




HOW BIG IS OUR ORGANISATION'S DIGITAL FOOTPRINT ANYWAY?

CHRIS ROBERTS AND DAVE PARSONS



AGENDA

- The big picture
 - What we already know
 - SaaS adoption is out of control
 - Conclusions

 - Digital Health Care Wales
 - Digital footprints
 - Passwords
 - Data sharing
- 

MEET THE TEAM



CHRIS ROBERTS

- Principal Consultant and Founder of Cybata
- Co-Founder GDPR Alliance 2017
- Fraud Forum Board member (Wales)
- Cyber Wales Steering Group member
- Member of COPRNET

I've been working with digital technology since 1983 when I installed some of the first digital systems in BT's network.



DAVE PARSONS

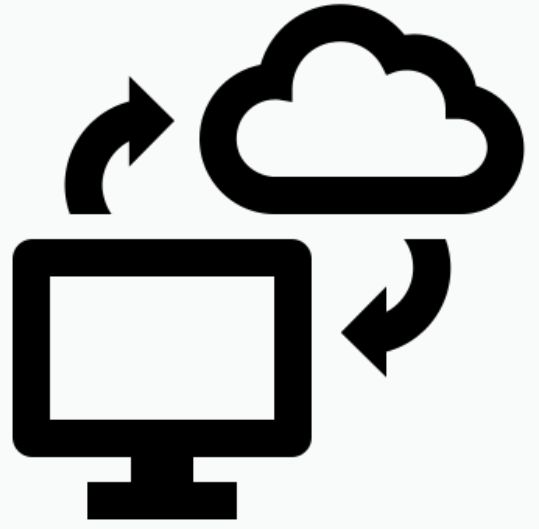
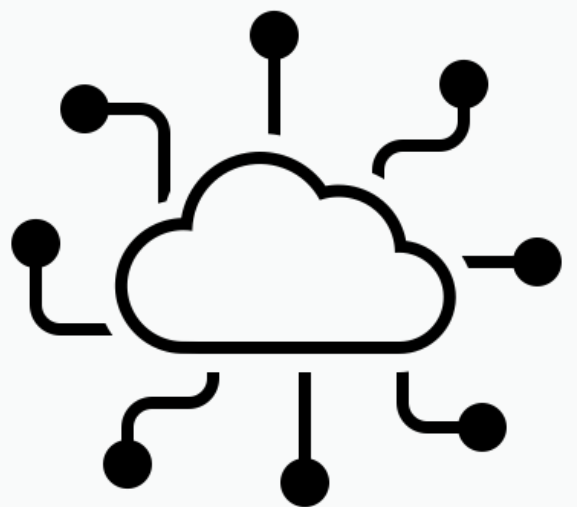
- WASPI Code Manager
- Information Governance
- Digital Health and Care Wales

- Rheolwr Cod Wales
- Llywodraethu Gwybodaeth
- Iechyd a Gofal Digidol Cymru

What we already know...



USE OF THE INTERNET



OUR DIGITAL FUTURE

Smart



Power



Homes



Transport



Cities

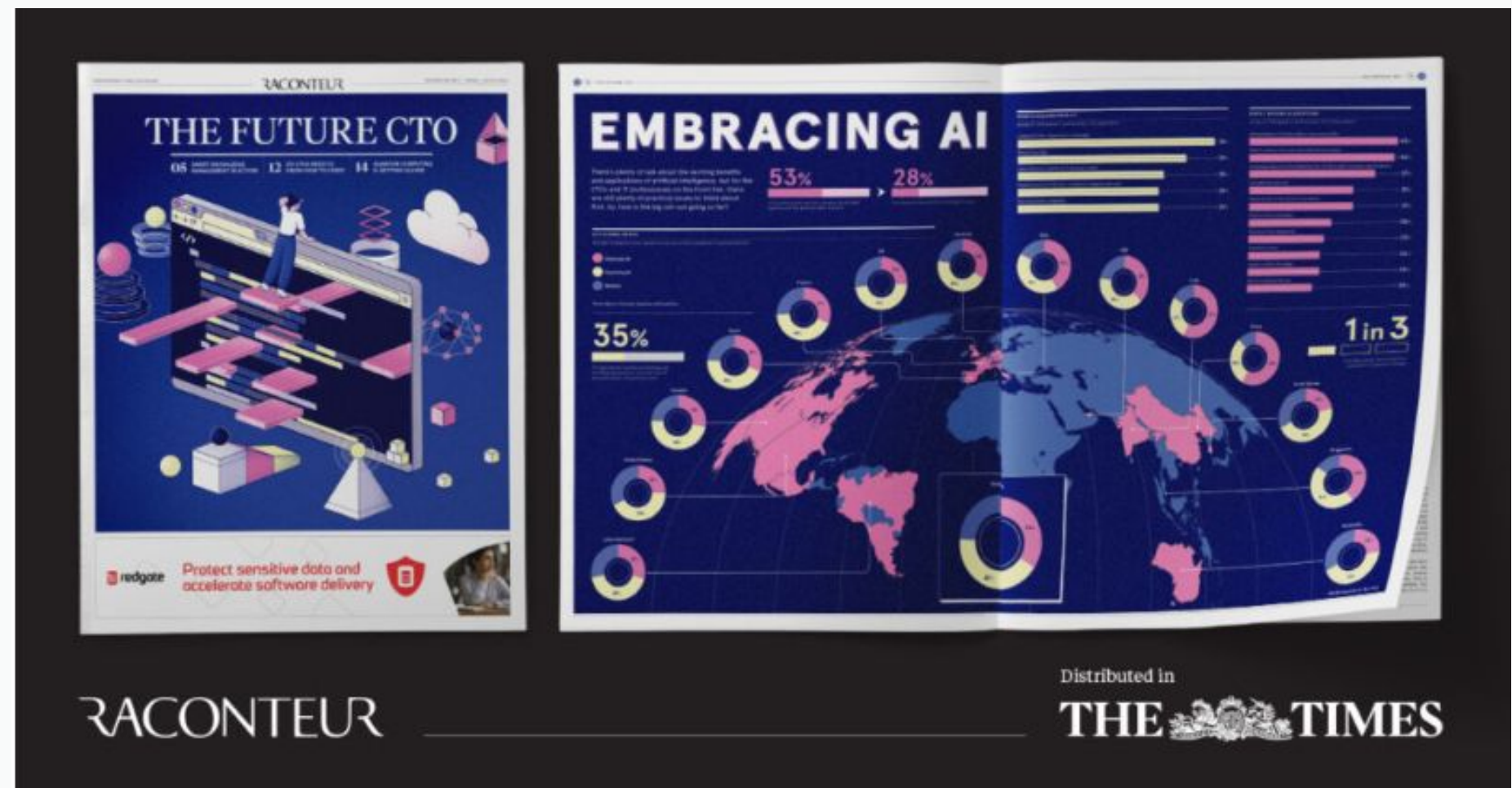


Health

AI

THE DIGITAL LANDSCAPE IS GETTING TOUGHER

- ▶ Harder to keep the data we are responsible for safe
- ▶ Regulation is trailing real world experience
- ▶ Cyber-attacks, Data Breaches and Electronic Fraud are all up
- ▶ Digital Transformation must include; cyber-security, data protection and people upskilling



[Future_CTO_AW_spreads.pdf \(cloudinary.com\)](#)

DIGITAL LITERACY IS POOR

21%

Lack Digital Skills for life

35%

Less likely to have essential Digital Skills for life

1.7M

Households have no broadband/mobile

36%

Lack essential Digital Skills for work

9%

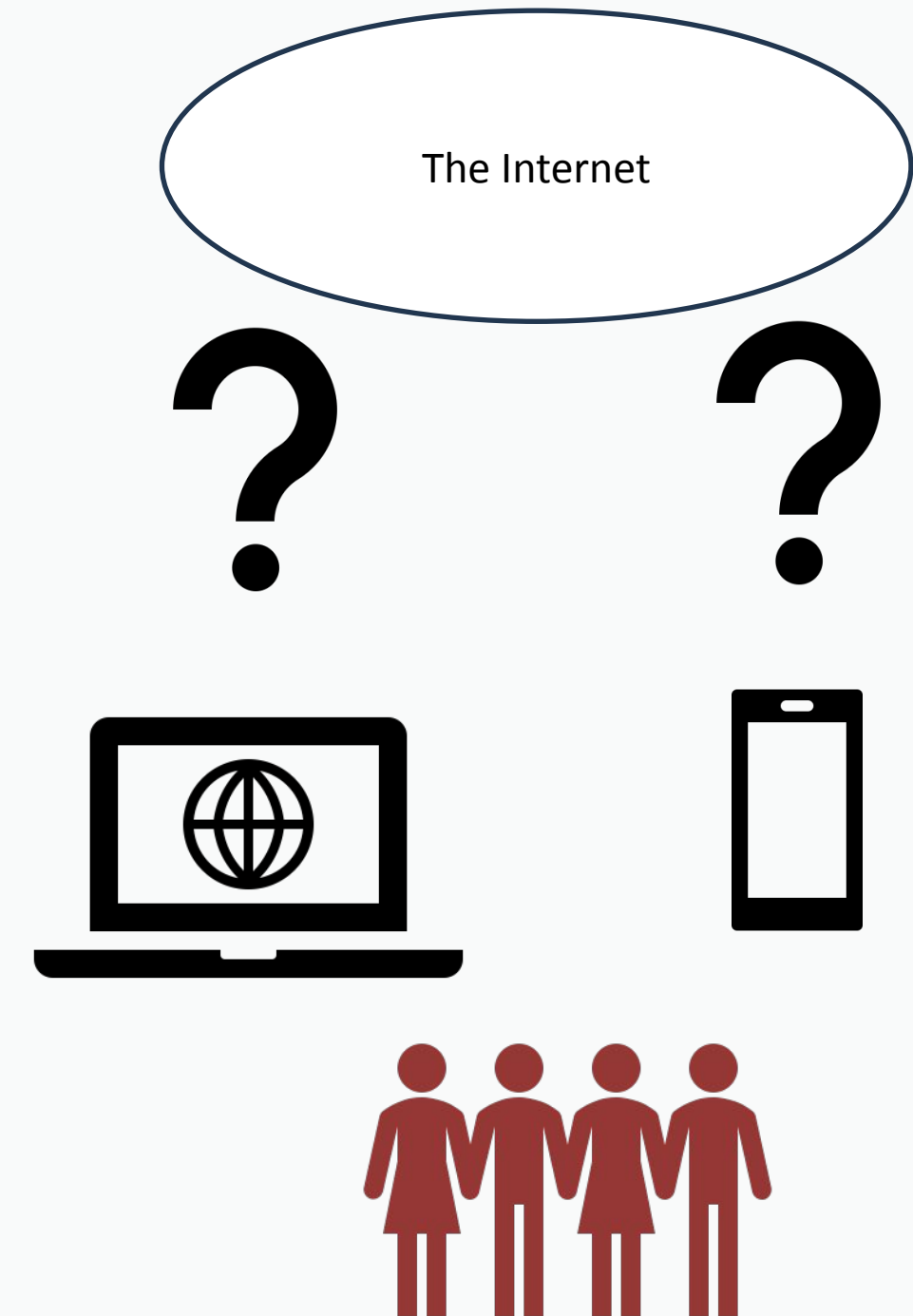
Of those aged 55-64 lack Digital Skills to thrive in a digital society

£63Bn

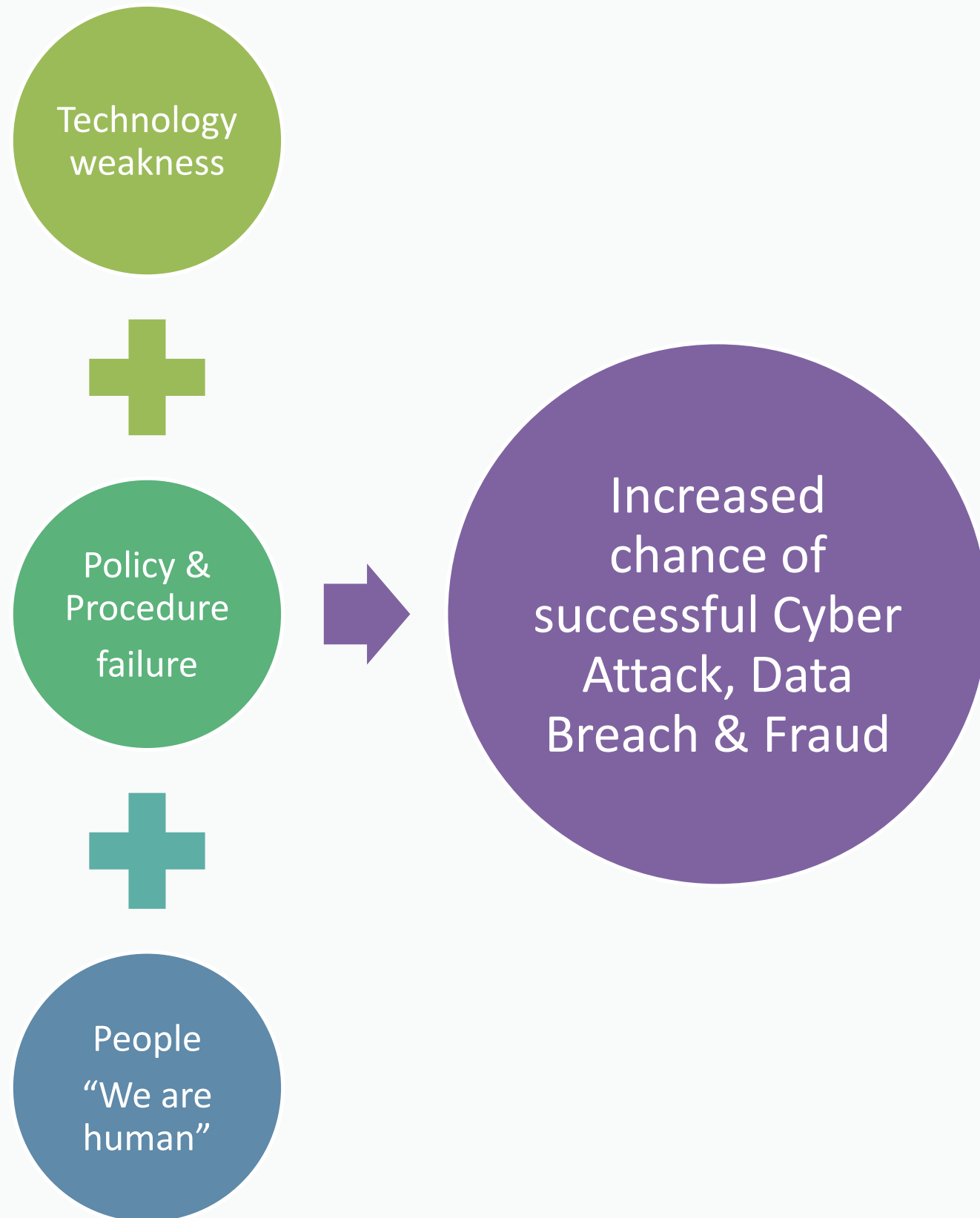
UK economy loss each year due to digital skill shortages

81% Scotland	79% Northern Ireland
81% England	73% Wales

Foundation of Digital Skills by region



ALL ORGANISATIONS ARE AT RISK



THE FINTECH TIMES
'Secure by Design': New UK and US Guidelines Put Cybersecurity at the Forefront of AI Development
by Tom Bleach © November 28, 2023

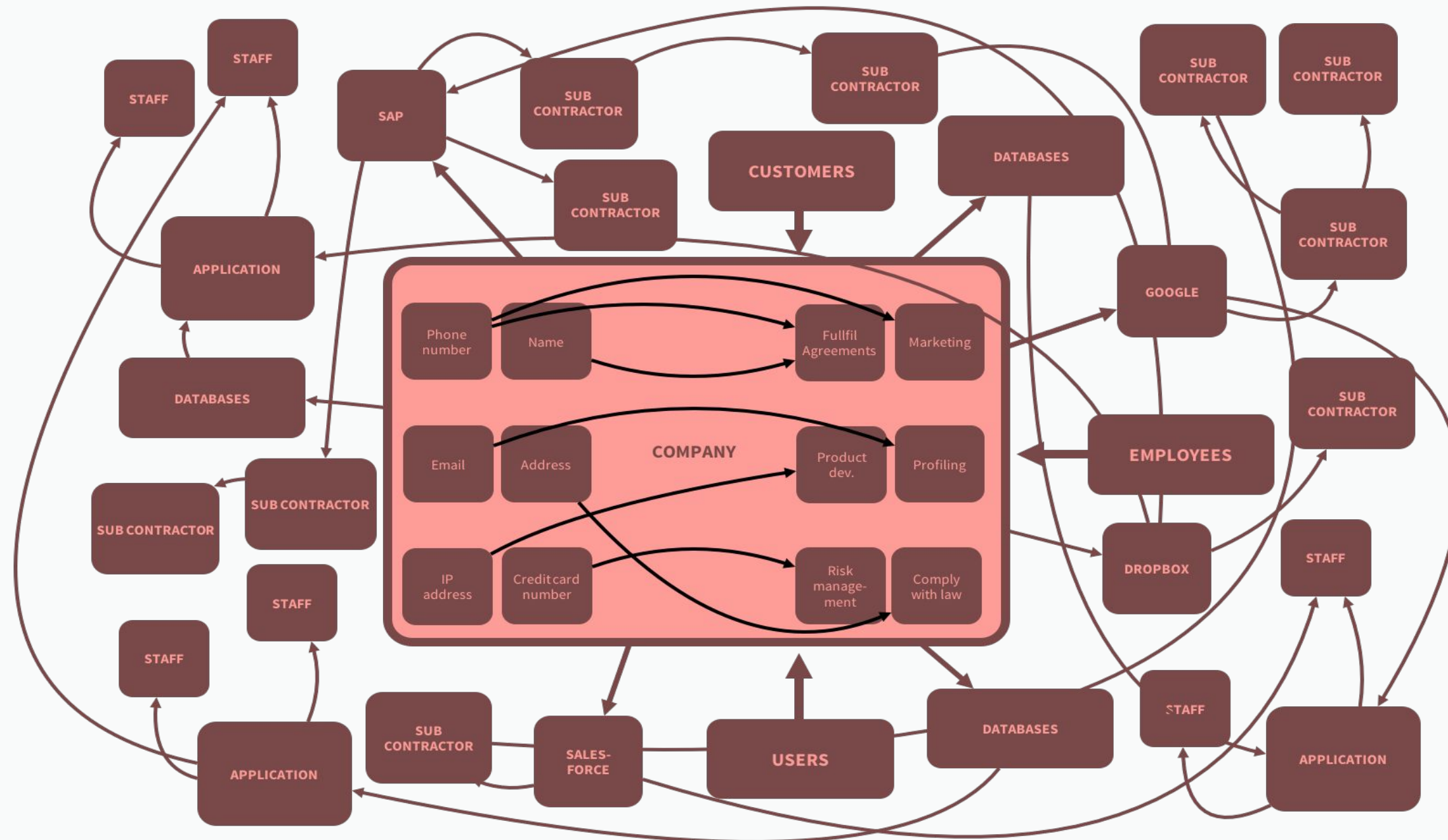


What we find on the ground...

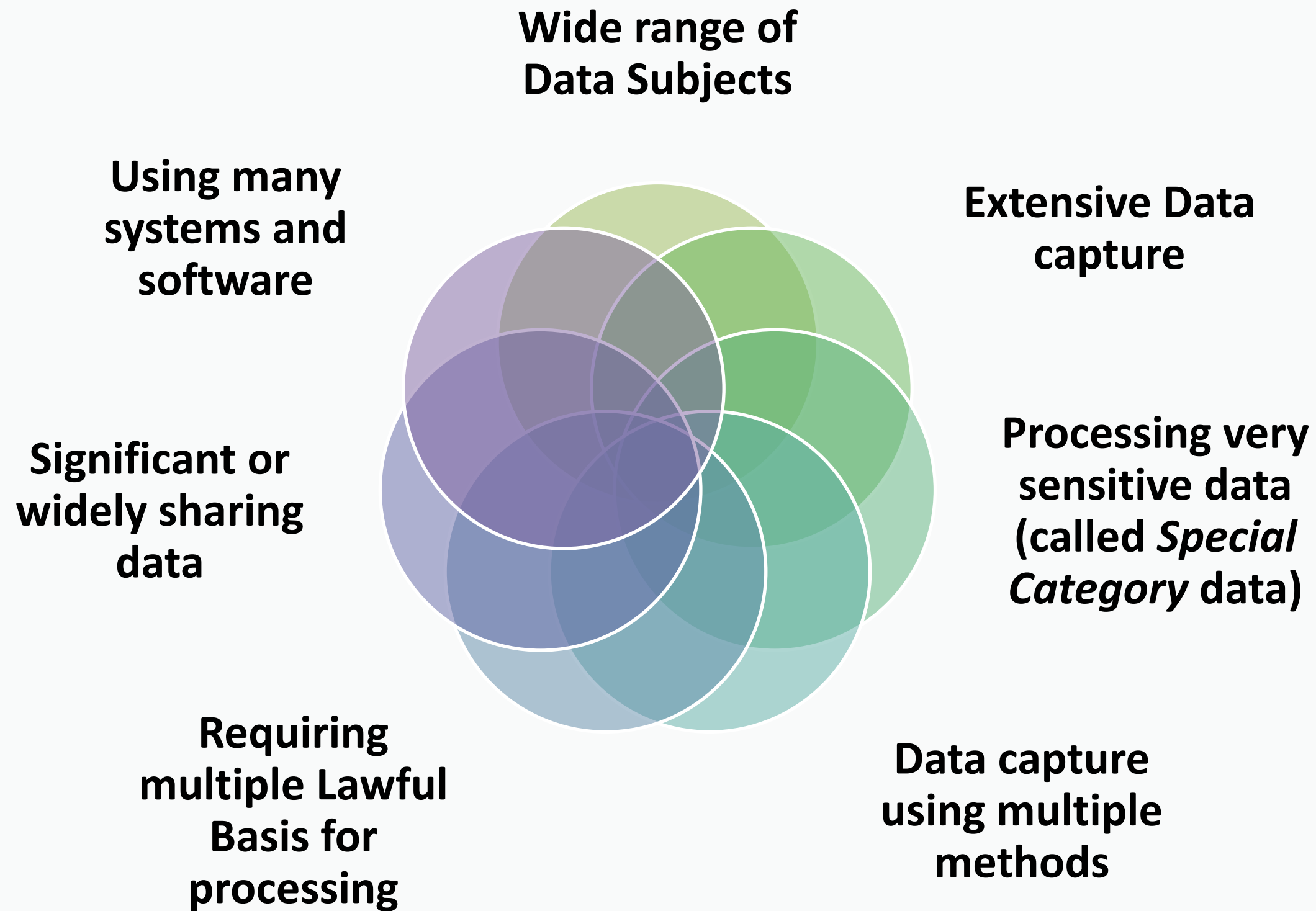


DATA SPRAWL IN LEGACY

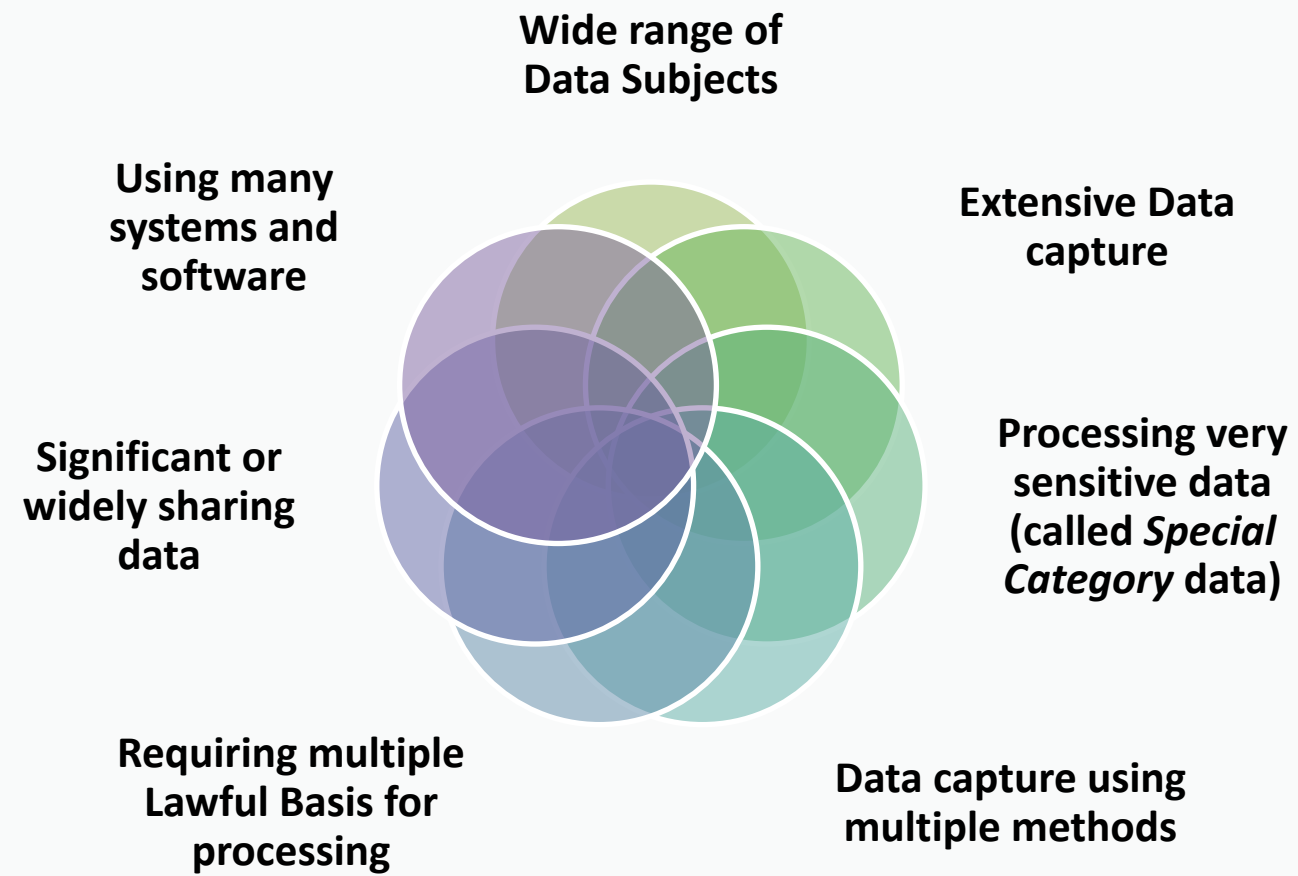
ORGANISATIONS OFTEN SIGNIFICANT



DATA COMPLEXITY IN ORGANISATIONS



DATA RISKS SHOULD INFORM CYBER MEASURES



MANY DATA LAKES ARE DATA CESSPOOLS



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Creator: MARKO DJURICA | Credit: REUTERS

INCOMPLETE SUBMISSIONS FOR OTHER STANDARDS



TOO MUCH OR TOO LITTLE DATA SHARING

Little or no thought into why data should and can be shared.



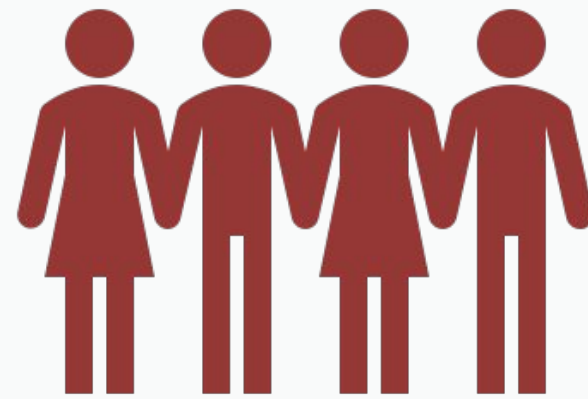
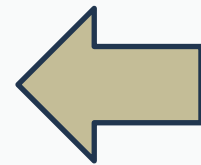
Fear of GDPR and DPA results in data not being shared when it should.

DIGITAL FOOTPRINTS ARE SIGNIFICANT

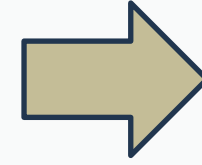
Personal Digital Footprint



Acknowledgement: Texas Public Radio



User Credentials
Password



Professional Digital Footprint



Acknowledgement: Texas Public Radio

SAAS ADOPTION IS OUT OF CONTROL



Acknowledgement: <https://acropolium.com/blog/saas-app-architecture-2022-overview/>

- ▶ SaaS adoption is out of control
- ▶ We're failing to authenticate securely
- ▶ Removing access is hard
- ▶ Apps are becoming more invasive by default
- ▶ A distributed responsibility for managing identity and access in most organisations

SAAS ADOPTION IS OUT OF CONTROL

Experience across Health, Fintec, Sport,
Manufacturing, Arts and Finance Sectors.



THE PRACTICAL REALITY

- ▶ A study across 50+ organisations, reveals the picture is worse than expected



- ▶ Systems such as Microsoft and Google do not easily facilitate the surfacing of this important information
- ▶ Third party tools and services are now available to help organisations better understand and manage this risk

ART, SPORT AND HOUSING ASSOCIATION

	Entity 1	Entity 2	Entity 3
Staff	900	350	1200
Apps	1614	1523	755
High Risk Apps	55	15	74
Travel #	93	17	3
Marketing #	19	13	7
Productivity #	50	23	26

Duplicate Apps often found are:

PDF Apps	Calendar Apps	Survey Tools
Small PDF	Calendly	Typeform
PDF Simpli	Doodle	MS Forms
PDF Filler		Survey Monkey

- ▶ Individuals with high App count have been seen as high as 79!
- ▶ Many individuals set up accounts using business email and passwords (likely a duplicated password)!
- ▶ Many individuals, accepted all App integration permissions as "Read and Write"

CONCLUSION

- ▶ # Accounts/Apps are massively under-estimated
- ▶ Control of Accounts/Apps is more distributed than many realise
- ▶ Ownership of on-boarding, moves, off-boarding is broken
- ▶ Password authentication using passwords is too prevalent
- ▶ Apps are more invasive at default than known, users accept defaults
- ▶ Wider risk is being missed by IT/Security teams
- ▶ The tools to easily expose risks are becoming available
- ▶ Who cares the most about these issues? IT/Security or DPOs?

OVER TO DAVE!

OUR DIGITAL FOOTPRINT

Passive digital footprint:

Websites create a background digital trail through data like cookies, browsing, and shopping history, collected with user consent. Varying levels of data collection occur, so checking cookie policies is advised.



Active digital footprint:

Users knowingly post data online, forming their active footprint, often unaware of its reach or use. This includes social media posts, articles, and public reviews.

DO I HAVE A FOOTPRINT I'M NOT AWARE OF?



- ▶ Type your name into an online search engine and search the results
- ▶ Also try your name and job title, or previous job title

THE THREE P'S



REDUCING YOUR FOOTPRINT

- ▶ Delete old accounts
- ▶ Check privacy settings on social media apps from time to time
- ▶ Keep location tracking off as much as possible
- ▶ Be careful what you post online
- ▶ Unsubscribe to mailing lists you no longer use

DATA SHARING - OPPORTUNITIES

Fitness Tracking

When this data are combined with other information, like health records, it becomes helpful in understanding the health and well-being of a person

Intelligence sharing

The ability of understanding information which could support services for citizens and reduce missed opportunities

Data Protection must be used as an enabler not a barrier – it's our responsibility to support this

800+

organisations now signed up to the Accord

350+

Approved Information Sharing Protocols are now published on the WASPI website

5

regional quality assurance groups, which are all now supported by the WASPI Team and have their own Chair appointed



20fed Pen-blwydd

WASPI

20th Anniversary



Llywodraeth Cymru
Welsh Government

WASPI's importance as the **information sharing framework in Wales**, recognised by Welsh Government and other stakeholders, following work and support in particular areas including during pandemic and as part of the Ukrainian Resettlement programme

Supported priority areas such as NEET, Flying Start, MARAC, Teams around the family programmes

- ISP's across all areas of Wales

No equivalent framework in UK

WASPI

“Provides a common set of principles for the sharing of personal information, which greatly facilitated the Welsh government’s response during the pandemic. The framework reduces some of the imbalance in risk perception often associated with establishing new data sharing agreements, reducing any legislative barriers preventing data sharing.”

- Institute for Government -

Data sharing during coronavirus: lessons for government

February 2023

<https://www.instituteforgovernment.org.uk/publication/government-data-sharing-pandemic>

