

Integrated Office Proposal

5 August, 1993

Key Characteristics of Integrated Office

- Combines world-class applications

- Product-specific features continue to evolve
- Sim-ship with stand alone products

- Feels like one application

- Strong unifying metaphors
- Cross-app activities are as easy as in-app activities
- Unifies activities that are common across document types
- High performance and efficient working set

Note: As we move to an object centric user model, where applications are less visible, we might say Integrated Office "feels like no applications". i.e. It feels like you are working directly on your documents or other objects.

- Extensible and configurable

- Components can be added, removed or replaced
- Easy to use tools for building and customizing UI
- Programmable

- access to information
 - on list
 - ACN
 - P. 10/21/93
 - RT
 - WAF

Intelligence cost staff

second minus

not feature complete

Market Trends

Dramatic increase in demand for "Office Suite" type products

Consistency and integration are becoming important software purchase criteria

Leverage our control of platform technology

- Allow our apps to anticipate the coming "left turn" of platform
- Repeat advantage we gained from bet on Windows

High development cost increase entry barrier for competitors

Integrated Office vs Previous Integrated Applications

- Components applications will be full featured (Word, Excel, etc.)
- Integrated Office will be extensible
- Components applications already have partially unified UI: fewer artificial compromises

Key User Activities in Integrated Office

Working with documents

- Finding, creating, using, modifying, printing, sending, saving documents
- Working with compound documents
- Working with groups of documents

Working with data

- Activities: Finding, viewing, managing, collecting, transforming, analyzing, reporting, specialized apps
- Examples: Project, Access, Fox, RPM, most MIS apps, EIS systems, accounting systems, etc.
- These are typically non-document oriented applications

Working with other users

- Mail, BBS, routing, doc library, collaboration
- Most of these are not product-specific

Customizing the system

- Adjusting UI
- Adding/removing capabilities
- Automating tasks
- Building new systems with Office components
- May be done by: end user, MIS, ISVs or Microsoft at appropriate levels, of sophistication

Learning

- Consistency, help, cue cards, help channel, tip wizard

Benefits to End Users

Synergy between applications

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Plaintiff's Exhibit

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Comes V. Microsoft

Integrated Office

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Easier to work with mixed document types
Products more closely tailored to their needs

- by themselves
- by their MIS departments
- by ISVs
- by Microsoft

Freedom to choose appropriate apps
high vs low end
specialized apps

Reduced working sets.

Higher performance for mixed app activities

Functional synergy between components

Components of Office can be used together to accomplish things not other otherwise possible.

Hypothetical example: Using Excel recalc engine to compute values in a Word table, or to compute constraints between drawing objects.

Easier installation and upgrading

Benefits to MIS & System Integrators

Platform for vertical & MIS applications

Easier to create solutions targeted at exact requirements

Office as run-time for custom solutions

Easier to maintain

More robust

Building blocks for down sizing

Opportunity for 3rd parties to offer add-ins, vertical products or services

Security

Real time processing

Business Opportunity

Reduced training costs

Benefits to Microsoft

More customers will choose buy the office suite

Lock in users, lock out competition

Competitive advantages

Lotus: does not have a development tools business

Borland: incomplete family of apps

Word Perfect: incomplete family of apps, no development tools

More features possible through extensibility

Development efficiency

Opportunity for industry-specific solutions

Steady revenue flow through annual licenses

Keep prices up and increase market share

Changes in user model, high level of integration and new shared functionality could allow Integrated Office apps to be positioned as a new class of software, and thus transcend the feature and price wars.

Integrated Office Contents

Standard Edition

Word processor (Word)

Spreadsheet (Excel)

Presentation (Powerpoint)

Drawing

Charting

List manager (low end database)

PIM (Ren)

Mail (Included in Ren)

ISAM? Query Tool? Document library?

"Professional Edition" adds

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Integrated Office

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Access
 OB development environment
 Library of custom controls
 Other add-ins
 OFS (as server edition?)

Possible Server Edition

Adds EMS or OFS

Office is also synergistic with

Shell
 Document routing
 Project management
 Smart office equipment
 Hand-held computers
 Notes?

User Interface**UI is document-centric or object-centric**

Create new documents by replicating templates or "stationery"
 Apps less visible. User focus is on working directly with documents or other objects.
 Commands and tools come and go as needed based on selection
 Also need to incorporate non-document oriented tools

The Shell is the overall container in which Office runs

This assumes that we can design the shell for excellent support of application requirements
 Would make extensive use of shell extensibility to support Office scenarios.

Explorer extensions to work with
 object oriented stores (Ren)
 document stores (Word's Doc Lib)
 structured stores (DDT's navigator)

Possibly tray extensions for support of cross app scenarios

In SDI, some app functionality would be shared across windows. This may shared Office palettes or toolbars which we may want to incorporate into the system.

Workbooks will be a key type of document

UI metaphor for accessing components of documents
 Act as a container of other documents

Great support of browsing and querying for documents, objects, and information.

Chicago Explorer, Cairo Explorer, Ren, Navigator, Word doc library, Excel information finders
 Need to rationalize and unify these designs where possible.

Simplify UI and reduce number of concepts. Candidates for unification/simplification:

Charting
 Drawing
 Tool bar/tool bar customization
 Options/Settings
 Proofing tools
 General paper model
 Print Preview
 Mail
 Document Library
 Property sheets e.g. Font, borders
 Styles
 Print layout, headers, footers, etc.
 Workbooks
 Outlining
 Tables/spreadsheet grid
 Annotation
 Naming
 UI customization
 Add-in management
 Programmability

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(Note: UI unification could also imply code sharing)

Development Strategy

Key APIs to Standardize

OLE 3

- Layout negotiation
- Transparent object support
- Irregular object support
- Search and spell
- Ambient properties

App documents as component controls

App documents as forms (containers for controls)

Standard interfaces to storage and stored objects

- Access to storage
- Reconciliation
- Context indexing

Standard app object models, programmability interfaces and events

Standard interfaces between addins and host apps

Note: These interfaces should be compatible with the component object model.

SDI

Shared Components

Development Process

Platforms

Chicago

May include development of a unified shell for Chicago. See separate paper on Unified Shell Proposal.

Cairo

As above, plus leveraging of OFS, smart folders, security, summary catalogs.

Mac

Supported with enhanced portability layer. Some features may not be available.

Win 3.1?

Assume not supported, or more limited feature set.

Most users who would upgrade Office would also upgrade to Chicago.

Integrated Office Process

Confirm vision and fill in details

User visits and ABP

Write spec and develop prototype

Interop, Desktop product groups, Res group, Cairo, Chicago, DDI

Provide input to Chicago, Cairo, OB and forms effort

Any feature should have exactly one owner

Design & development tradeoffs need to be able to be made at a level below senior VP

Need to maintain the "hallway effect", at least for feature teams.

Should consider using better workgroup software

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