



# Bracknell Forest

*"... the borough of opportunity."*



## ICT & Digital Strategy 2017-20



*This strategy is provisional  
Content not yet finalised  
All dates provisional*



## Scope & Structure

- An ICT & Digital strategy
- Covering the period to December 2020\*
- Flowing down from the Corporate Aims
- Enabling the Transformation agenda
- Supporting the changes in Council-Wide Support Services
- Supporting the changes in care & health
- Supporting the Customer Contact Strategy
- Facilitating Flexible and Mobile working
- Aligned with the Accommodation Strategy
- **Underpinning the move to Digital**

\*Less than 1000 working days away



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## Creating an ICT Strategy

- An ICT strategy must serve the Council's strategic aims
- Plus the current & emerging needs of the departments
- It must examine how technology is changing, and examine the potential impact on the Council
- There is a special focus on **digital** here – a modern phenomenon changing our lives
- It must look at current ICT provision, and areas for improvement
- It must cast a vision of where we want to be – and 2020 is a reasonable future date
- This leads on to plans for how we get there – structured by short, medium, longer term.

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## Digital

- What is 'digital'?
- (It's not 1's and 0's)
- It's the use of internet connectivity, typically through mobile devices, in on-screen interactions for social or business purposes, usually brief in nature
- And it's everywhere....



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## Digital

- What is 'digital'?
- (It's not 1's and 0's)
- It's the use of internet connectivity, typically through mobile devices, in interactions for social or business purposes, typically brief in nature
- **And it's everywhere....**



## Digital

- It's changed our lives: on-line shopping, banking, news...
- We like to interact digitally (81% of the population have smartphones)
- Facebook means we can have THOUSANDS of friends...
- *And I can have free video calls with my daughter in Sydney*



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## Digital

## Government Digital Service

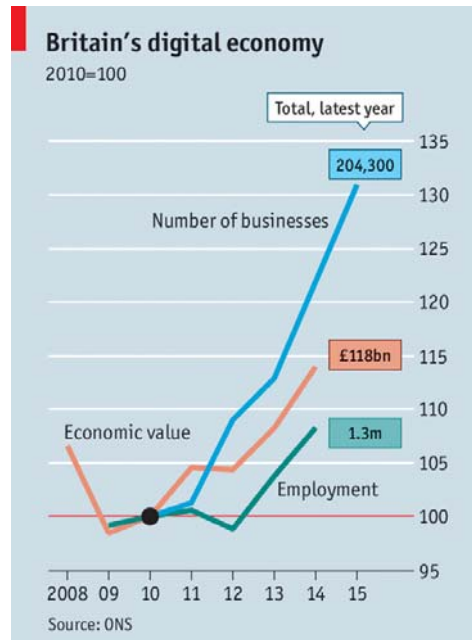
- We like interacting with Government via digital channels
- Great job, GDS!



# Digital

- It's growing fast: 32% faster than the rest of the economy
- Creating jobs x2.8 times as fast as the rest of the economy
- It's set to overtake manufacturing in terms of the economic value of output

Latest figures: UK digital economy now worth £145Bn (Cabinet Office, Feb 2017)



Economist.com

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## IN NUMBERS

**DIGITAL TECH ECONOMY**

**1.56m jobs<sup>1</sup>**  
Job creation **2.8x** faster than the rest of the economy (2010-2014)

**£50,000**  
Almost £50k average advertised salary<sup>2</sup>

**36%**  
higher than the national advertised average<sup>2</sup>

**41%**  
Digital tech jobs exist within non-digital industries<sup>3</sup>

**DIGITAL TECH INDUSTRIES**

**£161bn turnover<sup>3</sup>**

**32%** ↑↑  
Grew 32% faster than the rest of the economy (2010-2014)<sup>1</sup>

**58,000**  
identified active digital tech businesses<sup>4</sup>

**TOP SECTORS<sup>4</sup>**

- 17% App & Software Development
- 12% Data Management & Analytics
- 11.5% Hardware, Devices & Open Source Hardware

**DIGITAL TURNOVER TOTAL<sup>2</sup>**

LONDON	£62.4bn
READING & BRACKNELL	£10bn
BRISTOL & BATH	£8.2bn
MANCHESTER	£2.2bn
BIRMINGHAM	£1.8bn

**DIGITAL TURNOVER GROWTH (2010-2014)<sup>2</sup>**

SOUTHAMPTON	+180%
TRURO, REDRUTH & CAMBORNE	+153%
DUNDEE	+129%
LONDON	+101%
BRISTOL & BATH	+53%

**80%**  
Over 80% of Tech Nation clusters have seen growth in digital turnover, digital jobs and advertised digital salaries (See page 32 for definition of cluster)

**58,000**  
digital tech businesses found across the UK

DIGITAL JOBS <sup>1</sup> TOTAL	PRODUCTIVITY <sup>3</sup> (SALES PER WORKER)	DIGITAL SALARY <sup>2</sup> GROWTH (2010-2015)	
LONDON	328,223	BRISTOL & BATH £296,340	LEEDS +29%
MANCHESTER	51,901	LONDON £205,390	NEWCASTLE & DURHAM +27%
READING & BRACKNELL	40,440	READING & BRACKNELL £196,800	SUNDERLAND +26%
BIRMINGHAM	36,768	SOUTHAMPTON £171,720	EDINBURGH +26%
BRISTOL & BATH	36,547	OXFORD £170,460	SOUTHAMPTON +25%

Tech City UK & NESTA, Feb 2016  
<http://growthintel.com/tech-nation-2016-2/>

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## Digital



**Digital by Default  
Service Standard**

- **So how do we exploit this?**
- **Externally:** make it a core part of our Customer Contact Strategy
- We know from the residents' survey that they welcome this
- And the borough's population is highly digitally enabled
- So let's use it for the right sort of interactions:
- Report something, apply for something, pay for something....
- While maintaining other channels for more complex things (social care, housing, benefits...)
- But being digital wherever we can: it's cheaper, and citizens prefer it
- And doing it well: following the GDS design standards

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## Digital

Let's re-engineer end-to-end processes to suit the digital age – not the paper, post and phone age



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## Digital



**Digital by Default  
Service Standard**

- **So how do we exploit this INTERNALLY?**
- We make it a core part of redesigning our business processes
- Analyse our core business processes end-to-end, think about desired outcomes
- Simplify, automate where possible
- Make interactions digital
- Leverage the fact that our workforce will be mobile & flexible
- Make meetings virtual, when appropriate
- Use more applications that support co-operative working (internally and externally)
- Move from paper to on-line (e.g. payslips)
- Support the 'work is a thing you do, not a place you go' principle
- **Ensure the technology enables all the above....**

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## Current ICT Provision

- **We're a bit behind the curve...**
- We don't have easy access to systems, even internally
- It isn't easy from outside the network, either
- We're using Protective Marking that ended in 2014
- We're not using the cloud much (everyone else is...)
- We've introduced flexible & mobile working, but the technology has lagged
- Telephony is clunky, and we don't have Skype
- We still have Blackberries – they are obsolete





## Current ICT Provision (cont.)

- We're a bit behind the curve...
- We still have Windows 7, and Office 2010 – it's on extended support, ending 2020
- We're so locked down, it's hard to work
- We don't have follow-me printing
- We haven't had ICT Business Partners
- We don't communicate well
- We don't ensure that technology is fully exploited
- We haven't started looking at shared services
- The list goes on....



## A Vision for 2020

- Staff are ICT-enabled to work wherever they need to: office, home, a citizen's home, another organisation's site, on the move....
- Staff are able to provide a service that is most effective for the customer, not just for the Council
- Travel time, dead time and duplication of effort are minimised
- Line of business systems are best of breed, consolidated, up to date, usable remotely as well as in the office
- Organisational data is timely & accurate, and shared with other public sector bodies as needed
- Partnership working is the norm, across social care, health, police, etc
- The Council is exploiting the power of 'big data' to gain insights, make better and more timely decisions
- Data is open by default
- Interactions with citizens are primarily digital and self-service
- Call-centre operations are multi-channel, including video, and there is easy load-sharing across teams

## A Vision for 2020 (cont.)

- Staff interaction with systems is primarily digital, from anywhere, anytime, and time spent on admin is minimised
- Shared services (including ICT) have been examined, and adopted where appropriate
- The e+ card has been adopted for staff identity, log-on security, follow-me printing, cashless vending, local citizen benefits....
- All meeting rooms are 'smart' – bookable on-line with a display outside, video and phone conferencing enabled, easy connection to the display screen, etc
- Staff collaborate extensively on-line, via multiple channels, internally and externally. They experiment with new cloud-based offerings as they emerge; staff are digital enthusiasts
- The move to the cloud is largely complete, Office 365 has been adopted, everyone uses a laptop (or similar) with Windows 10, deskphone are mostly gone and staff use headsets
- Staff get all the support they need to get the best from their technology, via multiple means (training, masterclasses, 'how do I' video clips, local super-users, hints and tips online, lunch and learn...)
- Bracknell Forest Council is well known for having high quality, up to date technology. It works well, and officers and members exploit it to the full. User satisfaction is maintained at a high level.

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## What is the Cloud?



It's about replacing this:



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# What is the Cloud?



With this:



Microsoft San Antonio Data Centre

## Cloud: Why?



- Computing power is now a **commodity**
- Google, Microsoft, Amazon, IBM\* etc run vast data centres around the world\*
- They are super-secure, super-reliable, energy-efficient, and they are here to stay
- They offer storage, compute power etc cheaply
- Cheaper than you can do it yourself
- Most software suppliers now offer 'software as a service', hosted in the Cloud
- Microsoft's Office product went to the Cloud some years ago (Office 365)
- They will be offering all the best new features in the Cloud version

\*Combined, they have 50% of the cloud infrastructure market

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## Cloud: When?

- If we were starting from scratch - **immediately**
- BUT we have a data centre, all paid for...
- It will become end-of-life by 2020
- So it makes sense to plan a progressive move to the Cloud, over that period



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## Short Term Plan (to June 2018)

The Council has defined 3 work-styles (Fixed, Home-Flex, Free):

- Fixed and Home-Flex have laptop
- Device for Free being finalised
- Desks with dual 19 inch monitors (16:9)
- Universal docking
- Older laptops upgraded to SSD, 4 year replacement cycle (inbuilt camera)
- Window 10, Office 2016
- Soft phone & headset (some will prefer a handset)
- Soft phone works on your laptop at home (or wherever)
- Free workers: smartphone with email on the move (Samsung J5)
- Voicemail for all (on Cisco or mobile)
- Instant messaging, video conferencing, and collaboration apps

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## Short Term Plan (to June 2018 – cont.)

- Collaborative working the norm – group chat, video conferencing, screen sharing
- Move away from phones on desks
- Hot-desking culture:
  - Get your equipment from your locker
  - Find a desk – plug in and work, headset on
  - Join a call or a virtual meeting, by voice / video – from your desk
  - Find a space for a one-to-one with a colleague
  - Join a meeting in a well-equipped room – freeing up your desk
  - Presence indicates you're not available
  - Work somewhere else, or in another building, or from home
- Processes are progressively more digital – fewer human touch-points, processes slick, interactions well-designed.
- **Staff increasingly using cloud-based collaboration & project management platforms**

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## Short Term Plan (to June 2018) : Enablers

- Vodafone contract renewal (imminent)
- Microsoft Enterprise Agreement (Q3 2017)
- Internet upgrade (Q1 2017)
- Wifi - ensuring coverage is good everywhere (asap)
- Replace Blackberries with Samsung J5\*
- Vasco tokens no longer needed on laptop (Q1 2017)
- New helpdesk software; more self-service (Q2 2017)
- Print: move to follow-me printing (with move to Time Sq)
- e+ cards for identity, building access, print, local benefits...
- Document management system
- Agenda management system (Modern.Gov)
- Smart meeting rooms
- Restructure creates the roles of ICT Business Partner (Q3 2017)
- Fix protective marking, unblock webmail, enable Skype, measure User Sat...
- NB: General Data Protection Regulation takes effect May 2018
- **Full support for customer contact strategy**



\*Should be able to do without Good software

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## Medium Term Plan (July 2018 - June 2019)

- Data centre days are numbered: end of life by 2020
- Applications rationalised, and progressively cloud-hosted
- Cloud by default: applications progressively moved from data centre
- Have adopted Microsoft 365: cloud-based email, Office, telephony/videoconferencing
- Moved out of Easthampstead House – new means of mirroring data & handling ICT DR (either another Council, or cloud)
- Continuation of the short-term strategies

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## Longer Term Plan (July 2019 – Dec 2020)

- Transformation and Digital Enablement complete
- Applications rationalised to support new structures
- Cloud by default
- SAN and server infrastructure due for renewal from mid 2019
- Collaborative working across agencies now standard
- Automated customer contact support (chat-bots) in routine use
- Big data benefits starting to be realised
- Data is open by default (subject to proper safeguards)
- Exploration of deep learning systems; trend to automation starting to become more obvious

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The move to replace skilled office workers with Artificial Intelligence has started...



Japanese insurance firm Fukoku Mutual Life Insurance is making 34 employees\* redundant and replacing them with IBM's Watson Explorer AI (Guardian, 6 Jan 2017)

\*Assessing medical insurance pay-outs

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And computers are now better at poker\*



Libratus, an AI system from Carnegie-Mellon, just beat four of the world's top poker players in a three-week challenge at a Pittsburgh casino (it failed last year) (Guardian, 30 Jan 2017)

\*A game with imperfect information – this is a really significant step forward

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## Proposed Way Ahead

If this strategy is approved (and it has go through the proper processes):

- Create a roadmap (actually, several: end user, applications, infrastructure)
- Plan projects in outline, to estimate costs, durations, resources
- Draft a 'MasterPlan' of projects, to ensure dependencies & resources work out
- Create a Business Case for each project; project manage using appropriate methods (Agile or conventional)
- **Periodically review the strategy**

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## Stop Press

Government ICT Strategy  
published 9th Feb

It aligns closely with what  
we are proposing here

## Government Transformation Strategy

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<https://www.gov.uk/government/publications/government-transformation-strategy-2017-to-2020>

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## Questions

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