



SPT Digital Strategy 2020 – 2023

Committee Strategy and Programmes

Date of meeting 22 November 2019

Date of report 1 November 2019

Report by Assistant Chief Executive

1. Object of report

To recommend the Partnership approve the draft SPT Digital Strategy 2020 – 2023.

2. Background

Digital products and services are critical to SPT's operations and external service delivery. Technology continues to develop at pace and hence it is important to ensure that SPT's digital offering and future developments are managed in a structured, controlled manner. Development of a Digital Strategy is crucial to that management.

3. Current Position

Over recent years, SPT has refocused its information technology product team to deliver digital transformation in conjunction with other departments. This includes both major and minor projects aimed at rationalising business activity and improving services internally and ultimately to the customer.

The aim of the Digital Strategy is to provide appropriate, clear direction to our current and future digital activities. Specifically, the strategy includes high level objectives that will guide future digital activity as well as documenting key digital programmes and initiatives planned to be delivered during the life of this strategy. It also defines how we will measure our progress against the high level objectives set out in the strategy.

4. Recommendation

The Committee is asked to recommend the Partnership approves the draft SPT Digital Strategy 2020 – 2023.

5. Consequences

Policy consequences	<i>The Digital Strategy supports all SPT activities and policies.</i>
Legal consequences	<i>None directly.</i>
Financial consequences	<i>The Digital Strategy has been developed within the context of SPT's existing revenue and capital funding levels.</i>

Personnel consequences	<i>None directly.</i>
Equalities consequences	<i>None directly.</i>
Risk consequences	<i>None directly.</i>

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Title Assistant Chief Executive

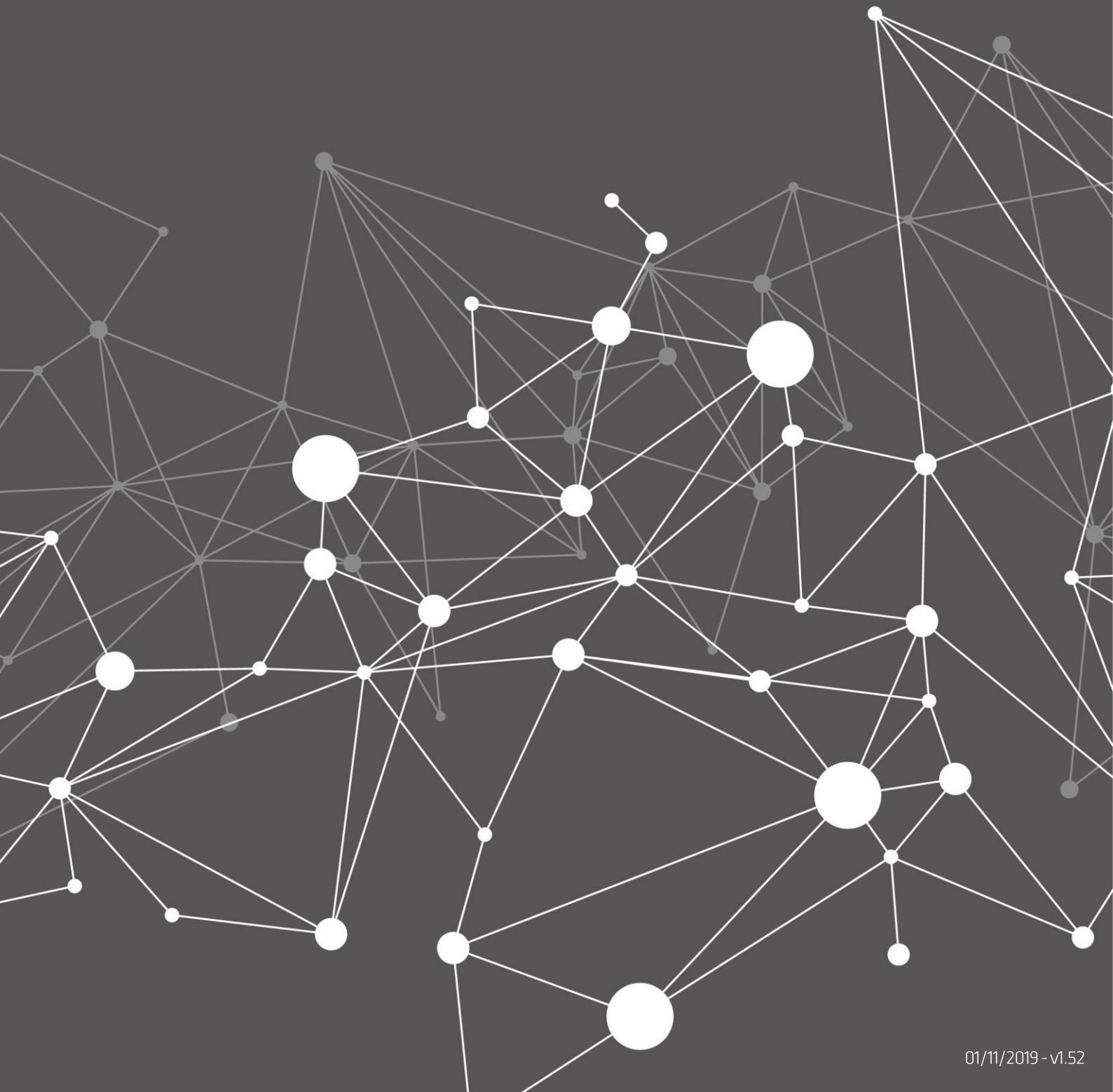
Name Gordon MacLennan
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Strathclyde Partnership for Transport

Digital Strategy

2020 - 2023



Providing **value** by delivering efficient, timely and innovative digital services.

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Executive Summary

Strathclyde Partnership for Transport is the Regional Transport Partnership for the west of Scotland covering 12 local authority areas, responsible for the region's transport planning. SPT has a range of operational responsibilities including the management and operation of the Subway and a number of the region's bus stations, supports socially necessary bus services and Community Transport (CT) services, co-ordinates schools transport on behalf of eleven councils and delivers the MyBus demand responsive transport service. We seek to influence active travel plans and projects, ensuring the operational needs and impact of freight transport is taken account of in transport planning

SPT recognises that good transport infrastructure is key to the economic growth and success of our regional area. The use of technology especially is transforming society's information standards, not just for transport but for every aspect of life, with improvements in sharing information and accessing it readily through mobile devices.

Providing accessible high quality travel information for passengers is a core function for SPT and we have successfully delivered new region-wide Real Time Passenger Information (RTPI) systems across the west of Scotland. This has helped to improve the public's perception of bus services in terms of quality and reliability. The use of technology to provide travel information and offer passengers more options when travelling helps to meet the ever growing passenger expectations of high quality public transport services, enabling more informed travel choices.

At SPT, we have a duty to ensure that the technology we utilise, support and consult on delivers the optimum outcomes for people living or travelling within our area.

Internally, within our organisation, we need digital solutions that improve our data management, workflows and outputs to reduce costs and improve the quality, security and resilience of our services. All business activities are supported by digital technology in some form.

While digital technology will underpin how services are designed in the future, there is still a need to evaluate what services we want to deliver and the most efficient means of supporting those services. The solution cannot just be the technology we introduce but there must be on-going analysis of what we are doing; what problems we want to solve; and how we are achieving that.

Digital transformation is one of the strategic priorities of SPT. This document details how that priority will be met along with the underpinning objectives, programmes and behaviours.

It should be noted that realisation of this strategy is a process of constant reiteration with the aim to deliver new or improved products or services. This will be underpinned by user, staff and partnership feedback as well as investigations, research and insights delivered through data evidence.



Guidance Used

[Cyber resilience economic opportunity: key actions 2018-2021](#)

[Building a World-Leading AI and Data Strategy for an Inclusive Scotland](#)

[Realising Scotland's full potential in a digital world: a digital strategy for Scotland](#)

[The Scottish Approach to Service Design \(SATSD\)](#)

[5G: strategy for Scotland](#)

[Audit Scotland – Enabling Digital Government](#)

Digital Objectives

The Digital Strategic Objectives aim to denote the six high level goals of the department as well as the benefits to the organisation and external stakeholders. Below you will find the strategic objectives that will be realised through various behaviours, programmes and initiatives.

Positive Digital Engagement

It is the responsibility of the Digital department to support SPT initiatives and processes that can be improved through the use of technology. This can only be achieved through research and collaboration across the organisation. These collaborative exercises need to focus on user-centric design for both internal and external customers, having them involved in the design process where appropriate.

Our engagement needs to recognise that technology can be a disruptive force both positively and negatively. This means that people need to be brought on the digital journey and supported to deliver using new technologies.

Digital by Default

We need to ensure that new services or improvement opportunities have digital tools or interfaces considered at the earliest stage possible. This is to support the organisation in delivering the most efficient services internally and externally through the use of technology. This will only be properly achieved through successful delivery and promoting digital thinking through various communications. The *Digital First* approach can be used to improve our reputation to the public, transport and public sector by simplifying services, improving internal processes and using data to improve decision making where possible. We do however recognise that some customers will have difficulty in transitioning to digital platforms and will therefore need access to services appropriate to them.

Data-Driven Thinking

SPT aim to be an exemplar in how the performance data of resources and assets can underpin the digital mission as well as influence decisions, strategy, perception and outcomes.

SPT also recognises the Scottish Governments open data Strategy released in 2015 which aims to “*create a Scotland where non-personal and non-commercially sensitive data from public services is recognised as a resource for wider societal use...*”. At SPT our aim is to deliver improvements through sharing transport data so that others may deliver benefits as well as ourselves.

Security at Our Core

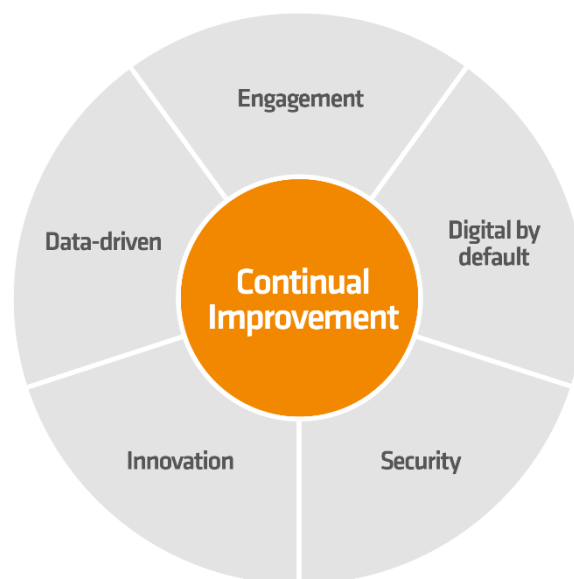
Digital technologies bring enormous opportunities as well as new threats and vulnerabilities. More information is shared and data transactions occur than any other time in history. With this increase in accessibility comes further risk to our data, intellectual property, finances and corporate reputation. At SPT we aim to deliver measures to support the confidentiality, integrity and availability of information through the correct behaviours, processes and technology.

Innovation

Services can quickly become out-of-date in the digital era. Research has shown the close interface between services and economic opportunity. We realise the need to research new technologies, techniques and frameworks with an appetite for disruptive ideas to improve services provided by SPT. We must consider external consultancy to look at different approaches. All research will be discussed and presented to relevant stakeholders for consideration. Prototyping, presenting and workshopping where necessary.

Continual Service Improvement

Digital Transformation must continue at SPT and augment existing business improvement successes and processes. We will continue to evaluate suppliers, processes, contribution, data and products to ensure that any technology implemented is done so whilst considering the value that it delivers. The Digital department will support the requests of individual departments, provide recommendations based on technology already available and investigate wider efficiencies.



Culture

Successful implementation of this strategy will require it to be owned and delivered across SPT. Our leaders, managers and staff all have a role to play in supporting the programmes and projects. Whilst the Digital department will play a key role in the development or sourcing of new product and solutions, the strategy requires contribution from all staff and a culture of digital leadership. New products which focus on the customer and different ways of working facilitated by technology provide the opportunity to change the way in which we work across the organisation. Where that is the case we will take a flexible and pragmatic approach to manage both the opportunities and challenges that arise.

We need to support our people as digital innovation changes the way we work, where we work, how we organise our work, the tools we use and how we communicate. A rapid pace of change can be the norm when working with digital technology, whilst this allows us to rationalise and innovate it creates the risk that we leave people behind.

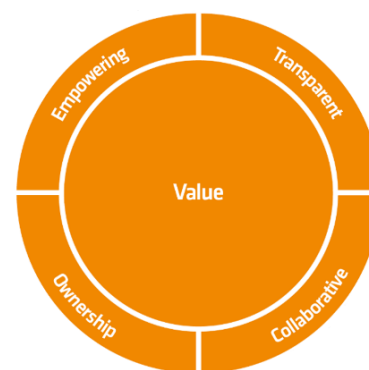
A key step in avoiding that risk will be to ensure that the changes we make demonstrably improve our services and processes, both for those using our services and those administering them. As we deliver on this strategy we need to find ways for people to use more of the digital skills they have developed in their daily lives, as approaches that make use of these will be embraced and effective.

We want SPT to be an employer where staff (existing or new) can start and develop a digital career. We need to highlight the unique opportunities available over the coming years in order to develop and attract people who can help us to realise the ambitions set out in this strategy.

Evolving Behaviours

Our culture must be supported and enhanced by the behaviours of our staff. Our approach to engagement and how people react to change is an important factor. In many organisations change is often seen as needing to be process or technology focussed, however this is not always the case. If implemented properly over a period of time our digital ideas and behaviours will become second nature. Within the organisation, this will be achieved through ensuring we repeatedly review relevant processes and products as well as our operating rhythm.

Behaviours will be driven based on customer demand and the service requirements. It is expected that the organisation will evolve further over time and thus so will the behaviours. Our current focus is on Empowering staff, being Transparent and Collaborative whilst taking responsibility for our outputs and customer delivery (Ownership).



Governance

Overall responsibility for delivery of this strategy rests with the Digital Governance Group and will be delivered and prioritised over the period of the strategy. Implementation of these programmes will be led by SPT staff under the authority of the Assistant Chief Executive (ACE).

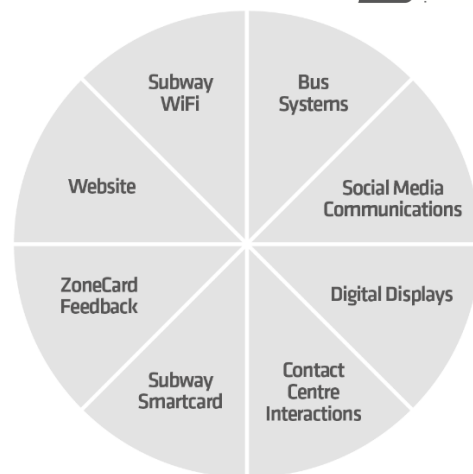
Any new major initiatives will be brought before the Digital Governance Group for approval as well as the monitoring of ongoing activities



Audit Scotland - Enabling Digital Government - Key Factors

Digital Services for External Customers

Technology plays a key role in the services that SPT provides. This role can be done directly through smartcards, WiFi or the website, it can also be done indirectly through Bus Systems or the automation of tasks. The amount of technology we utilise will rightly increase as we procure, outsource and internally develop products and services that put the customer at the centre of our design. Some of the key services we provide are represented on the right.



Digital Department Services

The Digital Department supply over fifty services to internal and external stakeholders on behalf of SPT. This includes technical services such as server deployment and bespoke partnership software as well as support and delivery skills such as project management, innovation proposals and consultancy. Key digital functions and some services are listed below.

Product Development

- Digitisation of Forms and Processes
- Business Analysis and Digital Transformation
- Database Management
- Data Visualisation Tools

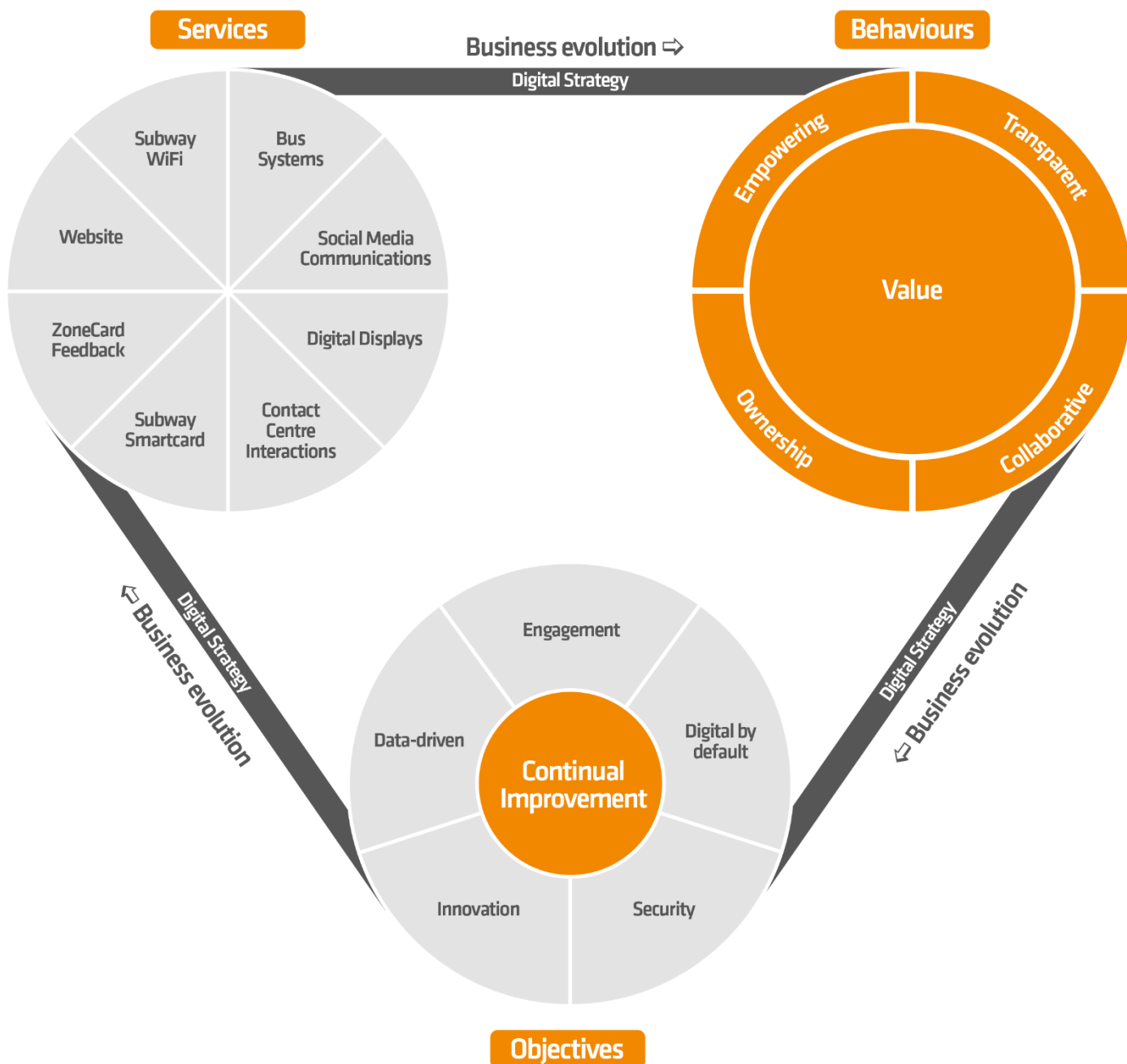
Service Desk and Infrastructure

- Cyber Security
- Service Continuity
- Network and WiFi Management
- Service Desk Support
- Server Management
- Disaster Recovery and Continuity
- Technical Procurement Support
- Telephony and Mobile Devices

“The best way hasn’t been found yet”

Appendix A - Underpinning the Vision

Providing **value** by delivering efficient, timely and innovative digital services.



A world class sustainable transport system that acts as a catalyst for an improved quality of life for all.

Appendix B - Digital Programmes and Initiatives

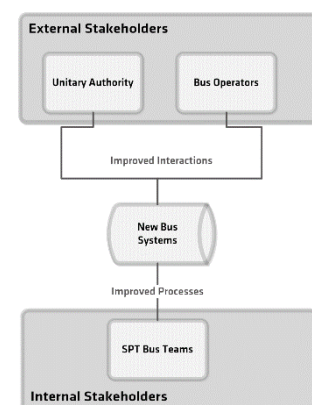
Below you will find the programmes of work which will form part of the Digital Roadmap

Bus and Reporting Systems Transformation Programme (BaRST Programme)

This programme aims to replace legacy technology (PTIS, RaTS, GIS, ArcInfo, Info Publisher, BIDS and BI Query) with digital solutions that improve processes, user experience, and business capabilities for all stakeholders.

This is achieved through:

- Automation. Analysing the processes that the legacy technology underpins and automating interactions and work
- Finding Efficiency. Analysing and reducing duplication, unnecessary work or any other waste
- Innovation. Technology needs to support the improvement culture and 'Digital First' strategy adopted by SPT
- Reducing Technology Costs. Solutionising with sustainable and cost effective technology whilst being mindful of what can be utilised by the wider business for other purposes (i.e. reporting or security technology)



Transport Information Transformation Programme

Alongside the efficiency savings to be realised as part of the refresh of SPT bus and reporting systems, new tools will support the delivery of an enhanced suite of public transport information.

The highest quality information must be built on the principles of accuracy, consistency, simplicity, clarity, legibility, timeliness and sustainability. The design of our systems and processes, and presentation of our customer facing information will encompass all of these principles.

Improvements should be seen in roadside information, bus station information boards, online information and in journey planning solutions delivered by Traveline and other 3rd parties via open data tools. Used alongside real-time updates and disruption information, this should improve customer satisfaction levels and build trust in the information to give our customers the peace of mind required when making any trip by public transport. We can also utilise these powerful datasets to inform the business and shape the future of our network planning and development activities.

Cyber and Information Security Upgrade Programme

This programme will support the Information Management Strategy and necessary actions across all data locations including internal storage and cloud technology. This programme includes:

- Engaging with stakeholders on information assets and reviewing the security around them
- Evolving and where appropriate investing in cyber defence technologies to support a vision of best-practice security
- Reviewing governance rules and audit structures
- Re-imagining and improving security training with relevant online training modules for staff
- Recreating an information audit strategy
- Retaining PCI Compliance
- Retaining Cyber Essentials Plus Compliance
- Ensuring best practice and new standards are applied to security around automated Subway vehicles and OCC
- Progressing towards ISO 27001 adherence where possible
- Redeveloping all cyber and information security policies
- Improving staff knowledge through specific training

Business Continuity and Infrastructure Improvement Programme

Technical infrastructure and services are often taken for granted until there is a failure or accessibility issue. Issues can arise from environmental challenges making it more difficult to reach places of work or digital infrastructure failures. This programme aims to mitigate risks and improve the resilience of our digital services whilst interfacing with other programmes. The following benefits are to be realised:

- Reduce server and database licensing costs for current technologies over a long period
- Reduce carbon emissions through rationalising hardware and shared cloud infrastructure
- Deliver near real-time Data Disaster Recovery capability across SPT locations
- Adapt modern technologies such as storage containers to reduce cloud infrastructure costs and improve capabilities
- Faster storage access through best in class technology
- Improving our ability to work in disaster scenarios through improving remote working capabilities
- Aim to adhere to practices within ISO 22301

Business Intelligence Programme

SPT has many different tools used for capturing or extracting information across the organisation. This means that data is decentralised and complex to manage or deliver insights from. There are several purchased products that assist in managing day-to-day activities as well as instances where information is only available through contacting a supplier and requesting data extracts.

The aim of the Business Intelligence Programme is to reduce the complexity and improve capabilities through:

- Increasing the amount of people using business intelligence tools
- Digitising paper processes and making the data available for analysis
- Reducing the amount of examples of data being stored in multiple locations
- Making data easily accessible to those who need it to deliver insights or solve problems
- Increasing access to real-time information rather than retrospective auditing
- Reconciling tools and thus knowledge support costs
- Promoting data to be viewed as a business asset and cultivating a data culture
- Improving the performance and availability of tools that support the visualisation and analysis of data
- Working with stakeholders to ensure data is relevant, accurate and timely
- Identifying data sources not previously used to improve decision making

Subway Passenger Cellular and Wi-Fi Upgrade

To augment on to the benefits of the modernisation programme, we have aspirations to deliver fast internet connectivity throughout the Subway stations and tunnels. This initiative would enable new data insights through Wi-Fi access reporting and upgrade cellular connectivity from 2G/3G technology for a better passenger and staff experience. This will allow more users to perform paperless activities and improve the continuity of services. The proposed solution will also be mindful of the ScotGov 5G Strategy.

New Contact Centre Technology and Improving Interactions

This project aims to improve the technology and processes associated with customer interactions for *My Bus* and the *Travel Card Unit*. This may include automated interactions out-of-hours or Robotic Processes Automation (RPA) to enable faster internal workflows. We can also consider new communication channels such as web chat. This approach supports an understanding that people can still use more familiar methods when contacting SPT but other options are available when interacting with us.

'Just Enough Governance'

We want our governance to be appropriate and agile where the circumstances require it to be. Ensuring that best practice does not restrict our change momentum but delivers enough bureaucracy to control how the department and organisation evolves. This can be done through awareness sessions, inspection and adaptation, good communication and sensible audit and procedure increments for higher risk areas.

Digital Advertising and Analytics

In the past, marketing was focussed on traditional channels such as posters and mail drops. In the digital era SPT have moved on to advertising on digital screens and social media. We are now delving into other forms of digital media and technology such as podcasts, geospatial targeting and Adwords. The focus of this is to improve the targeting of our marketing material and understand our customers.

Subway Modernisation Support and Consultancy

Ongoing infrastructure and application support of security, network and data management for Subway Modernisation as well as consultation on brand guidelines that underpin the highest level of customer experience. Work includes the installation of a new CCTV systems, datacentre moves to the new Operations Control Centre (OCC) and support to various teams on signage and graphic design. As part of the wider Subway Modernisation Programme, we aim to improve our interaction with customers by transitioning to dynamic service information provision and digital messaging.

Carbon Footprint Reduction Support

Continue to look at ways in which we can reduce our carbon footprint and use of paper whilst delivering new or automated services. This will include utilising shared infrastructure and digitising processes.

HR System Replacement

Introduce new HR technology which supports the digital objectives, reconciles current systems and processes to deliver better employee management and engagement

New SPT Website

SPT aims to deliver a website capable of interfacing with modern technologies and enabling capabilities which can futureproof online services. A modern website can:

- Improve the perception of an organisation, build credibility and encourage people to collaborate with us
- Be the heart of SPT's online presence
- Improve security
- Be underpinned by the SAAtSD principles
- integrate with other business processes

Appendix C - Enabling Digital Government Diagram

Below you will find the key factors identified by Audit Scotland that enable digital government



Key Factor	Our Approach
Strategic Vision and Leadership	Installing a Digital Governance Group and digital strategy
Investment	Continuing to invest in talent or solutions that enable digital transformation
Prioritisation and Monitoring	Supporting the digital strategy with a regularly reviewed roadmap and scorecard
Facilitating Collaboration	Performing workshops and having digital staff engaging with those involved with the services
Ensuring Value for Money	Finding efficiency and improving services through the monitoring of new technology implementations
Supporting Organisations	Working with partners to find 'common good' solutions
Building Platforms	Replacing bus systems and evolving Subway and Business Support Tools
Facilitating Innovation	Being Digital by Default and engaging with external specialists to deliver new solutions

Appendix D - Measuring our Progress

Providing **value** by delivering efficient, timely and innovative digital services.

Objectives	Engagement	Digital by Default	Security	Innovation	Data-Driven	Continual Improvement
Outcomes	<p>Bringing people on the digital journey through communications and training</p> <p>Stakeholders are involved in the design of services</p>	<p>Ensuring that new services or opportunities have digital tools or interfaces considered at the earliest stage possible</p>	<p>Having a strong focus on the confidentiality, integrity and availability of information through the correct behaviours, processes and technology</p>	<p>Researching new technologies, techniques and frameworks which will improve services provided by SPT with a targeted risk approach and appetite for disruptive ideas</p>	<p>Being exemplar in how data can underpin the digital mission as well as influence decisions, strategy, perception and outcomes</p>	<p>Ensuring that Digital Transformation continues within SPT</p>
Measure(s) of Success	<p>Annual internal survey for staff</p> <p>Attendance at Sprint Reviews</p> <p>Business Analysis Workshops</p> <p>Sharing Digital Newsletters</p>	<p>Continual release of new products, services and functions which meet the digital vision</p>	<p>Security metrics</p> <p>Public and partnership confidence</p> <p>Outputs of Cyber Risk Management Team</p>	<p>Continual release of new products and functions which support the digital vision</p>	<p>Modern visualisation and reporting tools being used throughout the business to answer questions or solve problems</p> <p>Sharing and opening-up non-personal data</p> <p>Information being digitised</p>	<p>Refining workflows and processes with Digital Technology (where appropriate) to create efficiency, reduce costs or increase income</p>
Indicators	<p>Survey score and feedback</p> <p>Amount of Business Analysis Workshops</p> <p>Number of Newsletters created</p>	<p>Number of projects delivering digital technology</p> <p>Number of features released</p>	<p>Number of security incidents</p> <p>Number of risks understood and managed</p>	<p>Number of innovation suggestions presented to the Digital Governance Group</p> <p>Number of new services, functions, efficiencies delivered through modern digital technology</p>	<p>Number of projects digitising information</p> <p>Number of users using business intelligence tools</p> <p>Number of projects looking at data sharing and management</p>	<p>Reduced costs or Increased income or workflow efficiency or New services or New Functionality</p>