



CREATIVE INSIGHT

SUMMER 2018 | MAIN BUILDING, ROOM 222

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**MICA**

# Digital Data & Your Digital Lifestyle

protecting your investment

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# Digital Data

# Digital Data

**binary code**  
(text, image & audio files)

**zeros & ones**





# Storage Media

(internal & external)

# Storage Media

## internal hard drive



### LIFE EXPECTANCY

Ideal Lifetime	Typical Lifetime
< 100 years	10–20 years

# Storage Media

old school – floppy disc (magnetic media)



## CAPACITY

1.4 MB

## LIFE EXPECTANCY

Ideal Lifetime

30–100 years

Typical Lifetime

5–20 years



# Storage Media

old school – zip disc (magnetic media)



CAPACITY
100–250 MB

LIFE EXPECTANCY	
Ideal Lifetime	Typical Lifetime
30–100 years	5–20 years

# Storage Media

old school – jaz drive (hard disc cartridge)



## CAPACITY

1–2 GB

## LIFE EXPECTANCY

Ideal Lifetime

< 100 years

Typical Lifetime

20–40 years

# Storage Media

old school – magnetic tape



LIFE EXPECTANCY	
Ideal Lifetime	Typical Lifetime
30–100 years	5–20 years

# Storage Media

new school – optical discs (CD/DVD/Blu-ray Disc)



STORAGE CAPACITY		
	Actual Capacity	User Capacity
CD-R	650 MB	< 600 GB
DVD-R	4.7 GB	< 4.4 GB
Blu-ray Disc	25 GB+	–

LIFE EXPECTANCY		
	Ideal Lifetime	Typical Lifetime
CD-R	5–100 years	2–30 years
DVD-R	20–30 years	10 years
Blu-ray Disc	50–150+ years	–

# Storage Media

**cool school** – external hard drives  
(desktop & portable)





# Storage Media

## photographic film

LIFE EXPECTANCY	
Ideal Lifetime	Typical Lifetime
300 years	100+ years



# Your Stuff

# Your Stuff

## your digital lifestyle



# Your Stuff

## Business

collateral  
legal documents  
financials  
passwords

## Education

academic papers  
artworks  
books  
photographs  
presentations

## Entertainment

books, magazines  
games  
music  
photographs  
video

## Personal

enrichment  
financials  
journal  
photographs  
projects

## Social

bookmarks  
calendars  
contacts  
email



# Your Stuff





# Your Stuff

Gone.



# Your Stuff

**Gone. Forever.**

phase 1: crying...

phase 2: anger...

phase 3: more crying...

phase 4: new computer ;)



The question is never **if** the hard drive\* will fail,  
but **when** will the hard drive fail.

\* includes other internal computer components – motherboard, processors, memory, etc.

You have made a substantial  
investment of  & \$ in your  
digital lifestyle.

**Back it up.**



# Back-up Solutions



# Back-up Solution 1

good – Apple Time Machine & Time Capsule



# Back-up Solution 2

good – external hard drive





# Back-up Solution 2<sup>1</sup>

better – two external hard drives\*



\* store additional drive in a safe location for additional security & peace of mind :)

# Back-up Solution 2<sup>++</sup>

even better – three external hard drives\*



\*store additional drives in a safe location for additional security & peace of mind :)



# Back-up Solution 2<sup>2</sup>

OMG! BFF I♥U! ☹️ME! – four external hard drives\*



\*store additional drives in a safe location for additional security & peace of mind :)



# Back-up Solution 3

**best** – external RAID  
(Redundant Array of Independent Disks)



# Back-up Solution 3<sup>+</sup>

**best plus** – external RAID & cloud storage\*  
(Redundant Array of Independent Disks)



\* off-computer storage accessed via Internet on servers (ginormous computer systems) hosted by another party (Apple, Adobe, Google, etc.)

# Daily Back-up Plan



# Daily Back-up Plan

## 3-step daily solution with 2 external hard drives



1. At the end of your work session, connect your **first external hard drive** to your computer. Create a new folder on your drive and name it **back-ups**.



2. Select the **Users folder** on your computer and drag & drop it onto the back-ups folder to copy it. Wait for it to finish copying. Rename the back-up Users folder with the year, month and day. Example: **Users-20180724**



3. Connect your **second external hard drive** to your computer and repeat steps 1 and 2. You now have a perfect duplicate digital back-up. Store your second hard drive in another room, preferably in a fireproof safe.

**NOTE:** You only need to keep the **latest** back-up of your Users folder. Delete previous back-ups after you have successfully made a fresh back-up. Keep multiple copies if it makes you feel more secure!



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**ADDITIONAL PROTECTION:** In addition to your daily back-ups, set a schedule (every month, three months, etc.) and archive your important **personal** and **business documents** to a CD or DVD. Label your disc with a name and date, then file it in a CD/DVD storage cabinet, case or binder. For extra protection, burn a duplicate disc and store off-location in a security box or a trusted friend.

# Did you back-up today?

