

Beyond Apache OpenOffice

Jürgen Schmidt
PMC Member, Apache OpenOffice

- Documents are changing
- Open as catalyst
- Open Document Format
- Apache OpenOffice & ODF Toolkit
- Proposed features & extensions

Technology disruption has always dramatically magnified the value of content

3200 BCE



1439



1969



1990



1984



1981



1998



2001



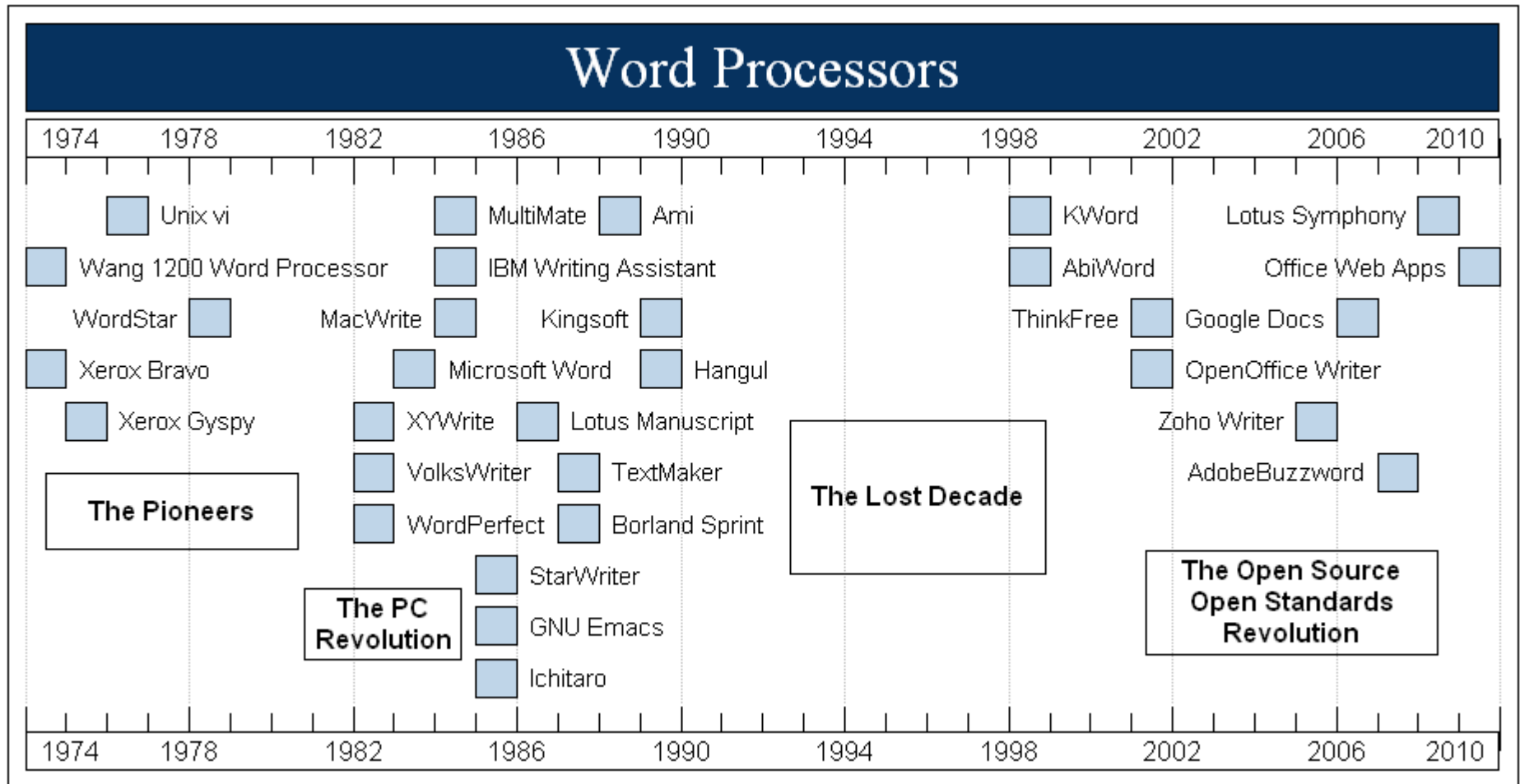
2009



2013



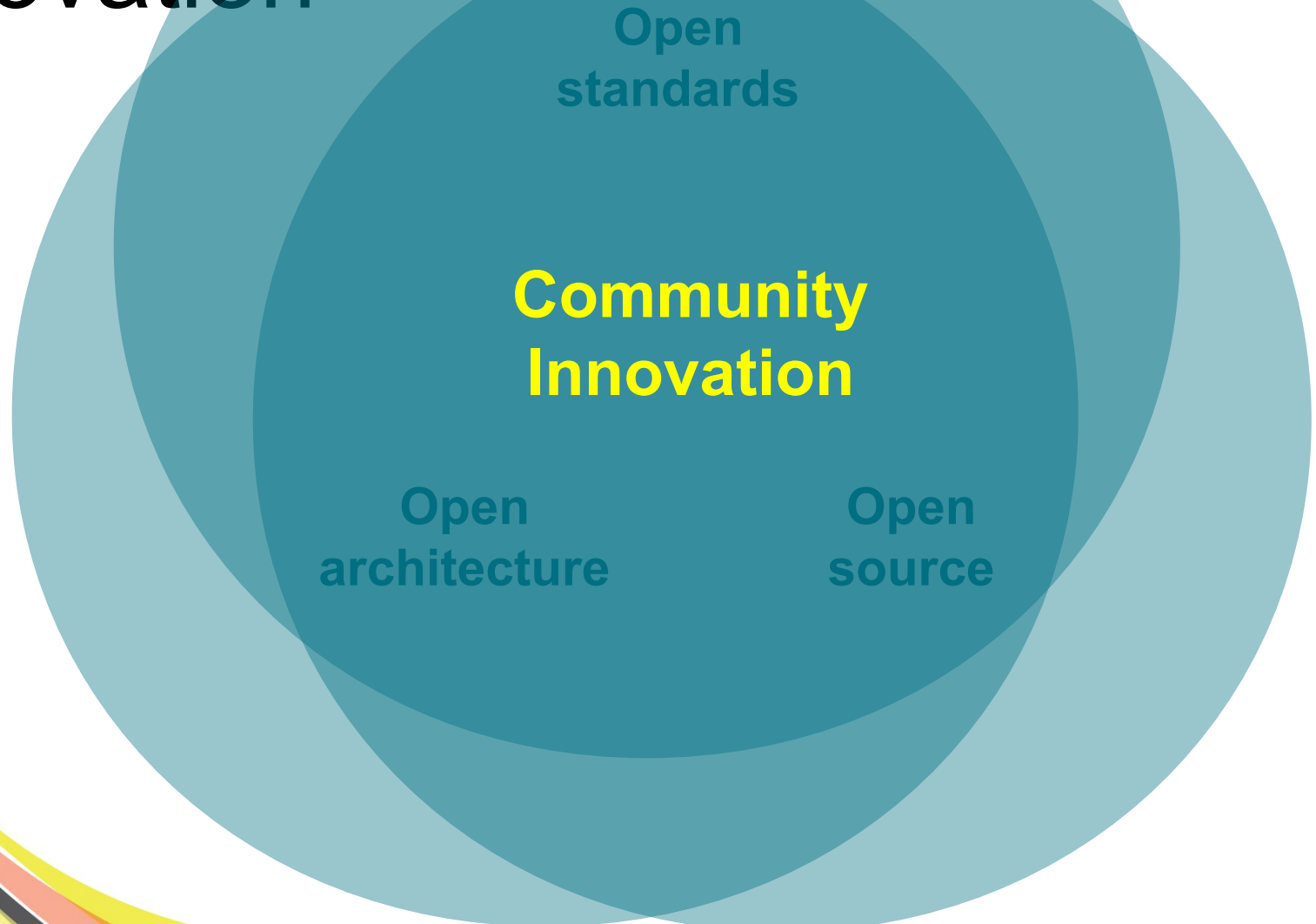
Much of the dramatic magnification of the value of document content in the last 20 years can be attributed to standards and open driven innovation



Document were— static and one-sided



Open is a catalyst for innovation



Open Standards

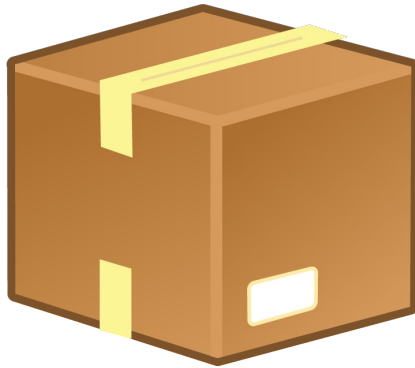
▪ What is Open?

- Lots of definitions - from published, proprietary interfaces to open source
- What is a meaningful gauge?
 - Broad adoption (multiple vendor implementations – especially by the vendors you and your partners buy products from)
 - Public interfaces/public input
 - Path to long term Stewardship (official standards body, effective open source community for implementations)

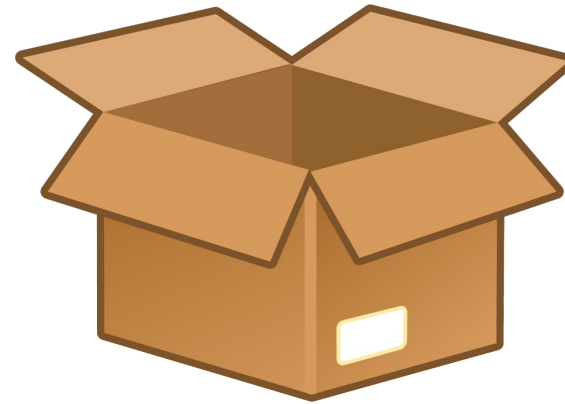
▪ Benefits

- **Choice** - *The choice I make today doesn't limit the choices I can make in the future*
- **Flexibility** - *I can connect to internal departments and external partners that made different technology choices*
- **Speed** - *I can build new solutions that involve multiple hardware and software platforms quickly*
- **Adaptability**- *I can adjust to changing business parameters (new opportunities, new partners, new employees) quickly*
- **Skills** - *I can find skilled resources that understand these solutions*

Documents have been changing from closed to open



- Contents are opaque
- Monoculture inhibits innovation
- Barrier to entry is high



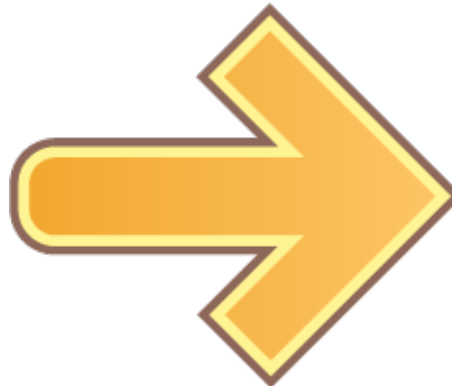
- Contents are transparent
- Open invites innovation
- Barrier to entry is low

**...and becoming much more valuable
in the process.**

Usage patterns are rapidly changing

Office Documents

- ✓ Unstructured
- ✓ Format intensive
- ✓ Print output imperative
- ✓ Network effects locks users in



Social Documents

- ✓ Many tools
 - ✓ Wikis
 - ✓ Blogs
 - ✓ Web/mobile
- ✓ Format for device
- ✓ Print seldom
- ✓ Dynamic sharing
- ✓ Highly social
- ✓ Co-editing
- ✓ Semantically rich
- ✓ Programmable



Standards drive innovation

- Leveling the playing field
 - **Deliver cost competitive alternatives and initiate network effect around and open standards**
- Magnifying market value by standardizing interchange between different tools
 - **Invest in Open Office and ODF Interoperability Plug-Fests**
- Driving innovation
- Creating new business opportunities in the new landscape
 - **Enterprise Content Management**
 - **Governance/Risk/Compliance**
 - **Analytics**
 - **Attention management**

What is the Open Document Format?



- An XML-based specification describing the content and formatting of a document.
- The open standard developed by a multi-vendor committee at OASIS and an approved international ISO standard.
- The standard that meets the common test for openness
- Enables choice through multiple implementations.
- Toolkits available for Java, and Python
- The option that gives you the most choices for interoperability and future-proofing your information.

Technically elegant... pragmatically implementable

What is new in ODF 1.2?

- Addition of Spreadsheet formula language (OpenFormula)
- Digital signatures
- RDF XML/RDFa capabilities (semantic web)
- Native tables in presentation slides
- Redrafting of conformance language as well as other changes to conform to ISO/IEC Directives, Part 2.
- Many editorial issues resolved
- Interoperability a 'work in progress'
 - **InterOp Demo**
 - **ODF Plug-fests**

Microsoft Office File Format Support

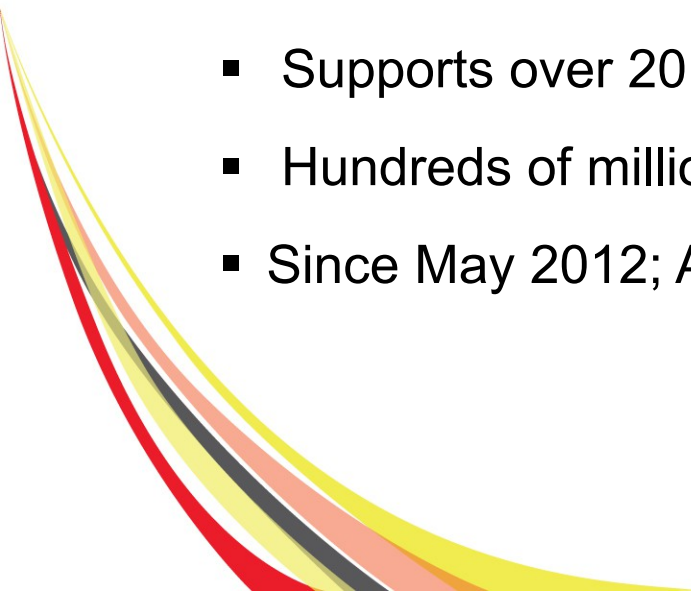
	Office 2003	Office 2007	Office 2010	Office 15'
Binary Format	Open, Edit, Save	Open, Edit, Save	Open, Edit, Save	Open, Edit, Save
Transitional OOXML	Open, Edit, Save	Open, Edit, Save	Open, Edit, Save	Open, Edit, Save
Strict OOXML			Open Edit	Open, Edit, Save
ODF 1.1		Open, Edit, Save	Open, Edit, Save	Open, Edit
ODF 1.2				Open, " Edit", Save
PDF		Save	Save	Open, Edit, Save

No ODF 1.2 compatibility for Office 2007 or Office 2010

For ODF 1.3

- Proposals currently being accepted and reviewed
 - **Everyone is welcome to contribute**
- Some areas under discussion:
 - **Change tracking enhancements**
 - **Chart enhancements**
 - **Font embedding**
 - **Profile for web/mobile editors**
- Schedule: 4 committee drafts over 2 years

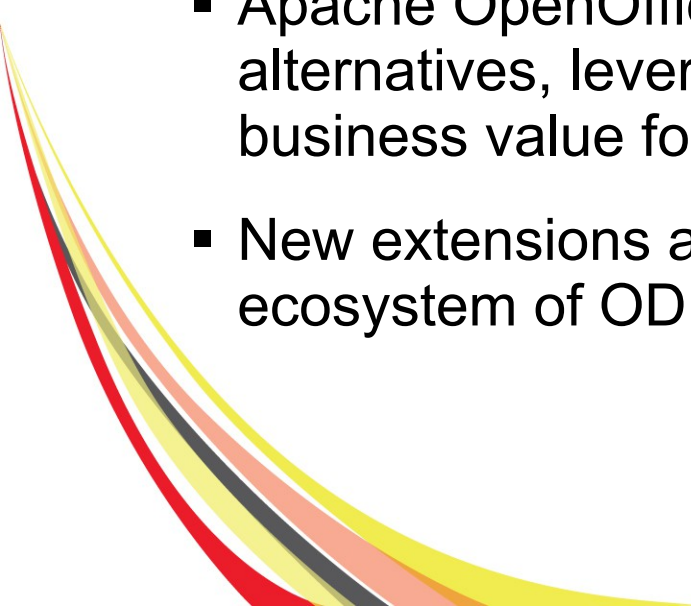
What is OpenOffice?

- Writer – word processor
 - Calc -- spreadsheet
 - Impress -- presentations
 - Draw -- graphics
 - Base -- create and modify tables, forms, queries, and reports
 - Lots of code ...~10M lines
 - Supports over 20 languages
 - Hundreds of millions of downloads over 10+ years
 - Since May 2012; Apache OpenOffice achieved >20M downloads
- 

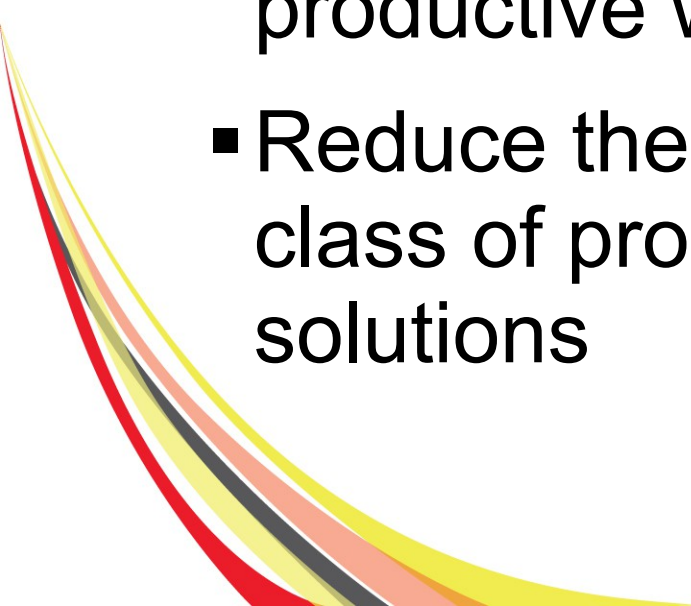
Proposals for Apache OpenOffice.next

- Microsoft Office OOXML file format support
- Useability
- Accessibility
- Enterprise Integration
- OpenSocial
- ECM
- Analytics
- Improvements in performance and quality
- Increased local language support
- Sidebar framework
- Property Sidebars
- Writer Table of Content enhancement
- Calc auto-filter enhancement
- Better clip arts and templates
- New branding/styling
- Improved install and deploy experience

Opportunities for innovation

- A healthy and vibrant OpenOffice project is in the interests of the marketplace that demands choice
 - Consolidating OpenOffice and the ODF Toolkit under Apache2 licensing supports the growth of the ecosystem, increasing choice for clients, expanding the size of the market for all participants
 - Apache OpenOffice will embolden ICT leaders to explore alternatives, leverage the value of ODF, and realize new business value for document-centric solutions
 - New extensions and related projects will accelerate an ecosystem of ODF solutions and applications
- 

Why Apache ODF Toolkit?

- An ODF API that exposes a higher level abstraction of ODF to application developers
 - Developers may quickly become productive with ODF processing
 - Reduce the friction for creating a new class of programmable document solutions
- 

Why do we need to work together? ...because there is so much potential to be realized if we do

Content can become:

- More social
- More discoverable
- More reusable
- Better structured
- Inherently linked



Documents will become increasingly semantically rich

Rich content



Reputation/ Ranking/ Value/
Provenance/ Inheritance



Exploiting Rich Semantics



Activity oriented

Content layer

A mix of rich media types

Presentation layer
A mashup of content fragments



Semantics layer
Tags, authorship, approvalship



**Layered Synchronous
Collaboration
Everywhere**

Collaborative Authoring



Programmable



Live connections



Creating Semantic information

Implicit

■ Derived from context

- Author
- Activity/workflow status
- Date/Time
- Authorized community
- Forms field definition

■ System generated

- Pattern recognition
 - ✓ Atlanta > city
 - ✓ MLS 456738 > realestate listing
 - ✓ SIN: 63781283 > SIN number
 - ✓ 00012 8374929 23498234 > bank routing and account number
- Fingerprint:
 - ✓ This is a Mortgage application
 - ✓ Fingerprint increases accuracy of pattern recognizer due to refined context
- System generated semantics can be validated or invalidated by explicit Semantics



Explicit

■ User created

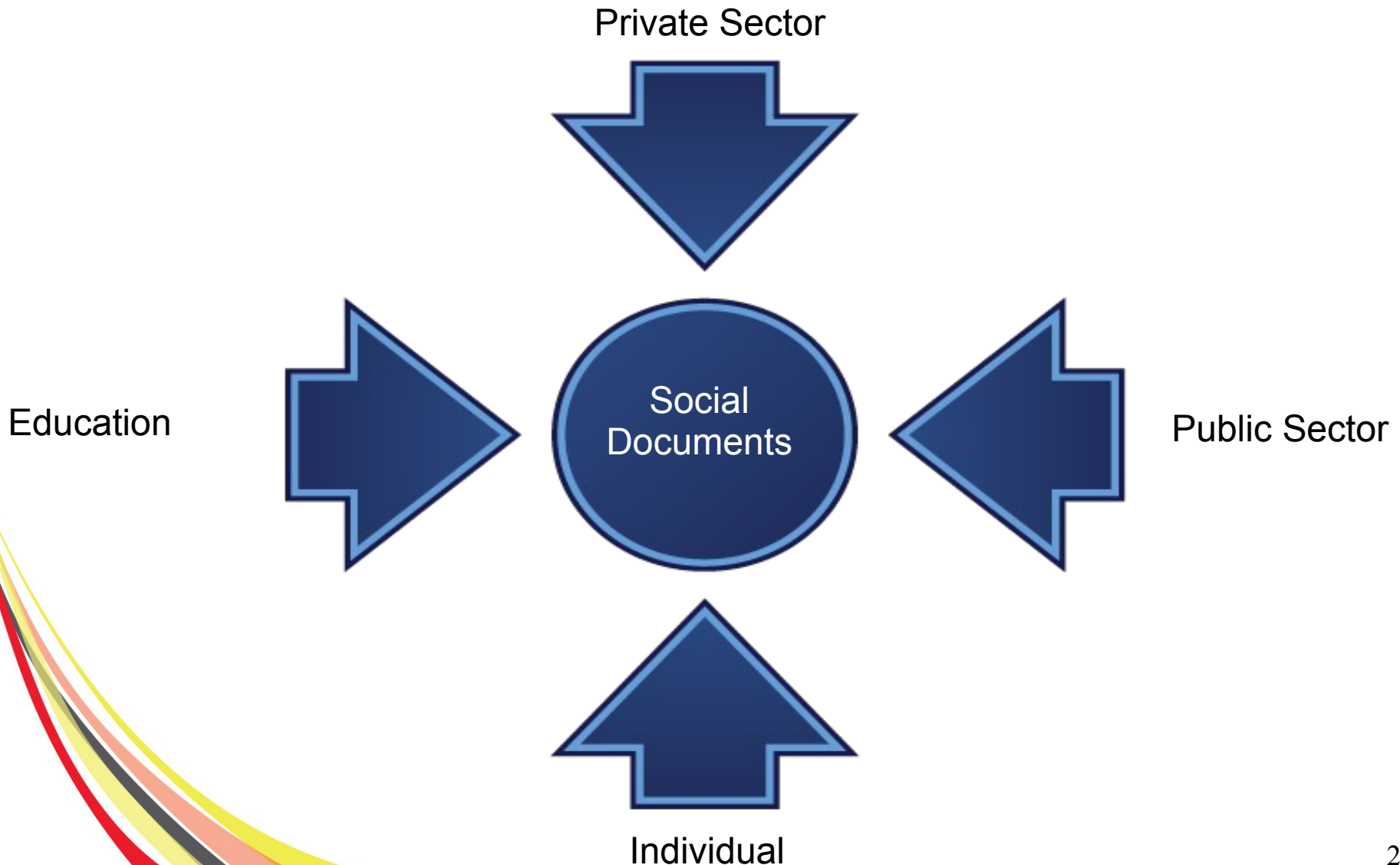
- Tags
- Ratings

The next generation of documents will create new value on many fronts

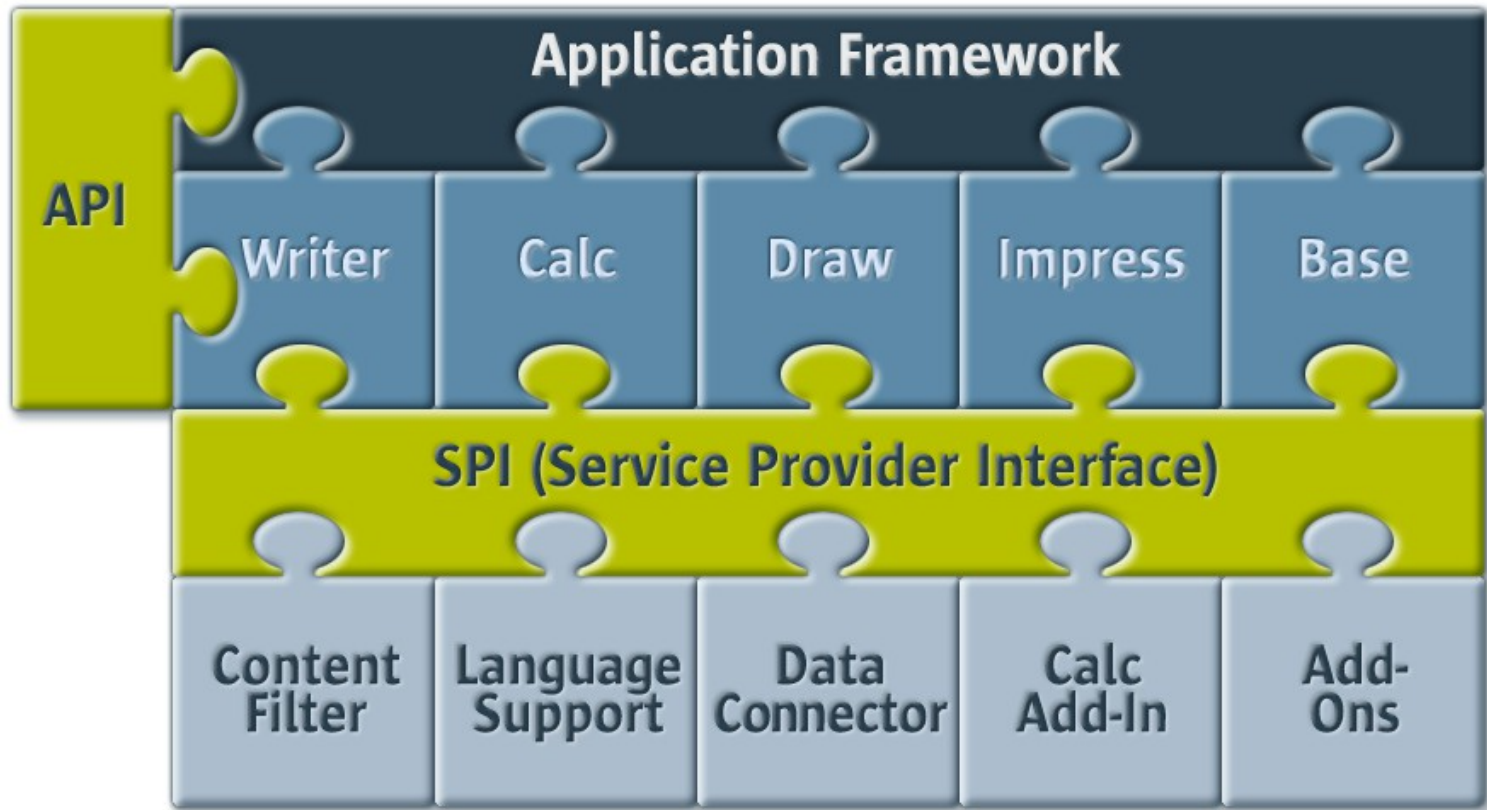
- Navigation and discovery
- Speed of composition
 - Assembly from fragments
- Improved decision making
 - Pattern discovery/analysis
- Intelligent archiving
- Encouraging engagement behavior /environment filtering
 - Recommendations
- Attention management
 - Fodder for analytics and prioritization
- Business process streamlining
- Deep QA



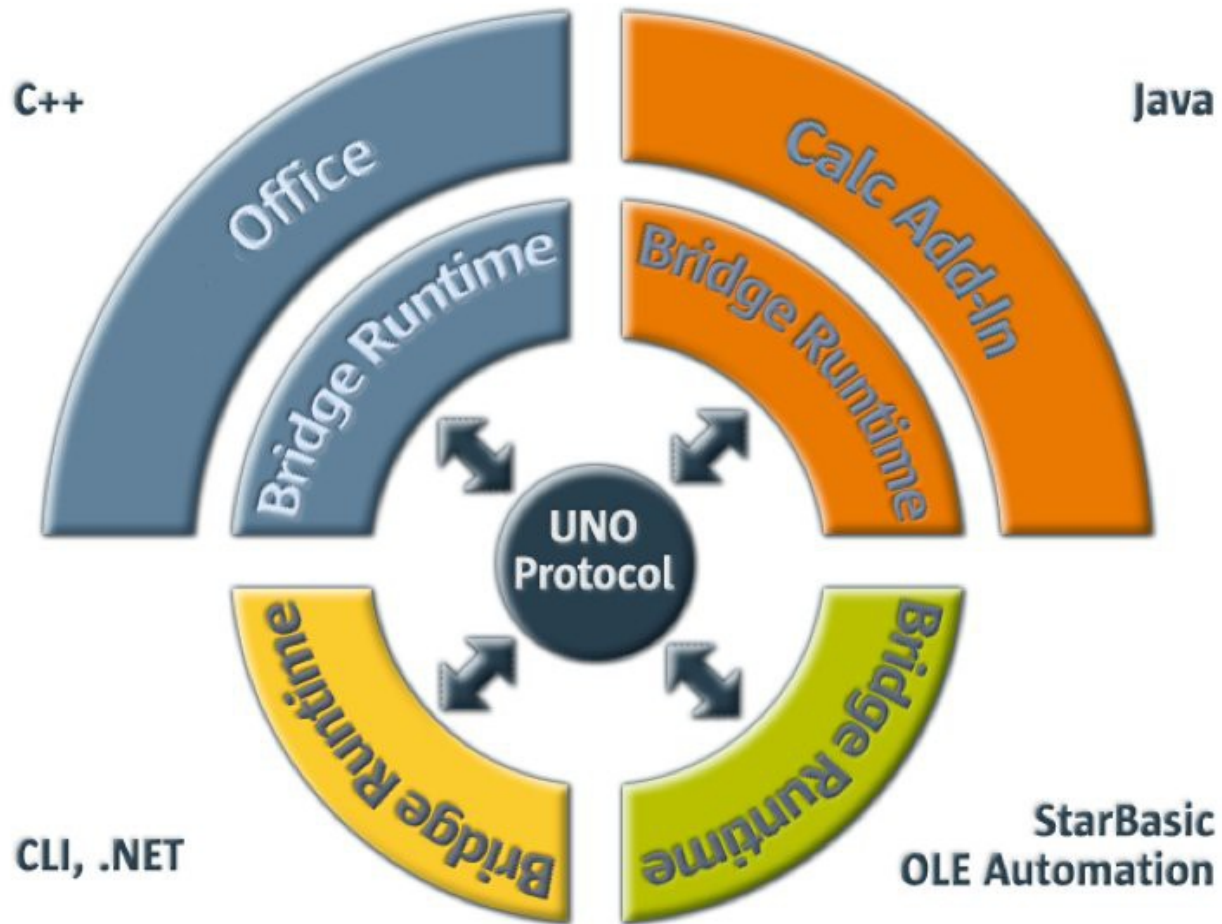
Trending: social documents



Programmability - at a glance

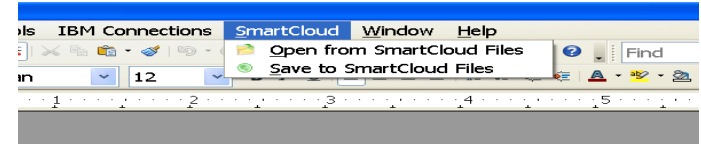
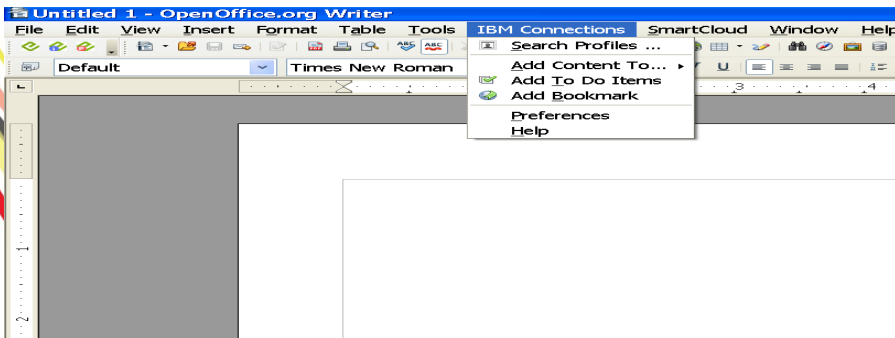


Programmability - at a glance



IBM Extensions Examples

- IBM Smart Cloud for Social Business Extension and IBM Connections Extension available for Apache OpenOffice 3.4.1
 - Posted to OpenOffice Extensions website <http://extensions.services.openoffice.org/>
 - Add Apache OpenOffice files to
 - an **Activity** or
 - a **Files**,
 - Create **To-Do** items,
 - Create **Bookmark**,
 - Post a document to a **Blog**



OpenOffice+OpenSocial = Social Documents

- Using OpenOffice API to integrate

The screenshot shows the OpenOffice.org Impress interface. The title bar indicates the file is 'Industry Trends.odp'. The 'OpenSocial' menu is highlighted, with a 'Share Slide with Network' option visible. The main slide area displays a presentation slide titled 'Lessons Learned' with a bulleted list of trends. The 'Slides' panel on the left shows a preview of the current slide and the next one. The status bar at the bottom indicates 'Slide 4 / 5' and '50%' zoom.

Lessons Learned

- Most profitable quarter is Q3
- Substantial increase of second mortgages
- Double digit increase in refinancing
- 5% year to year increase in new mortgages
- 18% increase in first time buyers
- Slow, steady increase in rates year to year

OpenOffice+OpenSocial = Social Documents

- Using OpenOffice API to add custom menu
- Using Activity Streams API to publish to IBM Connections 4

The screenshot displays the IBM Connections web application interface. At the top, there is a navigation bar with links for 'Communities', 'Apps', 'Metrics', and 'LC3.0.1'. Below this is a 'Home' button and a dropdown menu for 'All Connections'. The main content area is divided into two columns. The left column contains a sidebar with navigation options: 'Getting Started', 'I'm following', 'Action Required' (highlighted with a red dot), 'Saved', 'For me', 'Discover', and 'Widgets'. The right column is titled 'Updates' and features a text input field for posting updates. Below the input field is a 'Filter By:' dropdown menu currently set to 'All Updates'. A social update is visible, featuring a profile picture of Allie Singh and the text: 'Allie Singh [sharing from Apache OpenOffice] Please review this lessons learned slide from my in presentation I am preparing for corporate review. Thanks!'. The update includes a link to 'Industry Trends - Lessons Learned Slide' and a timestamp of '1:54 PM'.

OpenOffice+OpenSocial = Social Documents

- Using OpenOffice API to add custom menu

- Using Activity Streams API to publish to IBM Connections 4

- Enables tight integration from desktop authoring to social networking for review and collaboration

The screenshot displays the IBM Connections user interface. At the top, there is a navigation bar with a 'Home' button and a search field containing 'All Connections'. Below this is a sidebar menu with options: 'Getting Started', 'I'm following', 'Action Required', 'Saved', 'For me', 'Discover', and 'Widgets'. The main content area is titled 'Updates' and contains a text input field with the placeholder 'What are you working on right now?'. Below the input field is a 'Filter By:' dropdown menu set to 'All Updates'. A social update is visible, featuring a profile picture of Allie Singh, her name, and a link to a slide titled 'Industry Trends - Lessons Learned Slide'. The update text reads: 'Please review this lessons learned slide from my industry trends presentation I am preparing for corporate review. Thanks!'. The update includes a timestamp of '1:54 PM' and options to 'Comment' or 'Save this'. A comment box at the bottom of the update contains the text: 'This slide looks great Allie!! Thanks for taking the time to put this together|'. The bottom left corner of the slide features a decorative graphic of overlapping curved lines in red, yellow, and grey.

Apache Synergies

– many pieces are here!

■ Document stores

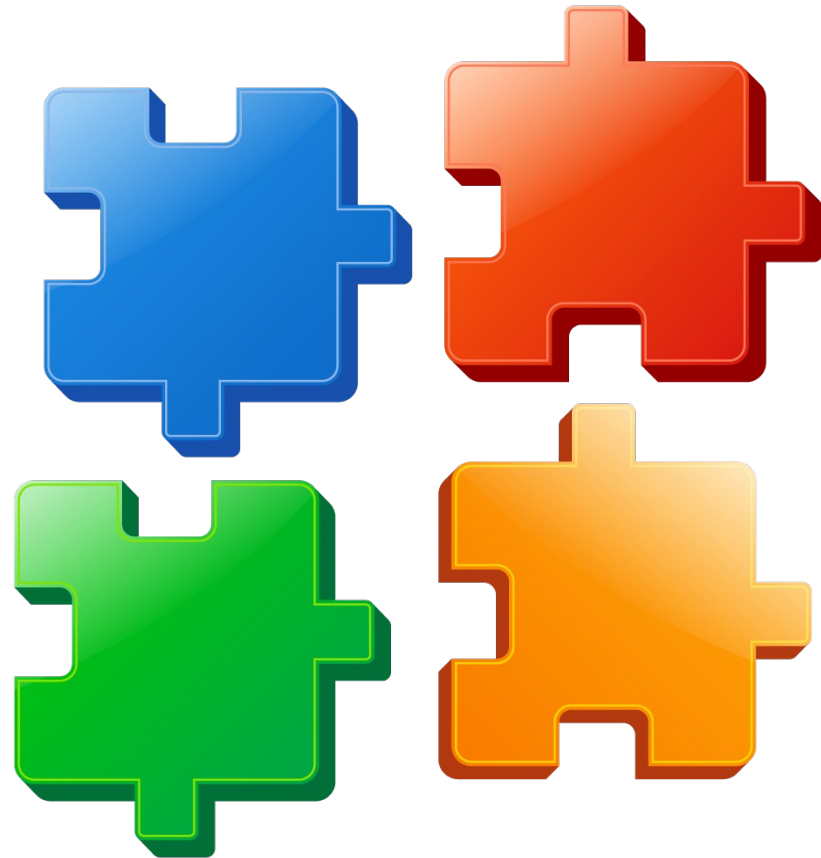
- CMIS standard (Chemistry)
- JackRabbit

■ Tools

- Tika
- POI
- ODF Toolkit
- PDFbox

■ Social collaboration

- Rave
- Shindig
- OpenMeetings



Join us and work together on:

- Innovative extensions
- Experiments
- Reference platforms
- Standards

Your contributions are welcome!

- Ideas
- Developers
- Code contributions
- Business direction
- Requirements

