Together we are delivering your
New Somerset Council

Interim Technology Strategy for the New Somerset Council

Version History

Version	Date	Author	Notes
0.1	18/03/22	T Beattie	For discussion at Workstream Meeting 21/03/22
0.2	01/04/22	T Beattie	Following informal mentoring session
0.3	04/05/22	T Beattie	Following Gartner interaction
0.4	05/12/22	T Beattie	Ready for Programme Board 13/12/22

Contents

About the Technology Strategy

Somerset Council's Digital Strategy sets out a case for making Digital central to how Local Government is delivered in Somerset. Though digital is not synonymous with 'IT', technology is a key enabler for a digital organisation. The Digital Strategy promotes DDaT – Digital Data and Technology – as a coherent discipline. Consistent with that DDaT approach, this Strategy is a partner document to the emerging Digital and Data strategies and sets out how information technology, as part of a digital business model, will help the new Somerset Council to achieve its strategic objectives.

Outcomes

Corporate Objectives

This version of the Technology Strategy is written before the final publication of Somerset Council's Corporate Plan. As the new authority becomes established, future iterations of DDaT strategies will show clear linkages to corporate objectives. In the meantime, this strategy supports, through a wider digital agenda, delivery of LGR, financial sustainability, and the emerging priorities and principles for Somerset Council.

User Expectations.

The technology we deploy should meet the following user expectations:

- for the user, it is simple and intuitive.
- it enables and improves business processes and working practices, rather than dictating them.
- it promotes efficiency and improves productivity.
- it delivers value for money.
- it is safe and secure.
- it is supported and available.

This strategy is in 2 parts:

Part 1 – ***Vision*** – high level, strategic guidance setting out our long-term ambition for Somerset Council.

Part 2 – ***Implementation*** - a road map for delivery; in detail up to Vesting Day, in outline beyond.

Part 1 -Vision

Until relatively recently poor technology has been holding back the public sector. Often applied piecemeal, built on poor infrastructure, procured from a marketplace monopolised by a few big players, and with IT departments viewed narrowly as a support service, IT has often under-delivered for local government. This need no longer be the case. Huge improvements in Government Digital Services and countless success stories from councils around the country and the globe show that modern technology is now able to support truly innovative, world class public services.

Many new and emerging technologies have the potential to vastly improve the way in which we serve our communities; in the quality of service we provide, the timeliness of interventions, the customer experience, and the efficiency with which we do business. Increased processing speed and computer power allows us to do more, faster; better connectivity through improved fixed infrastructure (e.g. fibre broadband) and 5G mobile coverage increases the reach of technology geographically and socially; AI, algorithms, and automation can be used to take on a huge amount of rules based, repetitive tasks, freeing up humans to do what humans do best (using empathy, judgement and emotional intelligence); the Internet of Things (IoT) and advanced data tools help us measure and then improve interactions.

The degree to which these and other technologies improve lives depends on how well we integrate them, how simple (or invisible) we make them to the users, and the extent to which we are able to personalise services. In setting up the new council structure, we must put ourselves in a position to understand emerging technology trends, and how we can rapidly exploit them.

Fixing the Plumbing

The Local Digital Declaration[1][2] 'talks about 'fixing our plumbing to break our dependence on inflexible and expensive technology'. Technological advances are creating new ways to improve the services we deliver, and the cloud has made even cutting-edge technologies comparatively cheap and readily available. SMEs and innovation start-ups now offer game changing products and services that can be incorporated with little or no reliance on on-premise infrastructure so allowing us to rethink technology, moving away from a ***legacy*** approach to a ***new technology paradigm***.

Joining authorities have all started on this modernisation journey and have used technology to support genuinely innovative service and business improvements. But legacy still exists, and as the new unitary authority forms, we face both the challenge and opportunity of keeping maintaining momentum.

Legacy *…we must move from …*	**New Technology Paradigm** *…we must move to …*
Large, costly, inflexible contracts, supplied by a few big vendors.	Cloud services offering scalable, flexible, PAYG agreements. A digital marketplace open to start ups and SMEs, driving better value for money.
Proprietary software which limits our ability to integrate with other systems	Open standards and open APIs that will allow us to integrate easily and effectively; internally, with our partners and suppliers, and with other providers.

[1] Department for Levelling Up, Housing and Communities Local Digital Declaration | Local Digital

[2] All joining authorities are signatories to the Local Digital Declaration. It is expected that Somerset Council will sign up by vesting day.

Legacy *…we must move from …*	**New Technology Paradigm** *…we must move to …*
Legacy software which is difficult to manipulate making improvements and modifications difficult.	An open and modular architecture will allow us to develop and improve systems, in response to changing user needs and the availability of emerging technologies.
Legacy IT systems which too often shape and constrain the way a service is delivered, rather than being designed for the best user experience and outcome.	User centred design enabled by technology
Single use systems that reinforce organisational siloes	Modular components that can be re-used for many purposes allowing a more flexible organisation design.
Outdated technologies.	New and emerging technologies such as robotic process automation (RPA), machine learning (ML) and artificial intelligence (AI) are used to deliver customer outcomes and operational efficiencies.
Significant on-premise infrastructure, which is costly, environmentally damaging, and drives a major operational support overhead.	Migration to the cloud will deliver cashable benefits as well improved resilience and security.
Data held in proprietary databases making it difficult and costly to exploit, share and manipulate.	Managing our own data throughout its lifecycle.

Principles and Guidance

Somerset Council's Digital Principles are designed to guide Somerset Council's development as a digital authority and have direct relevance to how we use technology.

Digital Principle	Example Technology Implication
Understand and address user needs	• Use web analytics and other available data to enhance understanding • Design in data capture and feedback loops so that real usage can be measured
Promote a digital culture	• Use common platforms where consistency will encourage participation (e.g. Microsoft) • Keep technology simple and intuitive for the user • Develop and adopt a new IT operating model
Be data driven	• Use open standards and, where possible, open source
Be Agile	• Work off clear problem statements rather than detailed requirements • Conduct discovery; Create alphas; Release Betas; Iterate live products • Develop/source in multi-disciplinary teams
Share, Reuse and Join Up	• Use open interfaces • Use standard integrations – e.g. Azure AD, Microsoft 365 • Sweat existing solutions
Focus on Value	• More ambitious use of AI, robotics and associated technologies to enable efficiencies and a better user experience. • Cloud first to allow scalability/PAYG and to reduce on-premise overheads
Be Trusted	• Design in security – don't just add on. Product roadmaps must include security testing and enhancements where possible. • Algorithms, automations and use of AI will be subject to ethical scrutiny. • Consider where you need a human in the loop.

Digital Principle	Example Technology Implication
	• Explain technical decisions plainly and clearer – and make them available to all users (unless security considerations prevents this).
Include Everyone	• Design for different channels – including analogue/face to face • Design for all devices • Design for limited bandwidth • Design for accessibility

Somerset Council will also follow gov.uk's Technology Code of Practice and Service Standard.

Operating Model

As well as conforming to the digital principles and other best practice, we must also develop an operating model that is future fit. Business as usual will not deliver the profound changes that are needed, and an unreformed IT operating model will see us stuck where we are - paying too much for poor and inflexible IT, delivering future legacy, and failing to fully exploit technology to drive improvements.

Rather than give structures and prescriptive processes, the model[3] identifies nine components where a change can bring about positive business outcomes.

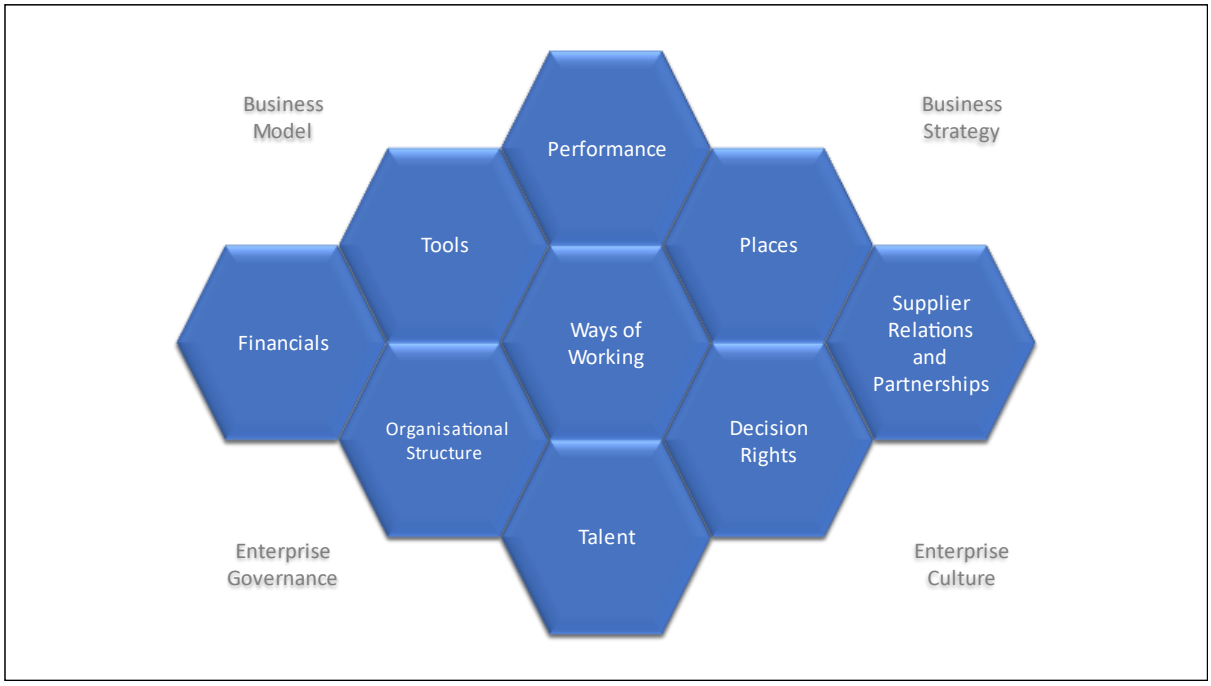


Figure 1- The nine components of the Gartner I&T[4] Operating Model

[3] Based on the Gartner I&T Operating Model

[4] Gartner intentionally use the term *'Information & Technology'* rather than IT, pointing out that *'[an] operating model that centres only on the activities if the IT organisation…will be inadequate for executing a digital strategy'*. In other words, information and technology is everybody's business, not just IT's.

Operating Model Component	Move from	Move To
Ways of Working *The methods, frameworks and processes that will be used to deliver the required I&T capabilities*	Projects, not products — mostly waterfall, with manual handoffs; efficiency and predictability are the priorities	Products, not projects — mostly agile, DevOps and continuous delivery; speed and innovation are the prioritised.
Performance *How the performance or contribution of IT will be measured and managed*	Business and IT roles are measured differently (in terms of traditional IT metrics such as on time, on budget and 24/7 availability)	Business and IT are measured in terms of shared business outcomes and metrics
Places *Where people and key assets are located, including whether these will be collocated with other functions*	Business unit and IT teams work in separate offices/locations	Cross-functional business and IT teams are collocated
Decision Rights *The rights of stakeholders with respect to decisions in key I&T domains such as architecture, investment, sourcing and applications*	Unclear or not applied consistently	Clearly defined and applied; product decisions are likely to be owned by business units, platform decisions by IT; high levels of collaboration
Talent *The people, competencies and skills needed and how they will be provided/acquired*	Specialists lacking business skills focus on technical disciplines; they are permanent employees and are augmented with temporary contract staff	"Versatilists" have a broader skills base covering technology, business, etc.; flexible talent acquisition allows for permanent/contract employees, partners, freelancers, crowdsourcing, etc.
Organisational Structure *How resources will be organized, including key roles and reporting relationships*	A hierarchical organization is built around traditional IT functions and roles	Fewer layers comprise multidisciplinary, self-managed teams drawing on business and IT resources
Tools *Tools and assets required to support or enable I&T capabilities*	Primary tools cover service management, time recording, infrastructure management and monitoring	An expanded toolset covers activities such as automated testing and release, and continuous delivery/integration

Operating Model Component	Move from	Move To
Supplier Relations and Partnerships *The approach and principles for working with external providers and partners*	Supplier management is a contract responsibility. Supplier agreements are long term and inflexible.	Different sourcing models reflects different products and goals. Relationships are actively managed by dedicated staff to get best value for money, maximum innovation and adaptability.
Financials *How I&T will be funded, and how budgets and costs will be allocated, planned, and monitored*	IT budgets are held and controlled centrally; funding is allocated to projects based on a business case; funding and allocations are determined annually.	Budgets match agile delivery, discovery, alpha and betas are funded and live product funding lines include provision for continuous improvement.

This generic model will not be adopted wholesale or overnight, but represents a start point. It will be tailored to suit the needs Somerset Council, the Digital and Data strategies and the wider Digital, Data and Technology (DDaT) operating model. Development of the model will be a key task in LGR Tranches 2 and 3.

Initial Implications

As we take advantage of the cloud to select the services we need, at the volume we need and when we need them, IT services will be more commoditised. Cloud utilities will more often be used on licence, integrated to form entire solutions. ***This means that the IT costing model will move away from Capital (CAPEX) towards Revenue/Operational Budgets (OPEX).***

Greater commoditisation will also lead to a busier and more dynamic supplier landscape. To take full advantage of the opportunities of the digital marketplace, IT contracts, licences and agreements will have to be very actively managed. This is likely to be beyond the capability of a central procurement organisation or generalist procurement officers and points to the need for ***dedicated IT Supplier Relationship Management function.***

Adopting open and modular architecture, using open source and open standards will allow us to develop and improve systems, in response to changing user needs and the availability of emerging technologies. But to do so will require the right skills and competences in the IT organisation. Consideration must be given to ***product management and systems development roles***. Without these skills Somerset Council will only be able to deploy technology it can buy and so will be at the mercy of vendors.

To create the capacity to consider, demonstrate and trial new and emerging technologies, Somerset Council should consider having a dedicated ***emerging technologies team*** as part of the IT or digital establishment. Discretely funded, this team will be able to horizon scan and develop prototypes without the constraints of BAU or operational delivery.

Part 2 – Implementation

ICT Core Programme

Activities of all the joining authorities, both BAU and transformation/project, and Local Government Reorganisation (LGR) IT activity[5], and the BAU/operational support timeline, has been collated to create a view of the consolidated ICT core programme. Detail can be found at the IT Core Programme BI Dashbord . In outline the programme consists of:

Ongoing Strategic Transformation Programmes:

- Adult Social Care
- Children's Social Care
- Cloud Migration
- Integrated Care System
- Sedgemoor Revs and Bens

LGR Sub-Workstreams:

Including Capita exit

BAU Pipeline:

Continuing support to ICT and digital output that falls below the threshold of a discrete project or LGR workstream

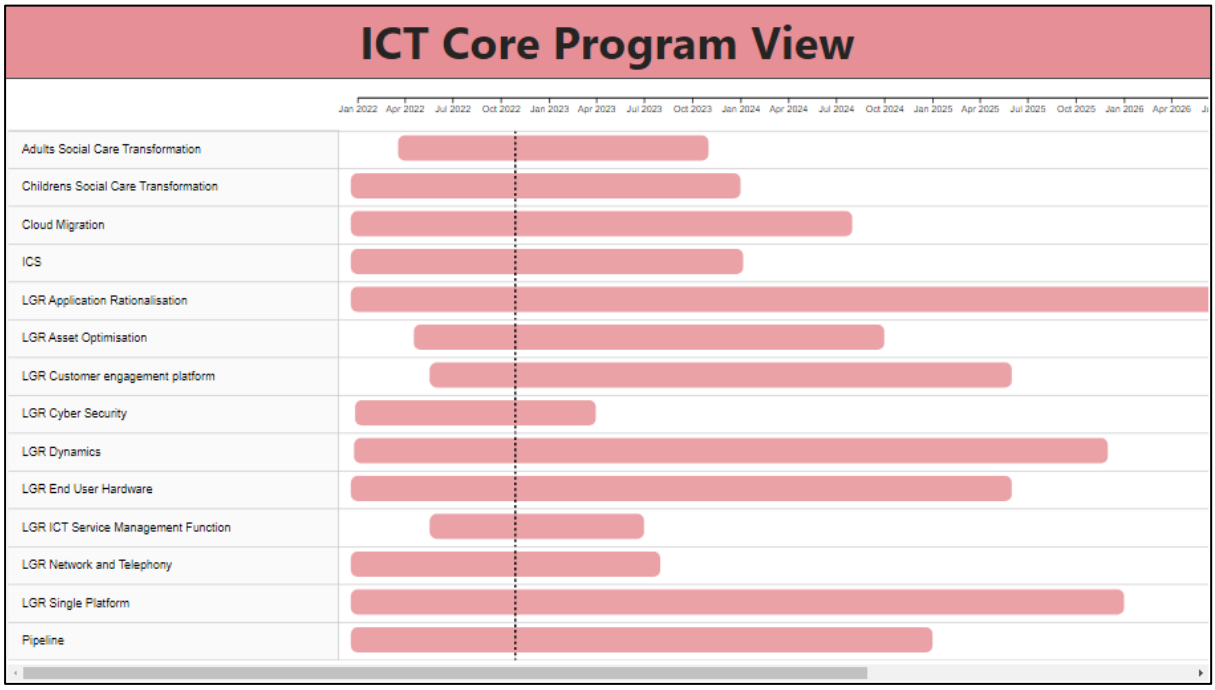


Figure 2- Snapshot of ICT Core Program View

This high-level view shows that the scale and scope of change, both within and without the LGR programme, will put considerable strain on ICT resources in the new organisation. When one considers that the IT department/team will also be reorganising itself and will take time to reach its

[5] Sub workstreams of the Technical Asset Optimisation Workstream

full capability (forming, storming, norming, performing), it is clear that the programme will have to be carefully managed and properly resourced.

LGR Tranche 1

LGR Tranche 1 has focussed on:

- ***Consolidation and Rationalisation*** - identifying opportunities to rationalise the use of multiple technologies to reduce cost and complexity.
- ***Early Implementation of New Capabilities*** - a limited number of new corporate/back-office capabilities with low business change and adoption overheads
- ***Strategy Development*** - Development of foundational strategies, policies, and guidance to shape the new IT service.

Adoption of a Single identity model and migration to a single Microsoft platform has been the key consolidation during Tranche 1. This opens up a range of other opportunities to rationalise supporting and peripheral software and tools. District HR and Payroll are migrating to SCC SAP during Tranche 1 and there is a phased adoption of the Genesys Contact Centre Platform, so that by vesting day all customer contact will be delivered on the same technology.

The most significant new capability being implemented as part of Tranche 1 is Microsoft Dynamics which will provide the unitary finance system. It is planned to achieve an initial operating capability by Vesting Day. In addition, Tranche 1 will see the introduction of systems for:

- Property Asset Management
- Legal Case Management
- Learning Management
- Building Control
- FOI/Complaints
- eRecruitment
- Electoral Management
- Health and Safety Management
- Vehicle Fleet Management

Initial governance structures and procedures have been put in place to support Tranche 1 activity. Strategic governance has been provided by the LGR Programme organisation. A Technology Gateway has been established to scrutinise new technology proposals and the In-Flight Project sub-workstream has been used to rationalise and oversee products that are already in delivery. The Apps Road Map sub-workstream has is developing a view of the current technical architectures across the 5 joining authorities and will, in later tranches, develop a future plan for investment and rationalisation.

The budgets of joining authorities are being analysed to understand the financial position on day 1 and, for reasons of both LGR Benefit Realisation and MTFP savings, costs are being constantly examined.

Extant cyber security measures and Information Security Management Systems (ISMS) have been examined with the aim of achieving standardisation for Vesting Day.

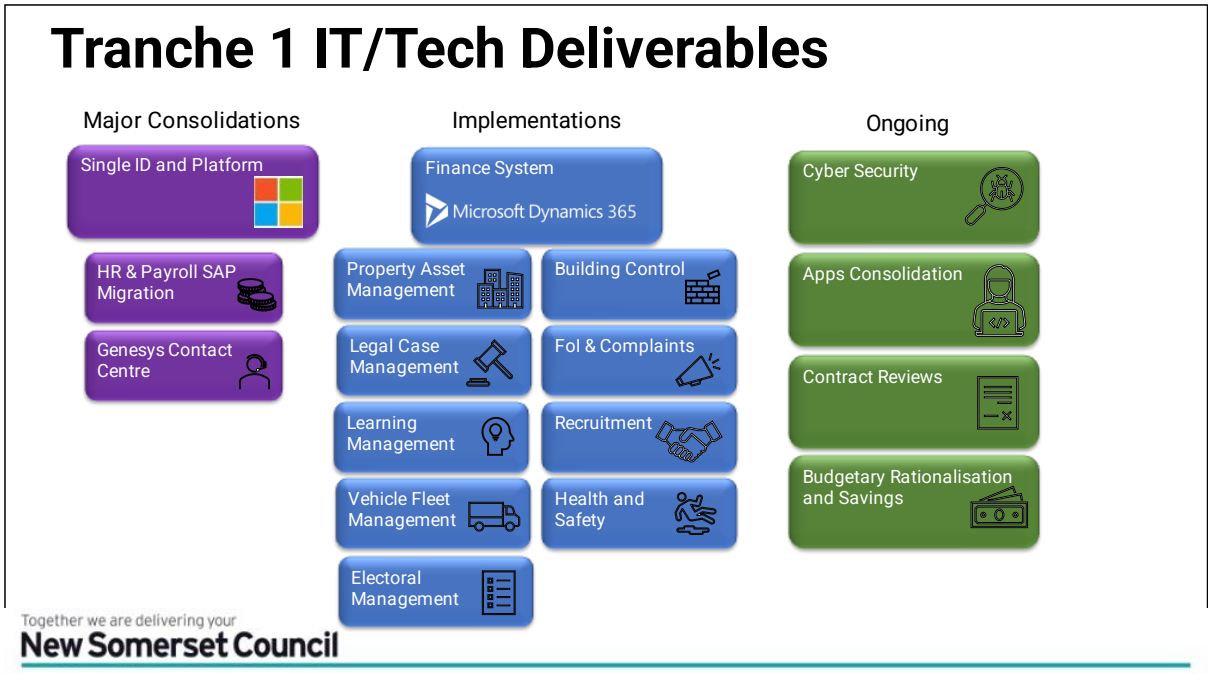


Figure 3- Tranche 1 Deliverables

LGR Tranche 2

For Trance 2 the focus will shift towards *shared platforms and services* and development of *the IT Operating Model*.

Shared Platform and Services

With all former authorities on a single platform and Somerset Council stood up as a legal entity, Phase 2 will focus on increasingly ambitious merging of IT infrastructure and application services.

The implementation of a new Customer Engagement Platform (CEP) will commence in Tranche 2. Many of the technologies that support the delivery of customer services will have critical dependencies with the CEP, so its development and progress will impact of later and more ambitious service redesign.

As the unitary authority begins to function as a single entity, there will be more scope and a greater need to develop shared services and/or consolidate existing assets. These will include:

- A single IT Service Management Tool
- Consolidated network provision
- Unified mobile device policy and management
- Closer harmonisation of information security and disaster recover policies and tools.

Development of the IT Operating Model

As the Somerset Council Business Model becomes better understood, and as Digital and Data strategies mature, the IT operation model will be developed and implemented. From the overview in Part 1 of this document it can be seen that this is a major undertaking. It will take time will need close involvement and cooperation with all business areas. Some key questions will remain unanswered until the council's business model, business strategy, enterprise governance and enterprise culture are better developed and understood.

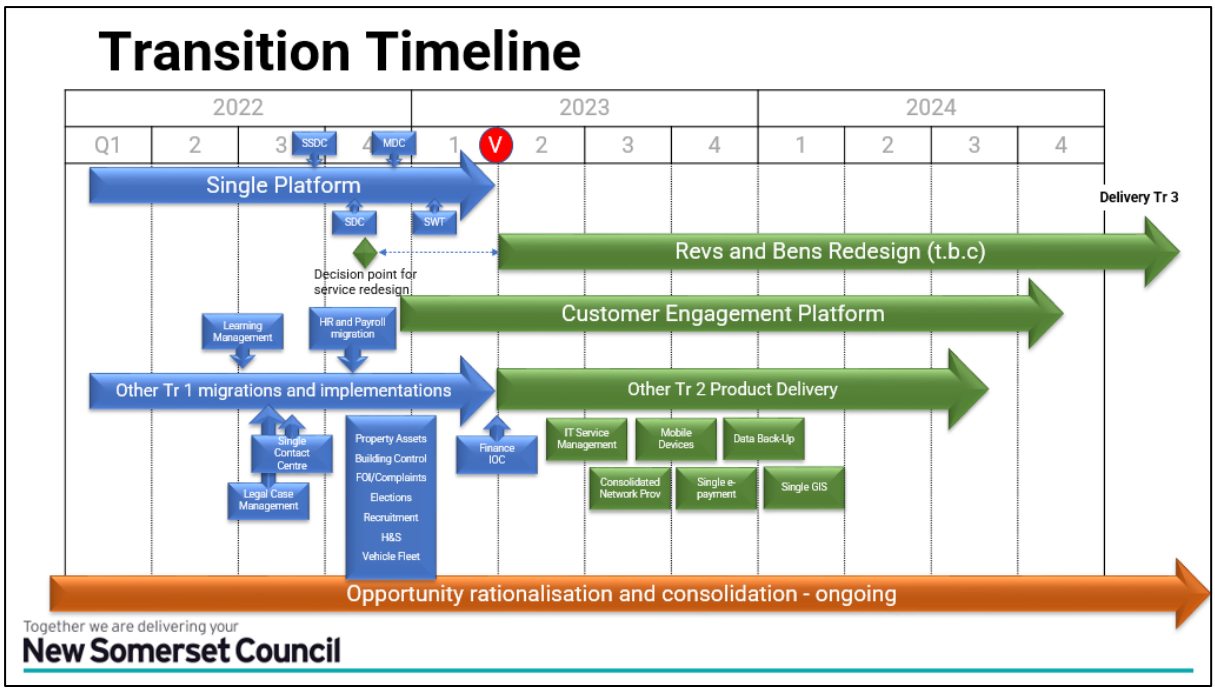


Figure 4- High Level Transition Timeline

LGR Tranche 3 and Transition

As the programme moves into Tranche 3 the future shape and direction of the council will have become much clearer allowing more ambitious ***service redesign*** and the full ***implementation of Somerset Councils Digital Vision*****.**

The pace and scale of service redesign is likely to be limited by resource and capacity. The change capacity (business and technical) of the new organisation is not fully understood and both ongoing transformation projects and the addition demand of managing legacy systems will impact. To overcome this a portfolio management approach will be required.

Collaboration and Service Plans.

In making Service Improvements Plans services should collaborate closely with technology staff. In this way plans are made with a better understanding of the technological opportunities, and technology staff have a better understanding of services areas demands and expectations. Together these will lead to more realistic and deliverable plans proposals.

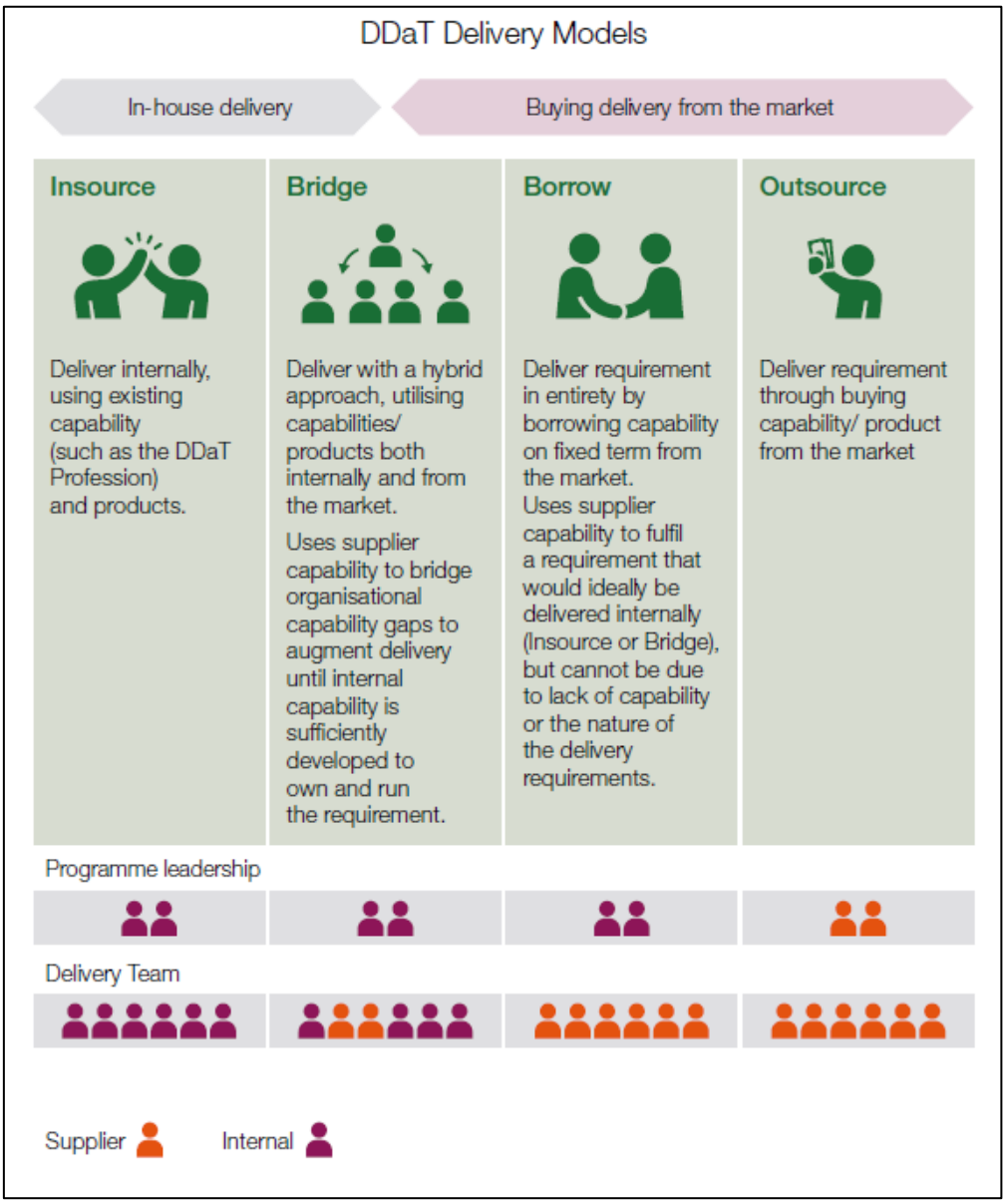
Strategic Prioritisation.

Service plans supported by realistic IT product delivery proposals will help senior leaders to prioritise. Other, non-technical factors will also be considered, resulting in a technology portfolio that delivers corporate value.

Resourcing and Delivery Models

By exploring different delivery models, resources can be better managed. The cabinet office DDaT Playbook identifies a scale along which are 4 categories of delivery model. A range of models can and should be considered – different models will suit different products and services better. However, the further towards *outsource* a delivery model is, the organisation has less flexibility, is less able to respond and adapt to user needs, and the more likely are unfavourable contract terms.

Conversely, the more in-house a deliver model, the greater is the reliance on internal resource and expertise.



Interim Solutions, Incremental Delivery and Continuous Improvement

Service improvement is not brought about only by full-service redesign. Even when full redesign is the long-term aspiration, smaller scale improvements are possible in the shorter term. In the context of LGR, rationalisation of business applications may be desirable both to bring about better business process consistency in a service area, and to reduce the cost and support overhead of having multiple applications delivering a similar or identical service.