**Technology Lead/Head of Architecture**

**Enterprise/Solution Architect**

*Vodafone Group/Barclays Investment Bank*

**Technologies**

* **Technology Lead** for the delivery of IT and **digital technology** solutions that support business transformation programmes including **Digital Technology**, **Data, Hadoop**, **SAP,** PAAS, SAAS, IAAS, **Java, Cloud Technology**, **Hybrid Cloud**, **Amazon Web Services,** Microsoft.Net, Python, C/C++, **API, Microservices, Machine Learning,**
* Developing solutions with focus on **JBOSS,** Weblogic, **Java (Spring Framework),** Tomcat, Apache, NoSQl, **Amazon Web Services (AWS),** SQL, Hadoop, Collibra, MongoDB, MariaDB etc
* Leveraging industry knowledge to lead workshops with business and technology stakeholders to review, develop, validate and finalize an **API strategy**.

**Architecture**

* Proactively define, communicate and embed the **Enterprise Architecture** and business design principles, regularly assessing their continued relevance and value to the organisation in collaboration with other Business Solutions Architects;
* Overall accountability for development and delivery of a portfolio of **digital initiatives** in support of Procurement and Real Estate strategy.
* Co-ordinate and deliver small scale **digital changes** and projects (e.g. content, design) to achieve improved business, partner and customer outcomes.
* Work in collaboration with Head of **Analytics** to lead digital optimization (testing, **customer journeys**) to enable business priorities and delivery of improved customer outcomes
* Lead the **Strategy & EA** team engage with Senior Business & Technology Stakeholders to understand business **strategies**, and define aligned technology strategies, architectures and roadmaps to enable these.
* **Lead t**he definition of all **Platform target architectures**, **principles and roadmaps** in order to drive the health, reduce technical debt and champion continuous improvement of our platforms.
* Work with the **Change Delivery and Service Delivery** departments to identify design and **architecture resource** requirements on projects and create comprehensive resource plans to ensure that demands are met and architect / design resources are utilized in the most effective fashion.
* Analyse industry, technology and market trends to determine their potential impact on the enterprise, proactively identifying **future technology solutions** appropriate for the organisation;
* Ensure that all relevant information about the **baseline, transition and target architecture** as well as plans and roadmaps are captured in an appropriate format, stored and controlled to promote re-use and consolidation in to a single view of the truth;
* Define the overall **enterprise infrastructure architecture** and driving related IT strategy decisions through the resolution in collaboration with other Business Solutions Architects;
* **Enterprise/Solution Architect** using a wide range of IT / Business experience and technical ability to influence **Strategy, Roadmaps, Solutions** and **Designs**. Individual who upholds architecture practices, principles and technical standards and promotes **best practice** approaches.

**Cloud Technologies**

* Providing **technical guidance** and support to **Cloud & Infrastructure** Architecture team. Providing **assurance** and advise that the solutions and technologies recommended will technically deliver and meet the needs of the business and operational needs. Cloud deployment models including public, private, and hybrid; Cloud service delivery models including **infrastructure-, platform-, and software-as-a-service;.**
* Support of corporate **architecture governance** and planning to oversee all **global architecture** matters relating to a specific shared technology e.g. SAP, **MDM, Cloud Technology**, Document management, **Integration, Interfaces**, Database technology, **Application and Data Security,** Development tools and techniques.
* Provide leadership in infrastructure migration methodologies and techniques including mass application movements into the cloud including implementation of **AWS and SAP Cloud** within in large regulated enterprise environments.
* Design of client’s **Cloud environments** with a focus on AWS and SAP Cloud and demonstrate **Technical Cloud Architectural** knowledge, playing a vital role in the design of production, staging, QA and development Cloud Infrastructures running in 24x7 environments.
* Performing landscape planning of the team portfolio, transfer planning into **roadmaps**. Providing input into **networking, security, reliability, and scalability** etc as applied to enterprise-scale Cloud hosted systems

**Solution Design**

* Construct **Digital solutions** that deliver the desired objectives ensuring the agreed standards relating to the IT target architecture, IT service (availability, resilience, and performance) and organization security policies are met. Assess and communicate the **impacts, trade-offs**, risks, costs, benefits and opportunities of proposed options.
* Design of **Workspace Technology Digital solution** with focus on serving multiple distribution channels (Mobile, Web, Kiosks,) utilizing **API** approach
* Define **Strategy and Roadmaps** and develop the architectural **governance** and direction for systems, services and **Digital Architecture** to support client strategies and Goals
* Create **solutions and design** for projects to meet client standards for technology and ensure they meet our ambitions for availability, security, resilience and performance. Work with product owners, architects and platform leads to agree trade-offs between, long-term and short term goals. Support overall architecture planning and governance, contributing to reviews, **planning, budgeting** and development of architectural policies, standards and procedures as required.
* Definition of **As Is/To Be** Architecture a**dvising** on **projects/programmes/strategy**, which impact the business and the overall IT architecture and developing future state architectures and roadmaps with a regional scope and a 2-5 year vision
* Develop approved **technical standards**, and the platform design to promote reuse, make progress towards the **future state architecture**, simplify the technical environment, and reduce the cost and timeframe of development.
* Ensure that proposals and **designs** meet business objectives are fit for purpose, cost effective and meet standards and best practices and that designs can accommodate future change cases.
* Work with senior managers to further develop architecture **blueprints, strategies, patterns**, and specifications in the Architecture domain
* Ensure the **As Is landscape** for their business domain is well documented and catalogued for use in architecture, project and support activities. Catalogues include business capabilities, information objects, systems and technologies

**Data and Analytics**

* Solution Design of **Data Hub/Lake** based on **Cloudera Hadoop** technology. Also proof of concept based on Amazon Elastic Map Reduce (EMR)
* Evaluation of **Big data environments** and tools including **Hadoop Distributed File System**, Map Reduce, Cloudera, Spark, Hive etc and delivery of the future Digital products built on Big Data Platform
* Strategic direction to design solutions within **Amazon Web Services Cloud environment** with particular focus on implementation via **Dockers and Containers i.e Kubernetes**
* Work with the broader Architecture team to shape the vision, enterprise business architecture, operating model and roadmap;
* Utilising **Machine Learning** techniques to analyse high resolution financial data to identify statistically significant trading **fraud patterns** and extract predictive features. i.e identifying **anomalous** transactions to assist fraud detection
* Identifying and implementing **artificial intelligence/machine learning models** to enhance business performance
* Architect and rapidly build cost effective proof of concepts/Minimum Viable Products to test commercial opportunity for new applications within **Machine Learning**
* Leveraging **data visualization** techniques and tools to effectively demonstrate patterns, outliers and exceptional conditions in the data
* Partnering with our Data Engineering and **Business Intelligence (BI**) teams to execute the data strategy, architecture and road map that enables the delivery of **analytical insights**. Utilizing products such as **Tableau, Qlikview**, Python, Java,, Hadoop and SQL

**Experience**

**06/2019 – Present Vodafone Group**

**S4 Hana Solution Architect**

Upgrading SAP ECC to SAP S4 Hana (1809) with focus on Finance and Supply Chain Management. System landscape includes SAP Ariba, SAP Concur, SAP SucceesFactors, SAP Cloud Analytics. Responsibilities include

* Digital Architecture based on **SAP S4 Hana** platform
* **Integration of S4 Hana** to SAP Ariba, SAP Concur, **SAP SucceesFactors**, SAP Cloud Analytics and non SAP landscape
* Design and assist the **Customer with User Acceptance Testing (UAT) and Performance Testing** paying attention to transition from development and test to production phases
* Plan for future functional enhancements as evidenced in the **S4 published roadmap**
* **Gather and analyse clients' business** and functional specifications using the prescribed S4 methodology for translation into a detailed design document with focus on **Finance and Supply Chain Management**
* Provide support for technical requirements gathering, analysis of system landscapes, technical design, and development of interfaces
* UX Design based on SAP Fiori Architecture
* **SAP Fiori enhancements** including Extensions/Adaptability, Customisation, Personalisation’s, **Abap CDS Views**

**11/2017 – 03/2019 Barclays Investment Bank**

**Lead Technology Architect**

Lead Solution Architect working on a number of different projects to identify choices and trade-offs involved in designing and implementing solutions and proactively manage scope change **implications and risks**. Working across the **Procurement, Real Estate, Finance** and Human Capital Management stream as Lead Architect.

**Projects:**

* Solution Design for **IFRS16** project (Bespoke Solution)
* Utilising **Machine Learning** techniques to analyse high resolution financial data identifying anomalous transactions to assist fraud detection (**Hadoop/Bluedata**)
* Workspace Technology (**Digital Architecture** **Hybrid Cloud**)
* Supplier Relationship Management **(Coupa Cloud Technology)**
* SAP Concur Travel & Expenses (**SAP Cloud Technology)**
* Real Estate Data Hub **(Cloudera Hadoop/ Amazon EMR)**
* SAP S/4 Hana Finance Implementation **(SAP Technology)**
* Capital Project Reporting Tools (**HTML5/SQL Technology)**
* Cloud Solution Design **(Amazon Web Services Design)**
* Remediation Projects involving Infrastructure Upgrades and Design
* Develop the external and internal **API product strategy**, with focus on AWS, Mulesoft, Microservices etc
* **Cloud Solution Design** **(Amazon Web Services Design)**
  + *Develop architecture blueprints and detailed documentation. Create bill of materials, including required Cloud Services (such as EC2, S3 etc.) and tools;*
  + *Design the overall Virtual Private Cloud VPC environment including server instance, storage instances, subnets, availability zones, etc*
  + *Design the AWS network architecture including VPN connectivity between regions and subnets*
* **Solution Design**: Leads the solution design, in close collaboration with the Procurement and Real Estate function teams to define the solution architecture for the end-to- Finance and & Risk CTO Document the architecturally significant aspects of the solution design within the standard artefact; including **functional, data,** deployment, testing, security, non-functional, and operational views.
* **Architectural Governance**: Provide **technical leadership** and ensures that the solution implementation adheres to the solution design.
* **Enterprise Standards Compliance**: Ensures that the solution design is compliant with enterprise standards; including Minimum Enterprise Requirements, **enterprise architecture strategy**, and **technology risk**. Collaborates closely with CTO to use the best-in-class reference architectures, technologies, and design patterns.
* **Architectural Decisions**: Drives pragmatic architectural decisions; by collaborating with stakeholders, balancing their concerns of **alternative options**, and ensuring that decisions are communicated and adhered to.
* **Architectural Risk Management:** Actively manages all architectural risks and issues; by ensuring they are communicated clearly to stakeholders and that appropriate mitigations are in-place. Escalates any critical architectural risks and issues to CTO and/or programme steering committee as appropriate
* **Enterprise/Solution Architect** using a wide range of IT / Business experience and technical ability to influence **Strategy, Roadmaps**, Solutions and Designs. Individual who upholds architecture practices, principles and technical standards and promotes best practice approaches
* Member of the **Design Authority/Architecture Council** providing guidance and thought leadership throughout the transition. Performing the **Leadership, Facilitation, Analysis** and Design tasks required to develop the Enterprise solution architecture and to ensure that it is leveraged.
* Interface to **S/4 Hana** team ensuring Procurement requirements are actively considered and incorporated into S/4 Hana solution

**12/2013 – 06/2017 Xoserve**

**Lead Enterprise/Solution Architect**

UK Link Programme - A multi-million £ SAP transformation programme to streamline National Gas networks, shippers, distributors data exchange platform into a single SAP Utility solution

Client is implementing **SAP ISU** across their business with focus on Device Management, Energy Data Management, FI/CA, GRC, Billing, Invoice and Customer Services. Providing a **SAP Solution Assurance** role including

* **Advising** on **projects/programmes/strategy**, which impact the business and the overall IT architecture and developing future state architectures and roadmaps with a regional scope and a 2-3 year vision
* Contribute to the development of the organisation’s **strategic plans by** Identifying new and evolving technologies in particular **S/4 Hana, Big Data, Machine Learning** and **IOT** which lead to commercial advantage
* Define **Strategy and Roadmaps** and develop the architectural **governance** and direction for systems, services and **Digital Architecture** to support client strategies and Goals.
* Contribute to the development of the organisation’s strategic plans by Identifying new and evolving technologies in particular around **Digital Architecture** S/4 Hana Migration.
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  + **Compare S/4 Hana Premise and S/4 Hana Cloud**. Validate implementation approach, licensing model, Implementation approach, Functional Scope etc Understand which is right approach for client needs.
  + **Evaluate S/4 Hana Cloud Editions Offerings -** Work with client to understand which edition of S/4 Hana is most suitable for business needs i.e Cloud Marketing edition, Cloud Project Edition and **Cloud Enterprise Edition**
  + **System Conversion/Migration Steps**. Review the **readiness checks steps** in S/4 Hana migration i.e Maintenance Planner, **Simplification List**, Pre Checks (SAP Notes) and Review of Custom Code
  + **Migration to Database S/4 Hana Database.** Understand technical challenges i.e correct enhancement packs, **Unicode conversion** etc.
* **Migration to Functional Scenarios.**  Evaluate S/4 Simple Finance scenario and Asset Connected software scenario.
* Member of workshops involved in defining the detailed **Finance business requirements** so that these can inform the SAP Blueprint/Explore and functional design of the system.
* Be the primary bridge between the organization's **Finance Function** and the Applications & Development consultants in the first instance and support the rest of the project team as required.
* Ensure the **As Is landscape** for their business domain is well documented and catalogued for use in architecture, project and support activities. Focus on mapping S/4 Hana business processes to target **To Be** status
* **System and Landscape Infrastructure** development with a focus on mapping business process to system capabilities, ‘**As is’ and ‘To be’**
* Evaluation of **Success Factors Leaning Management System and Performance Management Systems**. Validate business requirements and provide **architectural guidance** and advice.
* Working alongside system integrator in Implementation of SuccesFactor LMS and Performance ensuring that it meets Xoserve standard and guidelines. Also document the impacts associated with new software particularly Integration.
* Ensure timely delivery and maintenance of key architectural deliverables with specific focus on **data models (conceptual, logical and physical**), solution design and overall solution roadmap
* Leadership of critical workstream activities (including articulation and definition of **data architecture principles** and standards, technology and vendor selection process, assessment of technical options and recommendations etc) and cross workstream tasks needed to ensure architectural alignment and consistency.
* Work with senior managers to further develop **architecture blueprints**, strategies, patterns, and specifications in the Architecture domain
* Work with a team of architects and **development** leads to define and document architecture patterns and technology standards to accommodate delivery of functional requirements and meet expectations variously for usability, availability, capacity and performance, scalability, reliability, security, and business continuity.
* Providing the **Roadmap and Migration** Steps to move from SAP BW solution to SAP Hana
* Analyse, review & provide written challenges & appraisal of all delivery and **design** aspects of the systems integrator proposed SAP solution – Including early definition and analysis of any Proof of Concepts
* **Review** and challenge, where appropriate, the Systems Integrator proposed SAP design principles and **development standards** through SAP design deliverable review feedback and attendance at design workshops
* **Review** of requested changes to ensure they are suitable for implementation; clearly communicating associated **risks, issues** and opportunities to business stakeholders.
* Make recommendations and give guidance on implementation best practice for SAP – E.g. **Tools Selection**, Development, Workshops, Test & Cutover phases etc
* Close collaboration with Analysts, Developers, Architects to ensure **Architectural consistency**, Integrity, and compliance with workstream specifics and Xoserve standards and guidelines
* Review, assure and influence development, test and deployment activities to ensure that these are fit for purpose, traceable to **business requirements** and in line with quality expectations
* Advise business and applications stakeholders on syntax, semantics, usage, governance, quality and architectural impacts of data architectures, compliance with such and impact of changing and evolving requirements

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| **Client** | **Role** | **Dates** |
| Sandvik Mining Ltd | Lead Enterprise Architect | 04/2013 – 10/2013 |
| Thames Water | Enterprise/Data Solutions Architect | 09/2012 – 03/2013 |
| Boots Plc | Technical Design Authority | 09/2011 – 03/2012 |
| Astra Zeneca Pharmaceuticals | Technical Architect | 03/2011 – 09/2011 |
| Siemens Metering Services | Technical Architect | 09/2010 – 02/2011 |
| Birmingham City Council | Solution Architect | 10/2008 – 09/2010 |
| Jaguar Land Rover | Enterprise Architect | 04/2008 – 10/2008 |
| Birmingham City Council | SAP Master Data Management Architect(MDM)/CRM Architect | 10/2007 – 02/2008 |
| Centrica(British Gas Business) | CRM Architect/Data Architecture | 10/2006 – 10/2007 |
| Capita Insurance Services | SAP CRM Techno/Functional Consultant | 06/2006 – 10/2006 |
| Cemex UK | SAP CRM Functional Consultant | 02/2006 – 06/2006 |
| B&Q Retail Organization | SAP CRM Consultant | 09/2005 – 02/2006 |
| RS Components Ltd | SAP CRM Technical Architect/Consultant | 06/2004 – 09/2005 |
| Deloitte | Management Consultant | 03/2001 – 06/2004 |
| IBS | SAP Consultant | 01/1998 – 03/2001 |

**Employment History**

**Independent Consultant Principal Consultant Jun 2004 - present**

**Deloitte Consulting** S. Management Consultant Mar 2001 – Jun 2004

**Extraprise Ltd** Senior Consultant Apr 2000 - Mar 2001

**IBS Consulting** Senior Consultant Jan 1998 - Apr 2000

**Heartlands Hospital** Analyst Programmer Aug 1997 – Jan 1998

**Volvo Truck & Bus** Analyst Programmer Dec 1995 - Aug 1997

**EDUCATION**

1992–1993 University of Birmingham,

**MSc Computer Science**

1989-1992 University of Birmingham,

**BSc (Hons) Chemical Engineering**