



# Uncommon places your company data may be stored (and waiting for a breach)

Brendan O'Byrne, Guardian Data Destruction

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DATA DESTRUCTION

Thirty years' experience in IT operations and sales management in the electronics/ITAD industry.

Concentrate on most complex and enterprise projects comprised of multiple services including data destruction, packing, logistics, data decommissioning, lift & shift, lease return, software development and high value assets.

Customer-centric strategic and tactical thinker.

Detail-oriented project manager.



**Brendan O'Byrne**  
Enterprise Services Manager



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Data is the new commodity.  
(And, the new Achilles heel.)

Data creation and storage are growing  
at an *exponential rate*.

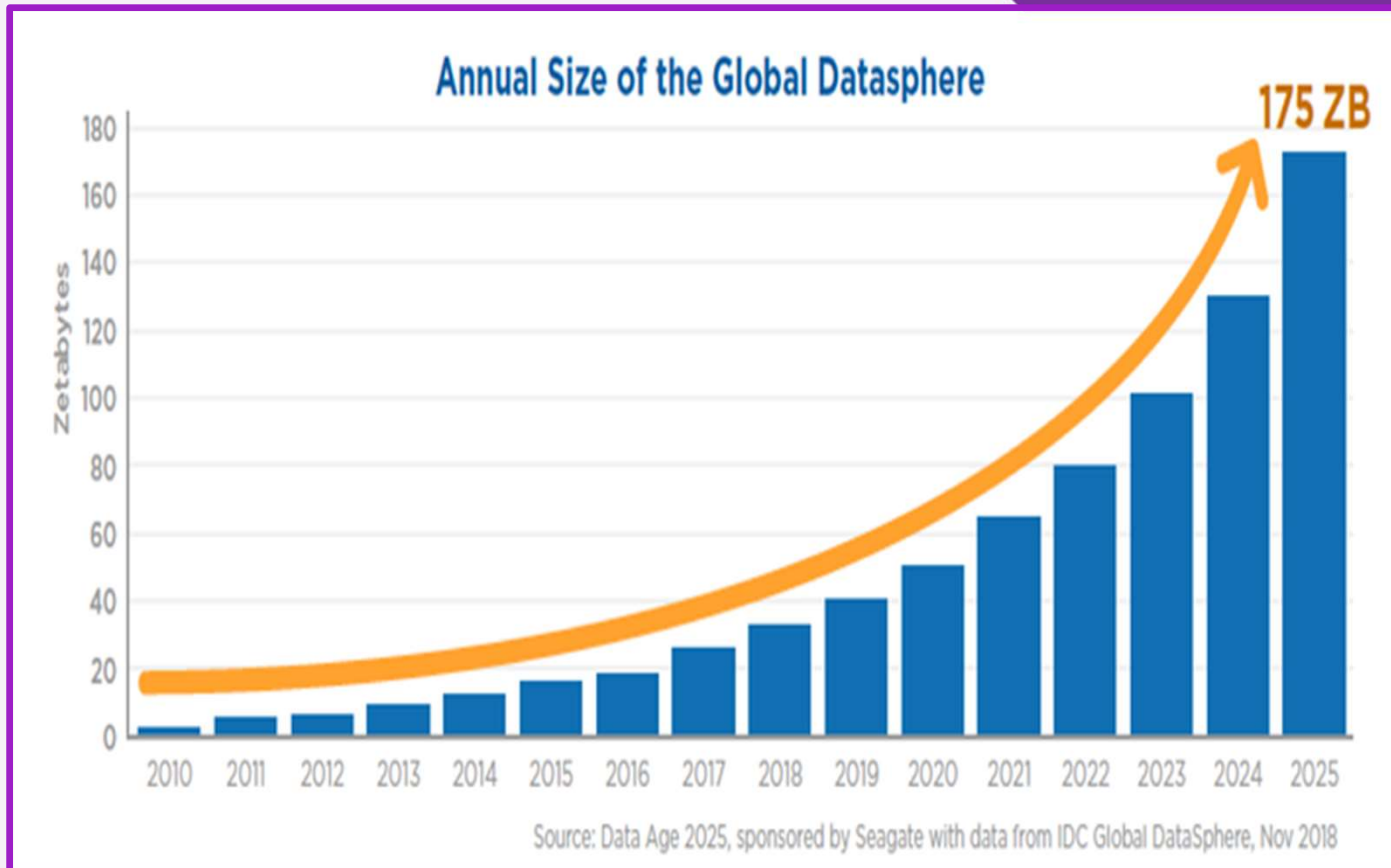


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# Data predictions

1 zettabyte = 1 trillion gigabytes



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# Data problems

**“40% of tested IT equipment still contained personally identifiable information (PII) of the original owners of the hardware.”**

*NAID – National Association for Information Destruction*

**“30% of all data breaches come from not properly disposing of assets.”**

*Gartner Research*

There is no singular US law that covers the privacy of all types of data. Instead, there are a mix of laws: HIPAA, FCRA, FERPA, GLBA, ECPA, COPPA, and VPPA.



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Where is my data?  
Where is it hiding?



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**Hard drives destroyed.  
My job is done!**



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# The Goal (always)

Ensure that you have a comprehensive data destruction program.

*Four out of five corporate IT asset disposal projects had at least one missing asset. More disturbing is the fact that 15% of these 'untracked' assets are devices potentially bearing data such as laptops, computers and servers.*

Harvard Business Review



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# Industries that (really) care



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TECH/CLOUD



EDUCATION



PHARMACEUTICAL



REAL ESTATE/INSURANCE



LEGAL/CORPORATE



AERO



RETAIL



HEALTHCARE



MANUFACTURING



FINANCE/BANKING

# All of them.



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# Data breaches in the news

 Microsoft 2020	 Walgreens 2020	 T Mobile 2020	 MGM RESORTS INTERNATIONAL 2020	 STAPLES 2020	 Pfizer 2020	 DUNKIN' 2019
 BlueCross BlueShield 2018	 BevMo! 2018	 NASA 2018	 2018	 facebook. 2018	 Google 2018	 Marriott 2018
 amazon 2018	 UNITED STATES POSTAL SERVICE 2018	 Instagram 2018	 NORDSTROM 2018	 HealthCare.gov 2018	 TD Ameritrade 2017	 Arby's 2017
 ESEA 2017	 Quest Diagnostics 2017	 MICHIGAN STATE UNIVERSITY 2016	 EQUIFAX 2016	 Linked in 2016	 YAHOO! 2016	 HOME DEPOT 2016

Source: [https://www.prilock.com/breach\\_list.php](https://www.prilock.com/breach_list.php)

Source: <http://www.Sontiq/identifyforce.com>



# Six groups of hidden data sources

## The Obvious



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# The Obvious

- **Computers** – laptops, desktops, tablets, Chromebooks, MacBooks, all-in-ones
- **Network equipment** – routers, switches, firewalls, NAS, transmitters/transceivers with chips
- **Data Servers/Storage** – arrays of hard drives and tape backup systems



# Six groups of hidden data sources

The Obvious

The Forgotten



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# The Forgotten

- **Add-on hard drives** - not original to the PO or spec
- **Backups of the backups** - your cloud partners/storage facilities/Internet provider
- **Old/unused accounts** - email, YouTube, Dropbox, etc.
- **Computer trashcans emptied** – even your cloud? (most are auto set up to hold for 30 days)





# Six groups of hidden data sources

The Obvious

The Forgotten

The Hiding in Plain Sight



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# The Hiding in Plain Sight

- **Credit cards, security badges & IDs** (magnetic strips)
- **Office equipment** – copiers, printers, scanners (HDD/SSD)
- **Cameras, video cameras** (MicroSD, tapes)
- **External storage** - thumb/USB drives/sticks, tape drives and libraries, JAZ/ZIP/hard drives, CDs and DVDs, videos







# Six groups of hidden data sources

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The Surprises



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# The Surprises

- **Kiosks** - games, video rentals, snack machines that take credit cards, medical check-ins, event/hospitality check-ins, airline check-ins (mostly HDD)
- **POS and Scanners** – retail self-checkout, restaurant mobile checkout scanners, delivery and shipment tablets, inventory scanners (HDD/SSD mix)





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The Innocuous



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# The Innocuous

- X-rays
- Industry equipment and devices
- Vehicles - rentals, lease returns, personal, commercial
- Anything IoT
- Tracked online behavior - shopping, browsing (mobile/home/work)



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# Six groups of hidden data sources

The Obvious

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The Surprises

The Innocuous

The Super Sneaky



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# The Super Sneaky

**Start with the memory technology  
THEN find the devices/assets**

**FLIP YOUR THINKING**



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# A Super Sneaky example: SSDs

- They're everywhere because they're small
- They can hold a lot of confidential documents in almost no space
- “What devices/equipment do I have that have SSD drives?”

Copiers, printers, scanners, any media, motherboards (standard), etc.

Memory cards – chips M.2 SSD – servers, desktop

MicroSD cards - cameras, printers, drones



# A Super Sneaky example: non-standard & not labeled

## Server memory configurations & flavors vary:

- Standard, no-surprise hard drives
- Hard drives in multiple locations – front/rear/legacy
- External hard drives + internal hard drives + one or more SSDs on the motherboard
- OS system on a MicroSD accessed through the controller
- **More!**



# A Super Sneaky example: IT Provisioning

Understand how to **unenroll** your IT department's auto-device enrollment, provisioning and deployment process for enterprise laptop security and management.

Unawareness of MDM setup and removal affects redeployment, resale, donation and data destruction and is an opportunity for a data breach.

How? Devices will auto-reprovision with initial setup data, access, software and your company identification even after the HD/SSD is erased and shredded.



# The (Uncommon Places Your Data May be Stored) Takeaway

+Action Items



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## The Takeaway

- Data storage is inside, outside, easy, inaccessible, buried, complex
- Look at every piece of IT and communication equipment and think, “What are you holding/hiding from me?”
- Understand that your IT asset data destruction “list” is temporary and will only grow



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## Action Items

- ☐ Review your IT asset management plan annually to ensure that IT assets, devices and technologies are recognized, tracked, inventoried and sanitized
- ☐ Work with your legal experts, industry groups and vendors to know the laws, regulations and requirements that apply so you can develop processes to ensure privacy and data security
- ☐ Understand the value of your data to someone else to evaluate the risk of a data breach and estimate possible brand and monetary damage
- ☐ Work with your VAR, ITAD, reseller or MSP to ensure that you have a third party that can advise you on how to destroy data – where ever it is



# LET'S TALK!



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Thank you.  
Questions?