

SCROLL, SAVE, REPEAT: A DIGITAL HOARDER'S GAME

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Digital Hoarding

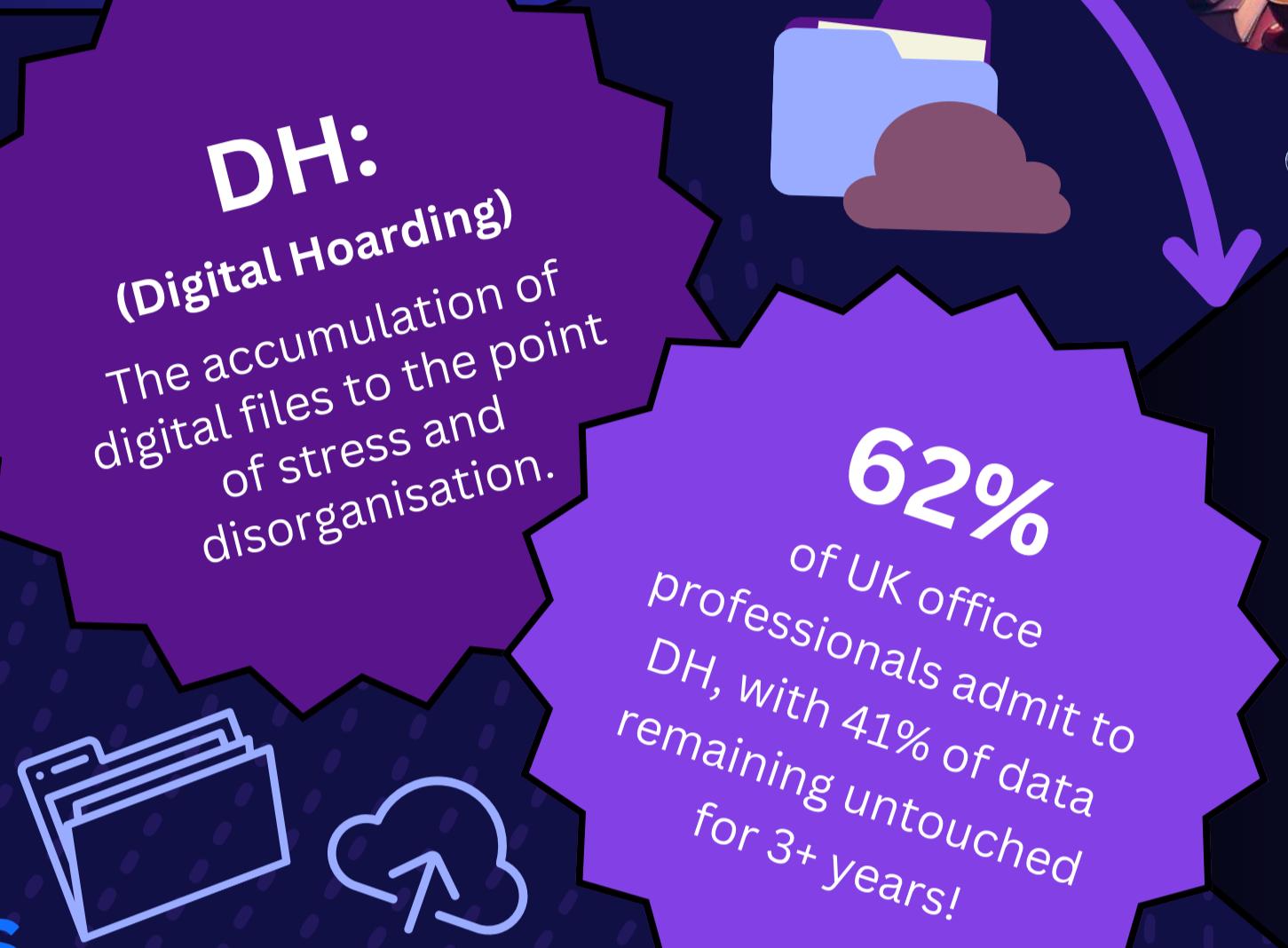
In our increasingly digital world, the compulsion to accumulate and retain vast amounts of online content has given rise to a phenomenon known as **digital hoarding**.

Individuals often accumulate digital files due to the **potential** value of information for future use and the **sentimental** value evoked by it, adding to the difficulty of letting it go. The ease of saving and storing data in the digital age exacerbates this behavior.

SYMPTOMS

- Excessive Data Kept
- Deletion Resistance
- Emotional Attachment
- Deletion Anxiety
- Disorganised Storage

DH: (Digital Hoarding)
The accumulation of digital files to the point of stress and disorganisation.



62% of UK office professionals admit to DH, with 41% of data remaining untouched for 3+ years!

Types of Hoarders

Although DH narrows down to the value one assigns to digital artifacts, there are 4 distinct manners in which DH manifests. Firstly, hoarders can be identified by the level of control they have over their data. For example, **collectors** are organised and systematic in stowing data, whereas, **accidental hoarders** are oblivious to what is kept where, with no control over it. Those who have strong emotional ties to their data and worry about deleting it, would be classed as **anxious hoarders**.

Finally, the **hoarder by instruction** keeps data on behalf of their company out of obligation over necessity. Organisations retain large volumes of emails, project files, and redundant data copies, due to compliance mandates, evidence preservation and 'just in case' culture. This practice can result in increased cybersecurity risks, compliance violations, and operational inefficiencies, as well as higher costs for data storage and management.

Dark Data - collected data that is not actively used, remaining untapped or forgotten.

ROT Data - (redundant, obsolete or trivial) data with no business or legal value stored by organisations.

TYPES OF HOARDERS



194 days is the average time it takes organisations to detect data breaches; containment typically takes 64 days.

Up to 85% of stored data in organisations is irrelevant, with 52% being 'dark data' and 33% being ROT.

Mitigations

Personal DH: Individuals can address digital clutter by creating structured file **organisation systems**, scheduling **regular decluttering** sessions, and using **tools** to identify and remove duplicate or unused files. They should adopt a minimalist approach to saving data, forming **new habits** and removing anything that is older than X months, for example. Seeking **mental health support** may also be beneficial if anxiety or perfectionism drives DHB.

Corporate DH: Organisations should implement clear **data retention policies**, defining what data to keep, for how long, and when to delete it. Regular **audits** and **employee training** on compliance (e.g., GDPR) are crucial. Encouraging email cleanup and limiting unnecessary data storage can reduce risks. Using **automated tools** for data management and **encryption** ensures better security as well as accountability and efficiency.

Attachment Theory:

People form attachments to digital content as a way to fulfill needs for security, acceptance, and belongingness.



The Psychology Behind DH

Due to discrepancy in the research field, the definition of DH as a disorder is lacking. Initially, excessive collecting was considered a type of **OCD**, but due to distinct mechanisms, hoarding now holds its own category within OCD.

Fear of losing valuable information and emotional attachment to digital content are primary motivators of DH; individuals often perceive digital artifacts as extensions of their identity. Methodologies used to measure core psychological contributors to DH include personality traits (**5-factor model**), digital hoarding behaviours (**DHB**), and **attachment theory**. The impact of DH results in heightened anxiety, depression, and feelings of overwhelm due to information overload, creating a cycle that reinforces hoarding behaviors.

DHB Factors:

- Information Overload
- Emotional Attachment
- Fear of Missing Out (FoMO)
- Decision Fatigue
- Maladaptive Perfectionism

5-Factor Model:

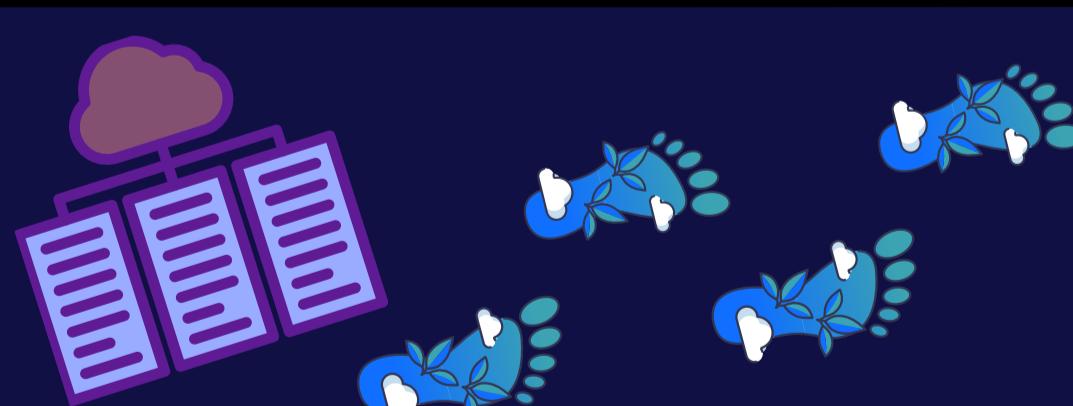
- Extraversion
- Neuroticism
- Agreeableness
- Openness
- Conscientiousness

Security or Lack Thereof

In personal and organisational contexts, DH comes with risks. **Productivity** suffers for both, as the volume of data to rifle through hinders efficient information retrieval. Comparably, the **mental impact** personally adds anxiety, stress and decision fatigue; the culprit behind procrastination and reduced focus. Furthermore, vast amounts of unorganised data expands the **attack surface** and complicates threat detection and incident response, increasing the risk of breaches, data theft, and unauthorised access.

Organisations also have to consider how DH often violates data minimisation principles, potentially leading to **compliance issues** with regulations like GDPR. Personally, individuals need to consider the effects of **digital overload**, where managing excessive information can cause feelings of guilt, distress, and inadequacy, impacting overall well-being.

Over 60% of Brits report feeling less stressed after decluttering their devices, yet only 34% regularly take steps to do so.



Environmental Impact

DH affects the environment, primarily through increased energy consumption and carbon emissions. **Data centers**, which store and process digital content, account for 2.5% of all human-induced **carbon dioxide emissions**, surpassing the aviation industry's 2.1%. A single data center can consume electricity equivalent to 50,000 homes, while collectively, data centers use 200 terawatt hours (TWh) annually.

The proliferation of unwarranted digital content exacerbates this issue, with **duplicate photos** alone creating 355,000 tonnes of CO2 emissions yearly. Moreover, the **water consumption** for cooling these systems is substantial, with data centers using billions of gallons of water daily. **Dark data** contributes significantly to organisations' digital carbon footprints.