INFRINGEMENT. IBM products are warranted according to the terms and conditions of the agreements under which they are provided.

The client is responsible for ensuring compliance with laws and regulations applicable to it. IBM does not provide legal advice or represent or warrant that its services or products will ensure that the client is in compliance with any law or regulation.

Statements regarding IBM's future direction and intent are subject to change or withdrawal without notice, and represent goals and objectives only.



DOC NUMBER GOES HERE

