Report to

Toller Porcorum Parish Council

Replacement of parish council laptop

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Introduction

The current parish laptop is no longer fit for purpose and needs to be replaced. In 2023 the laptop started to experience problems when starting up and could only be switched on when connected to power. Despite a full service in April 2023, this problem could not be solved.

I started using the laptop in May 2024 and found it sluggish when swapping between windows and opening files therefore slowing down the completing of tasks. More alarmingly the laptop started switching off when not connected to power resulting in loss of work multiple times. Due to this issue the laptop cannot be relied upon during has parish council meetings without a charging cable and extension lead.

Research

The parish laptop must have an operating system that can run all software included in Microsoft Office. Laptops and MacBooks can both run Microsoft Office but Chromebooks use app versions of Microsoft Office software that do not have full functionality.

Conducting parish business regularly requires multiple windows open at any one-time making processing power and memory (RAM) – hardware – important considerations. The current laptop has an Intel Pentium processor which has been superseded many times over, 4GB of RAM and a hard drive of 128GB.

Modern laptops have a listed battery life of 6-24 hours depending upon size, make and components. Battery life is affected by what a laptop is used for when running without power.

The lifespan of a laptop is 3-5 years and a MacBook 5-7 years with batteries usually the first part to degrade. Laptop batteries are expected to last 2-5 years with battery capacity continuing to decline while MacBook batteries are expected to last 5 years with battery capacity remaining at 80% for the rest of the machine's life which could be up to 10 years. Steps can be taken to manage batteries and most laptops can have a battery replaced.

All computing devices can be attacked by viruses and malware and anti-virus software mitigates this risk but does not remove it. MacBooks have long been considered to be more secure than laptops due to the operating system and that there are less of them in use. As MacBooks have become more popular, however, the risk of attack has increased.

A larger screen would be useful (current laptop has a 14 inch screen). As instances of the parish laptop moving location without transport are rare, size and weight are not considerations for this report.

Which? recommends Currys, John Lewis and Laptop Direct as trusted retailers. PCMag recommends Acer, Apple, Asus, Dell, HP, Lenovo, and MSI as leading brands.

Summary

Microsoft Office can run on Windows laptops and MacBooks. Chromebooks cannot be considered due to the lack of full functionality of the app versions of Microsoft Office.

For a laptop to operate as required when performing council business there are minimum and recommended requirements for hardware. These are detailed in the table below:

	Processor	RAM	Hard drive
Minimum	Intel Core i5 H series, AMD Ryzen 3 H series or Apple M2	8GB	256GB
Recommended	Intel Core i5 or i7 H series, AMD Ryzen 5 H series or Apple M3	8GB (with 512GB hard drive) or 16GB	256 - 512GB

A parish laptop is required to operate without power for meetings of a few hours. Multiple meetings on the same day are rare, therefore it is acceptable for a parish laptop to have a battery life of 8-16 hours.

MacBooks have a longer lifespan but this comes at an increased cost. MacBooks meeting the requirements above cost £900-£1600 while other laptops meeting the same requirements cost £450-1500.

Laptops and MacBooks come with anti-virus software. Buying a machine with the most recent operating system (Windows 11 and macOS 15) ensures the highest level of built in protection.

Recommendations

Laptop 1: Lenova IdeaPad Slim 3 15.6" Laptop – Intel Core i5, 512 GB SSD, Arctic Grey

£349.00 at Currys, currently reduced from £599 (6 November 2024)

The laptop meets the recommended hardware requirements as it has an Intel Core i5 processor, 8GB of RAM and a 512GB hard drive and a battery life of eight hours which meets the recommendation of this report. The laptop has a very good sized screen and a numeric keyboard which will be of help in accounting tasks.

Laptop 2: Lenovo V15 G4 Intel Core i5 16GB RAM 512GB SSD 15.6 Inch Laptop

£469.97 at Laptops Direct, currently reduced from £519.97 (6 November 2024)

The laptop meets the highest requirements of recommended hardware and it has a very good sized screen. The laptop has a numeric keyboard which will be of help in accounting tasks. The battery life is below the recommendation of this report at seven hours but this can be mitigated with programme management when not connected to power.

Laptop 3: Apple MacBook Pro 14" (2023) - M3, 512 GB SSD, Space Grey

£1299.00 at Currys, currently reduced from £1570.00 (6 November 2024)

The MacBook meets the recommended hardware requirements as it has the most recent Apple processor, 8GB of RAM and a 512GB hard drive. The battery life of 22 hours is more than enough for using the MacBook in meetings. The screen size is the same as the current laptop which is a little disappointing.

Sources of information

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