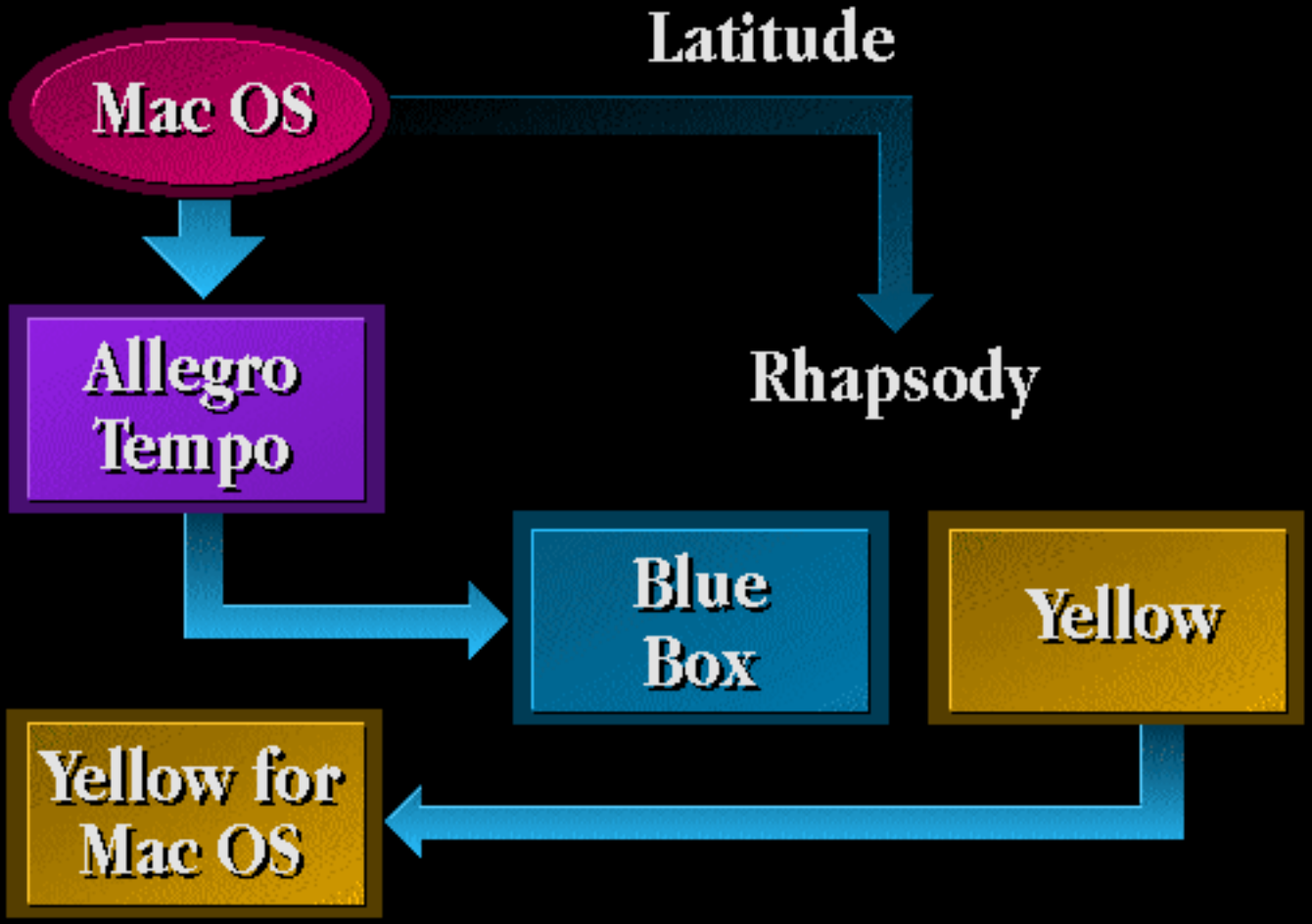
Worldwide
Developers
Conference

Cross-Platform Development with Yellow Box

Jordan Dea-Mattson

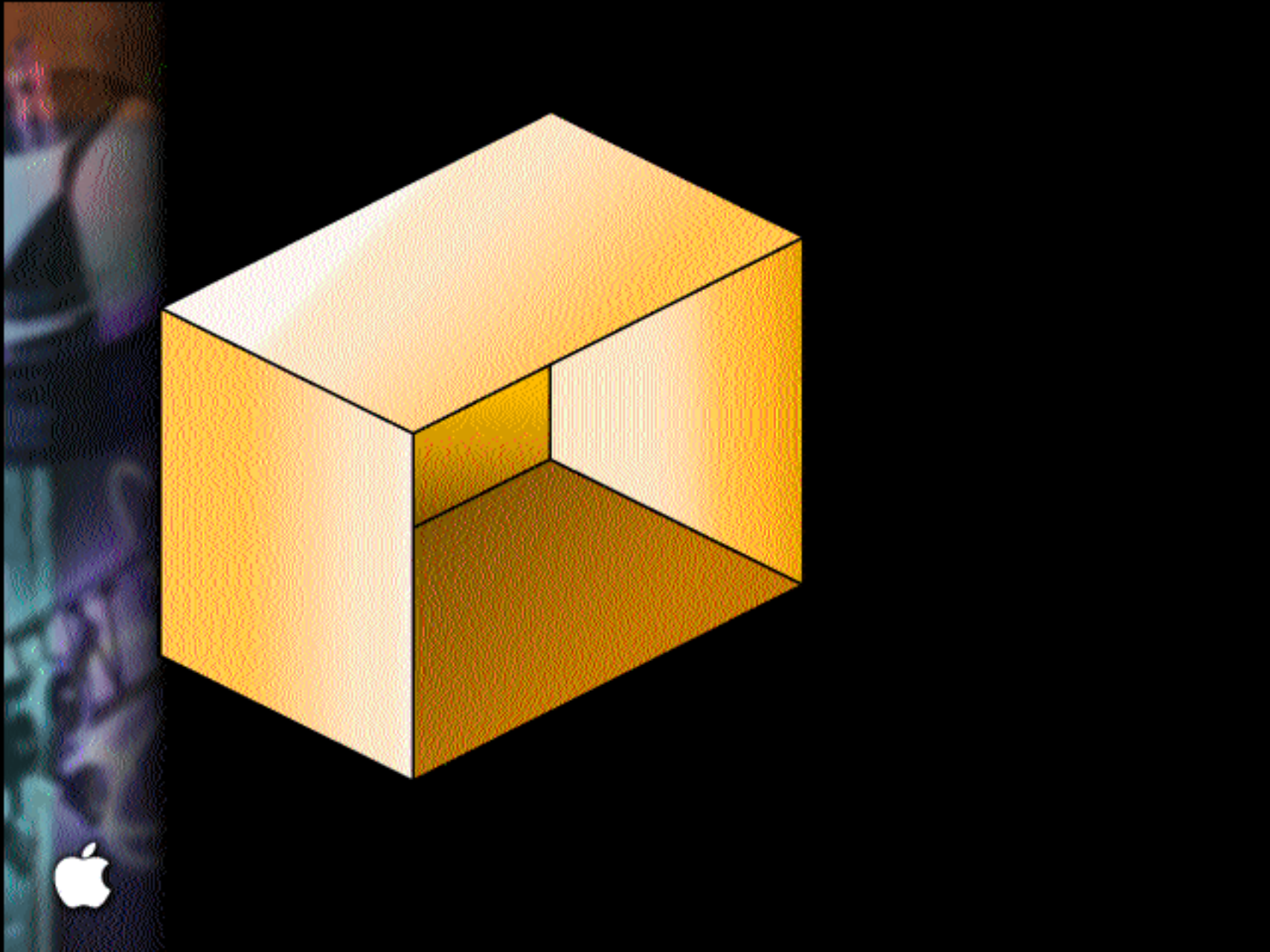
Senior Evangelist
Rhapsody Evangelism

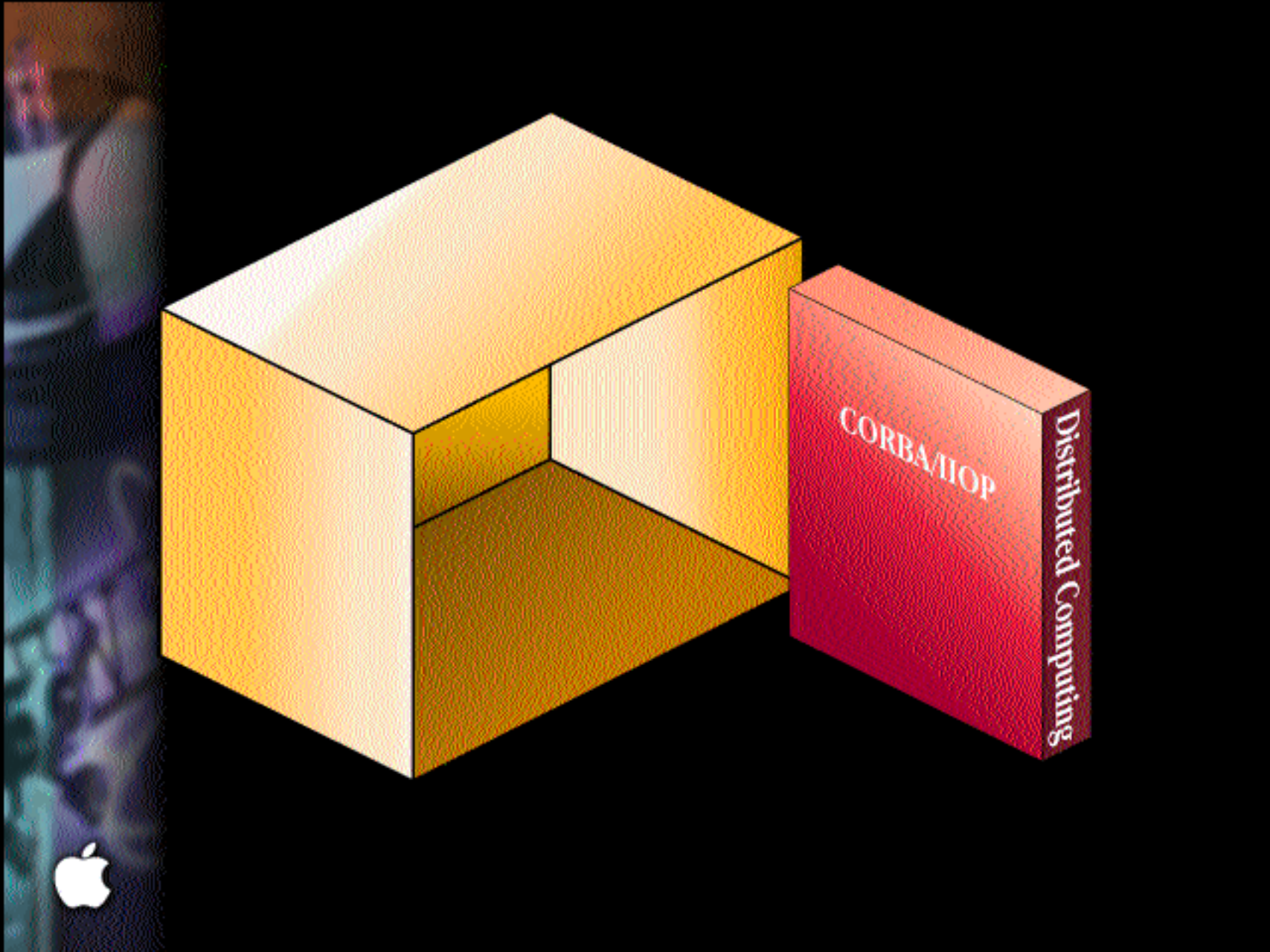
Making the Move

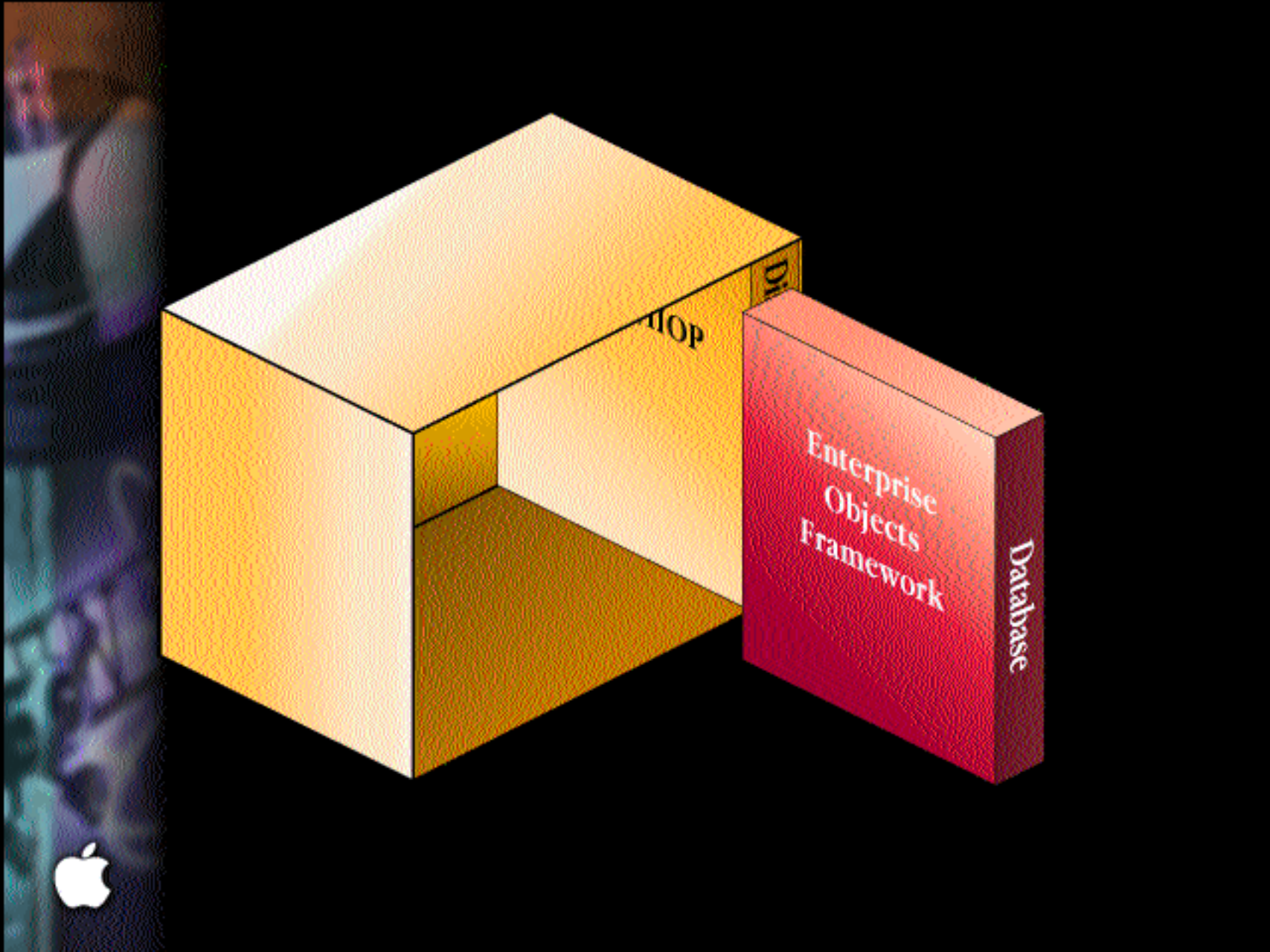


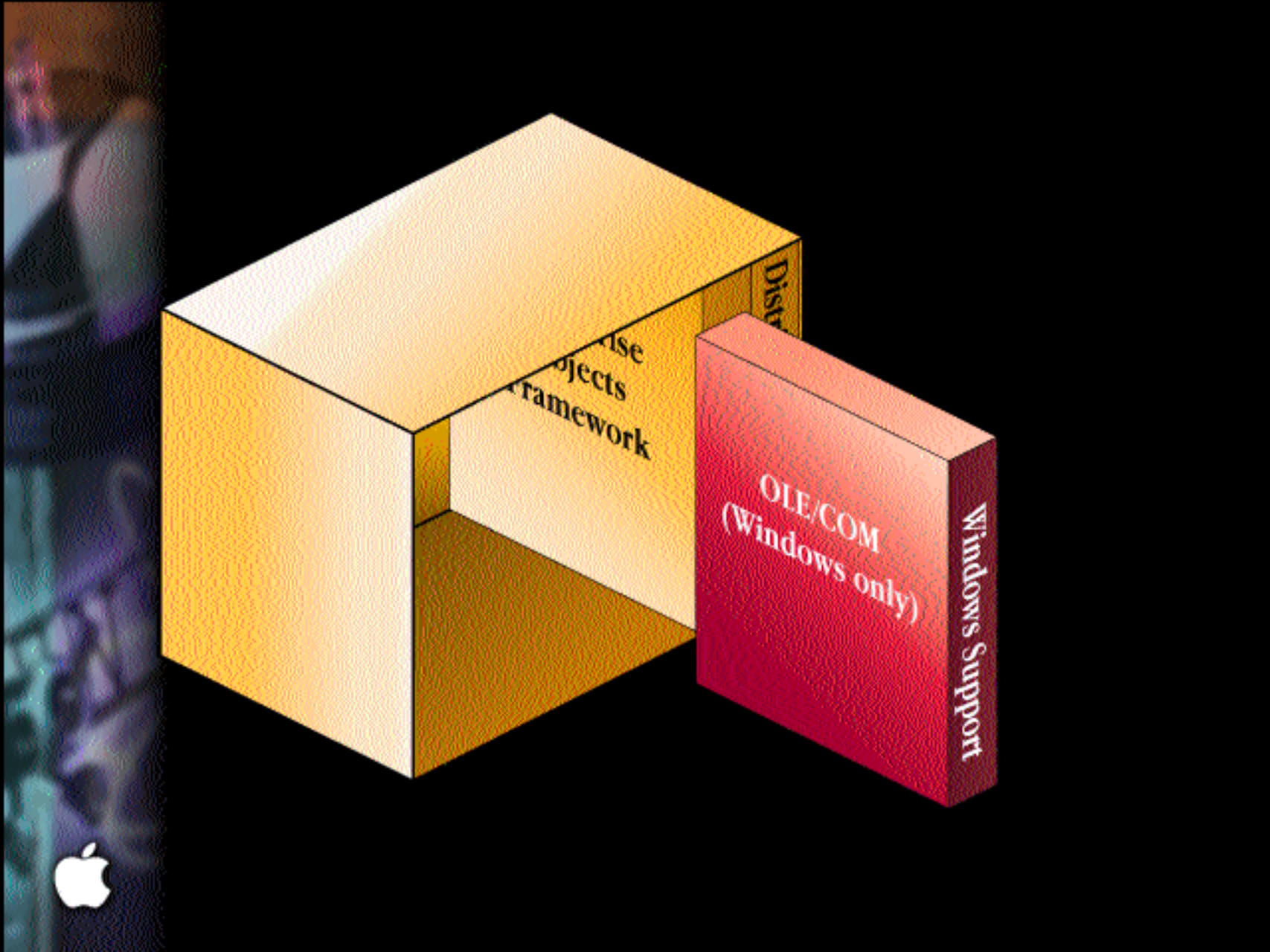
Cross-Platform
Development
Overview
Frédéric Bonnard
Yellow Box
Product Manager

Supported Platforms




CORBA/IIOP
Distributed Computing


Enterprise
Objects
Framework
Database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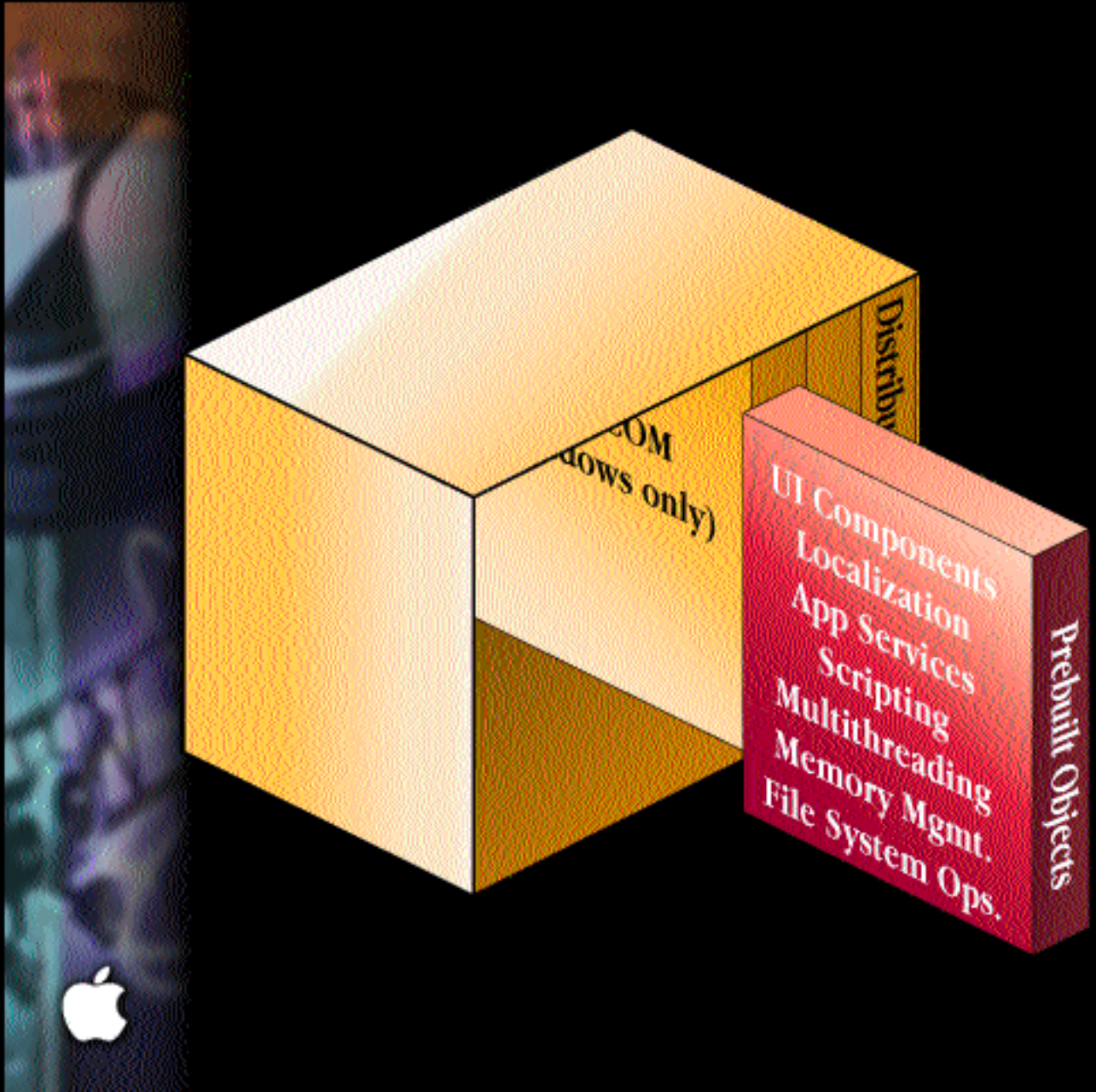
OLE/COM
(Windows only)
Windows Support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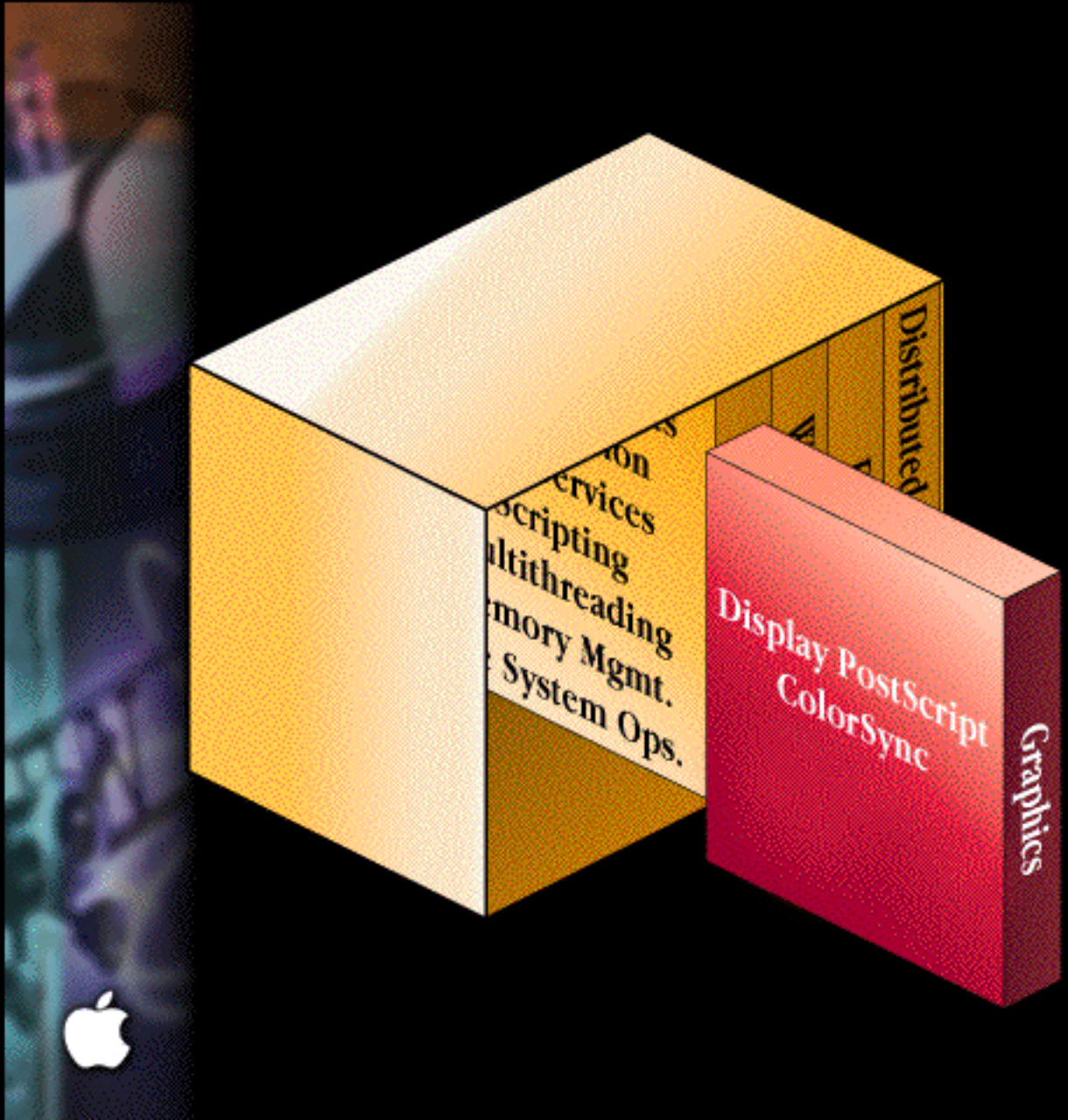
UI Components
Localization
App Services
Scripting
Multithreading
Memory Mgmt.
File System Ops.
Prebuilt Objects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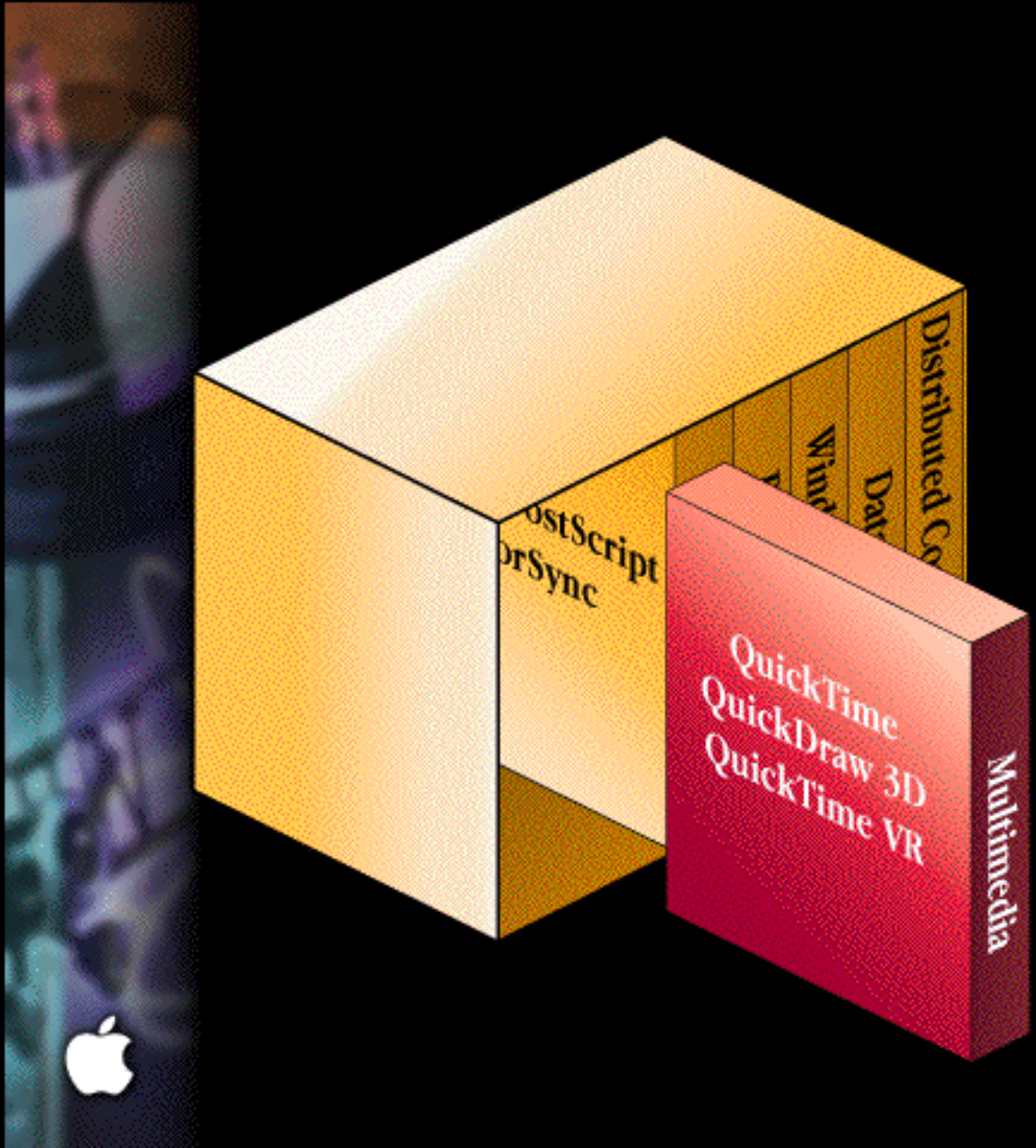
ColorSync
Graphics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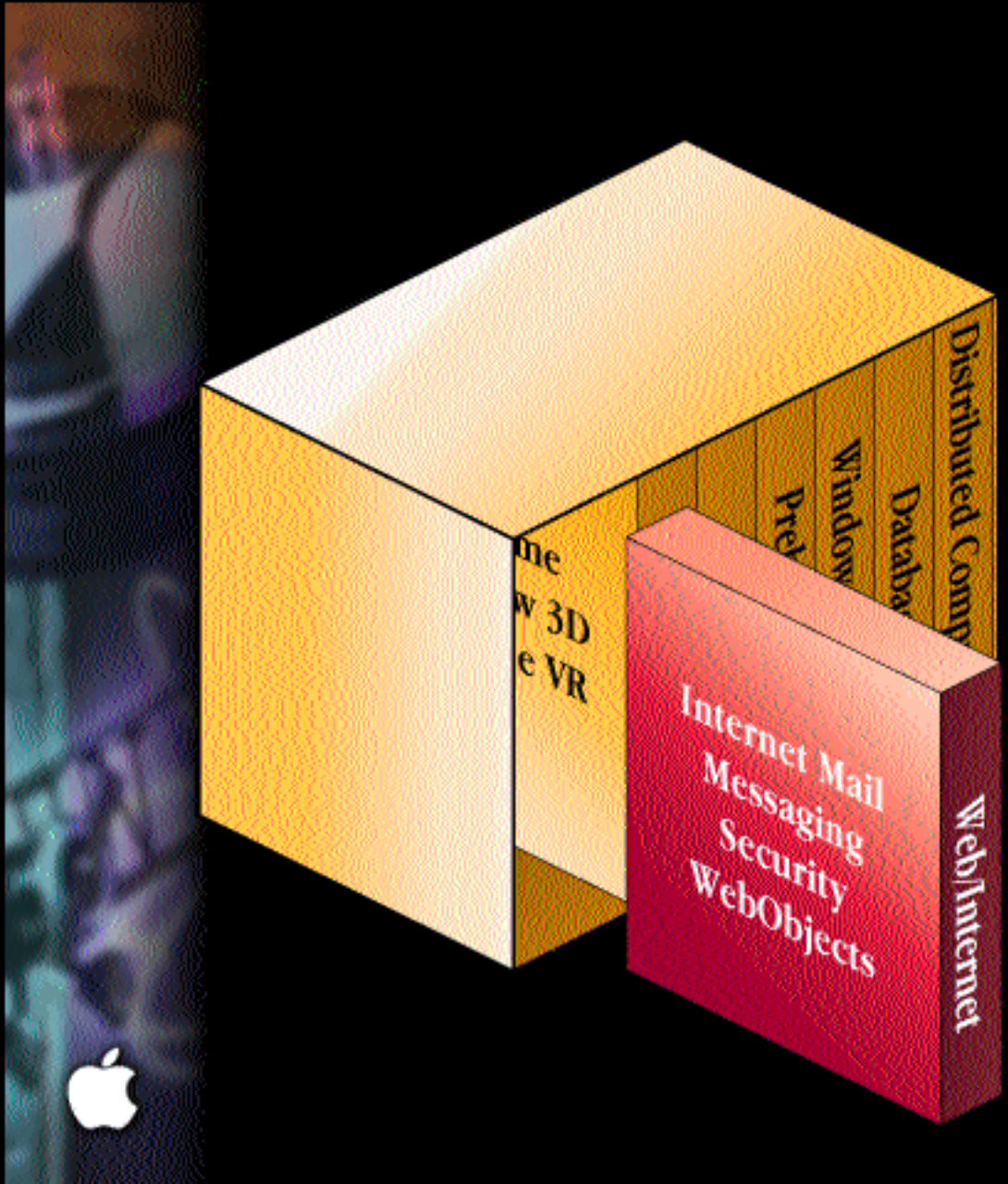
QuickTime
QuickDraw 3D
QuickTime VR
Multimedia


Distributed Comp
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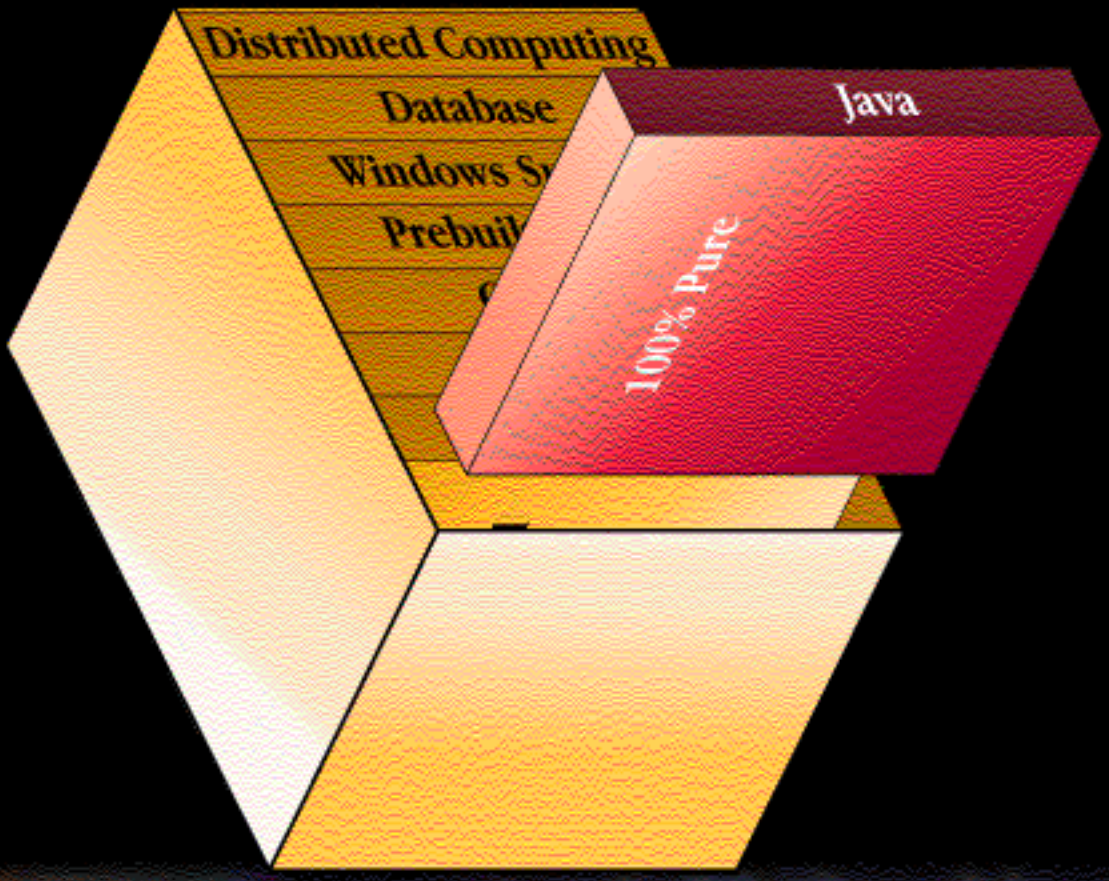
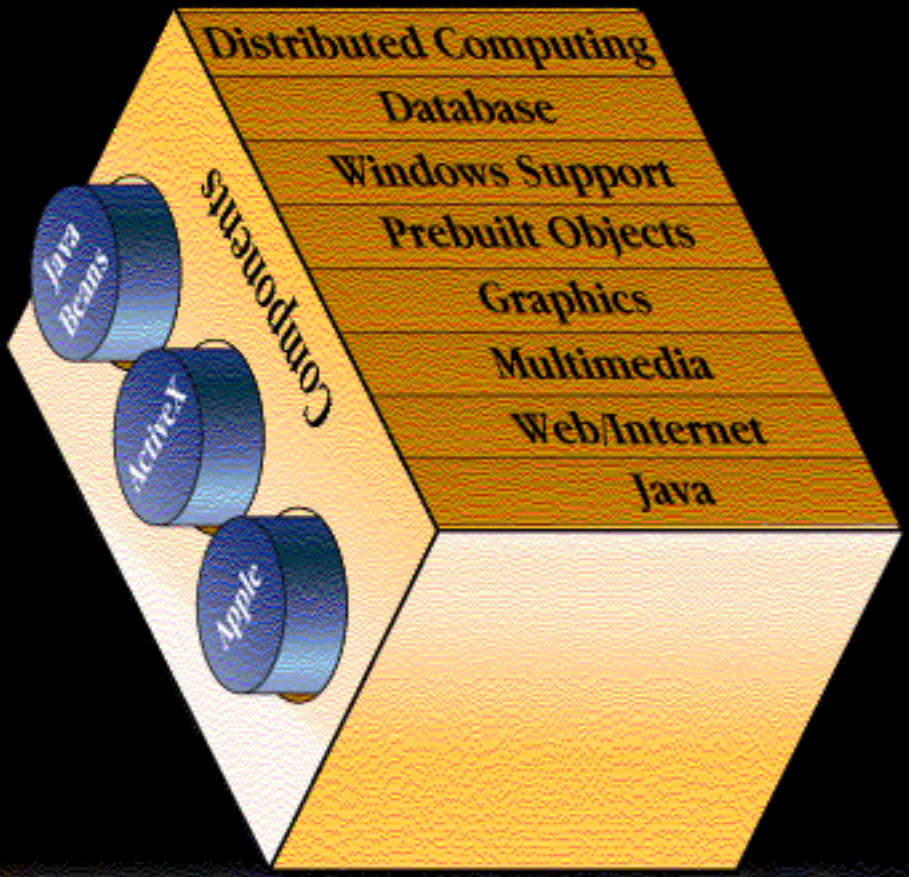
e VR
Internet Mail
Messaging
Security
WebObjects
Web/Internet


Distributed Computing
Database
Windows
Prebuil
Java
100% Pure

Components
Distributed Computing
Database
Windows Support
Prebuilt Objects
Graphics
Multimedia
Web/Internet
Java


Distributed Computing
Database
Windows Support
Prebuilt Objects
Graphics
Multimedia
Web/Internet
Java
Components
Java Beans
ActiveX
Apple

Why Cross-Platform?

- Leverage future investments
  - Write once, reap many
- Develop for mixed environments
- Reduce the risk of adopting Rhapsody

Why Another Development Platform?

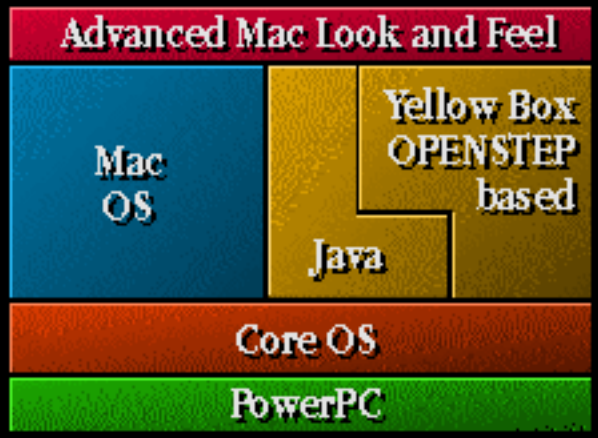
- Microsoft's Win32 Platform
  - Not cross-platform
  - Very low level API
  - Difficult to program
- Sun's Java Platform
  - LCD solution
  - Not designed to integrate with OS and desktop specific features (sand box)
  - Not ready for mainstream application development and deployment

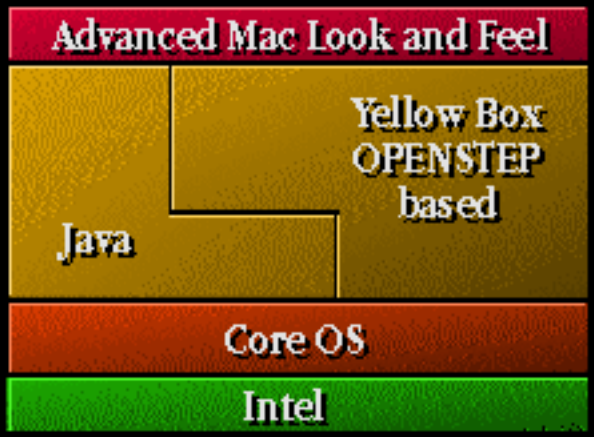
Cross-Platform Goals

- Rhapsody + Windows + Mac OS = 99% market share
- Same API on all platforms
  - Constrained by underlying OS (e.g. threads)
- Native look and feel
- Tight integration with other applications and system services
- Full functionality
  - Not an LCD solution
- Native performance

Rhapsody Goals

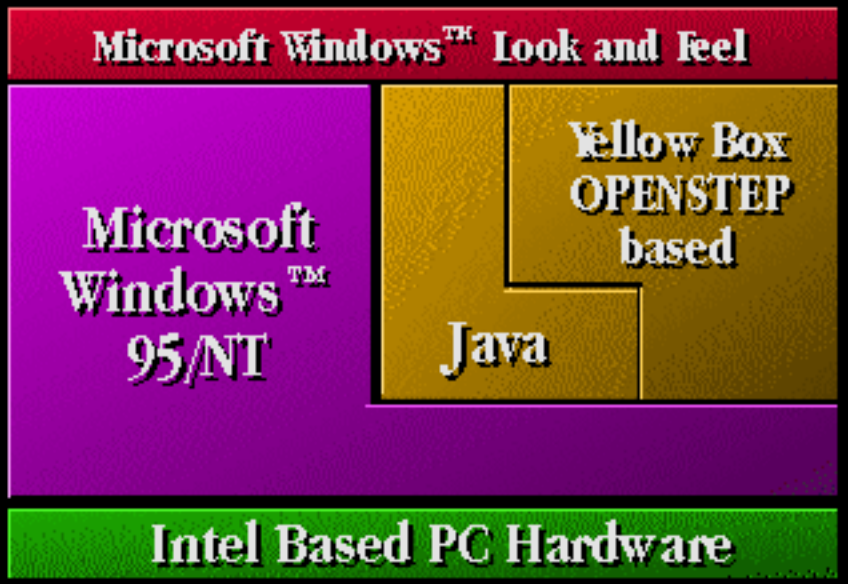
- The best host for Yellow Box applications (e.g., user experience, speed...)
- Native frameworks
- Intel vs. PowerPC issues
  - MacOS compatibility
  - Plug and Play





Windows Goals

- Full support for Windows NT and 95
- First class Windows citizen
  - Qualify for "Designed for Windows NT® and Windows® 95" Logo

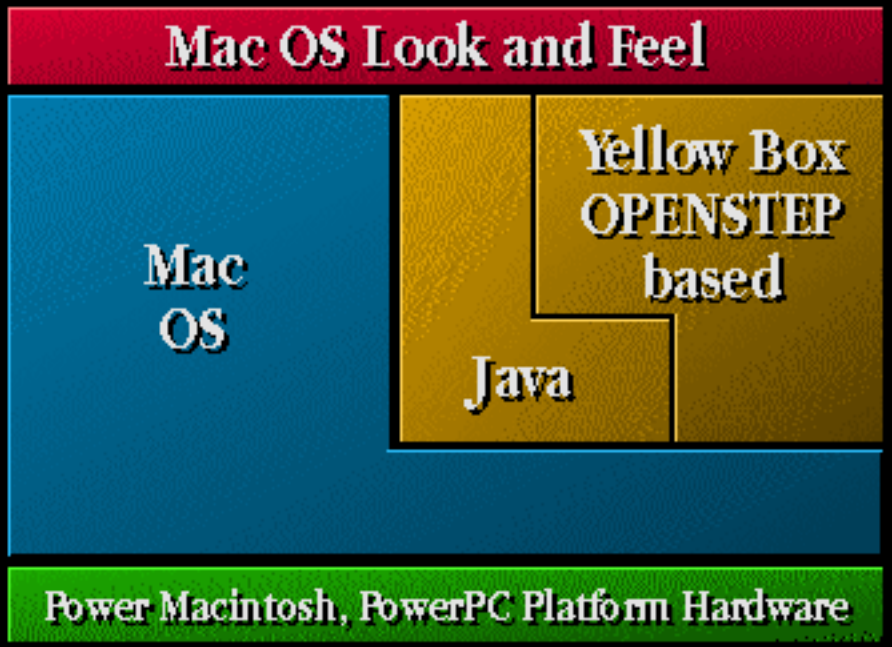


Windows Goals *(cont.)*

- True Windows look and feel
  - Windows dialog boxes
  - Drag & drop, cut & paste
  - TrueType fonts support
- OLE/COM and DCOM integration
- ActiveX support
- Use Yellow Box controls when they add value, otherwise use native controls

Mac OS Goals

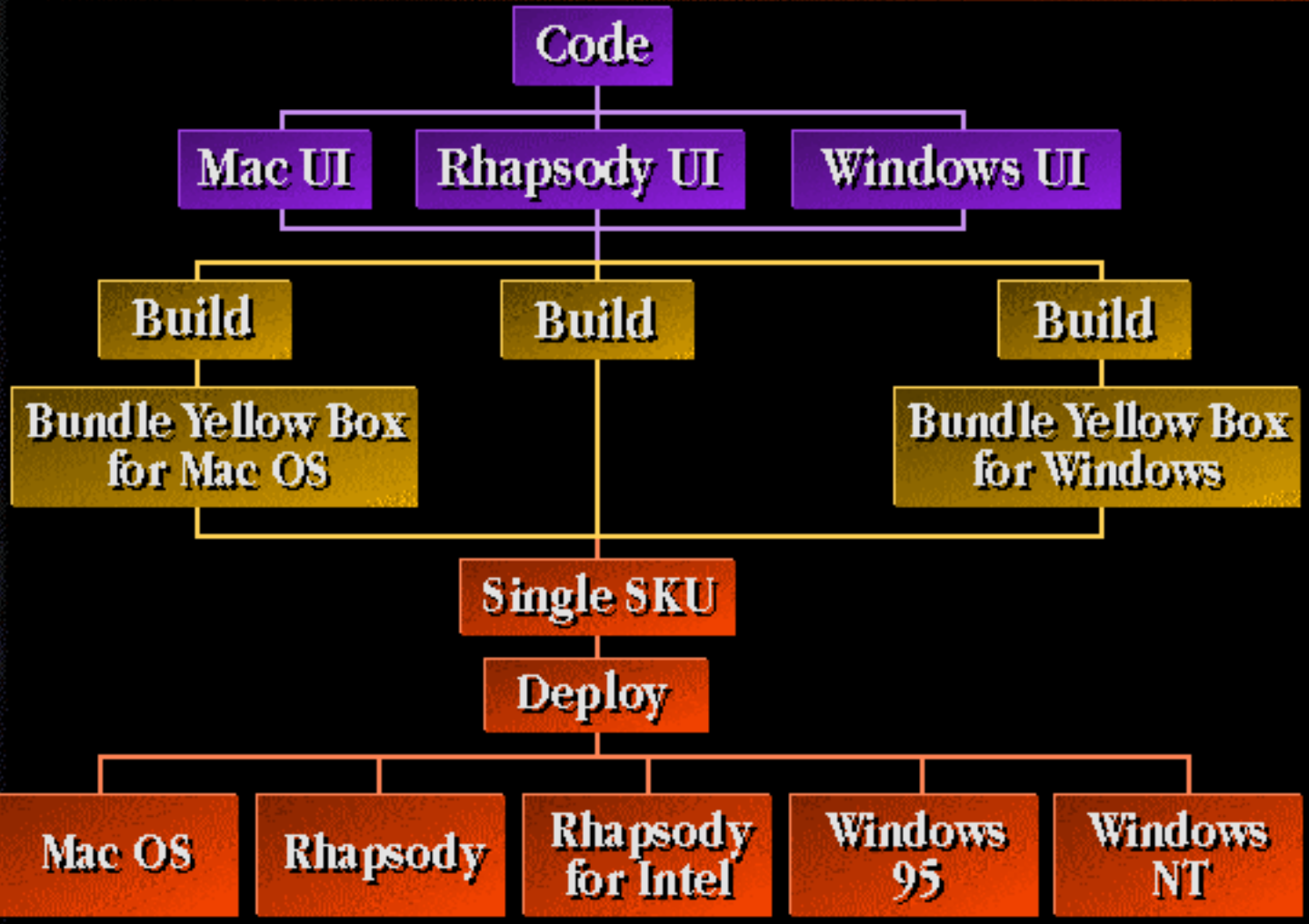
- First class Mac OS citizen
- True Mac OS look and feel
- Not completely defined yet! Stay tuned...



Same Tools Across Platforms

- Project Builder
- Interface Builder
- EO Modeler
- Compilers

The Development Cycle



Distribution of Yellow Box Applications

- Applications easy to distribute
  - Single SKU for all platforms and all languages
- Yellow Box available everywhere
  - Yellow Box part of Rhapsody
  - Yellow Box free for Windows and Mac OS

Avoiding the LCD Effect

- With other cross-platform solutions
  - Only a subset of native controls
  - Use of non-native controls
  - Applications work in a sand box
  - One UI often more prominent
  - Impact on speed

Taking Advantage of Native Features

- Rhapsody/Mac OS
  - Integration with Finder
  - Support Mac file formats
- Windows
  - Pasteboard integration
  - OLE/COM
  - ActiveX
  - Access to Win32
  - Windows dialog boxes
  - Microsoft Windows logo

Demo

- Build on Rhapsody for Intel
- Run on Rhapsody for Intel
- Build on Yellow Box for Windows
- Run on Windows NT
- Run on Windows 95

Real World Demo

Caffeine Software TIFFany

- Rhapsody for Intel
- Windows NT

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