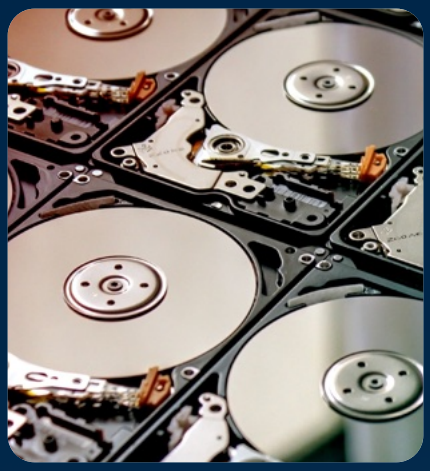
SHREDALL | SDS Group

White paper

Why the growth of AI and digitisation is changing information lifecycle management

The more valuable and abundant digital information becomes, the more important its physical lifecycle becomes.







1 Executive summary

The business world is becoming increasingly digital.

Organisations are digitising historic records, automating processes, moving information into cloud environments and using artificial intelligence to create new insight from increasingly large datasets.

At the same time, businesses continue to operate within a physical infrastructure of servers, storage systems, hard drives, SSDs, IT equipment, paper records and other assets.

This creates an emerging challenge that is often overlooked in conversations about digital transformation:

> **The more valuable and abundant digital information becomes, the more important its physical lifecycle becomes.**



Shredall SDS Group is seeing evidence of this transition across its own customer base.

Demand for document scanning continues to grow, including increasingly sophisticated requirements such as mailroom scanning. At the same time, customers are looking for more secure solutions for end-of-life IT assets, hard drives and SSDs, alongside growing demand for textile shredding and recycling.

These developments should not be viewed as isolated service trends.

They are indicators of a broader shift in the way organisations think about information, assets, security and sustainability.

2 The paradox of digital transformation

Digital transformation is often presented as a process of removing the physical from business.

1. **Paper becomes digital.**
2. **Physical files become searchable information.**
3. **Manual processes become automated.**

But digital transformation does not eliminate the physical world.



It moves the dependency.

Digital information still requires physical infrastructure to create, process, store and ultimately dispose of it.

Every server, storage array, hard drive and SSD represents a physical component of the digital economy.

And every one of those assets eventually reaches the end of its operational life.

This creates a fundamental question for organisations:

> **What happens to the physical asset when the data it contains is still valuable?**

3 From paper records to digital intelligence

The first stage of this transformation is already well established.

Organisations are digitising paper archives to make information more accessible, searchable and useful.

But the market is moving beyond simple document scanning.

Our experience at Shredall SDS Group is that customers are increasingly looking to integrate scanning into wider business processes.

A recent example is the growth of mailroom scanning, where incoming physical correspondence can be captured digitally and integrated into workflows rather than simply being distributed as paper.



This represents an important change.

The objective is no longer simply to create a digital copy of a document.

It is to turn physical information into usable digital intelligence.

That distinction will become increasingly important as organisations seek to automate more of their operations.

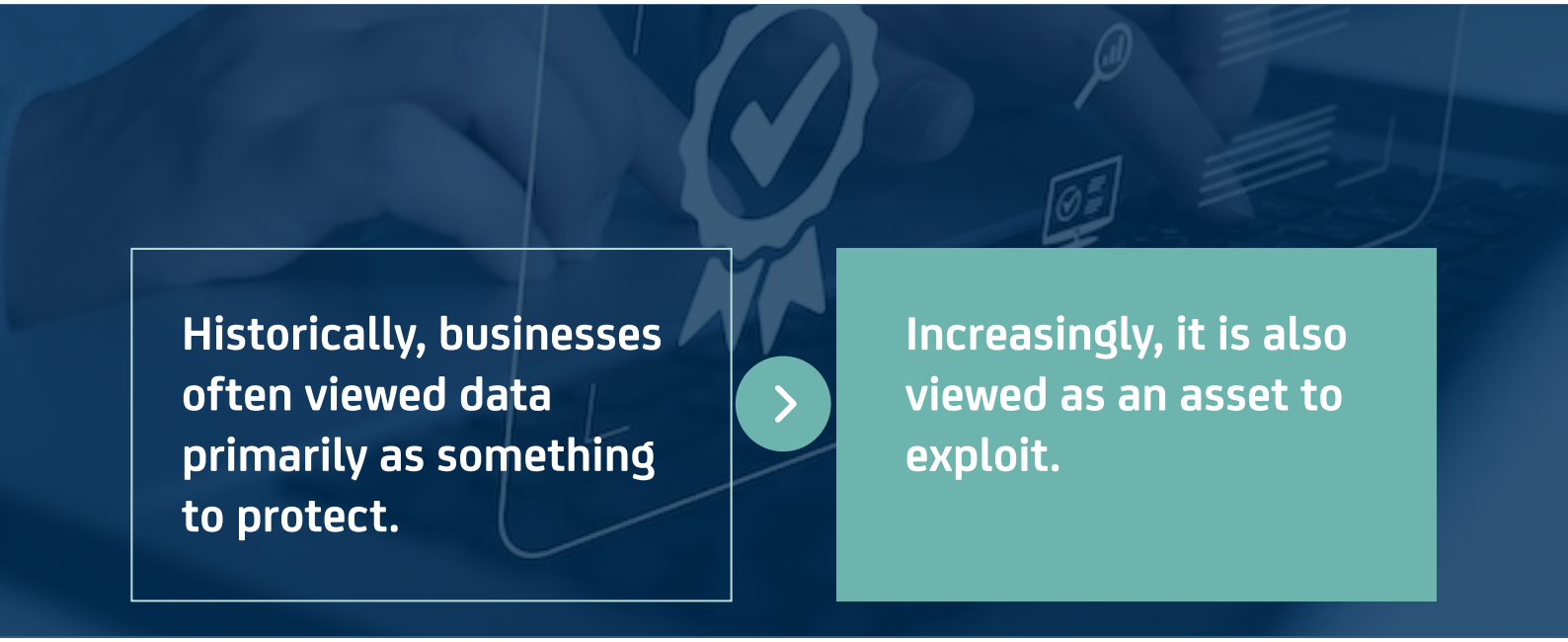
4 AI is changing the economics of data

Artificial intelligence adds another dimension.

AI systems require data. More importantly, the increasing sophistication of AI means that previously underused or archived data can become commercially valuable.

Information that once sat dormant in an archive can potentially become an input into analytics, automation or AI-driven decision-making.

The result is a shift in the way organisations think about data.



That creates an interesting consequence.

When data becomes more valuable, organisations have greater incentive to retain, process and store it.

And when the volume of data increases, the infrastructure required to manage it increases too.

This includes physical storage media.

5 The hidden physical infrastructure behind AI

Much of the discussion around AI focuses on software, algorithms and computing power.

Less attention is given to the physical infrastructure required to support it.

AI workloads depend upon significant storage capacity and increasingly sophisticated data-centre infrastructure.

That infrastructure includes data-bearing devices such as:

- **Hard disk drives**
- **Solid-state drives**
- **Servers**
- **Storage arrays**
- **Backup systems**
- **Network equipment**
- **Other electronic media**



As organisations upgrade, expand or replace their infrastructure, these assets eventually enter the end-of-life cycle.

And that creates a new information-management challenge.

> **The hardware may be obsolete.**
> **The data is not necessarily obsolete.**

6 The growing importance of physical data destruction

Traditional approaches to IT recycling are no longer sufficient for organisations handling sensitive or commercially valuable information.

Deleting files is not necessarily equivalent to securely destroying data.

Formatting a drive does not automatically eliminate the underlying information.

And physically disposing of a device without controlling its data creates an unnecessary risk.



As a result, organisations increasingly need to **distinguish** between:

IT recycling and **Secure IT asset disposition**

The difference is fundamental.

The objective of secure ITAD is not simply to remove unwanted equipment.

It is to manage the asset through its entire end-of-life process while ensuring that the information contained within it is appropriately protected.

For certain assets and risk profiles, this means physical destruction of the data-bearing

7 From data growth to data destruction

There is therefore a longer-term relationship between the growth of data and the requirement for secure destruction.

It can be represented simply:

1. More digital information
2. Greater storage requirements
3. More data-bearing infrastructure
4. More hardware refresh and replacement
5. More end-of-life assets
6. Greater requirement for secure data destruction



This does not mean AI automatically creates a requirement to destroy more hard drives today.

It means that the continued expansion of the data economy creates a growing physical lifecycle that organisations need to manage.

That distinction matters.

> **The strategic issue isn't AI itself. It is the scale and persistence of the data ecosystem that AI is helping to create.**

8 The other side of the life cycle: physical materials

The same principle applies beyond data.

Organisations are increasingly considering what happens to physical assets once they have reached the end of their useful life.

Shredall SDS Group is seeing more demand for textile shredding and recycling, particularly around uniforms and branded materials.

Again, this reflects a wider shift in corporate thinking.

A redundant uniform is not simply waste material.

It can represent:



- **A brand-security risk**
- **An identity risk**
- **A sustainability challenge**
- **A material recovery opportunity**

Securely destroying the item protects the organisation's identity, while recycling the resulting material can support its environmental objectives.

The same principle applies to paper and IT equipment.

9 Security and sustainability are converging

For many years, information security and sustainability were treated as separate corporate agendas.

They are increasingly becoming interconnected.

Consider an end-of-life server.

From a security perspective...

...the organisation needs to ensure that sensitive data cannot be recovered.

From a sustainability perspective...

...the organisation wants to recover valuable materials and avoid unnecessary waste.

The solution cannot simply be:

Destroy everything.

Nor can it be:

Recycle everything.

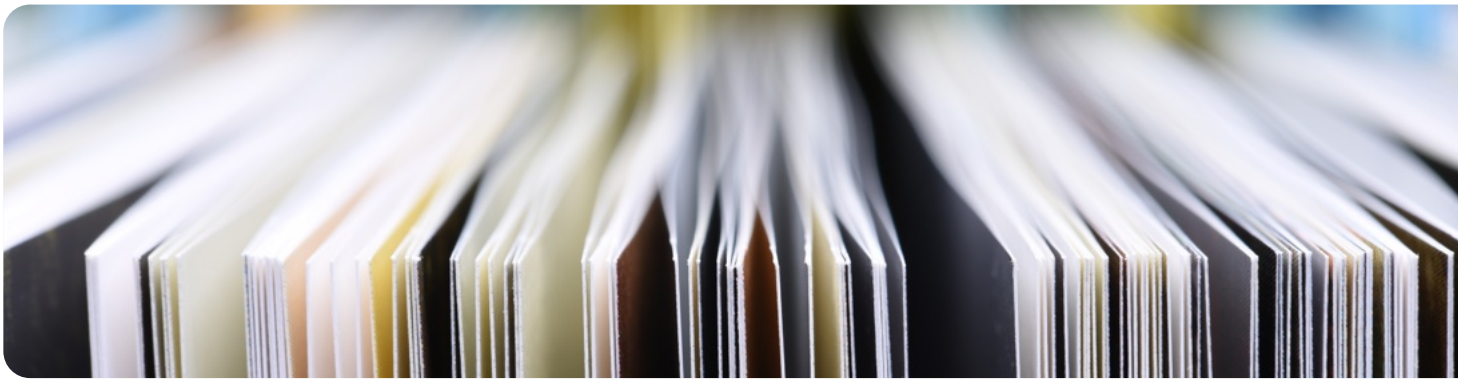
The future requires organisations to ask:

> **How do we securely destroy the information while maximising the recovery of the physical asset?**

This is where secure ITAD and circular-economy principles increasingly intersect.

10 Information lifecycle management is becoming physical again

The irony of the digital economy is that the more organisations move towards digital information, the more important physical information lifecycle management becomes.



1. A document may begin life as paper.
2. It becomes a digital record.
3. That record may become part of an AI or analytics workflow.
4. It may then be stored across multiple systems and backed up across multiple physical devices.
5. Eventually, the infrastructure supporting it reaches end-of-life.
6. The information must then be securely destroyed.
7. The physical asset must be responsibly processed.
8. And wherever possible, its materials should be recovered.

> **The lifecycle is therefore no longer linear.**

It is a continuous loop:



This is the emerging model of modern information lifecycle management.

11 What this means for business leaders

For boards and senior information, IT and sustainability leaders, the implications are significant.

Data lifecycle management can no longer sit exclusively within IT.



- **Information Security**
- **IT**
- **Compliance**
- **Procurement**
- **Facilities**
- **Sustainability**
- **Risk Management**

The organisations best positioned to manage this environment will be those that treat information and physical assets as part of one connected lifecycle.

That requires greater visibility over:

- What information exists
- Where it is stored
- How long it should be retained
- What infrastructure holds it
- When assets reach end-of-life
- How data is securely destroyed
- What materials can subsequently be recovered

12 The role of Total Information Management

This is the direction in which the information-management market is moving.

The traditional boundaries between document management, confidential shredding, ITAD, recycling and storage are becoming less relevant.

Customers increasingly want fewer disconnected suppliers and greater control across the information lifecycle.

At Shredall SDS Group, our experience across document scanning, secure document destruction, document storage, ITAD, data/product destruction and recycling gives us visibility across both the digital and physical sides of that lifecycle.



Secure document destruction

ITAD and data destruction

Document storage

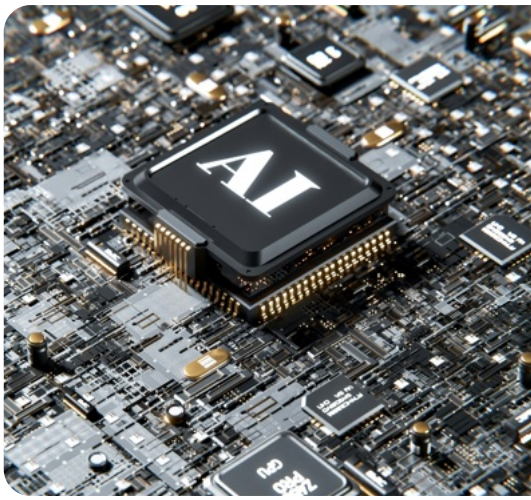
Document scanning

Textile shredding and recycling

The growth we are seeing across these services provides a useful insight into where the market is heading.

> **Businesses are not simply producing more waste.**
> They are managing more information, more assets and more risk.

13 What does the future look like?



The next decade of information management is unlikely to be defined simply by the transition from paper to digital.

That transition is already well underway.

The more significant challenge will be managing the consequences of an economy in which data is continuously created, stored, replicated, analysed and ultimately retired.

1

AI will accelerate that process.

2

Digitisation will accelerate it.

3

Cloud infrastructure will accelerate it.

And the physical infrastructure supporting all of them will continue to grow and evolve.

The result will be a greater need for organisations to understand the complete lifecycle of information, including what happens when the technology holding it reaches the end of its useful life.

The future of data security will therefore not be purely digital.

It will also be physical.

14 Closing thoughts

The growth in document scanning, mailroom digitisation, ITAD, data destruction and textile recycling may appear to represent separate market trends.



They are not.

They are manifestations of a much broader shift.

Businesses are becoming increasingly dependent on information while simultaneously seeking greater control over the physical assets and materials that support it.

The challenge is moving from:

Where is our information?

to

What is its complete lifecycle?

And ultimately:

> **How do we ensure that information is protected from the moment it is created to the moment it is securely destroyed?**

At **Shredall SDS Group**, we believe the answer lies in taking a more integrated approach to information lifecycle management: one that connects digitisation, security, IT asset disposition and circularity.

Because in a data-driven economy, protecting information doesn't end when data is deleted.

It ends when there is nothing left to recover.



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About Shredall SDS Group

Shredall SDS Group provides Total Information Management solutions across the UK, supporting organisations with document scanning and digitisation, secure document destruction, ITAD and data destruction, document storage, textile shredding and recycling.

Our role is to help organisations manage information and physical assets securely, responsibly and efficiently throughout their lifecycle.

- Secure document destruction
- ITAD and data destruction
- Document storage
- Document scanning
- Textile shredding and recycling

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