oxford archaeology: exploring the human journey

A year of full-speed FOSS

winning the hearts, minds, and business case

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Prologue

OXFORD ARCHAEOLOGY

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Oxford Archaeology: Europe's largest provider of archaeology and heritage services

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Over 400 regular members of staff

4 offices located across England and France:

- OA – Oxford, UK
- OA North – Lancaster, UK
- OA Med – nr. Montpellier, France
- OA East – Cambridge, UK

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Oxford Archaeology is:

Excavation:

Consultancy

Pre-construction surveys (using physical and geophysical evaluation)

Full archaeological excavation

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Oxford Archaeology is:

Excavation: Heritage Management services

HMS: Desk-based assessments

Environmental impacts assessments

Historic landscape character assessments

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Oxford Archaeology is:

Excavation:	Scientific dating
HMS:	Analysis
Post-Ex:	Publication
	Archiving

Chapter 1

THE WAY IT WAS

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Archaeology is spatial

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Data in

Digital field survey – *Total stations, Laser scanning etc.*

Site plans – *Hand drawn on perma-trace*

Context records – *Hand written*

Digital images

3rd party data sets (NMR/SMR, OS) – *DXF or SHP*

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Data in
Data do

Digitise plans and features – *AutoCAD 2004, ESRI ArcGIS*

Create context databases – *Microsoft Access 97*

Spatial analysis – *ESRI ArcGIS*

Context phasing – *AutoCAD / ESRI ArcGIS joined to Access 97*

Map regression – ESRI ArcGIS

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Data in

Data do

Data out

Publication – *ArcGIS or exported to Adobe Illustrator*

To clients – *Whatever they want, usually CAD formats*

Archiving – *Paper archive, server stored data*

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Data in
Data do
Data out

DATA OPEN

Open Archaeology - Oxford Archaeology's published core strategy comprising of:

Open Source
Open Standards
Open Data

http://openarchaeology.net
https://launchpad.net/openarchaeology

Chapter 2

FULL SPEED FOSS

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Moving to FOSS

A process

Researching the best solutions

Establishing an infrastructure

Legacy phase out

Gradual training

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Moving to FOSS

OA versus ESRI

ESRI and the CHEST agreement

Uncertainty of the future

The reality of propriety

Creating a FOSS infrastructure

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FOSS

Data in

Digital field survey – *Open Total Station, TangoGPS, GvSIG mobile*

Site plans – *Still hand drawn, hardware issues more than software*

Context records – *Input via the Freerunner mobile device*

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FOSS

Data in
Data do

Digitise plans and features – CAD, *GvSIG*

Create context databases – *PostGIS*

Spatial analysis – *GvSIG with Sextente, Grass enabled QGIS*

Context phasing – *?? GvSIG and PostGIS*

Map regression – *GvSIG*

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FOSS

Data in

Data do

Data out

Publication – InkScape, *???*

To clients – *Still whatever they want, usually DXF or SHP*

Archiving – *???*

Chapter 3

SOME REALITIES

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FOSS

Success?

One Laptop per Archaeologist

The primary uses of GIS and the establishment of a GIS toolkit

The strength of PostgreSQL and PostGIS

Changing the minds of some (more computer literate) people

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Success?

Hurdles?

Software

Freerunner still a developing platform

GvSIG is often buggy and intimidating to the casual user

Unrefined links between the GIS, Database, and Open Office

The general output of 'pretty maps' is still rudimentary in FOSS GIS

A useful CAD substitute, and client compatibility

The migration from ArcGIS mxds, and lyr files.

STANDARDS – Where are the open standards for GIS projects files?
ARCHIVING – What is the best established open format to archive?

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FOSS

Success?

Hurdles?

People

For some archaeologists change happens across centuries

Non GIS people struggle to learn GvSIG which is intimidating and still half in Spanish

I hate IT

“I don't like it as the buttons are in a different place”

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Chapter 4

THE WAY IT WILL BE

Coming in 2009

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