

Apple Macintosh Business Case



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Apple Macintosh Business Case

This document presents a business case to purchase Macintosh G3 and G4 computers for graphic designers and artists. This business case includes the following information:

- Graphics Department Overview
- Current Environment
- Business Need
- Benefits to the graphics department
- Cost and Cost Savings/Efficiency Gains
- Conclusion

Graphics Department Overview

The Graphics Department creates powerful sales materials that reinforce the value of company offerings.

The Graphics Department combines words and images to create powerful messages that reinforce the value of the company to clients and employees. The graphics team creates imagery, graphics, and collateral material to turn technical information into creative sales and communication deliverables that reflect and reinforce the professional image of the company. This process includes the following:

- Designing graphics to turn technical explanations into graphic elements that express the value the company brings to our clients
- Creating presentations for online, overhead, or print use
- Designing and creating graphic materials to clarify and enhance proposal messages
- Creating compelling and professional proposal covers
- Designing web sites and associated graphics
- Working with customers to come up with a consistent graphic theme for their materials
- Ensuring consistency and compliance with company graphics and branding guidelines
- Creating CD-ROMs that contain sales materials
- Overseeing the details of production and binding, coordinating vendors, checking the quality of products, and coordinating delivery of finished products

This graphic work includes efforts focused on the following sales documents:

- Sales presentations
- Proposal covers
- Web site graphics
- Proposal graphic creation
- Presentation graphic creation
- Other collateral graphic materials

Current Environment

The Graphics department environment is dynamic—with constantly changing deadlines and heavy workloads. At any given time, a number of proposals and presentations are in development, both on-site and off-site. These materials range from proposal presentations and brief, 20-page proposals, to documents totaling hundreds of pages. This constant activity is directly related to the following factors:

- The rapidly changing business environment of the company and its clients
- The increasing competition that the company faces daily
- The pressure the company is under to increase sales and revenue, while decreasing expenses
- The challenge to increase value to the company's shareholders

Higher customer expectations require more advanced graphics tools.

The graphics department has noticed an increase in the amount and complexity of graphics that customers request, especially for cover graphics and Web materials. Customers expect exciting, eye-catching, professional graphics that reinforce and clarify their messages. The explosion of the Web and client familiarity with the Internet has increased the demand for graphic excellence.

These higher-level graphics require tools beyond common company platform tools like Microsoft Office. The graphics department currently uses advanced tools like Adobe Photoshop, Adobe ImageReady, Macromedia Director, and Macromedia DreamWeaver to meet our clients' challenging graphic requirements.

Nearly all production vendors prefer Macintosh files because it results in higher quality output.

In addition, Graphics department graphics personnel must coordinate with outside production vendors to meet our output needs. Nearly all of these vendors prefer the Macintosh platform for file submission because of its color controls and proven track record regarding font issues, graphic quality, and output consistency.

This challenge is further complicated by tight deadlines, constant graphic changes and refinements, and simultaneous projects.

Currently, the majority of the graphics group is working on IS department—standard IBM Intellistation machines running Windows NT, which have proven to be unreliable and ill-suited to graphics work. Several of these top-of-the-line NT machines have crashed in the one year they have been in operation, requiring complete rebuilds of the systems by the IS department, and causing several days of lost productivity. In the same time period, the few *five-year-old* Macintosh systems still in use within the graphics department have performed nearly flawlessly.

Advanced graphics applications are not supported by IS, so little savings is actually realized by using IS-standard Windows platform.

In addition, internal company technical support (the IS department) has indicated that they are unable to support the graphics department's specialized needs and advanced graphics applications¹; hence the graphics department has to provide for its own support. Thus, most technical support costs are already borne by the graphics department, and are not ameliorated by standardizing on the IS department's standard Windows-based platforms.

Business Need

The graphics department needs to use the most efficient, proven, graphics development system to enable it to work at maximum efficiency, while saving time, money, and effort. This system must also improve content quality to help increase the win ratio of the company's sales materials.

Acquiring Macintosh systems will enable the graphics department to decrease expenses, increase productivity, and save the company money that is currently lost in production problems, vendor integration issues, and equipment and network troubleshooting.

Description and Functionality

The Macintosh dominates the graphics industry because it is the best graphics tool.

The Apple Macintosh platform is the recognized leader in graphics production. According to a recently published poll of 500 graphic design professionals², 85% use Macs versus only 35% who use Windows (20% use both platforms).

Unlike competing graphics production platforms on the market today (platforms based on Windows, Windows NT, or Unix), **Macintosh is the only desktop platform specifically designed for graphics production.**

Basic Functionality

New Macintosh computers will provide seamless integration with existing common company software, including Windows versions of

¹ Per conversation with company IS department representatives, IS will only support standard IS-installed software, which does not include PhotoShop or other graphics applications.

² *Graphic Design: USA*, July 1999, "Dual Platform Creative World is Emerging," page 142–147. Note that the title refers to the poll's findings that locations using PCs increased from 17% the previous year to 35%; locations using Macs actually also rose slightly from 83% to 85%.

Microsoft Office applications like Microsoft Word, Excel, and PowerPoint.³

Key Functionality Discriminators

The Macintosh offers several key functionality discriminators that its competitors do not provide, include the following:

The Macintosh offers the best performance in high-end graphics applications.

- The Macintosh G3 and G4 platforms run significantly faster than the fastest Pentium systems, a critical issue when working with multi-megabyte Adobe Photoshop files.
- According to performance testing, Adobe Photoshop, which our graphic designers use for the majority of their work, runs more smoothly on the Macintosh platform than on Windows platforms, and “appears to be visibly slowed down by Windows memory management.”⁴
- Memory management is better and more customizable on the Macintosh, allowing the user to easily and quickly allocate more memory to an application for memory-intensive graphics tasks.
- Macintosh systems allow printing directly to any available printer, a trait that will free the graphics department from its dependency on the often unreliable LAN print server.
- Improved font support
- Better integration with outside vendors (output)
- Better color consistency
- Better graphics design tools available than on Windows
- Consistent output
- More responsive mouse tracking—a critical factor for graphic productivity

Macintosh Benefits to the Graphics Department

Macintosh workstations will provide the following benefits to the graphics department:

³ According to Microsoft and graphics department testing, Microsoft Office for Macintosh applications are completely format-compatible with their Windows counterparts—no file conversion is necessary.

⁴ Pfeiffer Consulting, *Strategic Technology Analysis: Macintosh and Windows as Publishing Platforms*, 1999, page 8

The Macintosh will provide improved real-world productivity and less down-time than Windows

- Improved productivity in real-world graphics and publishing applications (Windows NT is almost 30% slower, and Windows 98 is almost 50% slower than the Macintosh platform.⁵)
- Decreased time and effort spent on technical problems (The Macintosh platform has much lower overall support and maintenance requirements than the Windows platform.⁶)
- Increased efficiency and a smoother, more efficient graphic development process (Designers using Macintoshes are 42% more productive, according to a recent GISTICS study.⁷)
- Increased accuracy and value of graphic content and finished product
- Improved hardware reliability, according to *PC World Magazine*⁸
- Cost savings/efficiency gains (as detailed below)
- Increased software proficiency, resulting in better quality and more creative work

⁵ Pfeiffer Consulting, *Strategic Technology Analysis: Macintosh and Windows as Publishing Platforms*, 1999, page 7

⁶ Pfeiffer Consulting, *Strategic Technology Analysis: Macintosh and Windows as Publishing Platforms*, 1999, page 10

⁷ *Trade-Off Analysis of Macintosh and Windows Platforms*, GISTSCS ROI Technology Brief, Volume II, Issue 1, Number 1, Revision 4.8

⁸ *PC World* magazine rated Apple best in reliability among the 15 major computer vendors (*PC World*, "Goodbye to Good Support," December 1996, page 144)

Macintosh Cost Savings and Efficiency Gains

Macintosh graphic workstations will provide the following cost savings and efficiency gains to the graphics department:

The Macintosh generates more profit and has a lower cost of ownership than Windows.

- Typically, for the type of work the graphics department performs, a **Macintosh user produces \$26,411 more annual revenue⁹ and \$14,488 more net profit** than a Windows user of comparable skill engaged in similar work.¹⁰

Mac shops earn more than Windows shops

Annually per user

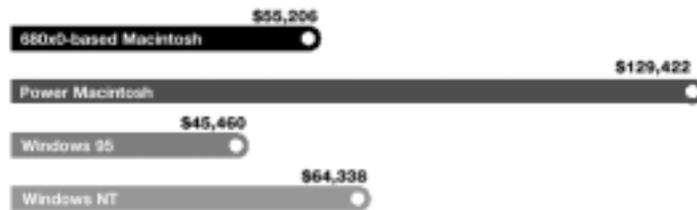


- In a fully-accounted cost-of-ownership analysis of a system purchase, a **Macintosh user saves \$2,211 more** than a Windows user.¹¹
- According to a 1997 study by Microsoft and Interpose (a software developer specializing in Total Cost of Ownership tools), even for general use a **Macintosh is still about \$1,450 less expensive to own than a Windows machine.**¹²
- A PowerPC Macintosh user, on average, **generates 7.14 times ROI** over three years. Windows NT users achieve 2.02 times ROI in the same period.¹³

Up to 3.5 times the ROI for Mac shops

ROI after three years

Base: One-year productivity gains (1995-1996) multiplied by 3



The Macintosh provides a much greater return on investment.

⁹ *Trade-Off Analysis of Macintosh and Windows Platforms*, GISTSCS ROI Technology Brief, Volume II, Issue 1, Number 1, Revision 4.8, page 19

¹⁰ *Trade-Off Analysis of Macintosh and Windows Platforms*, GISTSCS ROI Technology Brief, Volume II, Issue 1, Number 1, Revision 4.8, page 35

¹¹ *Trade-Off Analysis of Macintosh and Windows Platforms*, GISTSCS ROI Technology Brief, Volume II, Issue 1, Number 1, Revision 4.8, page 21

¹² *Law Technology News*, Volume 4, Issue 12, page 32, column 2, "Total Asset Administration" by Kingsley Martin, also available at http://www.ljx.com/ltpn/october97/total_p32.html

¹³ *Trade-Off Analysis of Macintosh and Windows Platforms*, GISTSCS ROI Technology Brief, Volume II, Issue 1, Number 1, Revision 4.8, page 24

Macintosh users gain more productive working hours.

- Because of the more efficient computing environment (i.e., integrated hardware and software platform, system resources optimized for media-rich processing, and third-party software), **the Power Macintosh user gains per year an average 304 more prime time authoring and composition hours** than a Windows user.¹⁴

More productive work makes Mac shops more profitable

Hours per week

Base: 21,228 respondents



An investment in Macintosh computers will pay for itself in about 5 months.

For the type of graphic work performed by the graphics department, we can expect investment in new Macintosh equipment to pay for itself in approximately 5 months, according to industry studies.¹⁵ This is in sharp contrast to the typical payback time for a Windows NT machine, which averages 12.6 months—**2.5 times as long.**

Other Savings

Not included are the potential for increased revenue and cost savings from the following:

- Ability to attract the most productive and talented employees, because the best designers use the Mac platform
- Increased output from reduction in turnaround time
- Increased focus on quality as a result of reduced time spent on problem solving and troubleshooting
- Vendor-related savings based on faster vendor turnaround, less rework, and reduced charges

Vendors report the company will gain quality and save money by submitting work on the Macintosh.

According to the graphics department's highest volume vendors, nearly all output imaging is done on the Macintosh platform. This means that files submitted in Windows formats have to be converted before they are imaged, requiring more time and often causing technical issues and quality problems.

Heath Press has stated that color management, font issues, and formatting problems occur much more frequently when we submit Windows files versus Macintosh native files for output¹⁶ Heath has noted

¹⁴ *Trade-Off Analysis of Macintosh and Windows Platforms*, GISTSCS ROI Technology Brief, Volume II, Issue 1, Number 1, Revision 4.8, page 10

¹⁵ *Trade-Off Analysis of Macintosh and Windows Platforms*, GISTSCS ROI Technology Brief, Volume II, Issue 1, Number 1, Revision 4.8, page 35

¹⁶ Per conversation with Cliff at Heath Press, the vendor who does the majority of our production work.

numerous font and imaging problems resulting from inconsistencies in the Windows graphic environment.

E&G Printing, which provides high-quality color output for the graphics department, can provide faster turnaround and charges less if files are submitted on Mac.¹⁷ E&G says that **the company graphics department is their only customer submitting Windows PC files** for output, and that Windows files always take longer for them to prepare.

Meteor Photo, a large commercial service bureau that the graphics department uses for large-format printing and high-end imaging, says that 90% of their Indigo work is submitted in Macintosh format. They also report font issues and color problems with files submitted from the Windows platform, causing delays and rework.¹⁸

Other Issues

Macintosh computers integrate well with our corporate network and standard corporate business applications.

Standard Microsoft Office applications are well-supported on the Macintosh platform, and Macintoshes integrate well with Windows computers. Microsoft Office for Macintosh applications are completely format-compatible with their Windows counterparts—no file conversion is necessary.

Macintoshes are well-integrated with PC networking (DAVE 2.0 from Thurby software, DoubleTalk™ from Connectix, Novell clients, etc.). Of course, Macintoshes work flawlessly with TCP-based Intranet and Internet networking.

Migration to web-based business applications makes desktop platform choice immaterial.

Many company business applications are migrating to web-based tools such as SAP, which makes them platform independent. The Macintosh versions of the de-facto standard Web browsers, Netscape and Internet Explorer, are feature-identical to their Windows counterparts.

AppleShare servers can run over IP, obviating the need for AppleTalk support on the corporate network.

Apple is a financially sound company, and was in fact the number one personal computer manufacturer in terms of unit sales at several points throughout the past year.

Conclusion

An investment of \$xx,xxx for new Macintoshes will pay an excellent return due to the time, effort, and money that the graphics department

¹⁷ Per conversations with Eric Roth at E&G.

¹⁸ Per conversation with Joel Thomas at Meteor.

will save in developing graphics for the company. Macintosh computers will be valuable tools to help the company efficiently and effectively create successful, compelling presentations and proposals that will win business and keep the company ahead of the competition. The available cost/benefit and ROI studies clearly indicate that the continuing use of Windows instead of the more cost-effective Macintosh platform for graphics production is not in keeping with fiduciary responsibility—instead it is a substantial, ongoing loss of efficiency and profit for the company.

Appendix

References

These items are cited as sources in this business case:

- Apple Computer, Inc., *Return on Investment: Drawing the Bottom Line*, Spring 1998, (Apple's one-sheet summary of the GISTICS ROI report results, included in the references section); available at <http://www.apple.com/publishing/collateral/ama/0101/pdf/roi.pdf> and at <http://www.apple.com/creative/collateral/ama/0101/roi.html>
- *Graphic Design: USA*, July 1999, “Dual Platform Creative World is Emerging,” pages 142–147
- Pfeiffer Consulting, *Strategic Technology Analysis: Macintosh and Windows as Publishing Platforms*, 1999; available at <http://www.apple.com/publishing/collateral/pdf/Pfeifferreport.pdf>
- *Trade-Off Analysis of Macintosh and Windows Platforms*, GISTICS ROI Technology Brief, Volume II, Issue 1, Number 1, Revision 4.8; available at <http://www.apple.com/publishing/collateral/pdf/ROITechBrief.pdf>
- *Law Technology News*, Volume 4, Issue 12, page 32, column 2, “Total Asset Administration” by Kingsley Martin, available at http://www.ljx.com/ltpn/october97/total_p32.html

Supplemental Material

The following items provide additional information related to the topic of this business case:

- Apple Computer, Inc., *The Macintosh for Web Publishing*, June 1999; available at <http://www.apple.com/publishing/internet/pdf/webpublishing.pdf>
- Apple Computer, Inc., *The Macintosh for Publishing Business Applications*, June 1999; available at: <http://www.apple.com/publishing/collateral/pdf/pubbizapps.pdf>

- Apple Computer, Inc., *75 Macintosh Advantages: Why Macintosh computers are better than PCs running Windows*, May 1997;
available at <http://ra.apple.com/ftp/pub/whymac/75adv.pdf>
- Apple Computer, Inc., *Why do People Prefer Macintosh*, April 1996;
available at http://wais.sensei.com.au/archives/macway/Why_People.pdf
- Evans Research Associates, *Personal Computer Satisfaction: An Independent Study of People Who use Both Macintosh and Windows 95 Computers*, May 1996;
available at <http://ra.apple.com/ftp/pub/whymac/evans.pdf>
- GISTSCS, *ColorSync Payback Assessment*, Spring 1999, Version 1.5;
available at <http://www.apple.com/publishing/internet/pdf/webpublishing.pdf>
- GISTSCS, *Media Asset Management: Best Practice Primer*;
available at <http://www.apple.com/publishing/collateral/pdf/mediaasset.pdf>
- Pfeiffer Consulting, *Power Macintosh G3: Apple sets new standards*, 1999;
available at <http://www.apple.com/publishing/collateral/pdf/G3Report.pdf>
(this is an update to the original Pfeiffer report included in the references section)
- PC Week, *Apple's 300MHz G3 keeps graphics lead*, by Herb Bethoney, PC Week Labs, April 15, 1998