

Mainframe modernisation

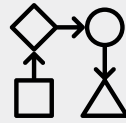
Reducing operational costs through technology renewal and cloud transformation

Years of technology layered on one another has led to monolithic, complex mainframe structures with many shortcomings, not least the huge cost to maintain them in order to meet customer demand.

GFT recommends its unique **ROAR** approach to mainframe modernisation:



Re-platform a great way to support rapid cloud entry and gain initial ROI improvements, by moving data processing into the cloud, in a manner that requires the least amount of change.



Optimise typically involves the improvement of batch processes and introducing parallelisation of batch critical paths to improve efficiency.

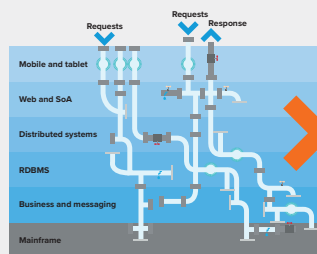


Augment minimise core mainframe usage by using key downstream API components and off-loading activities, in order to reduce MIPs charges for mainframe traffic and data. This approach is often implemented alongside an evolutionary drive towards digital transformation.

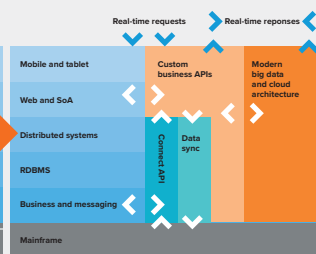


Re-engineer entails the functional decomposition of the existing platform into independently releasable microservices, with large productivity gains arising from utilising DevOps and cloud platform-as-a-service (PaaS).

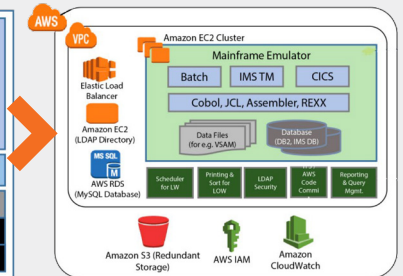
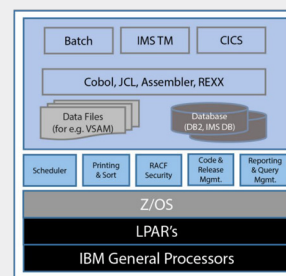
Complex systems integration



Delineated and decoupled systems integration



Lift, shift and optimise



A mainframe modernisation programme can leverage any (or a combination) of these four strategies. However, to really maximise the benefits, GFT has identified two essential approaches:

Software development life cycle (SDLC): An iterative and agile approach to ways of working, including a 'Scaled Agile Framework' for enterprises that has proven to be very successful for our clients.

Leveraging automation where sensible: Utilising the strengths of automation; for example reverse-engineering code or leveraging emulators that allow the migration of COBOL applications to Windows and Linux with minimum change to the original source.

Benefits



GFT is a dynamic and experienced partner able to help clients with their digital transformation journey.

- A key success indicator is in-house governance and control, achieving an over archiving visibility of the 'where' and 'how' of all data flows
- Off-loading mainframe activities to manage large volumes of traffic and data
- Reduce the cost of mainframe 'MIPs' by adding logic to minimise mainframe database calls
- API contracts designed to reduce data replication
- Loosely coupled architecture for performance and development efficiencies
- Faster integration with the existing mainframe
- Improved log correlation, analytics and monitoring

The GFT difference



Big enough to deliver – small enough to care

- Straightforward decision-making and a 'hands-on' mentality based on creativity, expertise and willingness to deliver. 5,500 engineers in over 12 countries worldwide, focused exclusively on financial services.

A passion for innovation

- Innovation Labs facilitate trend scouting and prototyping for financial services
- CODE_n innovation network identifies disruptive technologies across industries which can be applied
- Commitment to delivery
- Smart methodologies ensure successful delivery of high profile projects

- Efficient teams with creative, process and technology knowhow
- Scalable global delivery onsite and from nearshore locations

Focus on sustainability as opposed to short-term profits

- A large part of GFT is retained by the founding family providing stability. Our core values are embedded in our daily life as we deliver for our clients: Caring | Committed | Courageous | Collaborative | Creative

Partner reference customers / solutions



Tier 1 Spanish Retail Bank

Optimised the top 20 transactions in the installation (those with the highest CPU consumption), reducing 200 MIPs of online consumption, with focus on serving branches during opening hours (08:00 to 15:00). Prepared the target architecture for a re-hosting exercise to AWS.

Tier 1 Spanish Bank

Improved the efficiency of IT resource consumption and enhanced system performance: 1) A reduction in overall MIPS and cost maintenance, 2) Average savings in elapsed time: 7,966 min / month, 3) Average savings in CPU time: 750 min / month.

Tier 1 UK Retail Bank

Developed the architectural roadmap alongside a cloud enablement programme. Implemented a 'mainframe offload' strategy via an event mesh approach, fanning out from Kafka streams to various endpoints.

Tier 1 UK Retail Bank

Implemented the digitisation and automation of DB2 on an IBM iSeries, using IBM Infosphere to apply change data capture replication to the data. Data was then forwarded to Kafka for subsequent fanning out to MongoDB and an in-memory grid.

Key technologies



Infrastructure ecosystem

VMware, IBM ISeries, Z/OS, Solaris, Redhat, Cisco, Windows, AIX, Linux, Pivotal, Openshift, Kubernetes

Software languages

Java, Scala, Python, .Net, .NetCore, Go, Node.js

Software and tools

Hortonwork, Cloudera, Apache, MySQL, PostgreSQL, SQL Server, Oracle, Cassandra, DynamoDB, Spanner, MongoDB, React & Native iOS & Android, Python, Cobol

About GFT



GFT Technologies SE is a global technology partner focused on digital transformation in the financial sector. Founded in 1987, we have around 5,500 experts in 12 countries.

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