

**Information Management and  
Technology  
Retrospective Review  
Strategy 2019 – 2022**

**Sept 2020**

## Document History

Version	Version Date	Changes
0.1	04/09/2020	First draft
1.0	10/09/2020	Colour change to clarify retrospective comment.

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*This report is a retrospective review containing updates and additional information on the delivery of the IMT Strategy 2019-2022. It corresponds to the half way point of that strategy period. The document is the original Strategy document issued in 2019 with inserted sections as per this text box. These sections appear after the original 2019 content from this point forward.*

## 2. Introduction

The Information Management and Technology (IMT) Service underpins most Lincolnshire County Council (LCC) services.

Put simply if critical IMT systems fail, public facing services will be compromised or cease altogether. Modern IT systems will enable us to deliver high quality, efficient and effective services across all our activities.

The Council has recognised the need to modernise LCC's infrastructure, personal devices and systems for some time and continues to fund a programme of work which will deliver significant business benefits during 2019.

The IMT service organisation is a mix of internal and external resources. Strategic functions remain largely in-house and our prime service provider, Serco, provides the support desk for service users, infrastructure support, solution design and project services. The service is working increasingly in a more joined up way at the strategic level. The Serco contract runs to 2022 and over this period the IMT service as a whole aims to become a more "Enabling Service" which makes more of the skills available within the IMT service, available to business managers when they are in the process of redesigning their own services or changing their processes and tools.

*The IMT Team now includes two Systems Advisor posts to form the first layer of the new Enabling Service.*

The support desk service has improved markedly over the last year, and the expected reduction in the number of high severity incidents as a result of the investment will release resources to focus on providing a high quality service and the proactive maintenance of the estate.

*The Covid Pandemic and resultant “Working from Home” directive combined with persistent difficulties with a new remote working technology have placed the Support Desk under a prolonged period of pressure which has affected call waiting times and ticket resolution times. Work is ongoing to find the root cause of the technical issues, improvement has been delivered, but work continues to improve the solution. Specialist partners have been engaged to support these efforts.*

All LCC, IMT service providers are directly or indirectly managed through the retained IMT service, which is responsible for all IMT infrastructure, application and digital services.

This IMT Strategy will set out the guiding principles for how Council technology assets and services will align to corporate objectives and desired outcomes. It will enable senior leadership to establish the service has interpreted its directions correctly. It is a high level short form document intended for leadership level decision makers and stake holders and represents only the changing elements of the service.

More detailed information is being made available on the Council intranet.

### 3. Document Lifecycle

This document describes the high level IMT strategy from 2019 to 2022 and will be reviewed annually to validate the continued alignment of IMT Strategies with corporate objectives.

*This review has been delayed by 6 months due to unforeseen additional work due to Covid.*

### 4. IMT Strategy Alignment to Corporate Priorities

#### Key Corporate Objectives

The Councils key corporate objectives apply equally to IMT as to all other Council business areas:

Improve citizen outcomes

Ensure accountability

Deliver high quality services

Maintain a balanced budget

#### Business Priorities for the IMT Service

Stakeholder engagement has identified the following key corporate priorities for the IMT service, which will enable the Council to achieve its business objectives.

Priority 1

Become brilliant at the basics through Modernisation

Priority 2

Support business efficiency through Optimisation

Priority 3

Support the business in Transformation

## 5. Priority 1 - Become Brilliant at the Basics through Modernisation

The 3 highest priority areas for the Council IMT service are:

- A. Address known recurring high impact service issues.
- B. Deliver high performing and reliable IMT services and devices.
- C. Empower staff to exploit the full value of IMT services, devices and technology.

### Business Impacts of Not Being Brilliant at the Basics



### Brilliant at the Basics through Modernisation

To become brilliant at the basics, IMT will continue the existing refresh work programme and the migration to cloud services as part of the Modernisation work stream.

The **Modernisation work stream** will focus on:

- A. Resolution of known issues impacting day to day operations.
- B. Remove technical debt and establish a reliable baseline IMT service with high performing services, applications and devices.
- C. Build the foundation for a platform to support ongoing business improvement.

## Summary of Modernisation Work stream

The following key projects sit in this work stream:

- The upgrade of the **Identity Service**, used to verify the identity of users logging on to the network and Council applications, will ensure a 'single sign on' experience as services migrate to the Cloud

*Delivered, Cloud single sign on delivered with minimal interruption to users, Directory services are currently operating in hybrid mode with Microsoft Azure Directory Services which will deliver a seamless experience as the remainder of the Office 365 migration is completed.*

- The adoption of the **DMARC** email security standard will maintain ongoing confidentiality of emails between government departments as we move away from GCSX

*Delivered, DMARC Compliance achieved along with the frontrunners in the Local Govt. space. NB: 30% of public bodies have yet to complete this work. As this matures it will allow us to elevate our effective policy to reject "Unauthenticated" emails and eliminate the possibility of Spoof mail from compliant organisations email domains.*

- An extension of the **Web Access Modernisation** programme using the zScaler security service to protect against browser based cyber-attacks

*Delivered, All standard council PC's leverage this "Web Proxy" service which adds significant levels of protection from a wide range of Browser borne attacks.*

- The **Telephony Enablement** project will upgrade the Avaya software and reconfigure the underlying platform. This will extend the working life of the existing investment and address a number of issues affecting the CSC

*Ongoing, New software version released mid program required significant rework and re-planning. Additional processing capacity requirements have triggered dependencies on other infrastructure work. Project scheduled to be completed in this financial year. It remains true this should stabilise the CSC platform until 2024 and the forecast end of the existing Contact Centre operations contract. Prior to that date the Council should undertake a migration to a Cloud Contact Centre solution.*

- LFR will also be migrated to the LCC **Avaya telephony** platform to reduce the cost of replacing their current 'end of life' system

*Delivered, Ageing BT PBX telephone Switch has been replaced by the corporate Avaya capability.*

- The ongoing upgrade of the **Lincoln Campus network** is replacing ageing infrastructure and improving performance and supportability. Improved WiFi capacity will allow many more devices (including personal devices) to connect supporting staff, Councillors and visitors

*Delivered, Key central single points of failure have all been replaced and Wi Fi controllers replaced. Next project to design, plan and deliver a complex logical and physical reconfiguration is initiating to exploit the capability created during this and the Campus programme to reduce dependency on the single datacentre for key services, by splitting those loads across the Council Buildings.*

- A related project will also upgrade the **Internet Connection** to support the growing reliance on Cloud services. This includes the implementation of the new Health & Social Care Network (HSCN) as a replacement for the discontinued N3 Health connection

*Delivered, upgraded 10Gb physical external connections and connection to the replacement Health service network HSCN. This additional capacity proved critical when Covid struck as the network consumption pattern changed almost overnight to one where LCC devices were connecting from external locations requiring the capacity provisioned.*

- An investigation of the **Crown House network** is confirming the requirements for a network refresh taking into account the resilience of the telephony components used by the CSC. This project will adopt much of the design work from the Lincoln Campus network upgrade

*Cancelled: Investigation did not confirm the investment was required, a combination of some re-configuration and remediating a statistical anomaly created by a number of slow user devices in one service and location. (This was rectified within the Windows 10 programme). Some elements moved to the Telephony project.*

- The **IMP migration** project moves the Council's documents to the Cloud negating the need to replace ageing infrastructure and future work will allow full records management capability and a better user experience

*Delivered: The legacy, troublesome and instable "IMP" platform was decommissioned after its contents were migrated to a hosted cloud service which has delivered the required stability. NB: Initial performance issues proved to be related to Browser versions and other project work underway on our Web proxy technology.*

- The **Windows 10 Corporate Refresh** programme will provide staff with new, faster, lighter and more reliable laptops, and ensures we

*Delivered, This large and logistical project delivered several thousand new Notebook and Desktop Computers across the Councils entire staff of information workers. A low disruption methodology was preferred by the Council and the project was very successful in minimising the interruption to staff . In addition the project came in significantly under budget due to a combination of reduced prices, efficient process and a change in policy where multiple devices were not routinely upgraded unless a business case for multiple devices could be evidenced.*

continue to use a fully supported Windows version

- The introduction of a **Digital Platform**, which includes a rebuild of the **LCC Corporate Website**, will significantly improve the ability for local

*Delivered, After a significant delay effecting our decision, with the support of our Executive Councillor, to cancel the pre-existing project which had been in flight for over 4 years. It took less time to replace the website, working in partnership within a broader corporate project and a specialist provider, the legacy website was replaced with minimal disruption. It also delivered a revised look and feel, felt to be more “Up to date” by most. The Council decided to create a “Web team” external to the IMT Team and it proved a test case and a valuable lesson learning exercise for operating within corporate projects which will be important as we start to balance the portfolio with more Transformational projects, which by definition need significant business involvement and leadership to be successful.*

people and visitors to 'self-serve' and carry out online transactions

- **Corporate Card Payments** The provision of 'contactless' and 'chip and pin' payment methods for a broader range of Council services will be delivered as part of the

*Delivered, After delays caused by the commercial and corporate fallout of cancelling the pre-existing project which had been inflight for over 4 years, eventually a new project delivered in less than 5 months*

## Summary

Being brilliant at the basics means IMT services will be modernised and work brilliantly for our service users. Council services and business outcomes will benefit from reliable IMT infrastructure and application services and the support services to keep them working.

Recurring issues are impacting day to day service and Council productivity. This is the highest priority area for IMT to address in the short term, but will require least business engagement.

*During the reporting of this section of the IMT Portfolio, it became known as the “Fix the Basic’s” programme. This reflected the critical importance of remediating the significant risks to Council operations. With delivery almost complete, risk has been reduced considerably in key areas. The one remaining project to keep the core telephony in support remains, though for several months better stability has been delivered through operating special support procedures until the platform can be fully upgraded.*

## 6. Priority 2 – Support Business Efficiency through Optimisation

The level 2 priority areas for IMT are to:

- A. Enable collaboration between staff, Councillors and partners.
- B. Improve citizen engagement.
- C. Enable the better use of information to improve decision making.

- D. Make information more meaningful for transparency and accountability.
- E. Optimise our financial efficiency through cost engineering the solutions and services in use.

### **Business Impacts of not Supporting Business Efficiency through Optimisation**



### **Supporting Business Efficiency through Optimisation**

Optimisation refers to the introduction of new technology and capability to improve aspects of existing business service models and processes, or to improve the financial efficiency of the IMT services. In technology it typically refers to improvements and capabilities benefiting the whole Council.

Some of the capabilities deployed under this work stream could be termed transformational. However for the purposes of this strategy Transformation is defined as activities which fundamentally change business service models and processes, typically challenging historical practices and conventions in a particular business area.

The business value of technologies deployed under the Optimisation work stream will require greater business engagement, but in turn will generate greater business value.

The IMT service must assist and shape the business adoption of new services such as Office 365, which contains many new productivity tools and ways of communicating, to ensure maximum benefit is extracted from these investments.

The IMT service will further develop its collaborative working relationships with the business to deliver this goal. IMT will re-organise itself to provide business managers and leaders with better access to the skills and expertise within the IMT service. The objective is to support proposals requiring IMT work for presentation to the newly formed IMT Board.

This change will be evolutionary rather than revolutionary and is as much a cultural change as a service design change.

The **Optimisation work stream** will build upon modernisation outcomes to:

- A. Enhance Council productivity.
- B. Create organisational capacity through process automation.
- C. Improve access to services for citizens through enhancements to existing contact centre services, web channels and digital technologies.
- D. Improve the quality of management reporting and decision making through data visualisation and business intelligence.

### Summary of Optimisation Work Stream

- IMT is supporting **LFR strategic plans** for relocation:
  - To provide the technical infrastructure and capability to support LFR in occupying the new purpose built fire station in Sleaford housing 130 staff
  - To ensure services are fully tested and working as expected as the LFR Control room moves to Nettleham
  - The LFR South Park build project will provision the IMT service elements of the new shared service Blue Light Campus

*Delivered, IMT supported LFR in respect of the IMT elements of the Sleaford new build, and the new tri-service Blue Light Campus at Couth Park, working with partners from LCC Property, LFR, Lincolnshire Police and EMAS.*

- The current version of Microsoft Office will be replaced with **Office 365**. As well as access to well known apps – Word, Excel, Powerpoint – LCC staff will have access to Skype for Business video conferencing improving productivity and reducing travel. This sophisticated Cloud service will also allow content and data to be accessible to all connected devices with effortless sharing and collaboration

*In Progress, Skype was deprecated for the business market by Microsoft with Microsoft Teams becoming the next generation platform. At the outset of the Covid Pandemic a tactical project working with a specialist provider was delivered to expedite the adoption of Teams to enable the “Home working” directive. In the next phase the project plans to drive the adoption of the Office 365 “Web Apps” whilst preparing the deployment of the last software packages for the desktop versions of key applications, Word, Outlook, Excel etc.*

*Additional work has been required which has caused further delays due to the Councils devices now typically not being connected to our high speed networks but connected from homes via broadband services. Significant technical issues were encountered when attempting to migrate Lincolnshire Fire & Rescue due to their unique set-up, the deployment for LFR has had to be re-designed.*

- The introduction of **SIM Enabled Laptops** allows staff, particularly in Adult & Children's Services, to access key systems and real-time information whilst out in the field

*Delivered: Including the provision of SIM Enabled Tablets for Childrens Services field staff*

- The implementation of a **network link between LCC and the Microsoft Azure Cloud** will allow the Data Services team to build, deploy and manage workloads in the Cloud giving access to the latest **Business Intelligence** toolsets

*Delivered, in addition a route for Data access between Office 365 and Azure was created to further support the adoption of Business intelligence*

- To support the move away from GCSX, the **Symantec secure email** plug in project is the final piece of a solution which will make it easy for users to send emails securely to external recipients

*Delivered, Users now have a one click capability to encrypt a message end to end with any Email recipient*

- The **replacement of the remaining Windows 7 Laptops and PCs** during 2019 will provide numerous benefits: Windows 10 functionality, better hardware, seamless remote working, particularly for field workers, and lighter, faster and more resilient devices.

*Delivered: With significant reduction in original budget*

- As part of the **Digital Platform website** project, a number of supporting component technologies are being delivered to enable integration between the services offered and the required 'back office' systems used to process the transactions.

*Cancelled, A package of transactional forms was delivered by a corporate team external to IMT created for this purpose and there was not a business appetite to alter the existing integrations. Support and assistance was provided to re-target the existing integrations and create new ones with the legacy methods. IMT will be suggesting this is placed in scope of the new corporate transformation programme.*

- The implementation of a **Records Management** programme to address the accumulation of physical and digital records and to reduce cost of storage. The scale of these records is also affecting the Council's agility when adopting new technology.

*Pending delivery of Dependencies, The Digital element will be considered at the time the migration of "File Services" is being designed and planned. NB The responsibility for physical records no longer sits within the IMT service.*

## Summary

The Optimisation work speaks to the need for the Council to continuously improve how it delivers its services to citizens within its existing set of services, processes and business models.

Due to the speed with which it may be accomplished following modernisation activities, Optimisation is the second priority and will require business engagement to ensure new technology is adopted across the Council and the investments are fully exploited.

## 7. Priority 3 - Support the Business in Transformation

The level 3 priority area for the Council IMT service is to:

- A. Enable a sustained Council capability for agile service transformation to support managers who seek to exploit emerging technologies to transform their business operations.

In recent years the public sector has been subject to reducing budgets whilst citizens' expectations and demand for services has continued to grow. Consequently cost and waste has been driven from existing processes and service models.

In order to continue to serve the public's changing expectations and meet the ongoing budget constraints, the Council must rethink how it delivers its services.

In some areas a case can be made to exploit emerging technologies such as Artificial Intelligence and cognitive computing to transform the services we present to the public and reduce the cost of providing those services.

### Business Impact of not Supporting the Business in Transformation



### Supporting the Business in Transformation

Transformation in the IMT sense is about building upon the Modernisation and Optimisation work streams and commissioning additional capabilities that exploit emerging transformative technologies at the level required by the Council. The objective here is to:

- A. Co-ordinate investments made by the Council to augment its Digital Platform capabilities
- B. Develop the platform for rapid, secure deployment of new IMT capabilities and to support the creation of the Councils new business models
- C. Enable a Council capability for ongoing transformation and innovation at the level required by the Council by providing better access to the expertise within the IMT service and its partners

*The Strategy of 2019-2022 had a limited planning horizon in terms of optimisation and transformation and the IMT service extremely limited delivery capacity after the modernisation portfolio of work. The Council has now evolved an approach to deliver Transformation and a corporate program is in the initial phase of analysing its outcomes and target selection to deliver those. IMT will when appropriate undertake development and target selection within that program.*

## Summary

We are seeing a number of new and maturing technologies that create the capability to transform almost all modern businesses and the Council will to some degree be compelled to respond to this challenge. This will require the IMT service, and the complementary cultural and business change capability, to be developed to enable transformation to happen.

The IMT service will work with those business managers who seek to exploit these opportunities to take these initiatives through from business case to benefits realisation at the level the Council requires of us.

*Focusing on the sunk investment in Microsoft Cloud services in the medium term the IMT service is about to embark on building a small “Dev-Ops” capability in MS PowerApps and related services such as Business Intelligence, Flow etc. These low code rapid development business solutions are very accessible can deliver business value quickly and benefit from the adoption of an “Agile Methodology” where the business and IMT work closely at pace to develop business solutions to day to day problems, iteratively, that is, perfecting the solution over several versions. Such solutions will in time displace many tens of small but relatively expensive specialist software packages currently licensed by the Council.*

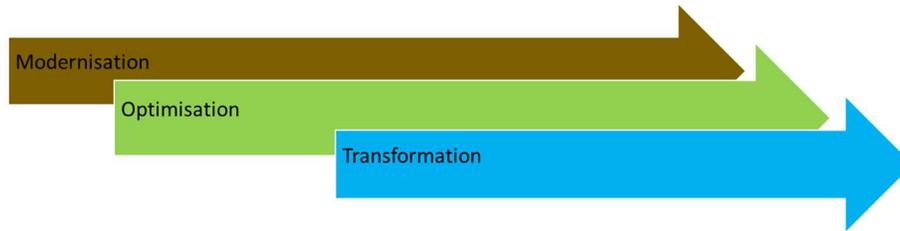
## Relationship between IMT Technical Strategy Work streams

Higher business value can be realised through Optimisation and Transformation work streams.

The IMT elements of these work streams by their definition require higher levels of business input to achieve improved business outcomes and business value.

Whilst it is true an ability to deliver Transformation builds upon the Modernisation and Optimisation work stream deliverables, there is significant overlap and individual projects could be in 2 or all of these categories.

These work streams will run concurrently for as long as transformative technologies continue to emerge.



A key success factor for the IMT Strategy and associated Forward Work Plans are that they demonstrate over time a move away from a predominately risk driven Modernisation payload to a more balanced Modernisation, Optimisation and Transformation payload at the level the Council decides.

## 8. Executing the IMT Strategy

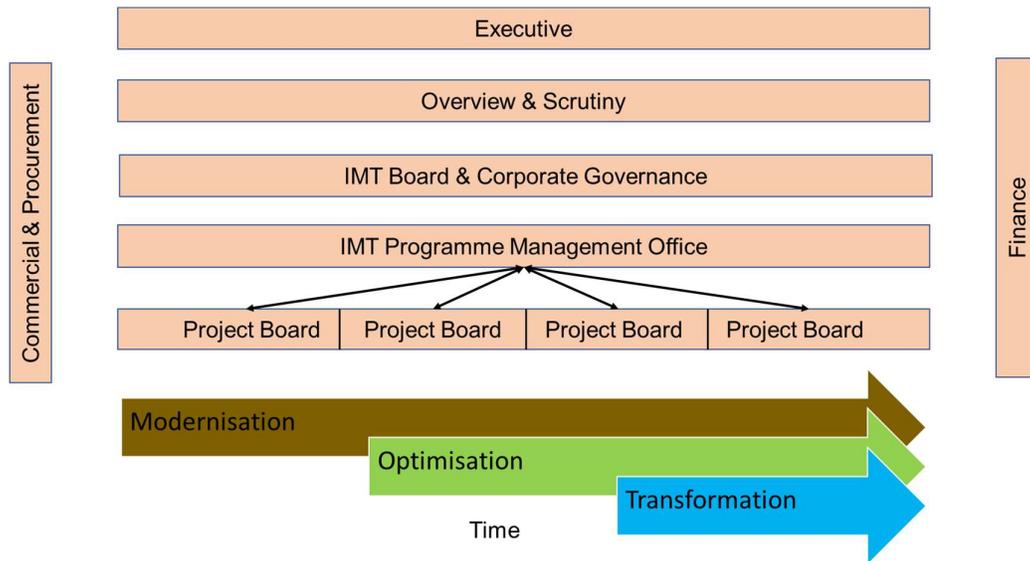
### IMT Strategy Programme Delivery

The delivery of the IMT Technical Strategy will be through a holistic IMT programme which will provide governance to:

- A. Provide ongoing validation of business alignment, map dependencies and take early corrective action when needed.
- B. Re-balance the work plan from Lifecycle/Modernisation to higher value Optimisation and Transformation at the level the Council decides.
- C. Enable strategic decision making through a programme rather than project view i.e. all work required to achieve a business goal is considered collectively.

*These goals will now be largely pursued within the scope of the Corporate Transformation programme*

## IMT Programme Governance Model



*The governance model has proved effective and is thought to provide suitable oversight to both our Executive Cllr and Executive Director and is the vehicle that is to refer IMT projects to Executive for decision as appropriate. The Transformation Board is expected to sit along side the IMT Board as effectively a commissioner of IMT Workstreams. Given resource contention is a continuing constraint on the service the IMT Board will decide priority, having the broader view of the portfolio and risks.*

## 9. The 6As - Measuring Success and Prioritisation

Success of the IMT Technical Strategy and projects commissioned through it will be measured against the 6As criteria.



**Aligned**  
Clear linkage to the vision of Council and needs of citizens



**Assured**  
Technology solutions are secure, compliant and auditable



**Agile**  
Enables rapid adoption, modification and retirement of technology



**Accessible**  
Council IMT solutions will champion digital inclusion for all



**Affordable**  
Purchase and ongoing costs are understood and sustainable



**Available**  
Technology is available where and when it is needed

## 10. Core Design Principles

The core design principles for new and changed technology services are:

- A. Technology must support achieving Council objectives and goals.
- B. All new services will be assessed against the 6As success criteria.
- C. Technology must underpin or enable business optimisation and transformation.
- D. New capabilities where possible will be built upon the Digital Platform to reduce the proliferation of single purpose solutions and siloed working.
- E. LCC will adopt a hybrid cloud service model with a cloud first preference.
- F. The security and integrity of Council data remains paramount.
- G. All new technology will be scalable, sustainable and supportable.
- H. IMT technologies will wherever possible adhere to open standards and be interoperable.
- I. Technology will enable secure collaboration internally and with authorised 3<sup>rd</sup> parties and citizens.

## 11. IMT Domains

The IMT projects will be characterised in terms of the following technology Domains.



### **Identity and Information Security**

How information and access to services are secure, monitored and managed.



### **Data Services**

Covers how data is collected, stored and managed for reporting, sharing with other services and supporting decision making



### **End User Compute Services**

Covers the end user experience. Covers devices, core productivity and collaboration applications



### **Platform Services**

The infrastructure which hosts applications, data and provides end users access to services. May be in the cloud, hosted and/or on-premise



### **Application Services**

Focuses on applications and services specific to individual Business Area service lines.



### **Connectivity Services**

How systems and end-users connect to access applications, communicate and share information

The IMT programme will plan and budget against these domains and continually ensure they remain aligned to the Councils objectives verified via the 6A's criteria.

This use of Domains can help expose situations where duplication of capability may occur and reduce or contain cost and complexity.

## 12. Conclusion

The continued support and recognition by the Council that the IMT Strategy underpins the Council's objectives, creates the possibility to undertake an ambitious and challenging programme of work.

The strategy is aligned to the priorities previously identified through stakeholder engagement sessions. The ongoing pipeline of work is being developed into proposals for consideration by the IMT board and will be aligned and assessed in the same way.

The IMT Strategy aims to deliver improvements on a wide variety of areas.

- Deliver the solutions to long running problems that have affected productivity
- Improve Citizen engagement
- Deliver modernised services, systems and devices. Providing the tools our staff and Councillors need
- Enable collaboration between council staff and Councillors with our public sector and delivery partners
- Evolve the IMT team and its service partners into an "Enabling Service"
- Drive improvements in the overall quality of service whilst remaining within budget constraints
- Normalise the IMT service away from firefighting to delivering a balanced programme of work, helping to move the Council forwards
- Deliver an effective program of cost engineering initiatives
- Collaborate on business cases in support of proposals for optimisation and transformation activity by working with the business managers
- Bring effective Information and Records Management into operation
- Deliver Business Intelligence and data visualisation tools to enhance inform and accelerate the councils use of data
- Maintain security and data assurance in a changing world

2019 will see many changes delivered representing a step change in the user experience. That work continues to ensure all council locations benefit

equally. The aim is then to broaden our focus to deliver the same type of improvement to the citizen experience when engaging with the council.

It will also see the start of initiatives to evaluate what emerging technologies LCC could exploit to the benefit of its citizens. Those that promise to advance the councils objectives will be drawn up into a business case for consideration by the Council.

The IMT service is being made ready to respond to those requirements.

*This retrospective Strategy review concludes that given such a high percentage of the 2019-23 strategy portfolio is now delivered it is time to now plan in the next Strategic programme.*

*The creation of the Corporate Transformation programme and its resources changes the way IMT will undertake that work.*

*As before, Modernisation and less business visible Optimisation workstreams will be proposed to the Council in a revised IMT Strategy 2021-23.*

*The business visible Optimisation and Transformation workstreams will be developed working within the LCC Transformation Program and will form part of its proposals and take the form of a "Transformation - Digital Strategy"*

**End of Document**

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