THE UNIVERSITY OF MANCHESTER

PARTICULARS OF APPOINTMENT

PROFESSIONAL SERVICES

DIRECTORATE OF IT SERVICES

DIVISION OF ENGINEERING

LEAD TECHNICAL ARCHITECT

VACANCY REF: PSX-023288

Salary:	£57,696-£68,857 per annum depending on experience
Hours:	1 FTE
Duration:	Permanent
Location:	Oxford Road, Manchester

Enquiries about the vacancy, shortlisting and interviews:
Email: alex.goffe@manchester.ac.uk

Overall purpose of the job

The Lead Technical Architect proactively and holistically leads and supports enterprise architecture activities that guide the development and management of technical and infrastructure solutions. These solutions enable the University's future-state business capabilities and drive its targeted business outcomes. The Lead Technical Architect will provide organisational leadership, facilitation, analysis and design around the development of the University's technical and infrastructure architecture. The postholder will also develop target-state guidance (e.g. standards, guidelines, platforms, configurations, etc.) that will meet the ends of a continually evolving technical infrastructure. They will enable and orchestrate the delivery of the University's business outcomes through facilitating and making technical decisions.

The Lead Technical Architect will be a key member of the divisional leadership team, providing strategic direction, anticipating challenges, driving performance and building the capability required to ensure secure and robust technical solutions and supporting infrastructure.

Key responsibilities, accountabilities and duties
Strategy, architecture and planning

- Works with other enterprise architects (e.g. business, data, security architects, etc.) to analyse enterprise business context (business strategy and trends), as well as change requirements in other enterprise architecture viewpoints (such as business, information and solution) to derive the future-state technology architecture.

- Leads development of architectures for complex technical solutions, ensuring consistency with specified requirements agreed with both external and internal customers. Takes full responsibility for ensuring that architectures balance functional and non-functional requirements for the University.

- Leads the analysis of the current technology environment to detect critical deficiencies, legacy and technical debt and recommends solutions for improvement. Drives digital innovation by leveraging innovative technologies and approaches to renovate, extend and transform the existing core technology base and IT estate.

- Establishes policy and strategy for the selection of solution architecture components and takes responsibility for the strategy and methods used in implementing a solution architecture in a significant area of the University. Manages the University's technical strategies, policies, standards and practices, ensures that they are applied correctly, and promotes consistency.

- Co-ordinates design activity, for solution architecture components, promoting the discipline to ensure consistency. Ensures that appropriate standards (corporate, industry, national and international) are adhered to.

- Takes responsibility for the technical integrity of solution designs, ensuring that reusable elements are recognised and that work is not unnecessarily duplicated.

- Manages or co-ordinates the solution architecture function within the infrastructure function, focusing on hosting.

- Assists with designing the governance, assurance and standards activities associated with ensuring enterprise technology architecture compliance of projects and products.

Strategic change delivery and assurance

- Within a business change programme, manages the programme's target design, policies and standards with respect to technologies and/or infrastructure. Works proactively to achieve stable, viable designs and ensure consistency of design across projects within the programme.

- Defines high-level migration plans to address the gaps between the future and current state, typically in sync with the IT budgeting or other capital planning processes.

- Consults on application or infrastructure development projects to align systems or infrastructure with the enterprise technology architecture and identify when it is necessary to modify the technology architecture to accommodate immediate or future project needs.

- Ensures that all changes are managed effectively and contributes to formal reviews and evaluations when projects and programmes end.

- Advises on appropriate quality standards and quality control processes relating to solution architecture. Ensures that quality control activities (including testing) are carried out satisfactorily. Attends quality reviews as appropriate.

Emerging technology monitoring and technical specialism

- Plans and leads the identification and assessment of new and emerging infrastructure technologies, products, services, methods and techniques and their evaluation in terms of potential impacts, threats and opportunities to the University.

- Develops guidelines for monitoring emerging technologies and collaborates with internal and external parties to facilitate intelligence gathering.

- Creates technology roadmaps which align strategic plans with emerging technology solutions and gains University commitment to their use.

- Engages with, and influences, relevant stakeholders to obtain University commitment to infrastructure technology roadmaps. Where appropriate, develops business proposals to exploit new and emerging technologies in line with the IT strategy.

- Provides emerging technology insight and expertise to contribute to the University's medium and long-term technology strategy.

- Keeps in close touch with and takes a leading role in contributing to current developments in technical/solution architecture for Infrastructure within the University and external professional networks. Is fluent at articulating best practice and is a recognised authority in solution architecture for Infrastructure.

- Maintains knowledge of technical and infrastructure architectures at the highest level by representing the University at conferences and seminars; meeting and maintaining contact with other professionals involved in solution architecture; and through taking an active part in appropriate professional bodies.

- Provides organisational leadership and guidelines to promote the development and exploitation of solution architecture as a discipline within the University. Initiates and authorises release of quality standards and policies relating to technical and infrastructure architecture.

IT Services responsibilities, accountabilities and duties

- You will be expected to demonstrate a commitment to the IT Services Practice Charter and the University's values. The University of Manchester values a diverse workforce and welcomes applications from all sections of the community.

- You may from time to time be required to undertake other duties of a similar nature as reasonably required by your line manager.

- Be available to provide leadership for priority incidents when the need arises which could be outside of standard hours.

- **Person specification**

Experience/education/qualification background:	• Minimum five years of design and implementation experience in IT, with a deep knowledge in a minimum of two of the following (or similar) technical disciplines: infrastructure and network design, application development, application programming interfaces (APIs), middleware, servers and storage, database management and operations, clustering technologies, virtualization, cloud technologies, and Active Directory and protocols. • Solid understanding of product management, agile principles and development methodologies and capability to support agile teams by providing advice and guidance on opportunities, impact and risks, taking account of technical and architectural debt. • Demonstrable ability to understand the long-term ('big picture') and short-term perspectives of situations and how they related to achieving targeted business outcomes. • Experience of applying multiple technical solutions or alternatives and estimating their financial impacts to enable future-state business capabilities that drive targeted business outcomes. • Capable of researching, analysing and capitalising on the functions and capabilities of existing, new and emerging technologies. Desirable qualifications: Advanced ITIL, TOGAF, IASA

Competency (Professional, technical or behavioural)	Level	Essential	Desirable
Inclusive Leadership: Able to encourage and inspire others to act inclusively, to engage and value the diversity of thought	Expected behaviour	X	•

and background within and beyond their teams and practice an inclusive approach.			
Infrastructure architecture: The frameworks and principles on which networks, systems, equipment and resources are based both on premises and cloud-based.	Expert in	X	•
Operational/service architecture: Knowledge of the IT/IS infrastructure and the IT applications and service processes used within own organisation, including those associated with sustainability and efficiency.	Expert in	X	•
Product evaluation and selection: The analytical comparison of IT products against specified criteria (including costs) to determine the solution that best meets the business need.	Expert in	X	•
Proof of concept and prototyping: Performing a proof of concept or prototyping exercise to demonstrate or evaluate the feasibility and potential benefits of applying a particular technological business change in order to meet a business need.	Expert in	X	
Applications systems: Technical or functional understanding of Commercial Off-the-Shelf (COTS) applications and/or other bespoke software deployed within the organisation in order to provide system configuration, audit, technical, and/or functional support.	Expert in	X	
Development approach: Understanding and application of different development approaches e.g. iterative/ incremental methodologies (Agile, XP, TDD, SCRUM) or traditional sequential methodologies (Waterfall or V-Model). Irrespective of development methodology a DevOps approach may also be taken where development and operational staff work collaboratively.	Proficient in	X	
Service delivery economics: The economics of service delivery, such as the cost per service line in terms of hardware, software, and manpower used to deliver the service.	Proficient in	X	
Stakeholder engagement: Establishing relationships, analysing perspectives and managing stakeholders from a variety of	Proficient in	X	

backgrounds and disciplines. Adapting stakeholder engagement style to meet the needs of different audiences. The identification of key business stakeholders and an assessment of their level of power and interests, and their perspectives to inform the way(s) in which they should be considered and managed.			