

BUCKINGHAMSHIRE  
COUNTY COUNCIL

**SMARTER**

**BUCKINGHAMSHIRE**

2018-2020



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I am proud to present, on behalf of Cabinet and the County Council, our Smarter Buckinghamshire strategy, which sets out how technology will support our ambitions for the council and county.

The council has often been modest in its achievements but there is much to celebrate. With our partners in the local NHS organisations, we are leading the way on health and social care integration. We are already taking forward some innovative partnership projects, including a digital process for discharging patients from hospital to social care, and we have appointed the newly created shared post of Joint Strategic Director of Information Assets and Digital Developments. This post will work across the County Council, the Clinical Commissioning Group and Healthcare Trust, and support the acceleration of our plans to form one of the country's first integrated care systems.

Our website attracts more than 2.4 million visits each year and we have made savings of £1m through channel shift, digital process redesign and reducing paper. We have embraced social media, with an average 42,000 Twitter impressions per week and reaching 30,000 people through this channel alone during last year's Annual Council Debate.

We continue to engage with residents in shaping the most appropriate solutions for our customers and have commissioned a Digital Programme to take us forward.

We cannot rest on our laurels - the pace at which technology advances continues to increase at the same rate as our residents' expectations for how we are embracing it. That is why I am pleased that Members have agreed to invest almost £15m in technology over 4 years (2018-2022). This investment is vital to delivering our strategic priorities – from ensuring the council has secure and flexible ICT systems, to helping people to get online to ensuring our online services are easy to use; and forming partnerships for innovation that will stimulate economic growth; to making sure our young people have the right skills for a digital economy. We will use the information received from our customers to continually improve and enhance our digital offering to ensure that our services are shaped around individual needs providing confidence to our customers that their data is in safe hands. .

It is our duty to ensure that every penny of this investment is spent wisely and in support of the council's priorities. This strategy sets out how we will do this and the difference it will make to our county. I would like to thank the many staff, Members and other organisations that have contributed to its development, and I look forward to its successful implementation delivering a 'Smarter Buckinghamshire'.

**John Chilver**

**Cabinet Member for Resources**



## Summary of deliverables from the ICT Strategy 2015 -2018

- Improved public access to services over the web, revamped website and platform to enable access via any device types, enhanced web journeys, increased self-serve activity, and increased process automation requiring less manual input;
- A more mobile workforce taking advantage of new technologies to work flexibly across sites and away from the office;
- Commenced development of technologies to sit between core ICT back-end systems and user devices to support mobile working, workflow automation and secure systems integration;
- Commenced the work to build an ICT delivery model which makes best use of in-house, supplier and contractor resources and skills;
- Supported the corporate cost reduction programme through the effective provision of technology shaped by the needs of the business;



This strategy has been developed in the context of the key business drivers which will support the County Council in delivering its strategic priorities as set out in the Strategic Plan. The council's Strategic Plan sets out our vision for ensuring that, in the next ten years, Buckinghamshire will still be a great place to live and work, with our economy one of the strongest in the country.

Our strategic priorities are:



The council has ambitious plans for Buckinghamshire and its residents. This strategy, Smarter Buckinghamshire, sets out how we will support the delivery of the Strategic Plan using technology. It is a strategy first and foremost to improve the lives of the people who live in, work in and visit Buckinghamshire and each chapter has been linked to one or more of the strategic priorities.

## Delivering our Strategy

The council recognises technology underpins the changes we need to make Buckinghamshire 'better every day'. Members have approved significant investment in technology over the next few years to achieve this; from ensuring we have secure and flexible ICT infrastructure; to making sure residents and businesses have access to fast, reliable broadband; to making more of our services digital by design; to utilising smart technology that will help people live independently for longer; to ensuring that staff and Members have the tools do their jobs efficiently from wherever they are.

This strategy outlines how we intend to spend that investment. It comprises five themes:

- **Smarter County** – using technology to create opportunities and ensure Buckinghamshire thrives
- **Smarter Communities** – safeguarding our vulnerable and building self-reliant communities
- **Smarter for Customers** – making it easier for people to access our services
- **Smarter Council** – creating an efficient organisation, helping staff and Members to do their jobs
- **Enablement** – delivering this strategy and ensuring value for money.



Using technology to create opportunities and ensure Buckinghamshire thrives

Access to the public services of the future will rely on fast, reliable internet connections. But more than this, access to high speed broadband and mobile connections is directly linked to higher household incomes, more businesses, and lower levels of unemployment, especially in rural areas. That's why new residential and business developments are being designed with connectivity in mind, which has already become a vital utility for most people.

“ 74% of people say that fast broadband is critically important to their home lives. *ISPReview*”

## Connecting the County

Place-based technology projects globally have tended to focus on densely populated or urban areas. There is an opportunity for the county council, working with our partners, to adapt some of the innovations seen in these Smart City projects and apply them to the rural geography of Buckinghamshire. Opportunities to better connect the county, its communities and data include:

- We continue to rollout **broadband to rural communities** through the Connected Counties programme, in partnership with Hertfordshire County Council and the Buckinghamshire and Thames Valley Local Enterprise Partnership (BTVLEP). The programme originally had a target of delivering superfast connectivity (greater than 24Mb/sec) to 95% of Buckinghamshire premises. This target has now been met, approximately 16 months early, and we hope to deliver to approximately 96.3% of premises by December 2019 when the contract finishes;
- We are adopting the European Commission's **action plan for smart villages**, which seeks to introduce digital thinking into all aspects of rural life – from agriculture and rural economics to transport and digital literacy - and ensuring that new built environments where we play a role as a developer, such as Aylesbury Woodlands, are built with good connectivity in mind and are designed to be ready for digital and smart technologies;
- We are launching a series of small **smart technology pilots** - making use of easily available, low cost sensor and wireless technologies to create 'smart streetlights' and 'smart street furniture'. We are also looking to partner with businesses on transport innovation, including autonomous cars, next generation vehicles and vehicle to infrastructure connectivity.



## Getting Businesses Online

We recognise the importance of access to high speed, reliable broadband as being key to building one of the country's strongest economies.

### We will help to ensure that Buckinghamshire's businesses are poised to compete by:

- Submitting a bid for **additional funding for broadband to rural businesses** from the Rural Payments Agency and DEFRA. In partnership with Buckinghamshire Business First (BBF), the council has submitted a bid for £1.8m funding to improve connectivity across the county.
- Championing the use of the Department for Culture, Media and Sport's Gigabit Broadband Voucher Scheme, which is helping SMEs and those living in rural areas to subsidise the cost to upgrade to superfast broadband.





## Connecting County Resources

Place shaping requires a strategic and collaborative approach. The council has taken a bold and exciting move towards this by recruiting the new joint Strategic Director of Information Assets and Digital Developments jointly with our partners at the Buckinghamshire Clinical Commissioning Group and Buckinghamshire NHS Healthcare Trust. This role will not only be instrumental in enabling integration of health and social care through technology, but will also drive closer working across the public sector estate more broadly.

Other emerging areas include supporting the development of the new Buckinghamshire Industrial Strategy, and working closely on key initiatives which seek to improve the quality of life of our residents, workers and those who visit our county. Key local partners include but not limited to:

- District Councils
- Clinical Commissioning Group
- Healthcare Trust
- Local Enterprise Partnership
- Business community, through Buckinghamshire Business First and locally based big businesses
- Education sector, including schools, academies, further and higher education





Key to effective partnership working is the ability to share information between organisations in a way that protects the interests of vulnerable individuals. Open systems standards will be adopted that are both secure and supportive in the movement of information between organisations.



## Using technology to help safeguard our vulnerable and build self-reliant communities

Having the technical infrastructure in place to deliver the services of the future is only part of the challenge. We need individuals and communities to have the means, skills and confidence to access services online – whether those are public services or completing everyday tasks like booking appointments or paying household bills. According to national statistics, ‘offline’ households are missing out on average savings of £560 per year by not taking advantage of the online marketplace.

Being online gives people more opportunities to search and apply for jobs, and studies have shown a clear link between regular access to the internet and educational attainment at both Key Stages 3 and 4. Technology also has a key role to play in helping people to live independent lives for longer. It can be used to monitor health, help people to stay in their own homes for longer, and help to tackle isolation and loneliness.

It is equally important to ensure that the move to more online services does not exclude our vulnerable communities. Therefore, all our projects will take into account the need for a multi-channel approach to ensure that our most vulnerable customers are able to access the services they are entitled to, easily and effectively.

“ 90% of jobs require at least some computer skills.  
*NHS Good Things Foundation*”



## Getting Communities Online

We will ensure all residents can access information and services online through:

- Free Wi-Fi and access to devices to get online at locations across the county. This will include the existing service in our libraries, as well as implementing the technology to enable the development of a network of 'community-based hubs' where residents can access public services;
- Staff and volunteers at these locations will be trained to help customers to get online – whether to access council services or other online resources. Council library staff and volunteers already offer sessions covering IT skills at 12 locations.

## Getting Communities Involved

We will make it easier for residents to participate in local democracy by:

- Delivering public consultations online which enables customers to participate from their own homes, on a mobile device, or in one of our digitally-enabled community hubs.
- Enable Members to set up online surgeries using applications such as Facebook and Live Chat.
- Reach our customers through the channels they are already using, for example streaming public meetings on popular online channels such as Facebook, so as to reach more people than using the council's website alone.

## Keeping People Independent for Longer

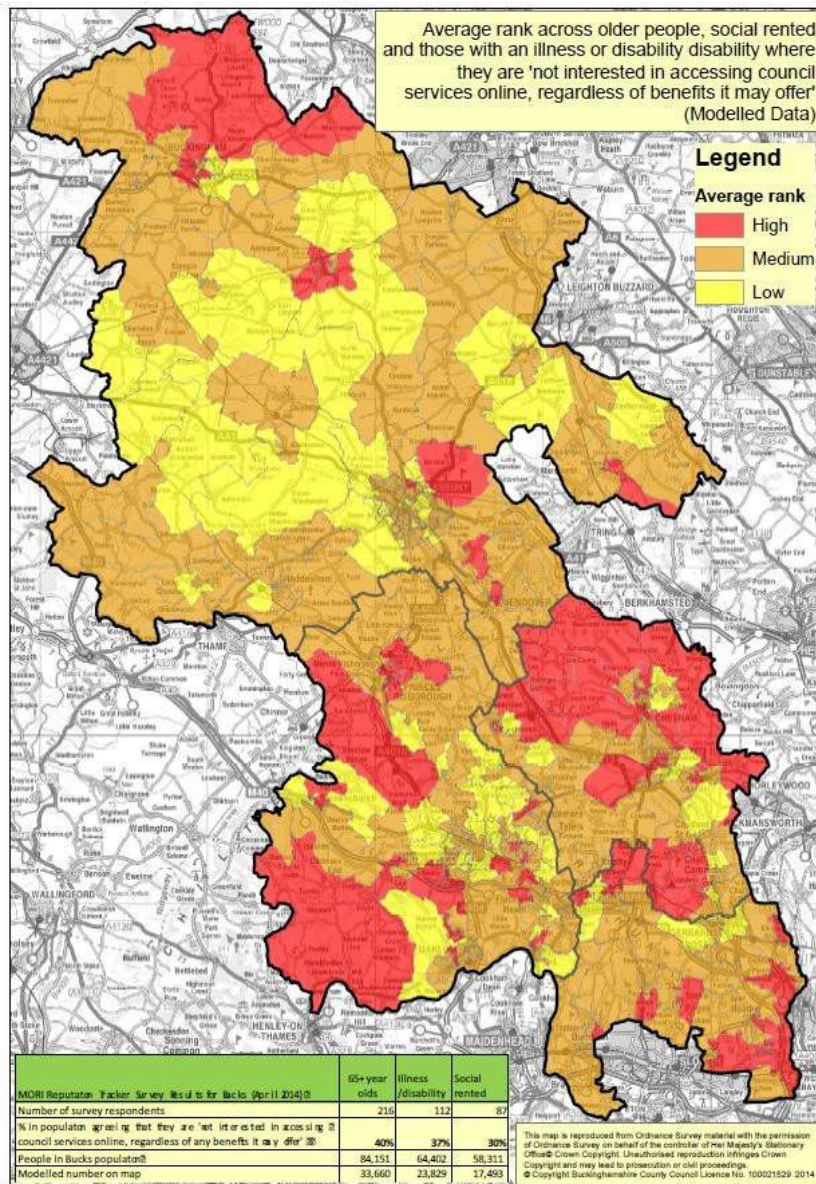
We will help people to live independent lives by:

- Implementing a 'smart technology for social care' pilot, using physical and environmental condition monitoring to enable early interventions that will help keep people living in their own homes for longer. This will be based on national exemplars such as the Health and Social care theme of Manchester's CityVerve programme.



## Social exclusion and digital exclusion in Buckinghamshire

MORI map of social and digital exclusion in Buckinghamshire





## Solutions shaped around individual needs

We continue to work with our partners and other services to design solutions around individual needs. We undertake regular customer consultation to gain a better understanding of who the users of our services are, and how they wish to receive council services. Our priorities are to:

- deliver better value for money;
- ensure online services are safe and secure;
- get it right, first time.

We will continue work to consolidate our websites into a single [buckscc.gov.uk](http://buckscc.gov.uk) ensuring the content is written with the customer in mind.

The digital and web teams design end-to-end services across all our channels (face to face, phone and on line) so that no matter how a customer contacts us, they receive the same excellent customer experience.

Alongside this, we continue to look at emerging technologies which can further improve our customer experience and enable them to access our services when and how it suits them.

### Digital by Design

With the drive to bring services online, we will ensure that services are designed with digital in mind, by:

- Promoting **[buckscc.gov.uk](http://buckscc.gov.uk)** as the **frontline route** to access our services;
  - Ensuring our websites meet the SOCITM (Society of Information Technology Management) accessibility standards, while ensuring that the content on our site is easy to find, easy to understand, and is always up to date;
  - Developing our capacity and skills to write content that is accessible and relatable to our customers, and structure our website with customer needs in mind.
- 
- We will explore the use of **Virtual Customer Service Advisers** (which use artificial intelligence to simulate a human interaction) to reduce the cost of routine queries which will improve the speed and consistency of the customer experience. By managing demand in this way, we will free up our human resources to deal with more complex enquiries. This technology is already being used by large banks and insurance companies, resolving up to 93% of queries first time, even for relatively complex queries such as health insurance claims.

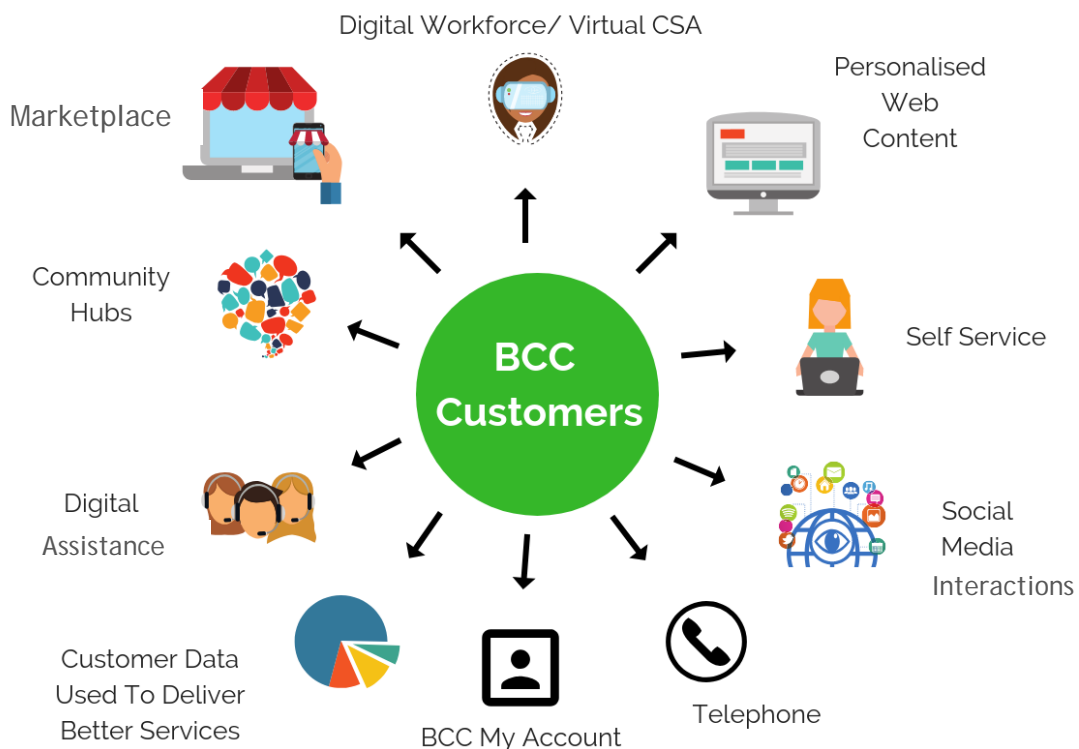


## Excellent Customer Experience

We will enhance the customer experience and create a seamless online journey by:

- Creating a new, single e-commerce platform which allows the marketing, management and sale of the full range of council products and services online – whether ordering a birth certificate, accessing the care marketplace, or buying HR services for schools. Upgraded search and account features will allow customers to easily search for services, pay online, and manage their orders through an online account. The new marketplace will streamline the administration of social care and offer services to self-funders. Moving the majority of our transactions through our e-commerce platform will improve the quality, completeness and accessibility of the data on our income from fees and charges.
- Rationalising our 80 microsites and consolidating to bucksc.gov.uk to facilitate an easier customer journey, improving content and quality control, and a strengthened county council brand.
- Trialling the use of MyBuckinghamshire skills allowing residents to access information and services from home using voice commands.

### The Buckinghamshire Vision for Customer Experience:





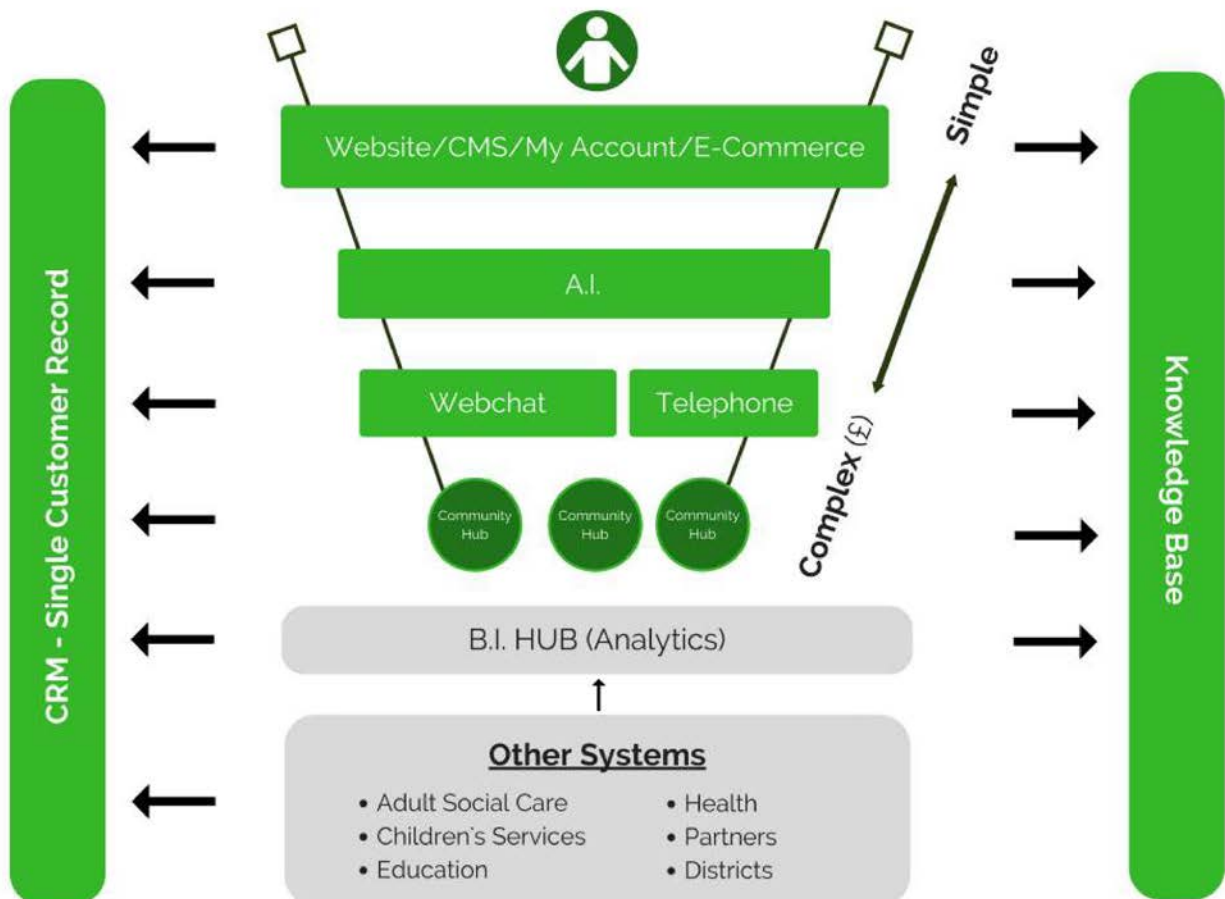
## Excellent Customer Insight

We will leverage the power of our data to design and deliver better services, by:

- Creating a **single customer record** by drawing our customer data into a new integrated data platform, ensuring staff across the council are using the same information – a single view of the truth.
- **Bringing our various sources of data together to create a richer picture** to identify patterns of behaviour that may indicate a future need for intervention, before it arises. We will use this insight to deliver a more preventative approach, making small, targeted interventions that will delay or avert the need for high cost, high dependency services, especially in social care and education. We will follow a privacy and security by design approach, carrying out privacy impact and data ethics assessments of all projects that use people’s data.



Our new customer model will push more demand to lower-cost, digital channels while enriching our insight into our customers and services





## Supporting our Members and Workers

The nature of public services has changed. While budgets have dramatically reduced, customer expectations haven't, meaning that local authorities will need to become more efficient to keep up with demand. Technology plays a key role in helping staff and Members to do their jobs more effectively, while allowing the organisation to reduce its costs.

There are a number of projects that will help to meet this challenge under the following workstreams:

- Improving our ICT Operations;
- Making work easier;
- Making better use of data;



For the vast majority of work that the public sector does, the internet is ok  
*Government Technology Blog*







## Improving our ICT Operations

We will procure/develop high quality, value for money ICT platforms and applications through the delivery of the ICT Improvement Programme. This will:

- Ensure we have a clearly defined and governed IT Work Programme that is aligned with the council's strategic objectives;
- Ensure we have a technical roadmap that enables the council to maximise the value of emerging technology while also making efficiency savings;
- Ensure we have a fit for purpose infrastructure design that provides a flexible, cost effective, and secure platform. That design will maximise the power and potential of the latest marketplace technical solutions;
- Review our cyber security requirements and ensure we remain compliant with all National Cyber Security Centre and other accredited bodies. In addition, our infrastructure design thinking will adopt security by design principles;
- Review our Public Services Network (PSN) offer to our customers;
- Continue to rationalise our technical architecture by reducing our applications to a newly defined core service offer;
- Provide a SAP Roadmap for our core Finance, HR and Purchasing system that is more powerful, more connected to other applications, and more user friendly;
- Build stronger partnerships with local SMEs and UK technology partners to ensure we have access to the latest and most relevant technical capabilities;
- We will use the Government Digital Service Technology Code of Practice as a model for the assurance of technology spending. This will help us introduce technology that:
  - Meets user needs, based on research with users;
  - Is easily maintained;
  - Scales for future use;
  - Delivers better value for money.



## Making Work Easier

We will make it easier for staff and Members to do their jobs more effectively by:

- Providing the appropriate ICT tools and applications based on job roles – by segmenting our workforce by the type of job they do (e.g. Member, senior manager, social worker), we will make sure they have the most appropriate devices and software for their roles, providing technology that meets customer needs, not ‘one size fits all’;
- Making it as easy as possible for staff and Members to use their own devices (BYOD), offering more flexibility and choice for individuals while reducing costs for the council;
- Moving all users to upgraded Microsoft applications, starting with Windows 10;
- Ensuring all staff and Members have access to Skype for Business voice and video calling;
- A refreshed intranet that is easier to use, is built around the things people most commonly want to know and do, and delivers a modern employee experience;
- Reviewing our service desk system offering more self-service and automated help, improving efficiency for service desk agents when human intervention is required;
- Ensuring the ICT services have efficient, effective processes in place to meet the needs of all their customers.

## Making better use of Data

We will maximise the value of the data we hold by:-

- Unlocking the power and potential of the data we hold on our systems;
- Providing an enhanced information governance capability which supports the aims and objectives of the Information Governance Board.
- Improving the quality of the data we hold and adherence to national data standards;
- Developing a strategy for connecting our systems;
- Implementing appropriate information governance tools that enable us to index and search all the structured and unstructured data held on our network;
- Developing an Information Governance Strategy designed to ensure that all our data is held securely and only viewed/shared by authorised users;
- Maximising the value of predictive analytical models so that our business services can accurately identify key clients, i.e. vulnerable children and adults and build predictive models for future service demand;
- Ensuring our corporate business intelligence resources have access to the corporate data and the latest most appropriate technical solutions.

“Improved self-service and automation can increase employee productivity by up to 200%. *Forrester Research*”



## Effective Governance and Value for Money

Delivering this strategy and making the most efficient use of our resources will require a whole organisation approach to ICT and digital, with clear governance and decision making, agreed principles and priorities, and effective procurement based on a category management approach.

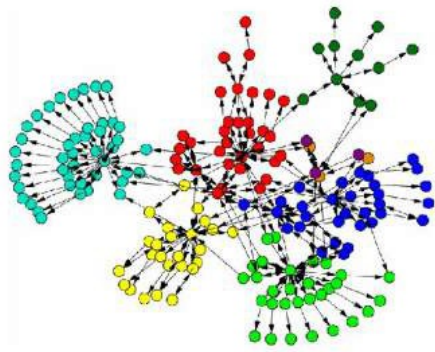
We will need to strike a new balance between flexibility and responsiveness to service-specific needs and a corporate approach to managing our technology estate and spend that focuses on simplification and managing down costs. This strategy proposes the introduction of a new governance framework for the council's technology that moves from a project-driven, or 'bottom up' approach, to a more strategic one, with greater emphasis on whole-system design, effective forward planning, and delivering against agreed priorities.

“ IT governance is essential for any well-functioning transformation in the public sector. *McKinsey & Co.* ”

### Smarter Governance

We will achieve better forward planning, use of resources, and value from technology spend, by:

- Embedding a **new governance framework** which clearly sets out the processes for ICT projects and procurement, working on a principle of first seeking to reuse technology that we already have before buying new applications. This will manage down our costs while making it easier to share data between a smaller number of systems for a single view of the truth. This will mark a big change for the council, moving from a model where service areas often choose and procure their own technology solutions, to one where service areas work with ICT Services to turn their business plans into projects that will form a prioritised pipeline of technology work, against agreed corporate criteria. There will always be unexpected requirements, and our governance model has to be agile enough to respond to these by asking business unit boards to review their programmes of work and agree which projects should be paused or postponed to free up the resources to deliver the new requirement.
- **Updating our technical architecture.** Technology moves so quickly that there is little chance of large organisations with complex legacy systems being able to move to a target ICT architecture before that architecture is out of date. We will agree a set of target architecture principles which any new projects will need to conform to, including the Government Design Principles, reuse of existing technology and open standards supported by appropriate security principles.
- Introducing **more rigour to the ICT procurement process** to ensure early engagement with ICT Services and Procurement. The corporate teams will help service areas turn their business objectives into technical solutions and procure these through the most appropriate route.



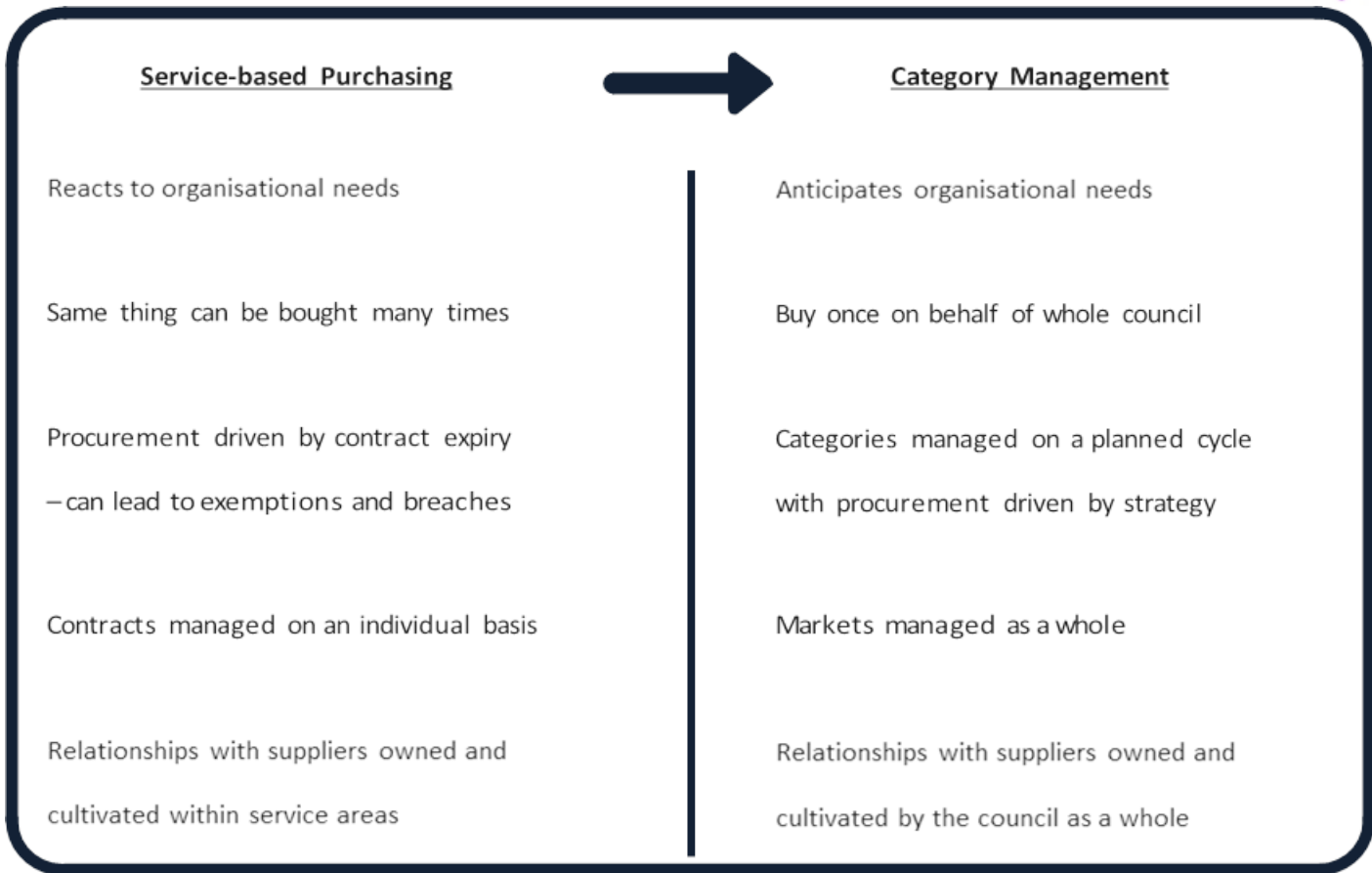
“I need a specialist solution”

“We can’t afford to be so special”

## Smarter Sourcing

We will achieve better value for money and quicker access to market by:

- Developing a **category management approach to ICT**, taking a whole-organisation view of the procurement of goods and services, organising purchasing activity by ‘category’ (e.g. hardware, applications) rather than by service area. Category management still delivers specific business needs but it sets out clearly what we should buy corporately to achieve value for money for the whole organisation and where there is room for service-specific variation. By organising spend by category, it allows us to secure value for money through economies of scale and base our purchasing decisions on a detailed understanding of key markets.
- Establishing an **ecosystem of digital suppliers** who can be called on to accelerate the pace of our digital programme – from building small scale applications to larger transformation programmes. The ecosystem will be made up of suppliers listed on the **Government Digital Marketplace**, specialist interims via our agency providers, local SMEs and education providers, including work experience opportunities for students. We’ll work with our local partners to stimulate the market for local digital agencies and skills.



## Smarter Skills

Finding different ways of doing things will require new skills – not just for staff who are directly involved in technology projects, but for commissioners of services, leaders and Members across the council. Digital awareness is a core competency for the modern manager, every bit as crucial to success as good financial and people management. For commissioners, understanding the potential of technology to transform services is key.

We will enhance our capabilities in this area by:

- Developing a **new commissioning framework**, led by the internal Commissioning and Supplier Management Group, which includes the tools, training and resources commissioners need to embed digital by design in the commissioning cycle. This will ensure that technology is considered up front, at the very start of the service design process.
- Developing **digital skills training** for non-commissioners, including senior officers and Members that will arm them with the awareness they need to think about digital in the context of their teams and services, providing opportunities for process redesign and better customer access.

We will model this curriculum on the **Government Digital Service Academy**, which provides content tailored to staff in different roles – from digital awareness for leaders and policy makers, to more hands-on content for business analysts and service managers. We will also develop some lighter content to raise awareness among Members.



## Funding a Smarter Buckinghamshire

Investment funding of £14.6m in ICT has been made available in the Medium Term Financial Plan over the next four years. This funding will deliver a number of the projects in this strategy as well making vital upgrades and maintenance to our existing technology infrastructure and architecture.

All projects will be assessed and measured using the following criteria:

- **Economic** – the project will support the county's economy and make it a great place to live, work and visit;
- **Customer** – the project will improve the quality of services to our customers;
- **Productivity** – the project will make the council and its partners more efficient;
- **Value for Money** – the project will demonstrate best use of the resources invested by the council and ensure sustainability.



In delivering our ICT solutions we will continue to operate a hybrid staffing model of a core baseline in-house team and supplier contracts, supplemented by supplier and flexi-resources. Delivery of this strategy will require additional resources to ensure that the right capacity and capabilities are available to deliver across the concurrent programmes.

A programmes and projects approach will be taken to the delivery of this strategy and themed under the key investment strands:-

1. **Smarter County** – using technology to create opportunities and ensure Buckinghamshire thrives;
2. **Smarter Communities** – safeguarding our vulnerable and building self-reliant communities;
3. **Smarter for Customers** – making it easier for people to access our services;
4. **Smarter Council** – creating an efficient organisation, helping staff and Members to do their jobs;
5. **Enablement** – delivering this strategy and ensuring value for money.

It will be supported by the ICT Improvement Programme to ensure the ICT and digital operating model is shaped around business and customer needs and that ICT and digital services adapt their staffing, supplier and contractor arrangements, processes and use of technologies to meet the changing organisational landscape. The ICT improvement plan will be focussed on delivering the following key outcomes:

- Enabling solutions for the workforce to be able to work flexibly, where and when it best suits them, their customers and service users;
- Working with our partners to shape joint programmes around Improving the health and wellbeing of the local population through technology enabled integrated health and social care services;
- Robust, timely and accessible information that drives informed decision making, service commissioning, and business transformation;
- A flexible, scalable and secure infrastructure where service cost is tied to applications and usage, and user experience is managed;

The programmes and projects approach will adopt appropriate PRINCE2 and Agile Project methodologies to ensure effective governance and management of plans, milestones, resources, risks and issues.