OpenOffice.org & OpenXML ...

Michael Meeks

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"Stand at the crossroads and look; ask for the ancient paths, ask where the good way is, and walk in it, and you will find rest for your souls..." - Jeremiah 6:16

Novell.

Why OO.o is so important

- The price gradient:
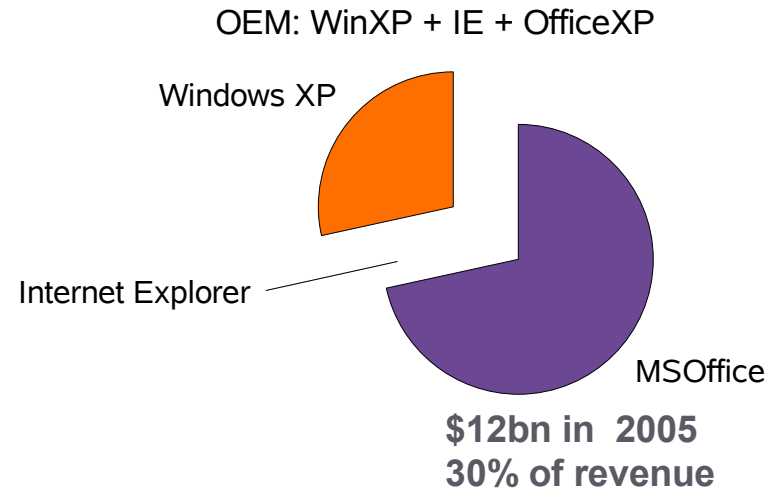
  - 'Normal' people using it today

  - runs on Win32

  - N x millions of users

  - big deployments...

- Developer bang for buck

  - where is Freedom best served ?

  - what Free software do people see 1st ?
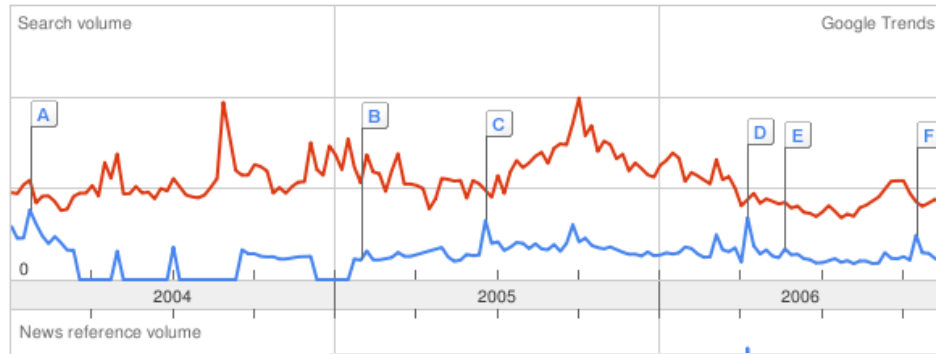
- Novell as an example:

  - all have OO.o; 80% of ~6000 *"as their main office suite"*
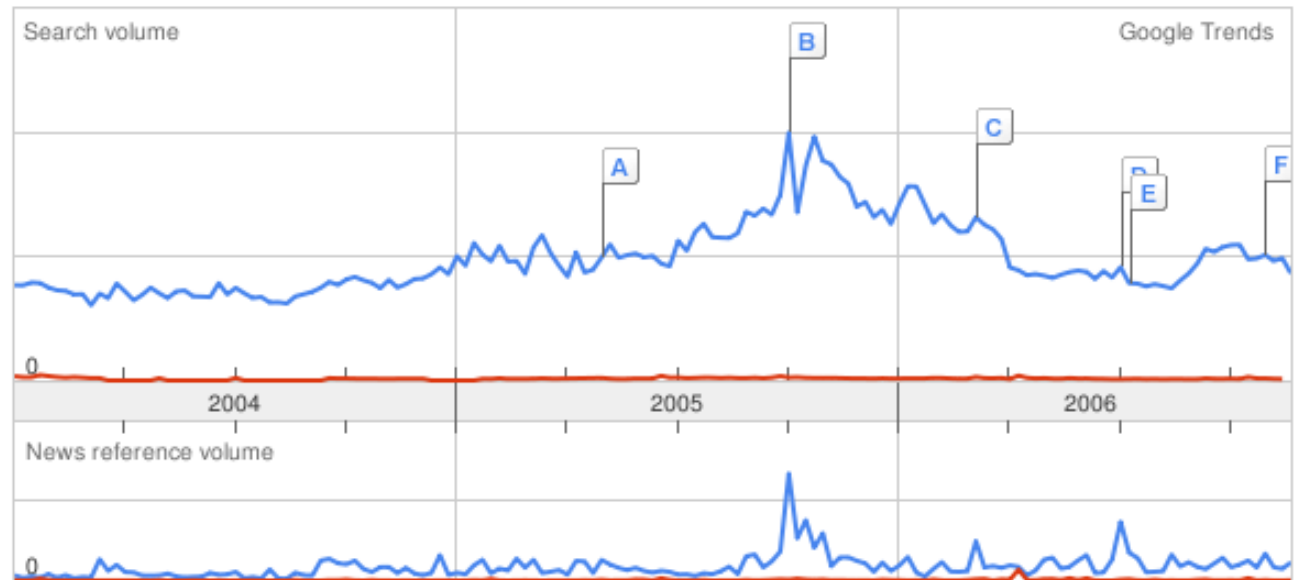
  - Saved $1M in MS Office license fees. Each year.

OEM: WinXP + IE + OfficeXP

Windows XP

Internet Explorer

MSOffice

$12bn in 2005
30% of revenue

Some trends ?....

Spot the Value .... ! (you know you it is somewhere ...)

OpenOffice.org 6 million lines 200+ man years	ODF 700 pages 5? man years

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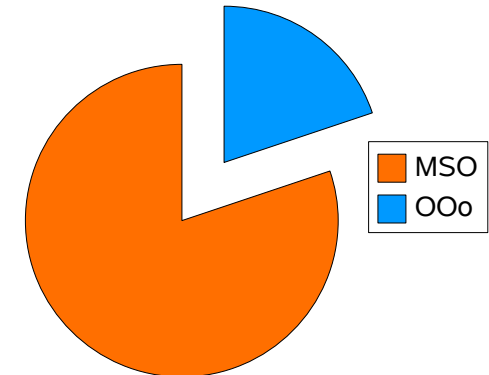
StarOffice 5.2	OpenOffice 1.0 ...

Open Source, not Open Standards
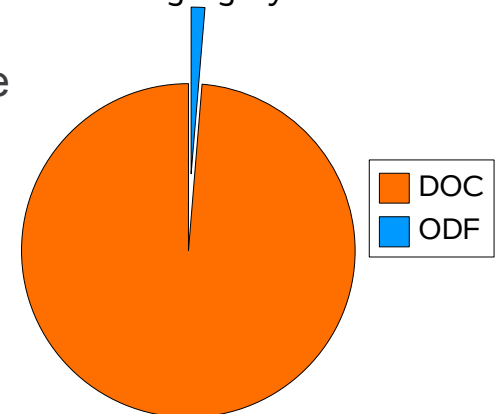- Where is the disruption ?
- OO.o without ODF ? ODF without OO.o

Why Interop. is so important ....

- OO.o Market share
  - > http://wiki.services.openoffice.org/wiki/Market_Share_Analysis
  - > Main site downloads: 80million, + Spanish/India x2 -> 8.5million
  - > Oct 05 – Yankee Group: 19% of SME ...

- Microsoft Market share:
  - > *400 million Office users worldwide*
  - > 1.1bn Internet Users (Global Reach)

- Good news ...

- But Document share is different:
  - > ODF is -very- new, .DOC is -very- old ...
  - > There are a huge number of documents out there
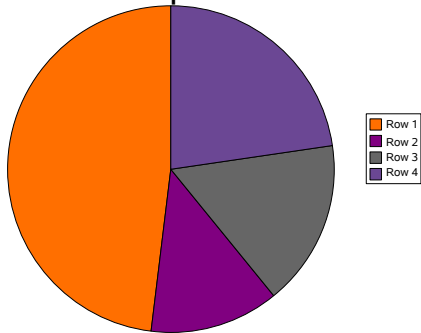
Current Market Share (best-case)

🟧	MSO
🟦	OOo

Assuming legacy doc tail

🟧	DOC
🟦	ODF

Why interop is hard ...

A simple chart ?

	Data Field Options			
Sort by				OK
Units	⊙ Ascending			Cancel
	○ Descending			Help
	○ Manual			

Display options

Layout: Tabular layout

☐ Empty line after each item

Show automatically

☑ Show   10

Data Field

Function

Min
Product
Count (Numbers only)
StDev (Sample)
StDevP (Population)
Var (Sample)
VarP (Population)

Name: Units

Displayed value

Type: % of

Base field: Weight

Base item: 54

	type	number
65531		
65532	type	number
65533	Herring	23
65534	Apples	13
65535	Pears	67
65536	Oranges	15

Fruit_n_things / Sheet2 / Sheet3 /

Sheet 1 / 3   Defa

Why interop is hard (2) ...

- Different models:
  - Word Processing:
    - Fields, red-lining (change tracking), Tables, Bullets/Numbering etc. ...
    - Ultimately: important to lawyers, tolerable for others:
      - Different paper sizes / fonts / devices wreck layout anyhow.
  - Spreadsheets
    - Why do we hear much less here ?
    - **Much** more critical:
      - If your formula computes to a different value – you throw it away immediately.
      - If your layout isn't quite right, you quickly tweak it
    - In-line arrays, computation semantics, different behaviors, missing type
- Compatibility hacks are sometimes necessary:
  - eg. 1900 date-base system: Lotus 123 – IBM ...vs. (1904 ...)

OpenDocument vs. Office Open XML

[get some mental dissonance ? 'Office Open XML' !?]

- Structure: Non-mixed   Or mixed ...

```
MS OpenXML
<w:r>
  <w:rPr>
    <w:b />
  </w:rPr>
  <w:t>this is bold</w:t>
</w:r>
```

```
OpenDocument
<text:span text:style-
name="Strong_20_Emphasis">
    this is bold
</text:span>

XHTML
<b>this is bold</b>
```
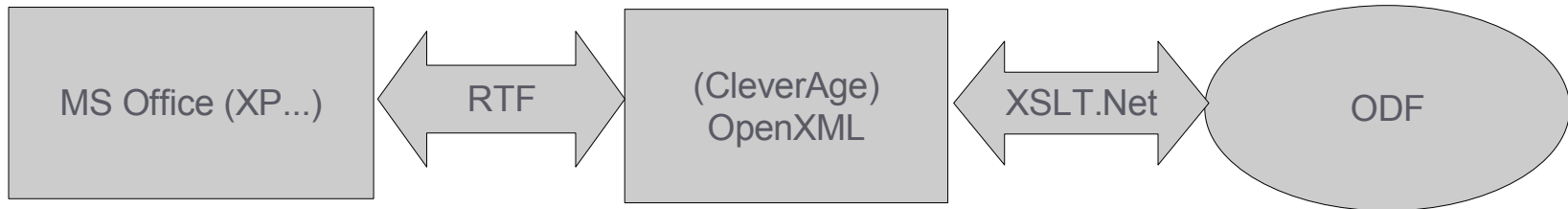
- Tag names not a huge issue

- Layout not specified by either side

- The good thing about standards is ...

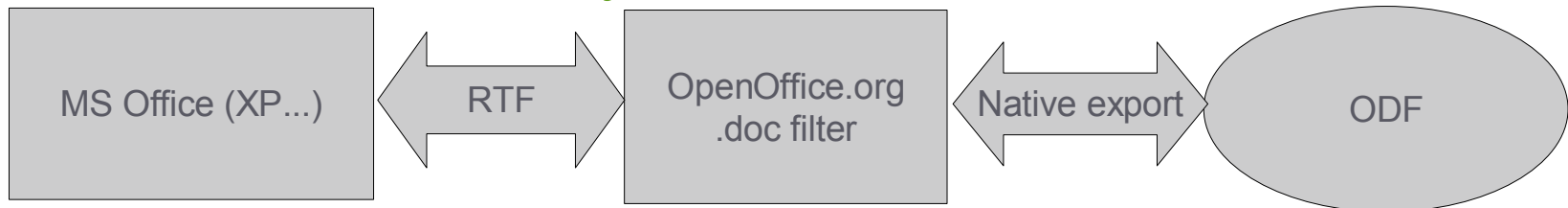- MS have very different design constraints

OdfConverter.sf.net ...

- A highly 'interesting' MS strategy ....
  - "Add ODF support to MS Office"

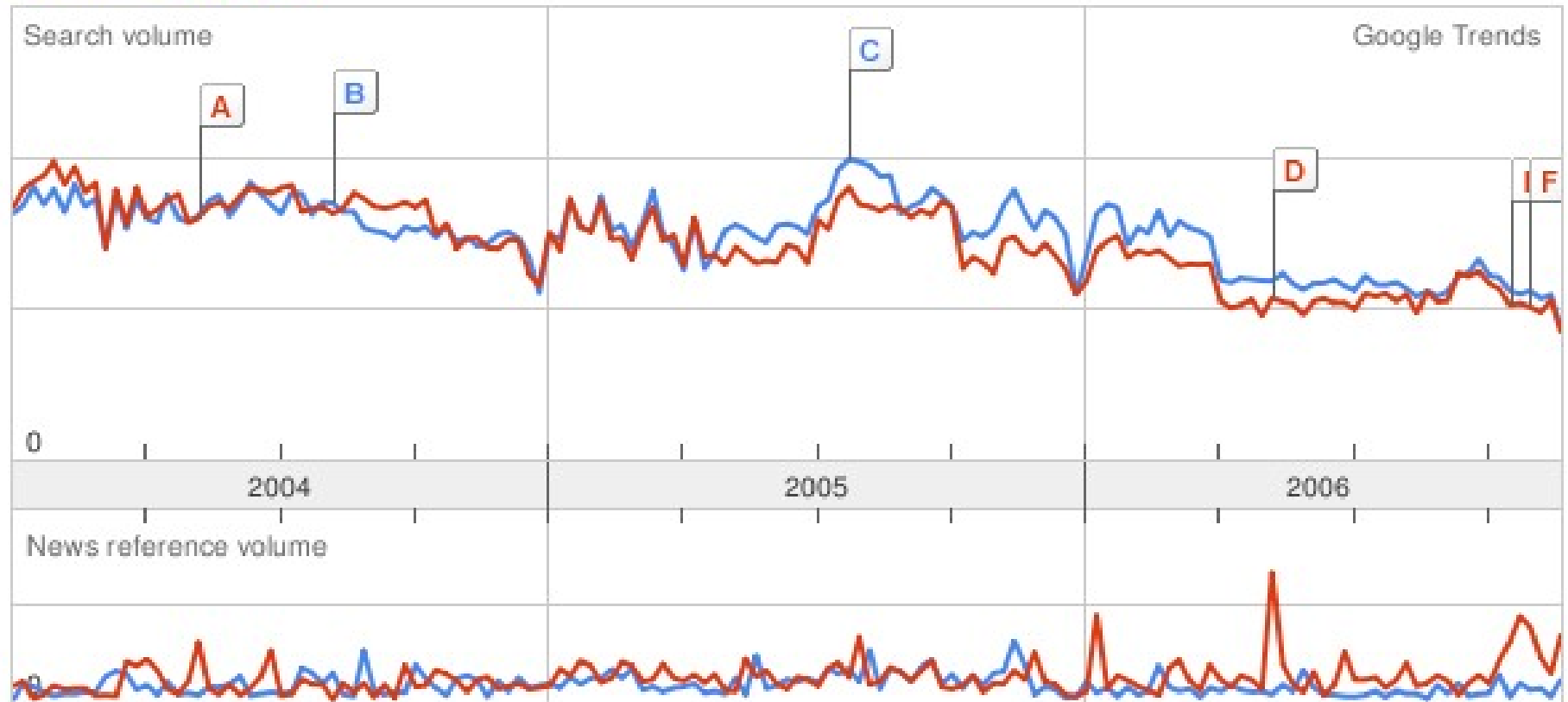| MS Office (XP...) | ←RTF→ | (CleverAge) OpenXML | ←XSLT.Net→ | ODF |

- Unfortunately:
  - XSLT requires fast/native OpenXML support installed 1st
  - OdfConverter: **extremely** slow for large set of document
- Better than nothing: we ship it (RSN)
- Sun's solution way better:

| MS Office (XP...) | ←RTF→ | OpenOffice.org .doc filter | ←Native export→ | ODF |

Another interesting tech. trend ...

Lame odf-converter demo time

So what is Novell doing ?

- Novell participates in odf-converter:
  - Mono port, 64bit port, improved packaging / bundling / QA etc.

- Novell has announced OpenXML support
  - Need to do it right too ...
  - Resourcing up a team to do -great- built-in OpenXML support
    - with **Sun** – already working on import
  - Florian Reuter, Fridrich Strba,Kohei Yoshida, Travis Hansen...
    - <more on their way>
  - Code re-use is king:
    - internal filter logic can get a little twisted:
    - share it between .doc / RTF / OpenXML

Novell's position on ODF / OpenXML

- Novell's *technical* opinion is that OpenXML is a fine standard.

- Novell's *business* opinion is that there should be **one** open standard and that standard is ODF

- Principles
  - XML-based file formats are superior to binary file formats.
  - Open standard file formats are superior to non-standard file formats.
  - Novell has worked in Ecma to interactively draft the OpenXML specification
  - Novell is implementing support for OpenXML in OpenOffice.org (though this is not yet completed) for interoperability purposes
  - Novell primarily supports the ODF file format. ODF is our default file format, and ODF is the file format that we recommend to all our customers.
  - Novell believes that ODF is a sufficient format and that standards bodies need not ratify additional document file formats.
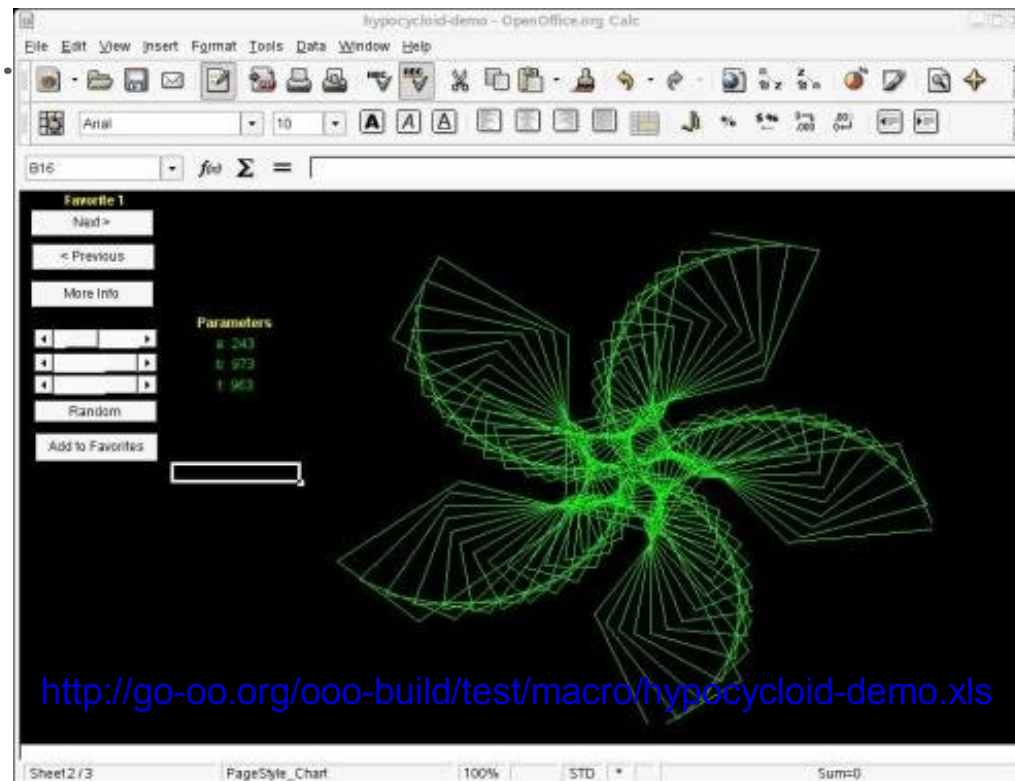
VBA interoperability

· Typical VBA macro:

```
Range("A1").Select
Application.CutCopyMode = False
Sheets("Benefits Summary").Select
ActiveSheet.Unprotect Password:=PW
Rows("43:47").Select
Selection.EntireRow...
```

· Like all 80/20 cases:

– Good data critical

– Please send your tangled Excel macros to us.

– we can provide tools to strip just VBA out

http://go-oo.org/ooo-build/test/macro/hypocycloid-demo.xls

VBA: the competition ...

- Microsoft Office: dropping VBA support on OS/X
  - Office12 OS/X – 9 months later...
  - http://www.schwieb.com/blog/2006/08/08/saying-goodbye-to-visual

The removal of VB means that **existing macros** in Office documents will be round-tripped across file open and save, but you will not be able to edit them and you will **not be able to run them on the Mac**. ... The MacBU is **very aware** of the **pain this decision will cause** for users, consultants, and **enterprise organizations**. I've personally seen the phrases **"apoplectic with rage"** and **"absolutely livid"** in two emails that crossed my inbox. ... As I mentioned in an earlier post, **GCC** is very picky about code meeting the current standards and the VBE code most certainly does not. ... VBA, on the other hand, is incredibly **difficult to port to Intel** ... Lastly, we have Forms. **Forms is** also C++, but is backed by **several thousand lines of gnarly custom assembly.** This assembly 'allows' the C++ code to swap object virtual function tables and individual member function pointers between objects on the fly, to essentially do very fast object morphing. ...

Conclusion

OpenXML

- Not a uniformly bad thing

- No need for a 2nd ISO standard

OpenDocument

- Not a uniformly good thing: distracts advocacy ...

- an ISO standard.

Focus on Free Software – not document formats
Novell are hiring ... [see me]
Hacking on the beast:
  http://wiki.services.openoffice.org/wiki

Oh, that my words were recorded, that they were written on a scroll, that they were inscribed with an iron tool on lead, or engraved in rock for ever! I know that my Redeemer lives, and that in the end he will stand upon the earth. And though this body has been destroyed yet in my flesh I will see God, I myself will see him, with my own eyes - I and not another. How my heart yearns within me. - Job 19: 23-27