About Nationwide and its Payments Landscape

About Nationwide

"Banking but fairer, more rewarding and for the good of Society"

- Nationwide Building Society is the largest building society in the world. Its origins lie in the late 19th century.
- Following numerous mergers, Nationwide is now the world's **largest mutual** financial institution, the UK's third largest mortgage lender, and one of the UK's largest savings providers.
- Nationwide is committed to staying mutual and is keen to emphasise that it has members rather than shareholders.
- Nationwide provides financial services both directly, and through around **700 branches**.
- Key facts and figures: http://www.nationwide.co.uk/about/



Payments legacy landscape at Nationwide and challenges

- People expect payment services to be available 24x7 and 'always on!'
- Nationwide's on-premise estate is built on aging monolithic technology and is not scalable to meet future growth. This has resulted in multiple challenges for the society in terms of resilience, throughput, scalability, and future proofing.

Resilience- Nationwide was failing to meet SLAs for 24*7 availability. For example, in January last year, a major outage of the Faster Payments service for 20 hours led to delay of nearly 500,000 Faster Payments and front-page headlines in in UK.

Scalability- Payment volumes average at 12 million per day, surging to 22 million on peak days. Anticipating a considerable rise in payment volumes in the near future, the payment engine faced scalability challenges and severe performance issues.

Performance- The Platform could handle only 30 PPS (payments per second) but growth forecasts suggested 50 PPS was soon required. Performance degradation resulted in platform sluggishness, attracting penalties from regulators.

Regulatory Compliance: The failure to meet SLAs for 24*7 availability resulted in increased scrutiny from regulators.

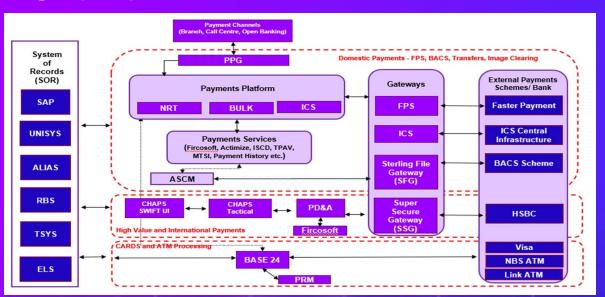
How we led a continuous innovation journey using industry differentiation to solve the challenges in the Payments area at Nationwide

We are replacing the legacy platform with a cloud-native solution, that is highly available, resilient, secure and scalable, fit for the increasing demands of our members.

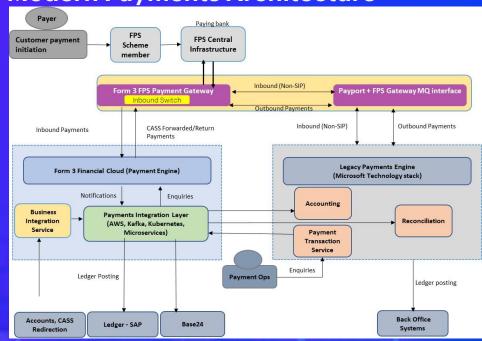
We partnered with a Payments gateway provider Form 3, leveraged our industry expertise on Payments and proposed a cloud native solution to deploy Payments on cloud to transform Nationwide's payments. We designed and built a Minimum Viable Solution to prove that a Faster Payment standing order payment can be successfully received, validated, and posted to core banking ledger.

Following the success of the solution, we implemented a scaled solution that provides a de-coupled microservices based architecture comprising of Form3's gateway integrated with a payments orchestration layer on AWS which interacts with the system of record. This solution will also be a key enabler for Nationwide to adopt UK's New Payment Architecture and ISO 20022. We have now successfully deployed the Single Immediate Payments functionality on production and processing upwards of 95% of payments at Nationwide.

Legacy Payments Architecture



Modern Payments Architecture



Scalable Solution



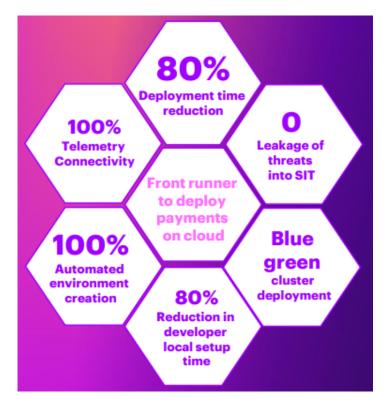
Our microservices-based architecture on AWS is inherently **scalable** due to the modular and distributed nature of microservices. Leveraging AWS services such as Amazon EKS and ELB allows for independent scaling of microservices, while autoscaling features and load balancing ensure efficient resource allocation based on demand.



Our architecture is **Resilient** by Design. We have designed and built a solution that strengthens our ability for the service to withstand failures, cope with 'abnormal' loads/conditions and can be recovered quickly with no Member impact, in line with the Operational Resilience strategy, standards and Design Time principles.



Performance throughput: The scalability of the new payments system ensures no impact on performance, as it's designed to handle varying loads. Tested in a production-like environment, it successfully handled a load of 150 TPS. Additionally, an 8-hour soak test to also proved the durability of the system.



Key elements of this success



Close collaboration with the Global Payments Industry practice at Accenture.

Quote below from Sulabh Agarwal, Global Payments Lead at Accenture -

"The accelerating digitization of payments, coupled with ongoing economic turbulence, is shaping how consumers transact and move their money. Nationwide's transformation is an excellent example of a traditional financial institution embracing next-generation payments and reinventing customer experiences at speed and scale – supporting future growth, continuous innovation and industry relevance."



Close collaboration with Form3, one of Accenture's key Ecosystem Partners in Payments Industry.

Quote below from Michael Mueller, Form3 CEO -

"As digital payments increase, many financial institutions are starting to modernize their infrastructure to compete effectively. Working with Accenture, Form3 will help Nationwide transition their payment processing to one of the most modern, efficient, secure and resilient platforms in the market without impacting service delivery."



Effectively leveraged Industry led assets.

Accenture's High Performance Banking Architecture for Payments Modernization and Next Gen Payments Architecture were leveraged to elaborate the solution.

Key Impact and 360 Value

This solution makes Nationwide the **first large banking institution in the UK to deploy Payments on cloud**, and amongst very few banks globally to do so too.

PRIDE

FINANCIAL

SUSTAINABILITY

Besides the scalability and resilience elements, the solution by virtue of being cloud based, promises a significant reduction in carbon footprint as it replaces a monolithic application sitting in the data centre with a high energy consumption footprint.

TALENT

We built our platform using cutting-edge technologies. This innovative foundation is fortified by the outstanding skills of the Accenture talent dedicated to the program, with a strong emphas on Industry skills, and DevOps practices to bring about automation and efficiency throughout the development and deployment lifecycle. The programme has enabled us to fulfil the aspirations of the team members to work on cutting edge technologies and leading industry trends in payments, thereby ensuring a holistic experience and building marketable skills for our people.

INCLUSION & DIVERSITY

We operate collaboratively as a team from multiple Geographies across the globe, fostering innovation and excellence in every aspect of our work, helping us to enhance each other's strengths, diverse talents and ideas woven together to bring the best for our clients.

Celebrating cross cultures across geographies both in-person and virtual is also one of the key success factors.



EXPERIENCE

Our 'always on' solution ensures a seamless payments experience for Nationwide's customers even during code deployments. Our commitment is to eliminate any delays in payment services and provide an uninterrupted experience for Nationwide's customers.

FUTURE VALUE POTENTIAL

Our 'always on' and Scalable solution is future-ready. While it fully satisfies the current transaction throughput requirement of 50 transactions per second (TPS), it is scalable enough to serve a much higher throughput of several 100s of TPS.

Client Endorsements

Note from Nationwide CEO

Excellent progress Well done all !

Debbie Crosbie | Chief Executive Officer nationwide.co.uk

Note from Nationwide COO

Congratulations team - this is a magnificent accomplishment for all of you and the Society.

Its probably been 4/5 years of many peoples lives to get here. Words can never do justice to that kind of effort.

Thank you 🙏 🙏 🙏

Best, Suresh

Suresh Viswanathan COO Nationwide Building Society

Client Endorsements

Note from Nationwide PayMod Programme Director

Now the dust has settled, I'd like to take a moment to recognise the huge achievement collectively reached last week – by completing technical enablement & live-proving, Paymod has proven the platform by processing the first end-to-end payment and completing reconciliation activity safely & successfully.

From the preparatory work undertaken in Planning Increment Zero 16 months ago to delivering a fully automated cloud platform and a working payments product is remarkable and has been a genuine team effort.

We still have lots to complete as a team and this will widen live proving across friends & family ahead of Christmas, and then being technically ready for migration of member payments in the New Year.

For now, the significance of technical enablement is well-noted by the ExCo Leadership (see attached) – well done to you all and I look forward to celebrating this achievement with you in our planned townhall in December.

Rgds Al

Al Dreeling
Programme Director | Payments CIO | MTD | COO

Note from Nationwide Director of Payments

Just to let you have a small piece of Friday "good news" which we wanted to share on our payments modernisation journey — we have put in production the software to support Paymod release 1 and have successfully received our first "penny payment" from a specific account (in Barclays) to a specific live, production account in Nationwide. While we are completing the confirmations and checks in the downstream systems (including reconciliation) we are happy that this has successfully posted through the customer account, which is a real success of our journey so far, and demonstrates that the technology we have put in place between ourselves and Form3 is working end-to-end in live! This constitutes an important part of our migration journey — our next step is then to widen this out to a more formal "friends and family" test in live, and then (once we have further approvals) to the wider customer migration — currently we are scheduled to move into that phase later in the New Year.

Regards

Otto

Otto Benz

Director of Payments | Chief Operating Office

Internal Accenture and External References



Nationwide Payments Modernization story was published in THE BREW ATCI EMEA newsletter.

Nationwide and Accenture Transforming Payments with Cloud-Native Solution | The BREW



Nationwide Payments Modernization Case Study was published in www.accenture.com portal

Cloud-Based Payment Solution | Case Study | Accenture



IBS Intelligence article on Nationwide selecting Accenture and Form3 to transform its Payments landscape

Nationwide Building Society picks Accenture & Form3 to modify payments (ibsintelligence.com)