Curriculum Vitae of
Nick Rozanski CEng FBCS

Nick graduated from the University of Cambridge with a degree in Mathematics, and went on to complete an MSc in Computer Science at the University of Manchester. He worked as an IT consultant for twenty years after graduation on numerous projects for a wide range of public and private sector clients. In recent years he has worked in senior architectural roles for Mastercard / Vocalink, Paysafe, ICBC Standard Bank, Barclays Investment Bank, and Barclays Global Investors.

Nick combines strong architecture, technical leadership and analysis and design skills with a software engineering background that includes complex systems integration, bespoke software development and enterprise package implementation. During his career he has taken architecture, analysis, design and development roles on projects and programmes in the finance, retail, government and manufacturing sectors. His systems development experience ranges from small systems for specialised users up to very large corporate applications for financial institutions, high-street retailers and government departments.

His enterprise architecture experience has focussed on leading teams to create architectural strategy and design, socialise and ratify it with stakeholders, and provide technology leadership, governance and support. As a solution architect, he has recently worked on a number of faster payments programmes.

Nick has co-authored a book, "Software Systems Architecture" (Addison-Wesley, 2005, 2012), a practitioner-oriented guide to designing and implementing effective architectures for information systems.

He is a Chartered Engineer (CEng) and Chartered Fellow of the British Computer Society (FBCS).

Employment Summary

2019 – present	**Vocalink / Mastercard**	contract Product and Solution Architect (*various Faster Payments programmes*)
2018 – 2019	**Paysafe**	contract Enterprise Architect
2015 – 2018	**ICBC Standard Bank**	Head of Enterprise Architecture and Integration
2010 – 2015	**Barclays Investment Bank**	Lead Architect, Chief Technology Office
2008 – 2010	**Barclays Global Investors**	Lead, Enterprise Architecture group
2004 – 2008	**Marks and Spencer**	Lead Technical Architect
prior to 2004	***consultancies including:* Logica, Sybase Professional Services, Cap Gemini Ernst & Young, and Praxis**	Consultant / Technical Architect

Vitruvius Consulting Services   *Various Contract Engagements*

Nick has undertaken a number of contract architect roles through his company, Vitruvius Consulting Services, including the following.

Mastercard / Vocalink   *Contract Product / Solution Architect*

Nick is currently working for Mastercard / Vocalink, which designs, builds and operates the UK's national payments infrastructure, and provides payment solutions for scheme operators around the world.

- He worked as a Product Architect for Vocalink's Faster Payments product, IPS, on a programme to implement their real-time payments solution for TCH, which operates the core US payments system infrastructure. Nick produced the architecture and design documentation for the client, based on workshops with business and technology SMEs in Vocalink, Mastercard and TCH, and inspection of 10,000 lines of Erlang source code.
- He produced a solution design for a bespoke extension of IPS for another of Vocalink's customers in the Far East, and is supporting the development team in its build and deployment.
- He is the solution architect for a programme to implement Vocalink's batch payments solution, BPS, for P27, a consortium establishing a payments infrastructure for Denmark, Sweden, Norway and Finland. The

solution will integrate with value-added networks including SWIFT and SIANet, and maintain running liability totals throughout the day.

Paysafe   *Contract Enterprise Architect*

Nick worked as an Enterprise Architect for Paysafe, which offers a wide range of B2B and B2C payment services to customers, merchants, and payment processors.

The company has grown substantially through acquisition and merger, which has resulted in duplication and inefficiency across the systems landscape. Nick developed a detailed capability model with senior business stakeholders, focussing initially on real-time and post-authorisation risk management, and is mapping these capabilities to internal systems and to external services. The information gathered is being used to identify opportunities for application rationalisation, simplification and consolidation.

ICBC Standard Bank   *Head of Enterprise Architecture and Integration*

Nick joined ICBC Standard Bank as their Enterprise Architect, and the role soon expanded to cover three areas of responsibility: enterprise architecture, solution architecture, and enterprise integration.

Enterprise Architecture: Nick was responsible for driving initiatives to simplify and consolidate the Bank's application portfolio. He worked with senior business and technology stakeholders, across all functional domains and asset classes, to:

- understand business goals, business capabilities and the existing system and data landscape
- define, articulate and ratify the front-to-back target-state enterprise architecture
- define, articulate and ratify the roadmap to take the Bank to the target-state.

Nick's enterprise architecture oversight ensured that major change programmes for business transformation, business growth and production stabilisation aligned with the Bank's strategic goals and priorities.

Solution Architecture: Nick managed a team of solution architects assigned to major change programmes including:

- Selection and implementation of an Enterprise Data Management platform, and its rollout to the Bank's systems for risk management, financial management, client management, and trader supervision
- Implementation of a strategic service for regulatory monitoring and reporting, initially for MIFID II, and later for EMIR, SFTR and FRTB
- Implementation of a highly secure online portal, used by the Bank's clients to manage their inventory in the Bank's precious metals vault.

Nick's leadership ensured that solution architects worked effectively with major programme teams to produce sound architectural designs, and oversee and support design and implementation.

Enterprise Integration. Nick led an Integration Refresh Programme to replace the Bank's very old infrastructure for real-time integration. He ran an RFP to select a new vendor product, and oversaw a pilot project to prove the capabilities of the chosen platform before starting the full rollout.

Nick also led the ICBCS Architecture Board and ran architecture governance.

Barclays Investment Bank   *Architect for Fixed Income Rates*
Lead Architect, Chief Technology Office

Nick joined Barclays Investment Bank as the Architect for Fixed Income Rates, a new post. He was also given architecture oversight of a new Control function, responsible for reporting submissions to regulators and public trade repositories in jurisdictions in the US, Europe and APAC.

- He led the architecture design for a new service which calculated real-time prices, risk, and P&L for the bank's traders, which ensured the application was well-architected, performant, robust and scalable
- He led the architecture and design of systems to help the bank meet its regulatory requirements under US, European and British legislation, working to tight deadlines and constantly changing requirements
- He provided architectural support, guidance and oversight to Rates projects for electronic trading, trade processing, end-of-day valuation, risk and P&L, and global trade data management.

He then moved into the Chief Technology Office (CTO) as a Lead Architect, while retaining his Rates and Control responsibilities. His new remit was to help drive the Bank's disparate technologies into a more structured, efficient and effective environment from which to deliver its ambitious technology commitments.

- He worked with his CTO colleagues to define the current and future state; to draw up, ratify and oversee standards; and face off to other global Barclays teams and to vendors and external partners
- He ran the Investment Bank Architecture Board (IBAB) which reviewed and approved the architectures of important new systems, and created a detailed questionnaire for architectural review

- He set up and led the bank-wide Architecture Community of Practice (sponsored by the COTO), which brought together practicing architects to share information, ideas and knowledge.

Barclays Global Investors   *Lead, Enterprise Architecture group*

Nick's remit at BGI was to re-launch the global Enterprise Architecture team. He developed and obtained IT leadership approval for a new EA Charter. His team was international, based in San Francisco, London, the Far East, and Toronto, reflecting the varied business of BGI and the composition of the IT Group.

He and his team started to deliver on the Charter, producing an enterprise-wide system dependencies model (using a tool developed for this purpose), a vision and roadmap for integration, and policies and other architectural deliverables. Barclays put BGI up for sale in 2009, and the EA team then focussed full-time on supporting the transition to the new owner, BlackRock.

Marks and Spencer   *Lead Technical Architect*

Nick led the Technical Architects accountable for Application Services (application hosting, RDBMS, data warehouse and BI, integration, and non-production environments). The team's remit was to develop and champion strategy and vision, blueprints and architectural policies; to sponsor infrastructure programmes to provide application services; and to provide guidance, support and governance to programmes which used those services.

Nick was also personally responsible for the Integration portfolio (messaging, bulk file transfer, web services and process orchestration). His leadership of the Application Services function drove out across-the-board service improvements, and enabled projects to be developed on a robust set of application platforms more quickly, cheaply and to a high standard of quality.

Consultancy Experience   *Developer, designer, business analyst, Sybase SME, project manager, architect*

Nick carried out a large number of consultancy engagements for clients in finance, retail, manufacturing, and government, in roles as developer, designer, requirements analysts, project manager and architect.

French Thornton   *2002-2004*

- Nick took a senior role on a major programme for the Department of Works and Pensions, providing architectural support and conflict resolution between the programme and its two services suppliers.

Cap Gemini   *2000-2002*

- Nick led a team of senior architects on one of Europe's largest deployments of Siebel eFinance CRM for a major UK retail bank, to replace a number of the client's core client-facing applications which served over 12,000 users.
- Nick helped establish the Architecture function within a major European financial derivatives exchange which was undergoing a business transformation programme. He captured architectural principles from key business and technology stakeholders and used them to define the exchange's architectural vision.

Compaq Global Services   *1999-2000*

- Nick worked with a major UK bank to help define their enterprise IT strategy, based around an integrated, multi-channel, customer-focussed delivery model.

Sybase Professional Services   *1994-1999*

- Nick was a senior member of a project which specified, designed and implemented a bespoke global exposure management system for an investment bank. He captured the requirements and algorithms for exposure consolidation for the bank's financial instruments and produced the logical data model for the system. He went on to architect, design and deliver the subsystem which performed exposure calculations.
- Nick's work at Sybase gave him a strong technical underpinning in relational database management, data architecture (he became a Certified Sybase Architect) and complex systems development.

Praxis and Logica   *1984-1994*

- Nick was project manager, analyst and designer on a project to build a system for an international bank, then in liquidation, to allow insolvency accountants to run queries against the bank's historical data. He worked with the bank's remaining employees to specify and designed a system to migrate twenty

years' data from their mainframe, with provable 100% accuracy, and led a team in its implementation and support.

Published Work

- Nick co-authored the book *Software Systems Architecture* with Eoin Woods (Addison-Wesley, 2005, 2012, www.viewpoints-and-perspectives.info). The book is a practitioner-oriented guide to designing and implementing effective architectures for information systems. It is in its second edition and has been translated into Japanese, Chinese and Korean. Writing the book with Eoin gave Nick valuable insights into the process and practice of software architecture.
- He is a Fellow of IASA, the International Association of Software Architects, for whom he wrote some of the viewpoint reference material (www.iasaglobal.org).
- Nick has delivered numerous speaking engagements on architecture, for example to BCS SPA (the Software Practice Advancement special-interest group, www.spaconference.org) where he has presented since 2004.

Educational and Professional Qualifications

Churchill College, University of Cambridge   BA Hons. (2:1) Pure Mathematics

University of Manchester   MSc Computer Science

Engineering Council UK   CEng (Chartered Engineer)

British Computer Society   FBCS (Chartered Fellow of the British Computer Society)

Personal Interests

Nick plays first violin for the Kingston Chamber Orchestra (www.kcomusic.org), for whom he is also the webmaster. The orchestra performs regularly in Kingston and tours abroad every other year.

Nick is Safeguarding Governor, and Chair of the Finance Committee, at Oliver Goldsmith Primary School in North West London, having previously served as Chair of Governors at the school for 8 years.