Job Description: STP Business Analyst

Job Title: STP Business Analyst
Company: X-Lab Ltd, Leeds, LS2 9DF
Starting Date: 1st April, 2019
Duration: 2 Years (Fixed term)
Package: Competitive Inc. pension

About X-Lab

X-Lab Ltd are based in Leeds and are changing healthcare with intelligent software solutions. Formed in 2006 by staff and students from the University of Leeds, our company has built a national reputation for successfully delivering ground breaking digital health within the UK NHS, the private sector and on an international scale. Our innovations focus on designing digital solutions that transform healthcare through challenging the way its providers think and work.

The drive to build digital technologies that will transform healthcare runs through the heart of XLab's company ethos. While many of our staff join us from the University of Leeds, our multidisciplinary team have varying professional and academic backgrounds and share a common passion for improving healthcare through the development of more efficient, safe and cost-effective solutions.

At X-Lab, our team are our most important asset and the success of our solutions arises from the passion, determination and skill-sharing of our diverse staff. X-Lab looks for enthusiastic, selfmotivated and organised candidates to fill our roles. Regardless of what position you are applying for, our team is made up of keen problem-solvers who are willing to learn new skills and push their limits. Communication is key between individuals and areas of the company to ensure that our solutions are progressing to their highest potential, our customers are looked after and that our team are happy.

Our office environment cultivates a strong sense of team-work and, in return, we want members of the X-Lab team to hold a strong sense of accountability to their colleagues, customers and the company. X-Lab has a relaxed office environment and productive atmosphere. From table-football tournaments to regular socials, we offer a stress-free setting for making our important work a reality

About the Role:

This role will support a number of work packages within a major programme of improvement work to our core product, the National Pathology Exchange (NPEx, see www.npex.nhs.uk) working closely with our NHS partner, The Health Informatics Service (THIS, www.this.nhs.uk) which is hosted by Calderdale and Huddersfield NHS Foundation Trust (CHFT). The Sustainability and Transformation Partnership (STP) capital funding will allow X-Lab and THIS to build on the national success of NPEx by consolidating its base and extending its coverage, scope, features and benefits to both NHS and non-NHS organisations. The investment programme will last two years and deliver major upgrades to NPEx in key strategic areas that will generate an increase in long term funding for the NPEx service and deliver transformational cost savings to the local, regional and national NHS organisations

Principal Accountabilities:

- Reporting to the STP Delivery Manager and supporting the successful delivery of the STP programme.
- Workshop facilitation: conducting meetings and presentations to share ideas and findings
- Performing requirements analysis, clearly documenting and communicating the results of your efforts.
  - Analyse data structures and information models that fit and support with complex laboratory requirements.
  - Analyse business processes and identify improvements to the NPEx service that will deliver savings and improvements to NPEx users.
- Effectively communicating your insights and plans to cross-functional team members and management
  - Work with the software developers to translate business and laboratory needs into and technically feasible software requirements and ensure that these are fit for purpose for NPEx customer.
- Manage the relationship with NPEx users to support STP activity including delivering training, outreach, engagement and supporting the NPEx User Group and forums.
- Working closely with the X-Lab team to support the range of products and services that the company provides.
- Help transform X-Lab's delivery culture and product set to being world class and well positioned to support transformation within the NHS and for international sales.

Personal Qualities and Skills

- Desirable:
  - A minimum of 2 years' experience in business analysis or a related field
  - Practical experience and knowledge of Waterfall and Agile frameworks
- Excellent organisational skills
- Strong communication, business understanding and negotiation skills are essential, both for developing and maintaining client relationships, and leading and mentoring staff.
- You will be expected to support creativity in the products under your development but must be capable of balancing innovation against the need to meet delivery targets.
- You must be an active learner, you will be expected to experiment with new and emerging approaches, and identify where and how these can be applied at X-Lab.
- Self-motivated, creative and with a strong sense of accountability

This is a fixed term position for two years based on external funding for a specific, clearly defined two year programme. X-Lab is a growing company with an ambition to develop international and UK markets and there may be future opportunities for a similar role.
You'll enjoy a fun, fulfilling and engaging work environment, with on and off the job training.

Information about the NPEx STP Programme

The following extracts are from the full NPEx STP Business Case and outline the aims and ambitions of the programme as well as the two year delivery commitment.

Requirement: The requirement is to **deliver a major upgrade** to NPEx in key strategic areas. This upgrade will position the NPEx service for significant increases in volumes (Business Continuity & Resilience) through increasing the number of laboratories, the number of pathology disciplines and the volume of digital traffic. It will also provide the necessary resilience and functionality to enable transformational cost savings to the NHS at local, regional and national levels.

Objectives:
1) **Business Continuity & Resilience** - Building out NPEx infrastructure to provide business continuity, both for NPEx as a service and also to enable cross-lab continuity to cover for laboratory failure (e.g. Leeds Pathology IT failure).
2) **Complex Reporting**
   a. Microbiology - Extension of messaging capability to enable LIMS-agnostic structured reporting of microbiology requests and results. Currently the solution is used, in the main, for Blood Sciences work. The benefits associated with further development of Microbiology would be tangible.
   b. Genetics - Extension of messaging capability to enable LIMS-agnostic structured reporting of genetic requests and results. This would deliver tangible clinical and cost savings benefits.
3) **POCTEx/GDEx** - Infrastructure and messaging capabilities to enable point of care and home care testing devices to be integrated into NHS pathology infrastructure.
4) **Non-N3** - Extension of NPEx to enable non NHS organisations and commercial or NHS partner organisations to partake in pathology messaging (whether as performers or referrers). An extension of the network outside of N3 would allow NHS services delivered through private collaborations to also benefit from the NPEx solution.

Project Management and Governance: The management and governance of the programme will be aligned with best practice described in the Treasury recommended methodology for programme management i.e. Managing Successful Programmes (MSP). The over-arching programme management will focus on the delivery of the key financial and non-financial benefits and outcomes associated with the implementation of the enhanced solution. PRINCE 2 project management methodologies will be used to manage underpinning project life cycles from start-up to closure to ensure project planning and monitoring are carried out rigorously. The project management will focus on delivery of the key enabling actions and outputs that support achievement of the overarching programme benefits and outcomes.

Market Opportunity: NPEx has a clear and unique USP in that it provides connectivity agonistically across the Pathology IT market. There is no other solution in the market that can deliver the technical capability and functionality that NPEx does. The potential untapped market size of NPEx is thought to be around eight times that of the current service provision – potentially another 80 NHS and private labs, a doubling of volumes and double again when NPEx can offer POCT integration.

STP Milestone Plan

Note: Due dates indicated here were based on a 1st July 18 start (revise for 1st Jan 2019.

Objective	Description of Action	Due
1a) Business Continuity & Resilience (Standards)	**World Class Standards** – this will include upgrades to the NPEx software architecture to incorporate the new NHS standards for GS1, HL7 FHIR and SNOMED-CT working with national bodies and, locally, with the STP funded Scan for Safety project. It will also include revising the management and delivery of the NPEx service to secure standard accreditation for software and service management processes (IASME / ISO27001) and EQA (ISO 15189, section 5:10) as well as emerging standards for digital medical devices (ISO 13485) and clinical safety (SCCI 0129/0160). Full accreditation and quality standards will be embedded into all aspects of the NPEx service.	Phase 1 (EQA) January 2019 Phase 2 (GS1, FHIR, SNOMED) July 2019 Phase 3 (ISO/SCCI 0129/ 0160) January 2020
1b) Business Continuity & Resilience (Scale)	**Resilience at Scale** – this will include upgrades to the NPEx infrastructure, hardware architecture and "fail-over" sites designed to support the planned major expansion of volumes and traffic and support high availability, comprehensive disaster recovery (DR) and business continuity (BC) processes. This will include external connectivity and continuity management for all NPEx customers. Work will include building and testing the new infrastructure and implementation of documented fully tested policies and plans. NPEx will be one of the NHS' most resilient systems. The NPEx platform is built on a geographically disperse database platform. This platform is sited across two datacentre locations to increase resilience and to cater for multiple disaster recovery scenarios and is setup as a hot/cold facility. There are a number of areas within the technology that have limited resilience and would also require manual intervention from the NPEx support team in the event of a disaster recovery situation. Investment in the local site resilience would decrease the likelihood of failure of local components whilst investment in cross-site resilience would improve the Mean Time Between Failure (MTBF) of the whole solution. With investment in newer technology THIS would be able to architect out the requirement for the majority of manual intervention from the NPEx support teams, thus enabling a reduction in the Recovery Time Objective (RTO) that is currently achievable.	Phase 1 (design) January 2019 Phase 2 (hardware) July 2019 Phase 3 (Testing) October 2019 Phase 4 (full end to end BC and DR) April 2020
Complex Reporting (Microbiology)	**Complex Results Reporting** – this new NPEx module will include the functionality to support new data models for the structured reporting of microbiology, histopathology and genomic results that are typically managed through paper or pdfs due to their complexity. The work will include engagements with LIMS suppliers and at local, regional, national and international (e.g. with SNOMED) levels to establish working models that	Phase 1 (design/engag ement) January 2019 Phase 2 (core architecture) April 2019

	solve local reporting and interface challenges and scale to national NHS solution.	Phase 2 (live pilots Microbiology) July 2019 Phase 3 (full national service) January 2020
Complex Reporting (Genetics)	This will extend the NPEx complex reporting solution developed for Microbiology to Genetics and other disciplines to provide 100% NPEx coverage of all pathology disciplines.	Phase 1 (genomics complex reporting extension) April 2020
POCTEx/ GDEx	**Point of Care Integration** – this new NPEx module will include functionality to integrate point of care devices to electronic patient records systems through the quality management control of the pathology labs. The solution of linking point of care devices through proprietary and vendor neutral links to NPEx and local labs was developed with Philips and previewed at the WHO Forum in Geneva. The work will involve two or more pilot implementations locally (to include the Vanguards and care homes) which establish end to end connectivity through NPEx and a new set of user interfaces for the "fleet management" of POCT devices which incorporates quality management standards and procedures that will help the pathology lab manager oversee and manage the digital data flows.	Phase 1 (core architecture) April 2019 Phase 2 (live pilots) October 2019 Phase 3 (full national service) June 2020
Non N3	As part of the NPEx delivery model, there is a requirement to offer services to non NHS customers who may or may not reside in the UK. The current solution involves configuring devices, couriering them to the customer location and requiring the customers to install them on their network. This can cause a number of issues for the customers which can delay the solution being deployed, including ITIL Change Management Processes, Information Governance requirements, Cyber Security clearances and the installation of the NPEx device into the customers secure computing/data centre facility. Through the use of alternate technologies such as Amazon Web Services or Azure hosting it will be possible to negate the requirement to ship the devices to the customer localities so they can link into NPEx and instead bridge the gap using these technologies. This would require improving the connectivity, security and bandwidth into these services and the resilience of the links into them.	Phase 1 (core architecture) April 2019 Phase 2 (testing) October 2019 Phase 3 (full national service) June 2020