



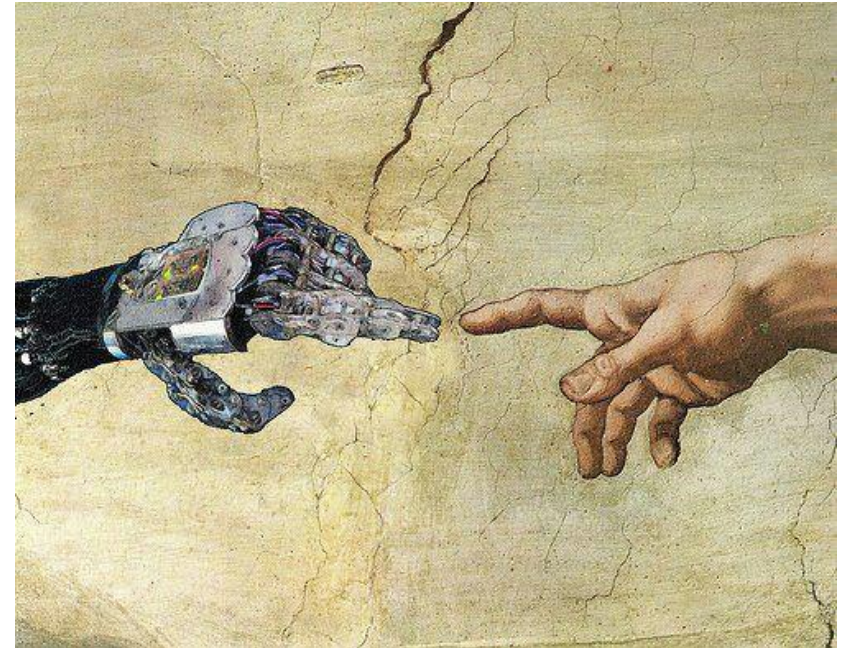
Swindon & Wiltshire

LOCAL ENTERPRISE PARTNERSHIP

Local Industrial Strategy

A Business Led Cyber Hub

Presentation to SWLEP Board



Presented by Chris Crowther

25 Sep 2019

Overview

1. A Strong Baseline

2. A Call To Action

3. Opportunity

4. Benefits VS Challenges

5. Economic Case

6. Social & Environmental Case

7. Financial & Commercial Case

8. Risks

9. Summary

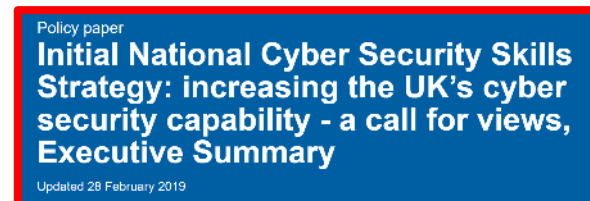
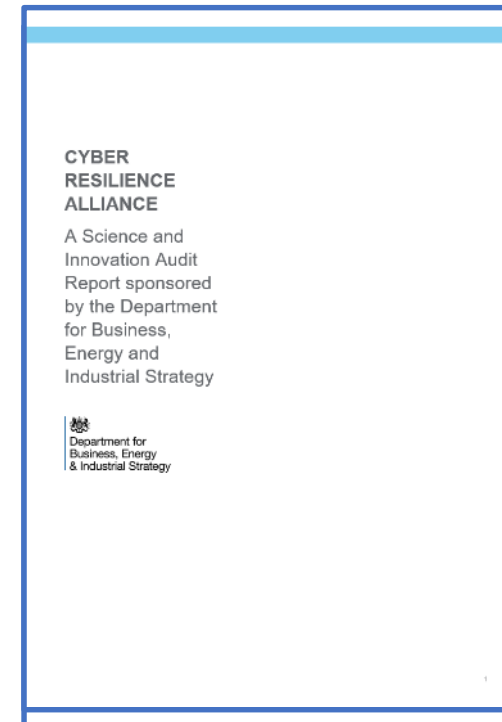
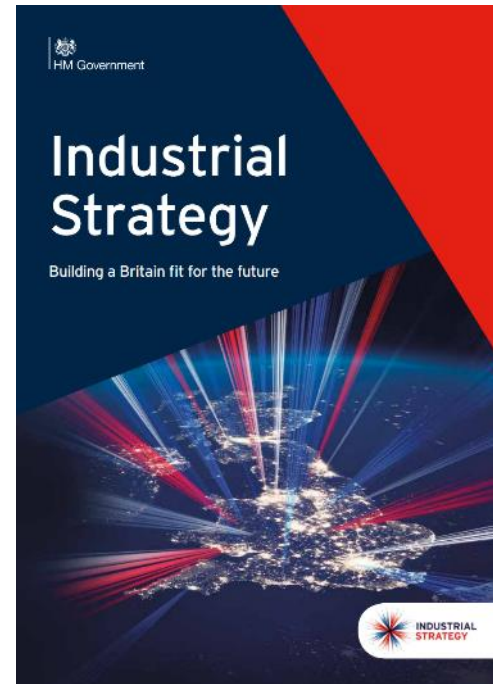
HM Government

Industrial Strategy

Building a Britain fit for the future



1. A Strong Baseline



This is why we need a Business-led Cyber Hub (Centre of Excellence)?



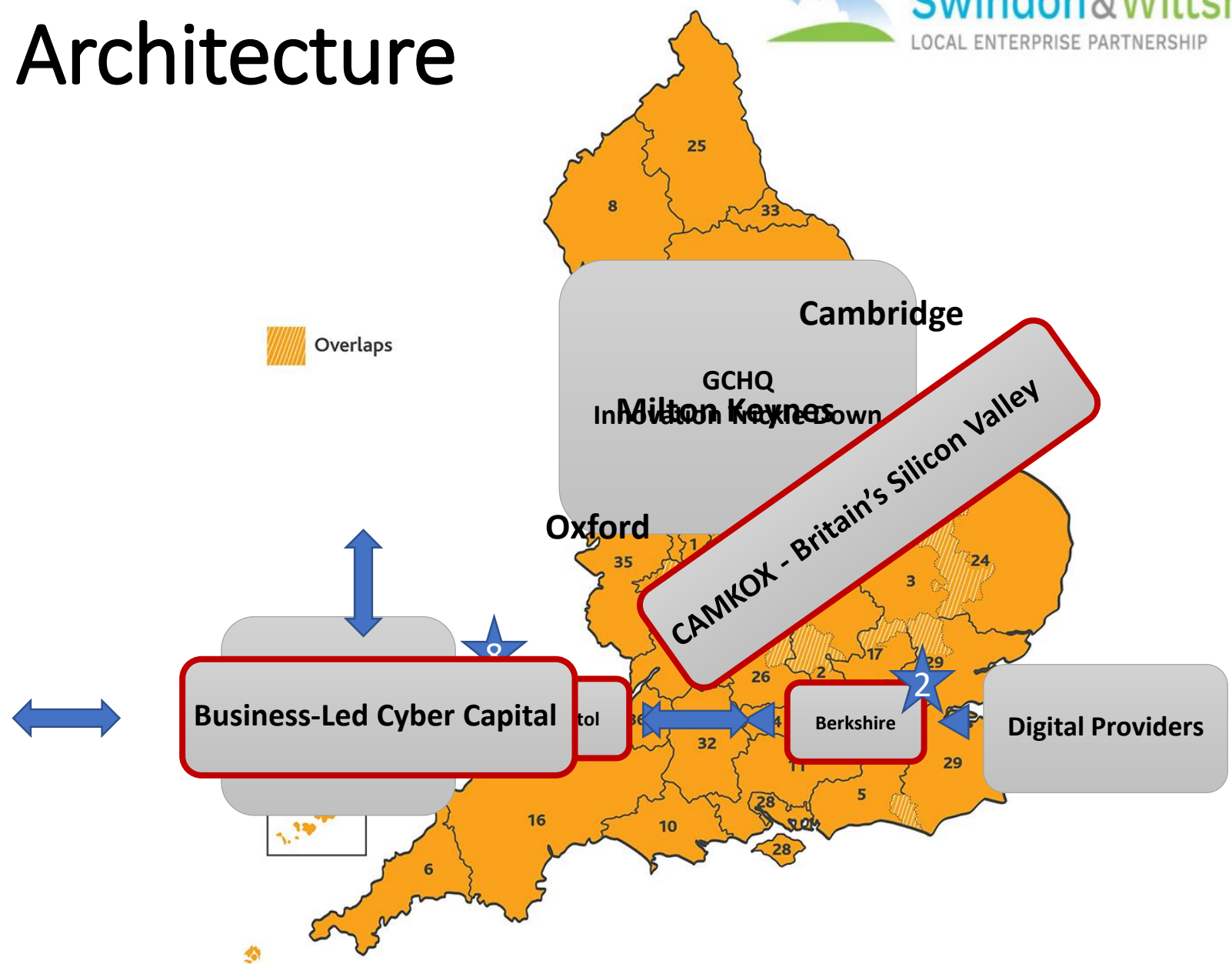
Government cyber security strategy is 'chaotic'

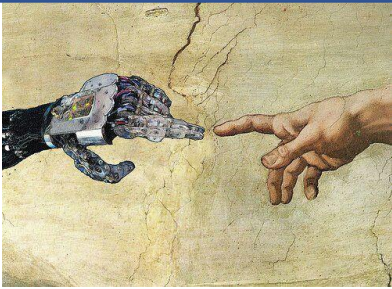
The National Audit Office has sharply criticised the Cabinet Office over failings in how it set up the National Cyber Security Programme that means it may struggle to meet its goals



- Establish which areas of the programme are having the most positive impact and are most important to address
- focus resources over the remaining two years of the scheme (£648m)
- Conduct a wide-ranging consultation for the UK's cyber security strategy post 2021:
 - What should be centrally funded?
 - **What should be private sector driven?**
 - What should be core departmental activities?
 - **Consider more flexible approaches that involve shorter, more flexible programmes**

Conceptual Cyber Architecture



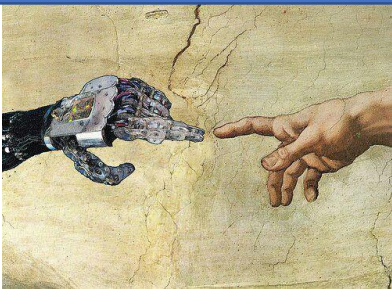


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Market Demands

- Global market for cyber products and services will reach **£759bn by 2021** and the UK is positioned strongly to deliver against this market (**DIT**)
- USA and Israel top the global cyber revenue charts. Impact of **R&D investment** and **public-private commitment**.
- **32%** of businesses | **22%** of charities identified a breach in the last 12 months. These breaches cost, on average, **£4,180** and **£9,470** respectively.



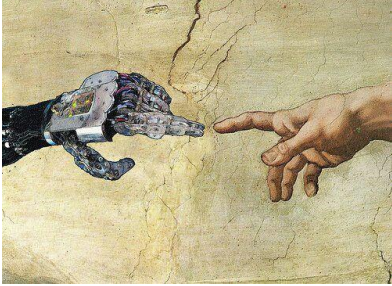


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Key Factors

- **Business-led** and designed to deliver against the UK, European and Global market and demand.
- Design has the **agility** to incorporate **innovative** ideas and technologies such as artificial intelligence, machine learning and data science in order to allow greater, more **effective cyber defence**.
- **Natural strengths and opportunities** including talent, resilience and connectivity.





Benefits

- Helps boost regional productivity
- Exciting employment opportunity linked to natural strengths;
- Global Market Access
- Supports UK Govt in delivering Cyber Strategy;
- Supports wider UK business community & cyber resilience;
- Compelling public and private investment for cyber resilience outside London;
- Focal point for academic institutions to design, develop and deliver cyber courses that meet needs of industry and society.

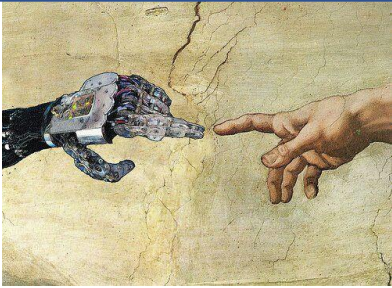


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Challenges

- Regional productivity has declined
- Focal point and catalyst for a regional cyber SME network focal point is missing.
- UK lags far behind the OECD in terms of R&D
- A business-led cyber hub provides a platform to raise awareness
- attract to tech talent and promote gender / age inclusive growth into the area.



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Market	Size 2018 £bn	Swindon and Wiltshire potential market share	
		1% share – low estimate £bn	5% share – high estimate £bn
EU market	£25.3	£0.253	£1.26
Global market	£733.7	£7.34	£36.68

Additional Catalysts for Growth

- The Industrial Strategy “Sector Deals” all have a cyber component.
- Regulation and Central Govt support are hugely attractive
- An advanced, well-connected ecosystem of world-leading companies, clusters, research institutions, networks and associations.
- Cyber security is a high-growth market and has yet to reach maturity.



6. Social & Environmental Case

	Location	Talent Supply	Quality of Life	Digital Growth Optimism	Transport Infrastructure
Bath / Bristol					
London	Swindon and Wiltshire	41%	92%	88%	-
	Thames Valley	42%	74%	77%	43%
Reading	London	45%	54%	78%	57%

2017 OFFICE RENT¹ % RATE AS GOOD

GROWTH CHALLENGES
70% LIMITED HIGHLY SKILLED WORKERS

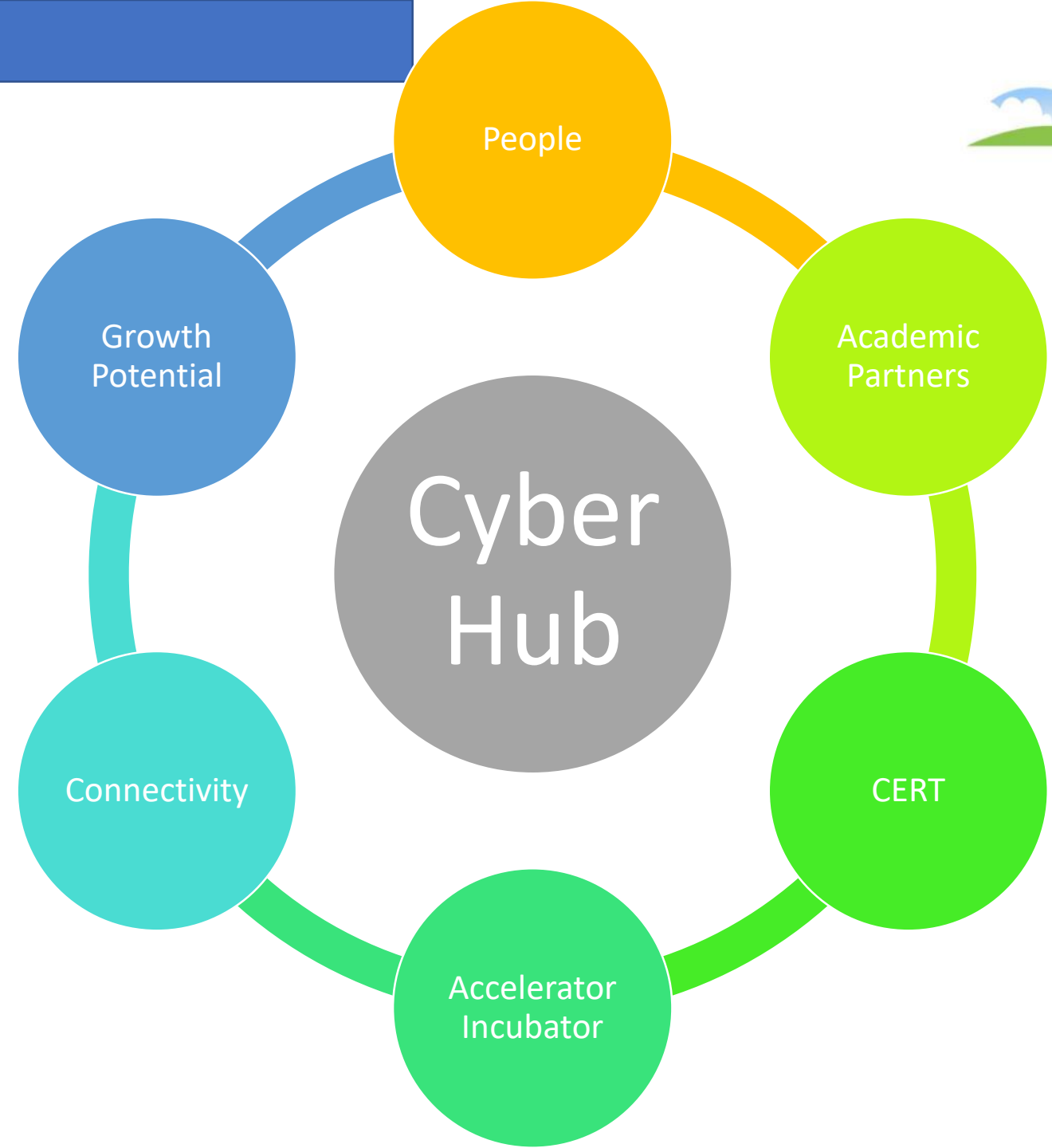
TECH CITY UK AVERAGE PROPERTY PRICE £390,592
1. JLL Property Data, 2016
2. Land Registry Data, 2016

DIGITAL GROWTH OPTIMISM 77%

TRANSPORT INFRASTRUCTURE 43%

22% LIMITED INVESTMENT OPPORTUNITIES
19% POOR TRANSPORT INFRASTRUCTURE

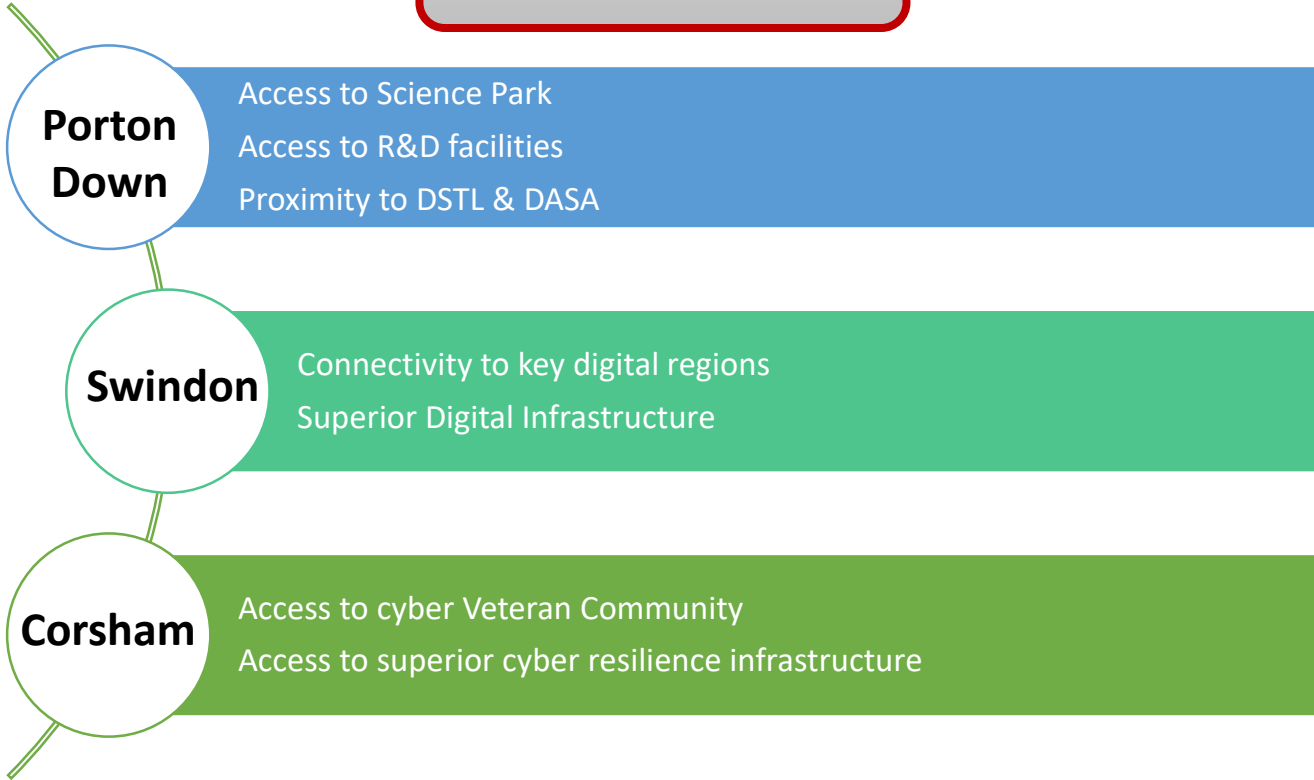


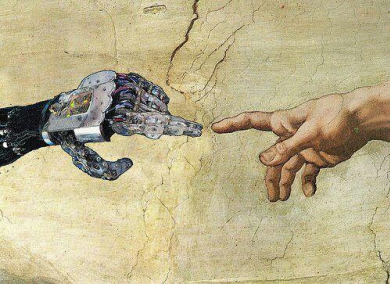


Financial

- Possible Public / Private joint venture.
- Estimated build costs £10m (Porton Science Park).
- Income through leasing incubation space and possible cyber services revenue share

Commercial





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Risks

- Identity ~ Investment
- Political Uncertainty
- Early stage private investment
- In depth development work
- Time is of the essence



A Cyber Hub already exists . . .

Be'er Sheva Cyber Security Complex



We have the component parts:

- UK Cyber Warriors
- Academia on our periphery
- Good QoL
- Potential for Cyber Accelerator / Incubator
- CSOC is based in Corsham

... And these are its people



Inaugural Multilateral (UK – US – IDF) Cyber Exercise

~ Aug 2019



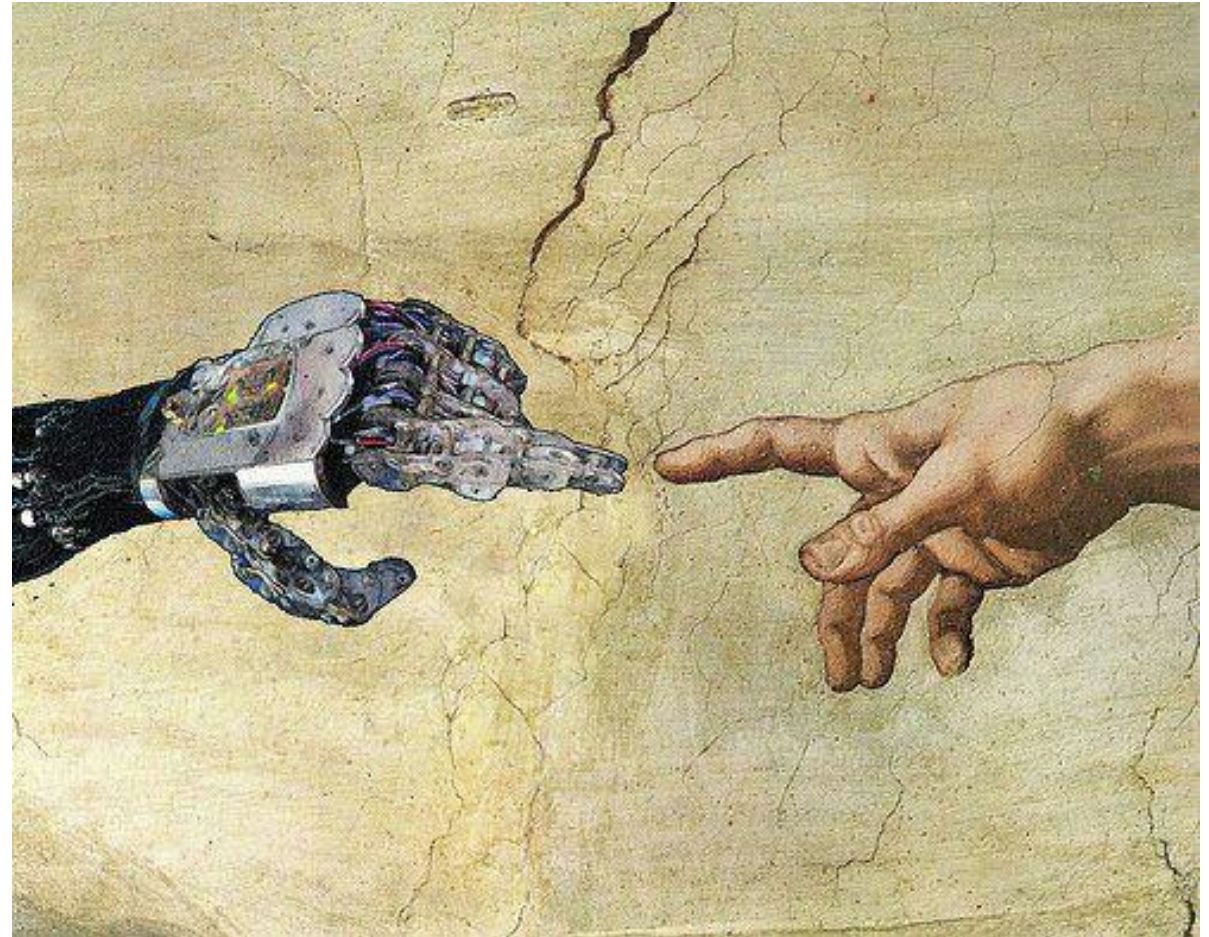
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Local Industrial Strategy

Back Up Slides

*Evidence Base:
Further details*

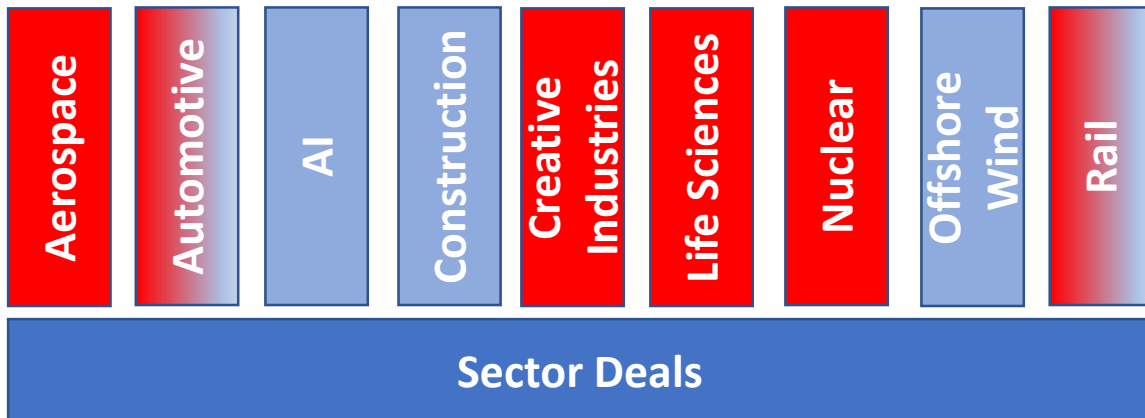


Industrial Strategy

Building a Britain fit for the future

UK Industrial Strategy (2017)

- Become the best place to start and grow a business
- Become the world's most innovative economy
- Upgrade the UK's infrastructure network
- Ensure prosperous communities across the UK
- Create good jobs and greater earning power



Aims & Objectives

The Swindon & Wiltshire LEP intends to submit a compelling and coherent cyber resilience proposal that will compete well for inclusion in the Local Industrial Strategy

Aim: To understand Swindon and Wiltshire's cyber resilience capabilities and national/international offer in the context of the industrial strategy (through a compelling evidence-based proposal).

Objectives:

- Provide a strong evidence base for the SWLEP and its partners to support strategic decision making;
- Support SWLEP's interface with, and representations to, government;
- Support the development of sector specific workforce and skills plans;
- Identify the area's unique selling points;
- Provide a robust evidence base and rationale to support funding bids;
- Underpin improvement in productivity performance and inclusive growth;
- Identify a set of stretching but realistic economic performance targets.



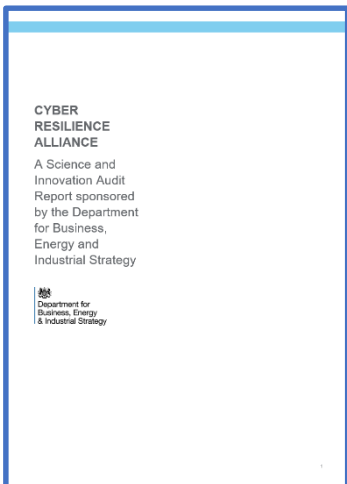
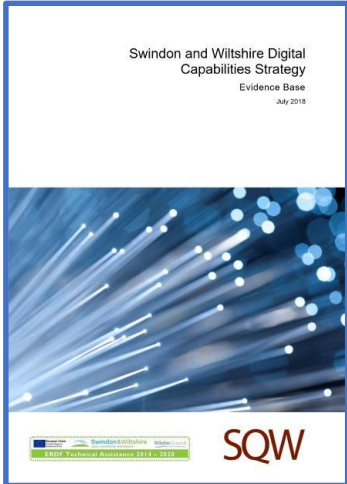
OPPORTUNITIES

- ✓ Digital Infrastructure
- ✓ Physical Connectivity
- ✓ Critical Mass
- ✓ Cost Effectiveness
- ✓ Dynamic Tech Sector
- ✓ Enthusiasm & Collaboration
- ✓ Access to Talent
- ✓ Investment (Local Government)



CHALLENGES

- Productivity Gap
- Skills & Education
- Scale Up Support
- Investment (Private Sector)
- Digital Reputation
- Sector Identity
- Inherent Sector Networks



A confluence of natural strengths

Emerging Best of British

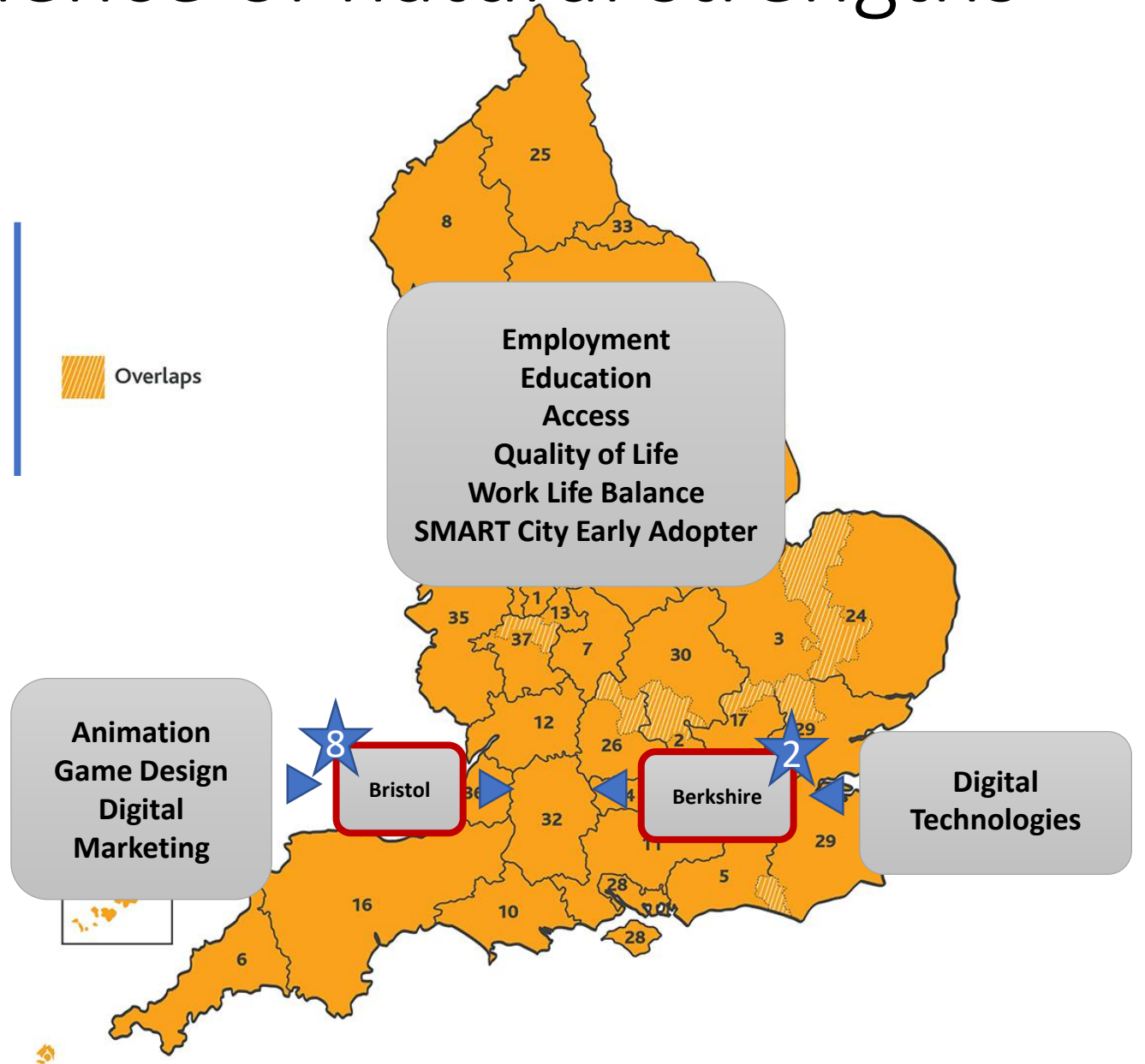


09 Nov 18: Computer Weekly

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Area	Score
Hounslow & Richmond	31.0
Berkshire	29.6
Haringay & Islington	29.0
Darlington	28.0
Lambeth	27.2
Edinburgh	27.0
Nottingham	26.8
Bristol	26.4
Lewisham & Sotuhwark	25.9
Tower Hamlets	25.5

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Key Themes & Questions

Our place in the Real World

- What are the unique selling points, with a focus on cyber resilience, that Swindon and Wiltshire has to offer?
- What differentiates the Swindon Wiltshire cyber resilience offer from the other surrounding regions?
- What do businesses need to support growth and where should regional and national investment priorities lie?

Building the Enterprise Blueprint

- Can we position Swindon and Wiltshire as a Business-led Cyber Capital (Centre of Excellence)?
- How do we boost private investment in regional infrastructure and incentivise digital infrastructure investors? Who are the key stakeholders?
- Are there cyber resilience focus areas that we should target? Gartner Top 10?

Leveraging the UK Industrial Strategy

- How do we facilitate great inward investment and trade into the region through the UK Industry Strategy?
- What opportunities do we have for closer Government-industry collaboration?
- What other factors should we leverage to make this a success (PESTLE)?

Our Place in the Real World



What are the unique selling points, with a focus on cyber resilience, that Swindon and Wiltshire has to offer?

- People with right skills, outlook and approach
- Easy access to globally recognised universities and education
- **Convincing touchpoints to many of the UK Industrial Strategy Sector Deals**
- **Potential to scale (space / access / QoL)**
- A very envious “network effect” given its position in the UK and the existing network links.
- A strong opportunity to leverage 2nd career people (ex military community)
- A diverse technology ecosystem that provides a good route to market with strong development potential.

Our Place in the Real World



What differentiates the Swindon Wiltshire cyber resilience offer from the other surrounding regions?

- Very strong digital resilience infrastructure.
- Stronger network effect & connectivity.
- Better Quality-of-Life
- Better access to existing digital Centres of Gravity (CAMKOX – Britain’s Silicon Valley).



- **UK regulation is constraining**
- **Growth mentality and confidence.**
- **High levels of internal competition.**
- No unified “call to action”.
- Perceived lack of accessible investment.
- **Convincing strategic plan.**

Our Place in the Real World

What do businesses need to support growth and where should regional and national investment priorities lie?

- People & skills - ongoing focus
- Business leadership needs to drive the effort.
- Understanding of the digital resilience design process.
- Better understanding of cyber service providers, products and services.
- Greater efforts must be made at collaboration.
- Supply and demand is a big unknown.



- Improved Board awareness
- Clearer incentives to adopt a unified digital strategy
- A common lexicon
- Communicate the benefits of:
 - Digital infrastructure, foundation and resource availability within SWLEP
 - Re-instil confidence in the regional reputation

Building the Enterprise Blueprint

Can we position Swindon and Wiltshire as a Business-led Cyber Capital (Centre of Excellence)?

- The supply / demand continuum.
- Cultural confidence
- Narrowing the scope – Sector specific



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The National Audit Office has sharply criticised the Cabinet Office over failings in how it set up the National Cyber Security Programme that mean it may struggle to meet its goals



- Establish which areas of the programme are having the most positive impact and are most important to address
- focus resources over the remaining two years of the scheme (£648m)
- Conduct a wide-ranging consultation for the UK's cyber security strategy post 2021:
 - What should be centrally funded?
 - **What should be private sector driven?**
 - What should be core departmental activities?
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Building the Enterprise Blueprint

How do we boost private investment in regional infrastructure and incentivise digital infrastructure investors?

- We need the best people (inc 2nd careers) equipped with the right skills.
- Access to unrivalled digital education and training provision.
- A public / private "Cyber Capital" collaboration inc. overseas investment.
- Engender an entrepreneurial spirit.



- Cyber fatigue.
- A comprehensive digital solutions programme NOT just disparate cyber products and services.
- Political uncertainty.



Who are the key stakeholders?



Building the Enterprise Blueprint



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Are there cyber resilience focus areas that we should target?


- Digital Ethics.
- Empowered Edge Computing and Internet of Things.
- 5G Roll out.
- Blockchain.
- Digital education.
- Open Source Assessments.
- Health & Life Sciences

Leveraging the UK Industrial Strategy



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How do we facilitate inward investment and trade into the region through the UK Industry Strategy?

- A long term strategic roadmap.
 - Tap into the UK industrial strategy sector deals.
 - Demonstrate mutually supporting benefits across multiple Govt departments and initiatives
 - Highlight unique benefits of the UK
 - Devise a comprehensive showcase investment package 
- The attractiveness of the region's digital offer
 - The health and robustness of the digital ecosystem
 - Low churn rate
 - Clearly communicate levels of local and private investment.
 - An attractive soft landing package.

Leveraging the UK Industrial Strategy



What opportunities do we have for closer Government-industry collaboration?

- Sector Specific in the initial instance
- Strong People potential
- Ability to scale.
- **Leveraging the Govt SME agenda.**
- **The UK Cyber Strategy Challenges.**
- Common Culture.

Leveraging the UK Industrial Strategy



What other factors should we leverage to make this a success (PESTLE)?

- Political support and funding will be critical.
- There is a strong economic case given the cyber resilience gaps identified by the NAO.
- Social / Societal: There is strong human potential (Societal) inc. education, training & awareness
- The necessary technology and digital backbone exists but needs to be continually monitored & improved.
- Any proposition will need to highlight clearly the eco benefits.
- The pre-eminent position of the UK as being legally upstanding is a key selling point.