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 ICBC Standard Bank, Barclays Investment Bank, Barclays Global Investors and Marks and Spencer.

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 recent 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 throughout the project lifecycle, from concept to implementation.

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

2018 – present	**Vitruvius Consulting Services**	Various architecture engagements
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

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 major 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, which was then extended to other regulatory regimes such as EMIR, SFTR and FRTB
- Implementation of a highly secure online portal, which the Bank's clients used to manage their precious metals inventory in the Bank's recently-acquired precious metals vault.

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

Enterprise Integration. Nick led an Integration Refresh Programme to replace the Bank's legacy infrastructure for real-time integration. He ran an RFP to select a new vendor product (IBM Integration Broker), and oversaw a pilot project to prove the capabilities of the chosen platform before starting the full rollout. The new service will deliver significant improvements in cost, time to market and agility for all major programmes which include a significant integration element.

Nick also led the ICBCS Architecture Board, ran architecture governance and worked to promote and develop the role and practice of architecture within ICBCS Technology.

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

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

- 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 regulatory 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. By running structured architecture reviews, and rigorously following up actions, he ensured that applications were designed, built and maintained to high levels of quality.

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. His achievements in this role included the following.

- He worked with his CTO colleagues to define and document 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 and rolled out a comprehensive 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 with the following accountabilities:

- drawing up and agreeing the vision and roadmap for all areas of IT
- providing architectural oversight and guidance to IT projects and programmes
- supporting key investment decisions and helping to shape and align the major programmes of work
- fostering innovative solutions to complex business problems.

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). In his time at Marks & Spencer his personal achievements included the following:

- he developed the Integration Strategy and Vision for Marks and Spencer, ratified it with the IT Leadership team, and championed it across the IT Group
- he carried out a service "health check" of the M&S BizTalk integration infrastructure, and developed a roadmap for the implementation of a new messaging service
- he led the specification and selection of a product for stateless messaging (IBM WebSphere Message Broker), and provided architectural sponsorship and oversight to the implementation programme
- he provided architectural guidance, support and governance to major programmes including stores transformation, the new M&S consumer website and the implementation of SAP Finance.

Nick's 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 undertook a Corporate Information Strategy study for a major government department, which, as part of its drive towards 'joined-up government,' was exposing services to the public through the Government Gateway. He developed an information architecture framework and a roadmap for its implementation.
- 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 main software and services suppliers, IBM and EDS.

Cap Gemini *2000-2002*

- Nick led a team of senior architects on one of Europe's largest deployments of Siebel eFinance CRM software for a major UK retail bank, to replace a number of the client's core client-facing applications which served over 12,000 users. After defining the data and integration architectures, Nick went on to lead the team which designed, developed and deployed the batch integration solution and various other sub-components. Nick's work helped ensure that the transition to the new platform went smoothly and successfully, with no impact on customer service or data quality.
- 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.
- He developed the non-functional requirements and solution architecture for what was then Europe's largest Windows NT-based PeopleSoft deployment, at a UK building society.

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 developed the replication architecture for an international provider of commercial information, which had to atomically replicate multi-transactional "units of work." He captured the architectural requirements, and produced a logical and physical architecture, built on Sybase Adaptive Server and Replication Server.
- Nick carried out a large number of small technical consultancy engagements, such as: advising clients on Sybase installation, configuration, performance and tuning; producing or reviewing architecture and design documents; and helping clients build systems which made best use of the Sybase platform.
- Nick delivered a wide range of public training courses to classes of up to 25 students, including deep technical topics such as Replication Server and Sybase Internals.

Nick's time 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.
- Nick led a team to develop part of a message-switching system for a German press agency.
- Nick was a developer, and later product manager, for a bespoke software product for the analysis and prediction of computer systems performance.

Published Work

- Nick co-authored the book *Software Systems Architecture* with Eoin Woods (Addison-Wesley, 2005, 2012). The book is a practitioner-oriented guide to designing and implementing effective architectures for information systems (www.viewpoints-and-perspectives.info). 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, and has helped him carry out the role much more capably and effectively.
- 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.

He has swum twice for Swimathon, raising over two and a half thousand pounds for Marie Curie Cancer Care.