North York Moors National Park Authority
Finance, Risk, Audit and Standards Committee

24 May 2018

Closed Source vs Open Source Office Applications

1. **Purpose of the Report**

1.1 To update Members on work currently being carried out to support and develop the Authority's Information Communications Technology, in particular to provide guidance on the use of open source software.

2. **Security of the Applications**

2.1 Having consulted our auditors; Veritau about their views on the security of open source applications they responded with the below:-

2.2 There are arguments for and against open source in terms of security. It's a complex topic with a lot of learned opinions on either side, but ultimately there a couple of points which tend to prevail.

2.3 The main argument made against is that as the source code is readily available it allows an attacker to have insight into where vulnerabilities may lie. However, a sophisticated attacker will have the ability to analyse and infer the function of closed source code through other methods such as decompilers and memory analysis. With this in mind there is only, in my opinion, a small edge for closed source here.

2.4 On the positive side open source code bases have a "many eyes" approach. Often you'll have communities of security researchers and developers who use a particular piece of open source software and have a vested interested in ensuring that it remains secure. This can lead to problems being spotted and fixed more quickly than with closed source software.

2.5 Ultimately the argument comes down to the individual piece of software you're looking at and making sure that due diligence is done during procurement. When considering open source it's important to learn about the community who develop and support it, particularly in terms of their reputation and track record with finding and fixing security flaws. These are really just the same checks you'd be running on a vendor when procuring closed source software'.

2.6 Microsoft (MS) Office applications have regular monthly patch updates which resolve security issues. The ICT Team ensure that our systems are up to the latest MS patch sets within 2 weeks of them being released following a strict testing and release schedule.

3. **Cost of the Applications**

3.1 The cost associated with MS Office are significant but there are a few options available to the Authority. These are:-

- MS Office 365 – which is a subscription charge based on a per user charge - £177.12 per users/year.

- Office 2016 Professional Plus perpetual licence – This is the price for the suite with Access - £388.01 per device.
- Office 2016 Standard Licence – Does not include Access - £284.15 per device.

3.2 We are currently using Office 2010 so any new purchase will run for the length of its support, which is traditionally 10 years. Number of devices is similar to number of users and currently sits around 140.

3.3 Purchasing the perpetual licences does have a larger capital cost which would be £54,000, at the costings and licence numbers above but when spread over the life of the product would be significantly less than Office 365 offering at £25,000 per year.

3.4 The two most common open source office suites are LibreOffice and OpenOffice both of which are free, however it is recommended that if they are to be used in a business environment that additional support is purchased through a 3rd party. There appears to be very little available support from UK based companies. Support tends to be forum based, which Officers don't believe is suitable for our purposes.

3.5 There is one company that have taken LibreOffice and "tweaked" it to be more suited to a corporate environment (https://www.collaboraoffice.com/solutions/collabora-office/) however there is a cost involved in this product.

4. **Reliance on MS Office by other Applications**

4.1 Three of the Authority's current systems rely on a link out to MS applications these are our:-

4.2 Sunsystems Q&A - Finance system which utilises a plug in to Excel for the reporting of financial information. This plug in is only available for Excel.

4.3 M3 – Planning system utilises a connection to MS Word for the production of letters. It uses the bookmark feature within Word to pull information out of the planning system to auto populate certain fields.

4.4 Earthlight – Our GIS system can use MS Word to produce page layouts for maps that require additional information fields to be displayed.

4.5 These systems are the Authority's three major systems and at this time are not compatible with the open source office equivalents. Any users of the planning application and finance system would have to continue to have access to MS Word and Excel this is approximately 28 Q&A users and 26 M3 planning users.

5. **Reliance on Access Frontends for Databases.**

5.1 The Authority has a reliance on MS Access to access some of the Authority's in house databases; ROWMANS (Rights of way management), HER (Historic Environment Records) and incoming post databases. Current user level amounts to 45 Officers. Whilst IT Officers have been converting the frontends of in-house databases to be web frontends over the past few years these remaining database are complex and due to existing project commitments are not in our schedule of work for 2018.

5.2 Whilst there is an open source alternative to MS Access there is no easy way to convert from one to the other.

6. **Training of IT staff and other Officers**

6.1 Whilst there is always an element of Officer training when we upgrade systems there would be an increased level of training and support required if moving to an alternative application. The vast majority of staff are already very familiar with MS products and require relatively little training in their use for work purposes..

6.2 There would also be a significant learning need for the IT Officers to be able to support the rest of the Authority as none of the existing Officers have experience of the open office applications. This additional training would impact the team significantly so extra IT resource would be needed for the duration of a migration project to allow the team to be able to effectively support the Authority post migration.

7. **Legal Implications**

7.1 There are no legal implications arising from this report.

8. Financial Implications

8.1 The costs associated with continuing to rely on MS products, detailed in Paragraphs 3.1-3.3 have been built into our forward financial planning.

9. **Conclusion**

9.1 The reliance of existing applications on MS Office, the reliance on MS Access and the impact changing applications would have on the IT team in terms of support and retraining means that at this time the Authority should continue to use the MS Office suite. The option to purchase the perpetual licence would be the best option for the Authority at this time as this would give best value for money over the life of the product.

10. **Recommendation**

10.1 That;

Members note the contents of this report.

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