

NHSBT Board Meeting
28 March 2019

ICT Way Forward

1. Status – Official

2. Executive Summary

This paper sets out a proposed way forward for ICT following the halting of CSM and following completion of the first 60 days as Interim Technology Director. The paper sets out:

- several working assumptions that are being used to drive ICT activity in the short term;
- a set of immediate ICT priorities that have been agreed with the Executive team;
- several key questions that need to be answered beyond these immediate priorities.

The paper also proposes an approach to resolving the key questions – the inception of a technology strategy project that will develop the technology strategy, direction and road map for Blood Systems beyond these immediate priorities.

It is envisaged that the project will require a mix of internal and external resources for both capability and capacity.

It is proposed that a professional services firm with a strong track record in technology strategy development (rather than sourcing external contractors) is engaged to work alongside internal resources. We have not yet engaged with potential suppliers but envisage that the project will take between 3-4 months to complete, from the point of supplier engagement, at a cost of between £300-500k.

3. Action Requested

The Board is asked to:

- **confirm the working assumptions and immediate ICT priorities that have been developed with the NHSBT Executive;**

- **review and feedback on the key application questions, that the NHSBT Executive have identified, that need to be answered to develop the broader technology strategy, direction and road map;**
- **confirm the proposed approach (sourcing, resourcing and anticipated cost) to delivering this work that has been agreed with the Executive.**

4. Background

The halting of CSM leaves several key residual ICT issues that need to be addressed:

- a sizeable infrastructure requirement, for infrastructure that would no longer have been required had CSM delivered on its original scope;
- high demand for new application functionality, to deliver on requirements that were due to be met by CSM, and on the backlog of requirements that could not be met as all organisational focus was on CSM;
- the technology portfolio has become more fragmented, and costly to support and maintain, as further applications have been added to our architecture, without any legacy decommissioning;
- ICT resource levels in key areas are not well aligned to the resulting architecture and portfolio of demand.

This paper sets out a proposed way forward against this background.

5. Proposal

This paper sets out a proposed way forward for ICT following the halting of CSM and following completion of the first 60 days as Interim Technology Director. The paper sets out:

- several working assumptions that are being used to drive ICT activity in the short term;
- a set of immediate ICT priorities that have been agreed with the Executive team;
- several key questions that need to be answered beyond these immediate priorities.

The paper also proposes an approach to resolving the key questions – a technology strategy project that will develop the technology strategy, direction and road map beyond these immediate priorities.

6. ICT Working Assumptions

The following working assumptions have been developed with the Executive Team, and it is proposed that they will be used to guide ICT activity in the short-term.

- We now require a range of upgrades to current applications and infrastructure, that we previously expected to be replaced by CSM. These are essential to safeguard the organisation's core technology.

- Central to this is the requirement to safeguard Pulse, which we now expect to continue to use, some or all, for (at least) the next 5 years
- Some on-prem (rather than cloud) hosting/infrastructure will be required for Pulse as significant architectural work would be required to move Pulse to the cloud.
- Consequently, we will need ongoing data centre capability beyond the life of our current SCC contract.
- We will not assume that any new projects/developments use, by default, the existing technology (platform) strategy.

7. Immediate ICT Priorities

Based on the working assumptions outlined above, and a review of in-flight projects, the following immediate ICT priorities have been developed with the NHSBT Executive and, are now being used as the basis of the technology portfolio moving forwards.

- Ensuring that (some, or all) Pulse can support the business for at least the next 5 years:
 - workspace remediation;
 - hardware upgrades;
 - further upgrades as needed, for example, Mimer and Open VMS.
- Confirmation of the ICT Infrastructure programme outlined in the Infrastructure Board paper in November 2018, namely the:
 - Data Centre Programme;
 - Local Infrastructure Programme;
 - Desktop Refresh programme.
- Upgrades of other key applications
- Improvements to our information and cyber security capability.
- Identifying opportunities to improve employee/end-user experience.
- Delivering several key business projects such as session solution and ODT Hub.

8. Key Technology Strategy Questions

NHSBT experience with CSM, and some of the technology issues that emerged on the programme, raise several questions that need to be resolved to determine the technology roadmap beyond the immediate priorities outlined above. Central to this are key application choices that need to be made for Blood systems, particularly Microsoft Dynamics and Pulse.

Microsoft Dynamics

Key questions that need to be answered include whether:

- a commercial off the shelf software CRM solution (and, more specifically, Microsoft Dynamics CRM) is a good fit for NHSBT requirements
- a commercial off the shelf software ERP solution (and, more specifically, Microsoft Dynamics Operations) is a good fit for NHSBT requirements
- there are better alternative solutions in the market

Whether NHSBT have used Microsoft Dynamics CRM effectively to date also needs to be assessed - in terms of the balance between configuration and coding, the integration approach and whether the Software as a Service solution (and Microsoft's 'Evergreen' strategy) is the right one for NHSBT? This analysis will also allow us to understand whether there is any potential to make use of any of the part-developed CSM code.

Pulse (Savant)

Key questions that need to be answered centre on Pulse's potential for supporting NHSBT requirements beyond our current 5-year assumption. Areas to be assessed include Pulse's current use and limitations, additional functionality that may be available, and whether, if re-architected, Pulse (or some elements of it) could have a place in a future architecture. Risks of continued Pulse use will also be assessed, both potential technology and supplier (size, stability, key person/succession) risk.

General

Notwithstanding the fact that these are, primarily, key application choices for Blood, we will need to understand the interdependencies and implications of Blood's choices for, ODT Hub (Microsoft Dynamics) and Tissue and Eye Services (Pulse).

Central to this work will be the question of affordability, both in terms of potential future development (and the business case for this) and in terms of the maintenance and support costs of solutions that are already live.

9. Proposed Technology Strategy Approach

The inception of a technology strategy project (primarily focused on Blood) is proposed to answer the questions outlined above, encompassing:

- confirmation of broad Blood business requirements (current and emerging);
- assessment of current Blood applications/solutions and their capability to meet these requirements;
- assessment of alternative Blood applications/solutions;
- confirmation of recommended solutions architecture (middleware and integration approach);
- confirmation of infrastructure/hosting strategy (cloud, on-prem, hybrid);
- consideration of the operational support needed and the total cost of ownership of solutions

The project's objectives will be to establish a revised technology strategy, direction and road map.

It is proposed that the project will require a mix of internal (solution architects and experts on current applications) and external resources. External

resources are required for both capacity (most ICT resources are fully engaged in delivery of the immediate priorities) and capability (technology strategy development and solution expertise).

It is further proposed that a professional services firm, with a strong track record in technology strategy development (rather than sourcing external contractors) is engaged to drive this work, working alongside key internal resources. No engagement has yet taken place with potential suppliers, but it is expected that the project will take 3-4 months to complete from the point of engagement of the professional services firm, at a cost of between £300-500k.

There may be some benefit in the chosen supplier providing ongoing delivery assurance through the delivery of the resulting road map. However, this has not been proposed, nor is it reflected in the above estimate, at this stage.

The Board is asked to confirm the proposed Technology Strategy approach (resourcing, procurement approach and anticipated cost) to deliver this work that has been agreed with the NHSBT Executive.

10. NED Scrutiny

None.

11. Appendices

None.

Author

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Responsible Director

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