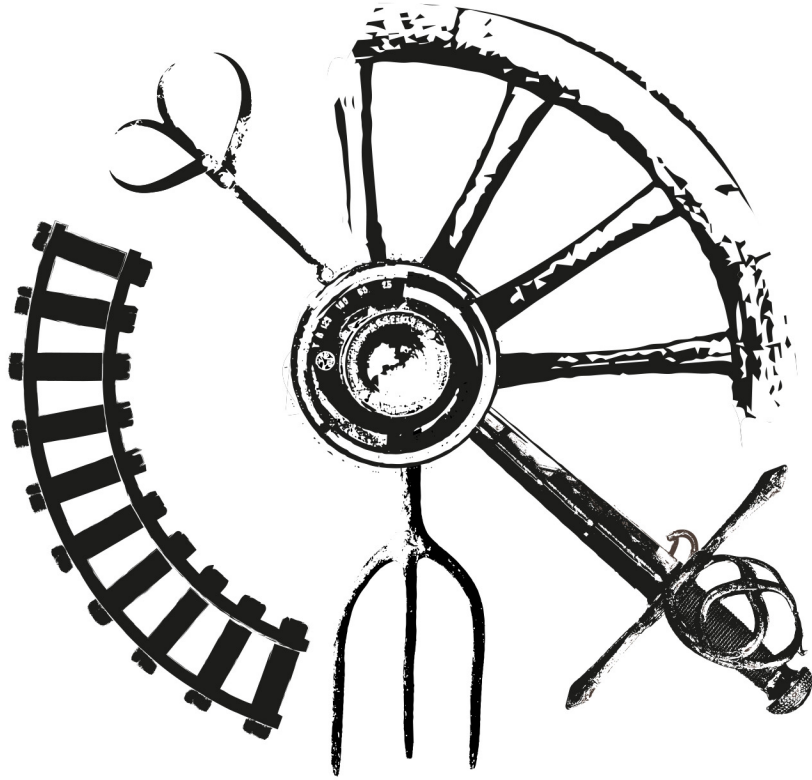




HERITAGE CENTRE BELLINGHAM

*Explore the Heritage
of the Northern Borders*

**Enhancing Volunteer-Led Small Museums Through (Simple)
I.T.**

Steve Gibbon – 18/1/24



Don't Panic

- This is a whirlwind tour
- More information and all links available at:
 - <https://stevegibbon.co.uk>
 - Digital Snapshot <https://digitalculturecompass.org.uk> – now the now the Audience Agency <https://www.theaudienceagency.org>
 - ACE – Digital compass <https://digitalculturecompass.org.uk/node/add/capabilities> (strategic)
- You can contact me for help anytime:
 - steve@stevegibbon.co.uk
 - 01434 344383
- I can talk about this from over 40 years in I.T. and 17 in website design, build and maintenance and I have used all the I.T. mentioned in this presentation in a real-world environment.
- ** In this second version I have added a slide covering USB sticks*

Why do we use I.T. in Museums?

- TO MANAGE THE 'BACK OFFICE'
- TO MANAGE COLLECTIONS
- MANAGE VOLUNTEERS AND FRIENDS
- TO IMPROVE THE VISITOR EXPERIENCE:
 - Pre-visit, website and social media, trip adviser etc
 - The Visit itself – the Museum
 - Shop, reception
 - Post-visit
 - For Friends and volunteers



The potential problem(s)....

I.T. can be expensive

Hardware

Software

I.T. can require expertise beyond most volunteers or

There are not enough volunteers with the right skill sets to manage all of the I.T.

I.T. is often not maintained in volunteer environments

Which can introduce security risks

Leave out of date content etc

So...

Challenges due to limited budget and resources

Need for affordable and simple I.T. solutions

Maybe some training required

Potential benefits....



Improved visitor
experience



Streamlined
administrative tasks



Enhanced
accessibility for
online audiences



Cost-effectiveness
and ease of
implementation



Before we start....

- Always worth doing an audit, even a basic one tabulated and easy to refer to
- What do you have:
 - Hardware
 - Operating System(s)
 - Software
 - Anti-virus and other security tools
 - Web presences
 - Social media
 - Databases
 - Network(s)
 - Till(s)
 - What do you have in the 'Cloud'
- How old?, Up to date?, Who manages?, Any known problems?
- You could also use the higher level but extensive ACE Digital Culture Compass <https://digitalculturecompass.org.uk> (requires a login) (*The Digital Culture Compass was commissioned by [Arts Council England](#) and [The National Lottery Heritage Fund](#) as part of the UK Government's [Culture is Digital](#) initiative.*)
- *Do you have a digital disaster recovery plan?*





So, some possible ideas?

Back office

Free tools, operating
systems and
something other
than MS-Office

**Enhance the Visitor
Experience**

Website and Social
Media

Recycle and Re-use

Your carbon
footprint?

Access for all

A.I.

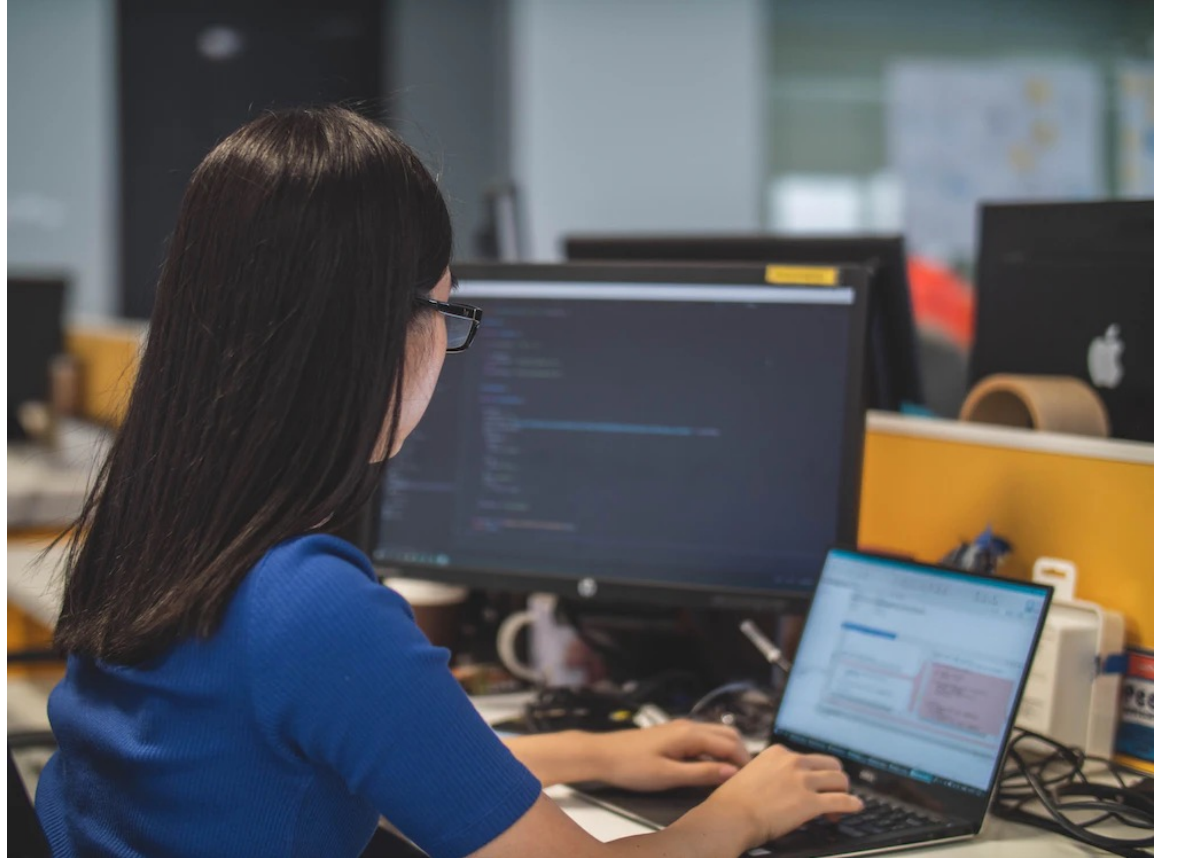


The Ubiquitous USB Stick (Flash Drives)

- This includes USB attached portable drives.
- Large organisations will typically prevent users having access to USB ports for security. This is not feasible in small volunteer led organisations. So what to do?
 1. Always scan USB sticks and drives for virus and malware (you do of course run scheduled anti-virus checks on your PCs and laptops regularly, don't you?).
 2. If you know how to set your devices up so USB sticks are scanned automatically.
 3. Beware shared USB sticks and drives or third-party ones passed to you with data on – you simply cannot account for where they have been and what state the other person's systems are in. There is a high probability of passing on a virus.
 4. Out of courtesy whenever you pass a USB stick to someone else please scan for viruses first.



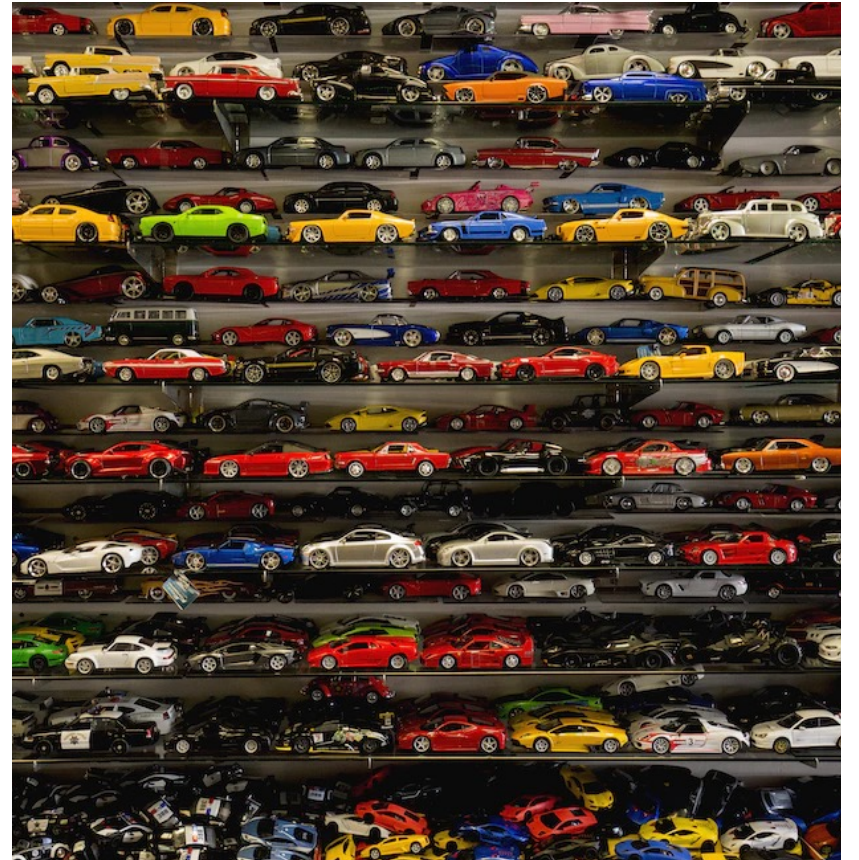
The 'Back Office'

- There are **free alternatives to Windows and MS-Office**, and these can be **more** secure, can be licence free and reuse older hardware (that otherwise would be recycled)
 - Especially useful if all you do is Word, Excel, email and browse
 - E.g. try installing Ubuntu and Open Office on an old PC
 - Consider **using online 'cloud' storage for sharing/team use**, archive and capacity e.g. Google Workspace and tools, OneNote, but there are lots of others
 - Information always available to whoever needs it from anywhere on most devices. You are not restricted to the office PC.
 - **Network and share scanners and printers** to minimise how many you have or need or have to buy different inks for etc
 - Other tools I have found useful:
 - **Mind mapping software** (mind mapping is a technique once used is never put down) <https://simplemind.eu>
 - **Do you make regular backups and is one of them offsite**, and/or in a safe or at a very minimum on a separate (removable) hard drive?
- 
- **Backups:** *"Lots of copies in lots of different places keeps stuff safe"* (locks). Do not be afraid of hard drives – the cloud is not necessarily the only solution – but P.S. hard drives do fail.

Collections

- Maybe indexed paper cards, a spreadsheet or a purpose made system such as MODES
- Are there backups? Even paper can get damaged, wet, lost or burnt.
- Are backups stored somewhere else away from the collections system? Backups are only any good if they are properly managed and checked/tested.
- If you are electronic, are any of your collections data available online to visitors e.g.

<https://collections.heritage-bellingham.org.uk>



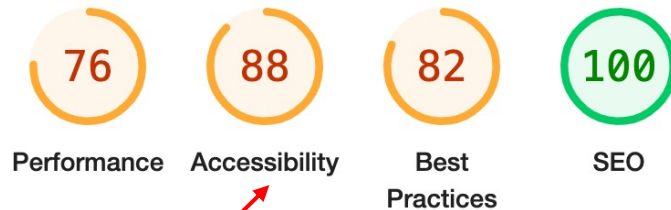
Website and Social Media



- Are there any security vulnerabilities on your website? e.g. <https://pentest-tools.com/website-vulnerability-scanning/website-scanner>
- Are you using a good quality, well supported Content Management System with regular updates
- Do you have backup and security (Web Application Firewall) addons e.g. Akeeba for Wordpress or Joomla <https://www.akeeba.com/products.html> , or a static site with security addons - examples: <https://www.zenarmor.com/docs/network-security-tutorials/best-open-source-web-application-firewalls>)?
- Do you have Strong passwords and do not share them? “Eight-character passwords are insufficient now... and if you restrict your characters to only alphabetic letters, it can be cracked in minutes.” In any case, to be on the safe side, a password length of 12 characters or more should be adopted. Try <https://www.passwordmonster.com> to check your password strength.
- IS THE SOFTWARE RUNNING YOUR WEBSITE UP TO DATE? You may have a hosting contract but nothing else....
- Are there backups of your website – regularly?
- Is there a place to collect and present Stories, images, audio, video? Consider a Wiki?



Website Performance and Accessibility



The screenshot shows the website header with the logo and navigation links. Below the header is a featured article titled 'POSTCARDS FROM BELLINGHAM' with a sub-headline 'ROAD TO BELLINGHAM 1912-1914'. The article text includes 'See, hear and absorb the fascinating history of Bellingham' and 'The Heritage Centre is open Saturday and Sunday 2/3/9/10 December'. Below the article is a section titled 'Santa at the Heritage Centre..'. An 'Accessibility Options' overlay is visible on the right side of the page, listing various options: Increase Text Size, Decrease Text Size, Increase Text Spacing, Decrease Text Spacing, Invert Colours, Grey Hues, Underline Links, Big Cursor, Reading Guide, and Text to Speech.

- Is your website **accessible to all**. Use Chrome Developer Tools and Lightspeed (or easier Google Pagespeed) to get a basic report.
- This will refer to structure of the site and page, alt text on images and links and possible tools to help users e.g.



Enhance the Visitor Experience

- Some examples:
- Pre-visit:
 - Who are your audience(s), do your digital offers inform them of Who, What, Where, When
 - Do you monitor and manage your reviews on TripAdvisor, Google, Facebook?
- Visit:
 - What I.T. helps the visitor?
 - Try signage displays for images and video
 - PCs and tablets in kiosk mode (guided access on an iPad) for security or use Proteus on desktops
- Post Visit:
 - In person and online surveys (Same form) – in person on exit at an old tablet in Kiosk Mode using a Google survey form, MS-Office form or similar
 - Manage your reviews



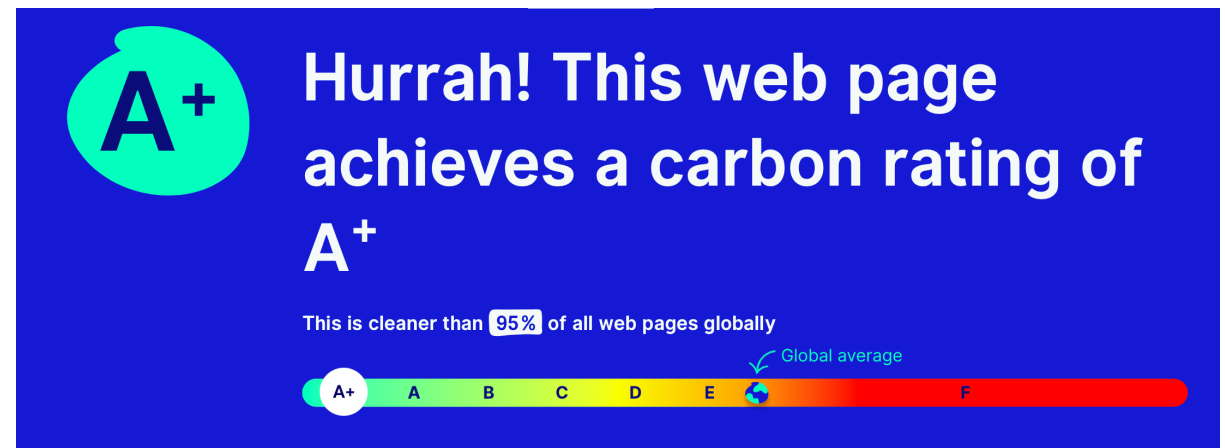
Recycle or Re-use?

- Old hardware can be re-used – tablets and desktops or laptops. Try Ubuntu and Open Office, Porteus on a desktop or laptop as appropriate
- Try Kiosk mode on your iPad (e.g. for Surveys) or desktop
- Add a touch screen to an existing PC for customer interaction with PC in Kiosk mode
- If you buy new, can you just buy the PC and not the monitor, keyboard. Mouse – buy from cheaper or refurbished sources – it is highly likely to be OK for your needs and cheaper. E.g. <https://www.backmarket.co.uk/en-gb/about-us>



Carbon Footprint

- You could use greener providers for hosting and cloud services but in some cases, you have no choice e.g. Social Media
- Check out your website hosting at:
<https://www.websitecarbon.com>
- Data Centres worldwide use nearly 40% MORE electricity than the whole of the UK and AI will increase this substantially!
- I.T. consumes an estimated 7% of global electricity
- Out of date software running your website tends to be poorer performing therefore consumes more electricity as well as being potentially vulnerable.





A.I. - The Future?....

- Is here now!
- I have tried ChatGPT and my jaw dropped in amazement
- It is not the answer, but it can get you started and put you on the right track – saves work and effort but you need to add value
- The better you define your request the better the answer
- E.g. “write a spectrum compliant access policy for a type 1 independent museum”

If you're not using AI, you're falling behind.

Best AI Tools

Text	ChatGPT	Writesonic	Rytr
Design	Adobe Firefly	Midjourney	Leonardo AI
Video	descript	2short.AI	PICTORY
Content	synthesia	Tweet Hunter	Taplio
Productivity	Perplexity	Eightify	grammarly
Business	Rationale	taskade	Mixo
Presentations	Gamma	tome	SlidesAI
Research	consensus	ChatPDF	Supertools

therundown.ai The Rundown.

Some simple things to do immediately (all free)

- Run the **carbon checker** <https://www.websitecarbon.com>
- Run your website through a **vulnerability checker** <https://pentest-tools.com/website-vulnerability-scanning/website-scanner>
- Run **Chrome/Lighthouse** on your website (Mobile first / desktop second) or google "Google Pagespeed"
https://pagespeed.web.dev/?utm_source=psi&utm_medium=redirect
- Run a **Crawler / link checker** e.g. Download <https://www.screamingfrog.co.uk/seo-spider/> or use <https://validator.w3.org/checklink> online
- **Accessibility checker** – Chrome or Firefox have good built in or add on extensions – there are some automated checks, others are manual or subjective, guidance usually provided.
- **Review any third-party website provider contract** (are updates included)
- Try <https://www.passwordmonster.com> to **check your password strength** and consider using a Password Vault or two factor authentication
- Has your password already been used for an attack?
<https://haveibeenpwned.com>
- **Manage your reviews and hence your reputation**
- **Does your website support a Friends / Members area?**
- **Try ChatGPT** (requires you to register but free at the moment)

How Secure is Your Password?

Take the Password Test

Tip: When adding a capital or digit to your password, don't simply put the capital at the start and the digit at the end Show password: ☐

.....

Very Strong

16 characters containing: Lower case Upper case Numbers Symbols

Time to crack your password:
634 million years

Review: Fantastic, using that password makes you as secure as Fort Knox.





Summary

- There are lots of free or inexpensive tools available
- Existing technology can be repurposed
- There are possibilities for a range of volunteer skill sets as well as for (semi-)professionals
- The visitor, volunteer and Friends/Members experience can be enhanced
- As a starter, **pick one area**, get some advice or do some research
- Conduct an audit and plan some improvements
- Gain confidence and move on to another area.
- Plan a digital recovery – sadly, one day you may need it!





Any Questions?

