Digital Poverty & Digital Capital
Identifying and addressing the lack of access to the digital world

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BCS & RSA
BCS Purpose
What should we do as members of the BCS?

Making IT good for society

In 2015, Paul Fletcher, BCS CEO, wrote that we should use the three pillars of Community, Excellence and Leadership to support our endeavours.

Let’s not leave anyone behind.
RSA Purpose

What does the RSA do?

We’re committed to a future that works for everyone.

A future where we can all participate in its creation.
Digital Poverty
Aside - Digital Irony

How do we engage with those in digital poverty?

Especially in lockdown, we are engaging more and more using digital tools.

How do we even begin to engage with those in digital poverty?
Measuring digital poverty

Is Government data too coarse for the job?

- ONS - UK Government data is too broad
- Lloyds Bank – much more depth
## ONS data on internet access

Every household with children has access?!

### TABLE 2: INTERNET CONNECTION BY HOUSEHOLD COMPOSITION, 2012 TO 2020

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</thead>
<tbody>
<tr>
<td>All households</td>
<td>80</td>
<td>83</td>
<td>84</td>
<td>86</td>
<td>89</td>
<td>90</td>
<td>90</td>
<td>93</td>
<td>96</td>
</tr>
<tr>
<td>1 adult aged 16 to 64</td>
<td>76</td>
<td>74</td>
<td>81</td>
<td>80</td>
<td>87</td>
<td>88</td>
<td>91</td>
<td>94</td>
<td>95</td>
</tr>
<tr>
<td>1 adult aged 65+</td>
<td>36</td>
<td>40</td>
<td>40</td>
<td>49</td>
<td>53</td>
<td>61</td>
<td>59</td>
<td>73</td>
<td>80</td>
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<tr>
<td>2 adults aged 16 to 64</td>
<td>93</td>
<td>96</td>
<td>97</td>
<td>96</td>
<td>99</td>
<td>97</td>
<td>99</td>
<td>100</td>
<td>100</td>
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<tr>
<td>2 adults, 1 at least 65+</td>
<td>69</td>
<td>74</td>
<td>79</td>
<td>84</td>
<td>85</td>
<td>88</td>
<td>87</td>
<td>89</td>
<td>94</td>
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<tr>
<td>3+ adults, all ages</td>
<td>95</td>
<td>97</td>
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<td>98</td>
<td>99</td>
<td>100</td>
<td>98</td>
<td>99</td>
<td>97</td>
</tr>
<tr>
<td>Households with children</td>
<td>95</td>
<td>97</td>
<td>96</td>
<td>97</td>
<td>99</td>
<td>98</td>
<td>100</td>
<td>100</td>
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</tbody>
</table>

Base: Households in Great Britain.  
Source: Office for National Statistics
Defining digital access

Is access to the Internet enough?

- ONS - all households with children have internet access
- Lloyds Bank - “3.6 million people (7%) are almost completely offline”.
- What is the discrepancy here?
Lloyds Bank Consumer Digital Index
A more detailed measure of confident usage

An estimated 9 million (16%) are unable to use the Internet and their device by themselves.
Defining Digital Poverty
Is it just about access to the Internet?

“Poverty is not just a lack of money” – everyone

Similarly, digital poverty is not just a lack of access to the internet.
Missing pieces
What is Digital Capital?
Tease out the social characteristics that enable it

• Knowledge
• Training
• Security and confidence
• Cash
• Space and time
• Family and peer support
• Local infrastructure
Missing digital capital
Define the pieces of our lives that enable digital access

- Knowledge – lack of information
- Training – lack of properly-tailored education
- Security and confidence – complexity of existing technical solutions?
- Cash – cash poverty, expensive hardware
- Space and time – complex lifestyle issues
- Family and peer support – very complex social issues
- Local infrastructure – rural and urban causes
Three kinds of capital

Devices, bandwidth and skills

- Device poverty
- Bandwidth poverty
- Skills poverty

James Davenport
Hebron & Medlock Professor of Information Technology, University of Bath
Member of BCS Council
Case Study - Hospital Volunteers
Friends of the RUH
Volunteers in a hospital in Bath

• Ward visits - tea and coffee, and more importantly social contact
• Gardening
• Kit repair - walking frames and hearing aids
Aside - "Fear of looking stupid"

What personal barriers do people put around themselves?

Should I avoid the benefits of the internet because of perceived risk of failure?
Effects of Poverty
Many effects
The many ramifications of digital poverty

• Poor education – especially with lockdown and remote learning
• Increased financial cost – reduced access to cheap deals, cost comparison
• Poor lifestyle – reduced access to food delivery, food comparison
• Social isolation – no Zoom, no Uber, no cheap train tickets
• News isolation – no access to variety of news sources, fact checkers
• Education impact – aside from direct access to education, the crossover effect of internet access to STEM and other learnings
Health impacts

COVID-19 Track and trace

- Physical hardware
- Ability to use effectively
- Desire to use
Digital in the workplace

Employer Demand for Digital Skills

• "... help inform the development of evidence-based digital skills policy".

• “Acquiring specific digital skills makes career progression as well as a pay increase more likely.”
Unaware non-participants
Who could benefit from digital world?

"Over one-third of those offline say the Internet ‘doesn’t interest me’ "

Lloyds Bank UK Consumer Digital Index 2020
Defining Solutions
Many existing solutions
The good work already being done

- Good Things Foundation
- Future Dot Now
- Barclays Bank Digital
Many existing solutions
The good work already being done

"We believe that digital technology can support equality of opportunity, and ensure everyone can participate fully in today's society."

Good Things Foundation
Many existing solutions
The good work already being done

"Our aim is to inspire **behavioural change** across society that could lead to a genuine cultural shift.

We are putting the focus on **lifelong learning** and developing the digital skills people require for work – helping them **identify the skills they need** and showing them where to get them."

Future Dot Now
Many existing solutions
The good work already being done

"Over 11,000 people are benefitting with devices, connectivity and support thanks to DevicesDotNow"

Devices Dot Now
Many existing solutions
The good work already being done

The story of the DevicesDotNow

Target 10,000 devices

- 2,419 devices allocated to 203 community partners
- Funding secured to support 7,772 further people, via 350 community partners

11,437 total devices secured
Many existing solutions
The good work already being done

We’re helping 500 care homes across the UK boost their digital skills.

“By having the tablet we’ve been able to keep residents in contact with family members, which has helped ease the distress that lockdown and shielding caused for both family members and residents.”

The Grove Residential Care Home
Leaders and Followers
Individuals as leaders
How we can lead

"Let’s take a second to remember that a lot of families in need will not have access to the internet.

"They can’t sign petitions or scroll down my twitter.

"Their voices cannot be heard so we have to use ours to communicate on all of this amazing local help.

"Thank you all"

Marcus Rashford MBE, 28 October 2020
RSA as Leader
How others can lead

WE UNITE PEOPLE AND IDEAS
Join us to resolve the challenges of our time.
Government as follower
How other bodies can define solutions first

“When it comes to social challenges which require citizen engagement, we need intermediate institutions to find a way forward.”

RSA, "Can Government be more effective as the ‘first follower’?"

Matthew Taylor, Chief Executive, RSA

Anthony Painter, Chief Research & Impact Officer
Government as follower
How other bodies can define solutions first

“We should see [Government] as providing the final piece of the jigsaw in a process of change started by citizens: ‘first follower’ rather than erratic leader."

RSA, same piece
Government as follower
How other bodies can define solutions first

“Who’s in the lead? We could be.”

RSA, same piece
Digital Census
Digital Census?
... or digital census?

"Census 2021 will be the first digital-first census. It’s easy to do and can be done on any device."

"If you can’t get online or need help completing the census online, there’ll be Census Support Centres across England and Wales."
Many demographics
How demographics relate to missing capital

• Poverty in general affects demographic classifications
• Digital poverty is not a canonical input into demographics
• How do demographics and digital capital intersect?
## Many more solutions

Tying demographics and missing capital together

<table>
<thead>
<tr>
<th></th>
<th>Knowledge</th>
<th>Cash</th>
<th>Support</th>
<th>Local infrastructure</th>
<th>Space and Time</th>
<th>Training</th>
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• A contributor to a wide range of social problems
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- A lack of digital capital
- A significant social problem with a wide range of causes
- A contributor to a wide range of social problems
- An issue that we can help to address through collaboration
How can we fix Digital Poverty?
Increasing awareness and getting involved

• Be aware, and raise awareness
• New language - digital poverty is real, digital capital is real
• Align your skills and experience with others
Questions?
References

• Making IT good for society, Paul Fletcher, 14 September 2015
  • https://www.bcs.org/content-hub/making-it-good-for-society/

• ONS - access by household

• Marcus Rashord tweet
  • https://twitter.com/MarcusRashford/status/1321443394682585090

• Government as First Follower – RSA
  • https://www.thersa.org/blog/2020/09/government-as-follower

• Devices Dot Now Impact Report, July 2020

• Barclays Digital Eagles - Care Homes
  • https://twitter.com/Digitaleagles/status/1321791397972922369?s=20

• No Longer Option: Employer Demand for Digital Skills, UK Government, June 2019

• UK Census 2021
  • https://census.gov.uk/about-the-census/about-census-2021/