



**Adobe Creative Suite 4:  
Market Perspectives, Productivity  
and Return on Investment**

# Adobe Creative Suite 4: Market Perspectives, Productivity, and Return on Investment

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# Introduction

## About this Report

This report presents the findings of an extensive benchmarking and research project conducted by Pfeiffer Consulting for Adobe Systems Incorporated.

**The aim of the research project was threefold:** to assess the **market situation of design, publishing and media production tools**; to **measure the impact of the Adobe Creative Suite 4** on the productivity of the creative workflow; and to present **return on investment projections** and recommendations based on the data collected during the research.

## About the Research

**Productivity measures**, based on the *Pfeiffer Consulting Methodology for Productivity Benchmarking*, compared workflow productivity based on the Adobe Creative Suite 4 with previous releases of the software or in some cases competing tools from other vendors. Highly detailed benchmarks separately covered four specific market segments: **design, digital imaging, web and interactive design, and video production**. A total of over 120 individual benchmarks were conducted. For details on the methodology used for the research and the productivity benchmarks, please refer to the *Methodology* sidebar on the following page.

In addition to the research conducted specifically for this project, **this report also draws upon several independent studies and research projects** conducted by Pfeiffer Consulting, as well as independent market analysis published in the *Pfeiffer Report on Emerging Trends and Technologies*. For more information on Pfeiffer Consulting's reports and research, please visit [www.pfeifferreport.com](http://www.pfeifferreport.com).

## Structure of this Report

This report is structured in 3 sections:

**Welcome to the Post-Digital Media Cloud** (page 5) presents the trends and evolutions of the design and publishing market;

**Adobe Creative Suite 4: Pushing the Boundaries of Integration and Productivity** (page 8) analyzes technology and features of Adobe

## Major Points

- ▶ This report presents **data from research** conducted by Pfeiffer Consulting in the Spring of 2009.
- ▶ The project combined **technology and market analysis with detailed productivity benchmarks**.
- ▶ The report presents **market data, productivity measures based on real-world assignments, and research-based return on investment projections**.

## About Pfeiffer Consulting

- ▶ Pfeiffer Consulting is an independent technology research institute and consulting operation focused on the needs of **publishing, digital content production, and new media professionals**.
- ▶ Download the full **Adobe CS4 Productivity Benchmark Report** at [www.pfeifferreport.com](http://www.pfeifferreport.com).

## Methodology

This report is based on technology analysis and market-specific productivity benchmarks conducted by Pfeiffer Consulting for Adobe Systems Incorporated. It also includes elements from independent research and technology analysis projects conducted by Pfeiffer Consulting.

### Productivity Measures

Pfeiffer Consulting conducted extensive, market-specific productivity benchmarks covering four specific market segments: design, digital imaging, web and interactive design, and video production.

**Nature of benchmarks:** Experienced professionals performed segment-specific design assignments, defined in clearly repeatable steps and executed in a closely monitored way. The benchmarks covered a variety of workflow-related productivity measures as well as market-specific design and publishing assignments

To ensure real-world results, no scripting was used for any benchmarks.

All statements in this report are factual and can be independently verified. For in-depth discussion of the benchmark methodology, system configurations, and comprehensive benchmark description and results, **please download the complete “Adobe Creative Suite 4 Productivity Benchmark Report”** at [www.pfeifferreport.com](http://www.pfeifferreport.com).

Creative Suite 4, and presents key figures of the productivity benchmarks conducted for this project;

**The Cumulative Effect of Productivity Gains** (page 11) presents core analysis and recommendations concerning return on investment (ROI), and provides ROI projections based on the productivity benchmarks and market research data from this research project.

### About Pfeiffer Consulting

Pfeiffer Consulting is a Paris-based, international research and consulting operation specializing in technology and media. Pfeiffer Consulting’s mission is to provide unique high-level, international market intelligence and strategic consulting for both content and technology providers. Pfeiffer Consulting is the publisher of the *Pfeiffer Report on Emerging Trends and Technologies*, an online resource on trends in the technology and content industry, as well as numerous specialized studies and reports.

For more information on Pfeiffer Consulting’s reports and services, please visit: [www.pfeifferconsulting.com](http://www.pfeifferconsulting.com).

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# Welcome to the Post-Digital Media Cloud

## Major Points

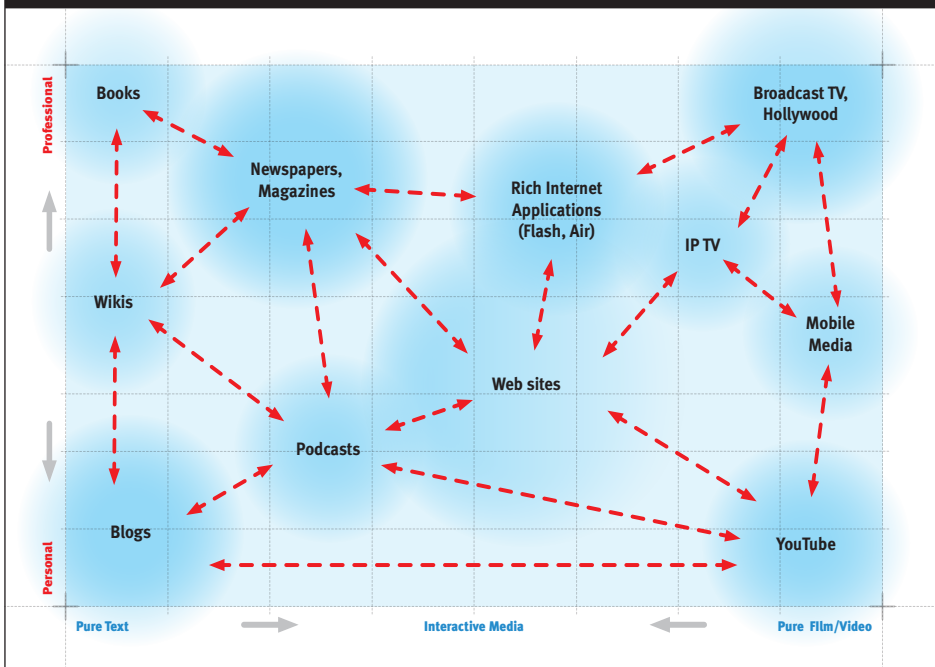
- ▶ Modern media production is characterized by **increasing fragmentation** of interconnected media instances.
- ▶ The emerging media landscape is not all-digital, **but combines the best of both worlds, analog and digital**, depending on specific needs.
- ▶ **Tools for the creative markets have to evolve constantly**, driven by the constant need of professionals to redefine excellence and to break new ground.

## The ultimate media fragmentation

When digital content started to emerge as a driving force in both media production and consumption, a widespread belief emerged that it was only a question of time before analog media were doomed, and that all our media needs would ultimately converge to a single, universal platform, the internet.

As anybody who has been involved in some form of content production can attest, the landscape that has emerged in the last fifteen years is infinitely more complex and nuanced. Yet it can be summed up with a very simple yet daunting principle: **new does not replace old any more.** Quite the contrary, really: the more choice we get, the less willing our civilization seems to be to put some media to rest. Record companies are bemoaning the decline of music CD sales, yet vinyl records are suddenly hot again. Newspapers, especially in the US, are having a hard time - but some companies are republishing blogs as local newspapers. Nothing seems to go away.

## The Post-Digital Media Cloud

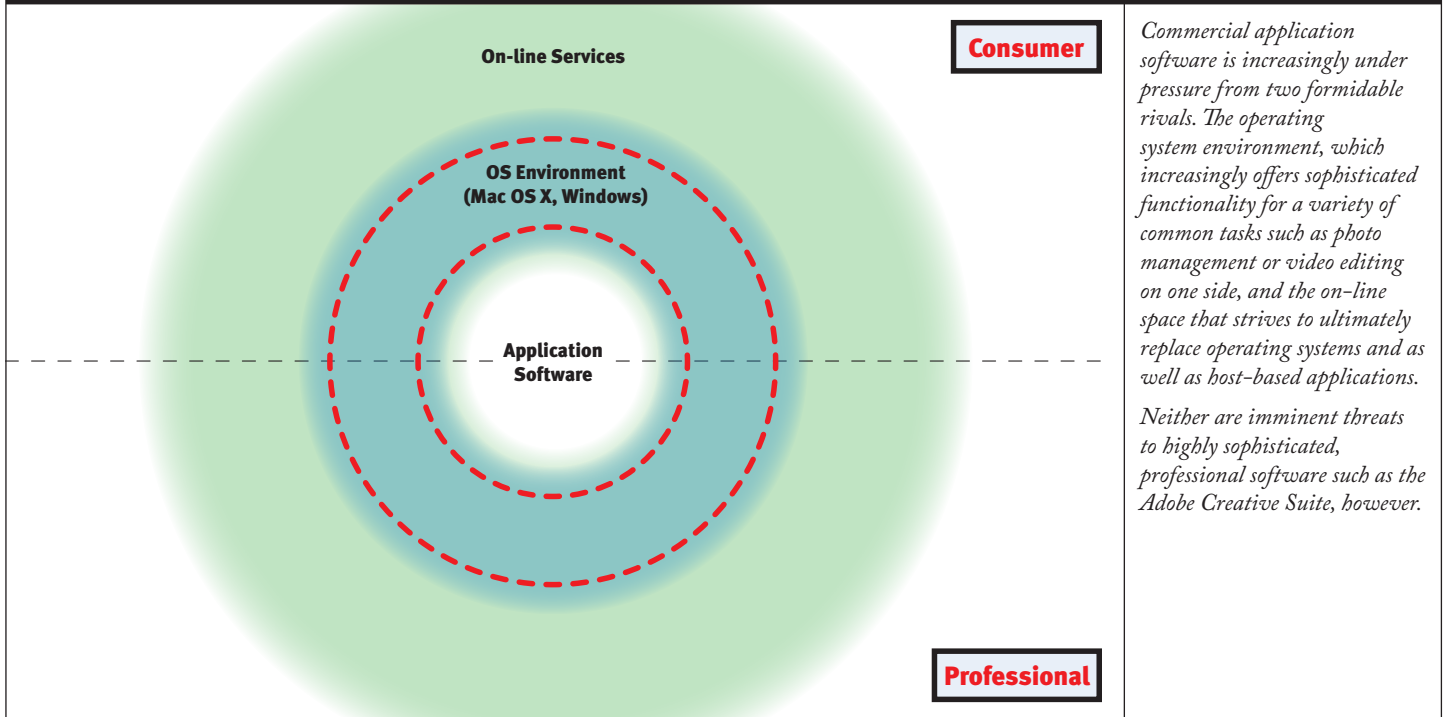


*Developments in the media space in the past decade belie the quick assumption that digital content will simply replace traditional media. The opposite appears to be the case: as consumers, we want choice more than anything, and we want to be able to choose the most convenient form for each content. We are becoming increasingly adept in using different media types to access the same information.*

*New does not replace old any more. Instead of the single, convergent on-line media space predicted in the past, we are increasingly faced with a post-digital media cloud, an intricately connected mesh of media representations, which rely on analog or digital carriers depending on the specific situation.*

*There is no doubt that traditional media instances such as newspapers, books or DVDs are facing a decrease in importance. Yet predicting their imminent demise may be premature.*

## Strategic Shifts in Media Production Tools



Commercial application software is increasingly under pressure from two formidable rivals. The operating system environment, which increasingly offers sophisticated functionality for a variety of common tasks such as photo management or video editing on one side, and the on-line space that strives to ultimately replace operating systems and as well as host-based applications.

Neither are imminent threats to highly sophisticated, professional software such as the Adobe Creative Suite, however.

### The post-digital media cloud and its implications

**The emerging media landscape is not digital, but post-digital. It ruthlessly uses what is best in both worlds.** The same kids that crowd Facebook happily read Metro or another free newspaper distributed in major cities on the subway. They watch YouTube, but also relax in front of the TV set or line up to see a blockbuster at the Cineplex (and they may well be downloading movies while they are doing this).

In fact, the most remarkable aspect of the digital media revolution is not that media are moving from one carrier to another, **but that we have become comfortable and adept in using different media types and instances to access the same information.**

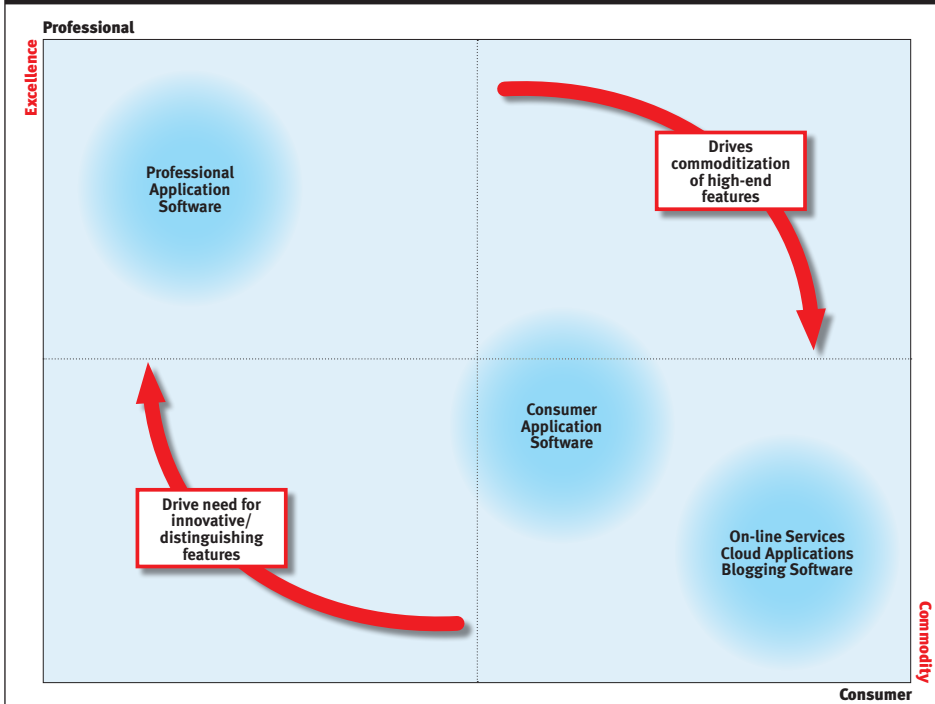
In short, we have moved from unique media instances to media multiplicity; we pick and choose depending on where, when, how and with whom we want to share a media experience.

Most importantly, there is nothing exclusively digital about the new media consumption patterns. **The new media landscape is not, as many observers predicted somewhat hastily, all digital, but it combines the best of both worlds, analog and digital.**

### Fragmentation of the tool-set

As far as content creation tools are concerned, two clear—and seemingly contradictory—trends are emerging: **Increasing commoditization of baseline tools** (blogging software and content management systems, in most cases free and widely available open-source projects) on one side, and **an ever-increasing trend towards sophistication and excellence**, which requires the most powerful and up-to-date software. While these trends seem to be going in opposite directions, they are actually driving each other. (See sidebar *Excellence vs. Commodity* on page 7.)

## Excellence vs. Commodity



*There is a strong interaction between sophisticated professional applications and the commoditized consumer space that is increasingly dominated by web services and free or almost free application software for consumers that offer ease of use but relatively limited functionality.*

*The increase in functionality in the latter provides a strong drive for high-end applications to distinguish themselves through sophisticated and innovative use of technology.*

*On the other hand, the often spectacular innovations provided by industry-leading applications such as Adobe Photoshop invariably trickle down to the consumer level, only to re-initiate another cycle of innovation in the professional space.*

**Adobe's Creative Suite is a strong reminder that the need for highly sophisticated application software has not vanished from this world.** It might be tempting to assume that, like office productivity software, creative authoring and production tools will eventually mature to the point where the need for future upgrades practically disappears. This assumption turns out to be erroneous: the need to diversify content to be published across multiple media, the constantly growing pressure for media producers to combine excellence with timeliness—and to deliver across an ever-increasing range of devices and media-types, both analog and digital—makes frequent software updates indispensable.

**Tools for the creative professional, in other words, have to cater for a constantly evolving target.** This is a market where good enough usually isn't; customers for whom excellence is often the only way to survive. And the tools at hand play a crucial role in empowering users to be their best. Creativity is essential, but so is the technical capacity to materialize an innovative concept.

**Digital tools have multiplied exponentially over the past decade; yet the very nature of creativity will continue to drive their evolution.** Adobe Creative Suite is a good example of this trend. Adobe Creative Suite 3 was a milestone release by many accounts (not least for its integration of Macromedia technologies after that company merged with Adobe), and it could seem that the software package had reached a level of maturity that made the need for upgrades less pressing. **Yet a closer look at Adobe Creative Suite 4 shows that the latest release brings significant features and productivity enhancements—and also that there is ample room for innovation as the media landscape continues to change.**

A quick look at recent evolutions of media and advertising makes it clear that this is one trend that is not likely to stop soon.

# Adobe Creative Suite 4: Pushing the Boundaries of Integration and Productivity

## Major Points

- ▶ Adobe Creative Suite 4 is the **first mature integration of Adobe tools with web and interactive technologies** such as Flash Professional, Dreamweaver, and Fireworks.
- ▶ One of the most significant achievements of Adobe Creative Suite is **to make complex web standards and tools such as CSS and Flash accessible to designers without programming experience.**
- ▶ Benchmarks conducted for this research project **underline the considerable productivity increase** that Adobe Creative Suite 4 can provide.

## Grasping the scope of Adobe CS4

**Adobe Creative Suite 4 is a significant release for a number of reasons.** When Adobe pioneered the Creative Suite concept several years ago, it was a promise more than a product. The integration of tools that the company envisioned could clearly not be achieved in one or two releases (even without taking in account the necessity of integrating tools acquired through the merger with Macromedia.) In addition, Adobe's development teams need to cover the increasingly complex and fragmented needs arising from the explosion of digital media of all sorts. Clearly not a trivial task...

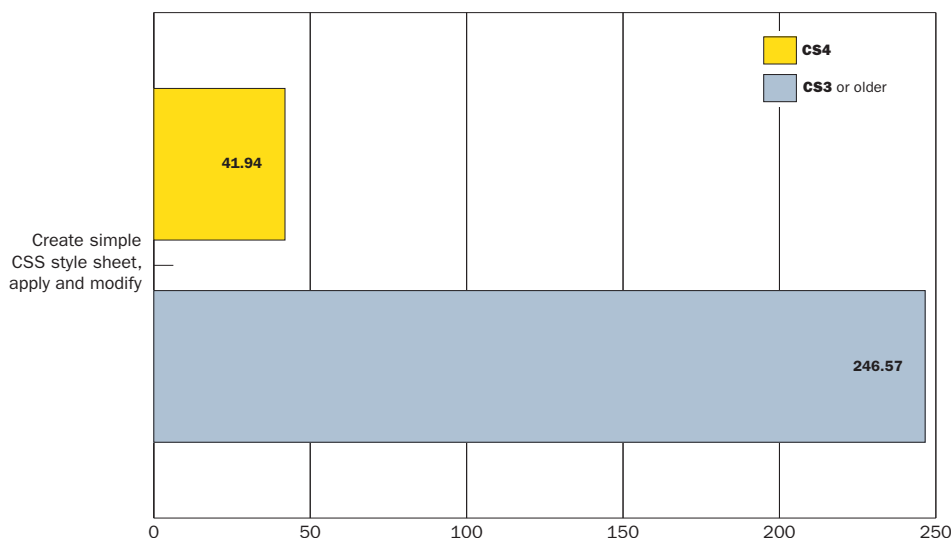
## What does Adobe Creative Suite 4 bring to the market?

**Mature integration of web and interactive tools.** Creative Suite 4 heralds the first true integration of Flash, Dreamweaver and Fireworks with the rest of the Adobe tools, supporting, for instance, Smart Objects from Photoshop within Dreamweaver, as well as tight integration between InDesign and Flash, and After Effects and Flash. Given the

## Web Design: Easing the Path to CSS

### Fireworks CS4/Dreamweaver CS4: CSS Creation and Management

Time in seconds. Shorter is better.



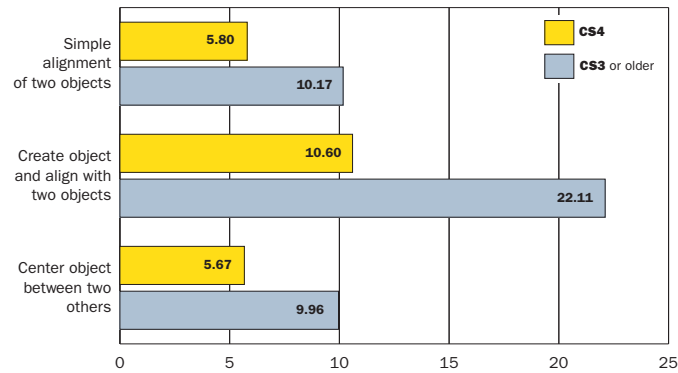
*Creating cascading style sheets does not need to involve special programming skills any more: Fireworks CS4 exports interactively created formatting in properly structured CSS style sheets that can be directly edited in any CSS-compliant application such as Dreamweaver CS4.*

*The productivity gains compared to recreating formatting manually in CSS are impressive.*

## Design: Productivity Lies in the Details

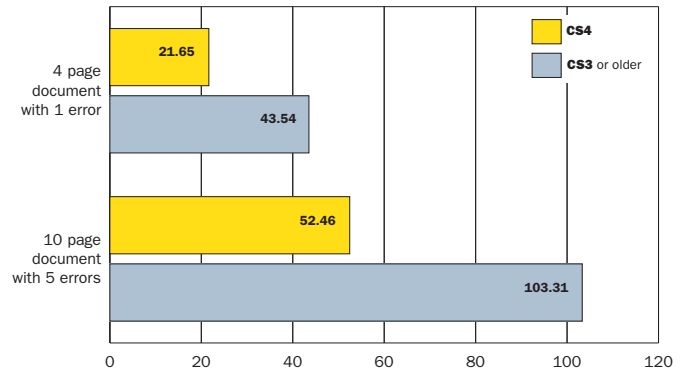
### InDesign CS4: Use of Smart Guides for Object Positioning

Time in seconds. Shorter is better.



### InDesign CS4: Live Preflight vs. Conventional Error Handling

Time in seconds. Shorter is better.



*InDesign's Smart Guides, a new feature used to position design elements, significantly speeds up the page layout process. (Chart on the left.) Live Preflight allows users to spot a wide range of potential problems as they are introduced, thus saving precious time at the final steps of document*

*preparation. (Chart on the right.) Live Preflight can be used to preflight documents destined for both print and digital publishing. In addition, InDesign CS4 allows the creation of output profiles that provide much more detailed information than did the preflight functionality in previous releases.*

enormous importance of Flash-based content on the web, this integration is crucial for leveraging creative content across a variety of media.

**Flash for Designers.** Designers with a background in print are often intrigued with the possibilities of Flash, but intimidated by the programming-focused authoring environment: They love what it allows them to do—and have difficulty relating to the way they are supposed to work. Flash CS4 Professional is the first release of the product that begins to feel like other, more familiar Adobe applications.

Designers are going to love this, particularly when taking into account the tight links between Flash and other Adobe applications. The fact that InDesign CS4 can export design files directly to Flash is a boon to print designers who want to be able to create interactive SWF (Flash) documents directly from their InDesign creations.

**Increased productivity.** *Never mind all the new things I could do (if I had the time to learn them); show me how I can get my current job done faster...* Productivity is quickly becoming the new killer feature. As the productivity benchmarks for this project show, Creative Suite 4 increases efficiency in a vast variety of tasks across its various applications.

**CSS for designers.** Over the years, Cascading Style Sheets (CSS) have become one of the essential formatting tools for modern web development. Unfortunately, they have so far remained much too complex for the average designer to master. Fireworks CS4 is the first design-oriented tool that bridges the gap between the design and web tools, by exporting formatting information in CSS format without specific intervention from an expert. In other words, Fireworks could do for CSS what WYSIWYG HTML editors did for web-design.

**Ubiquitous metadata.** Adobe has been very active in the metadata field for some time, but no previous release of Creative Suite offered metadata support that was as broad and as pervasive. This is essential: creative professionals recognize the need to embrace metadata, but actually getting it done has been a daunting task that Creative Suite 4 manages to make more accessible.

## The CS4 User Interface

One of the most significant changes in Adobe Creative Suite 4—as well as a significant productivity boost over older releases—is the new user interface for managing multiple windows.

Creative Workflows typically rely on a multitude of different documents that need to be open and available at the same time. Managing these multiple documents can be very time-consuming.

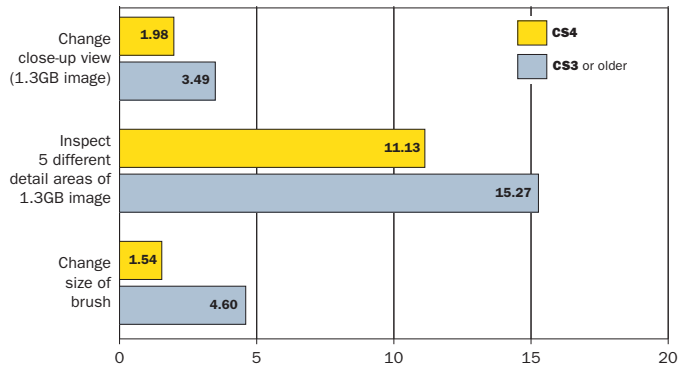
Adobe Creative Suite 4 offers what the company calls 'tabbed windows.' Whenever several documents are opened at once, they show up as tabs below the title bar. Switching between documents is as simple as clicking the appropriate tab, and a pop-up menu makes it very fast to switch between different ways of splitting the screen between several documents. (The older way of working also remains available.)

The new interface offers a sophisticated approach for a pervasive set of tasks; not surprisingly, the productivity gains from the new user interface are significant (see chart on following page), particularly since this is one of the features that will be used almost constantly.

# Digital Imaging: Keeping up with Technology

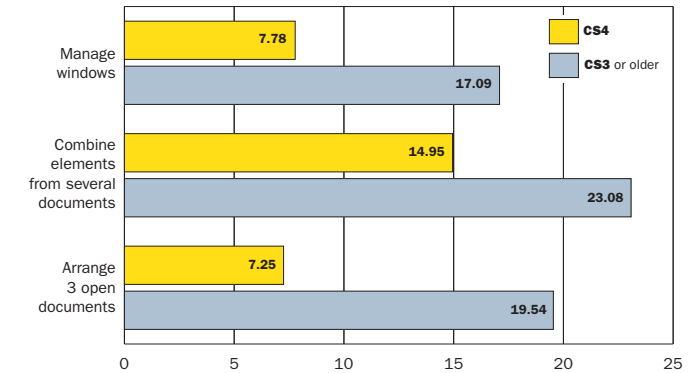
## Photoshop CS4: Impact of OpenGL Support

Time in seconds. Shorter is better.



## Photoshop CS4: User Interface Efficiency

Time in seconds. Shorter is better.



*Photoshop CS4 is the first release that uses the processing power of modern video cards to speed up common tasks such as zooming and panning large images. OpenGL support also provides sophisticated live preview of brushes during retouching. (Chart on the left.) Most Creative Suite 4 applications—including Photoshop, InDesign and Illustrator—sport a new*

*windowing interface that increase the efficiency when working with several open documents. Switching between windows has become much simpler, and splitting the screen between several open documents is significantly streamlined. The productivity gains apply to all applications that use the new windowing interface mode. (Chart on the right.)*

**Integration, integration, integration...** Computer operating systems are versatile, but they were not conceived for creative professionals. Adobe Bridge (introduced in Creative Suite 2) attempted to step in and help users with common file management tasks, but used to fall short in some aspects, particularly for Mac users. Adobe Bridge CS4 is the first version that feels mature enough to really become a useful management environment for the increasingly complex variety of data creative professionals have to manage. A good example for this is the possibility to create contact sheets (not only for photographs, but for a variety of document formats) directly in PDF, as it should be.

### About the productivity benchmarks

Pfeiffer Consulting has conducted an extensive productivity benchmarking project that analyzes a vast array of features and productivity enhancements introduced in Creative Suite 4.

These benchmarks (a total of over 120 individual productivity measures were conducted) were based on real-world tasks and assignments, and cover four specific areas of activity: **design, digital imaging, web and interactive design**, and **video production**.

Some key results from these benchmarks are displayed here, but there are many, many more. The next section of this report analyzes the impact of productivity on return on investment (ROI).

For the complete benchmark results, and for a detailed description of the benchmark methodology, please download **The Adobe Creative Suite 4 Benchmark Report** at [www.pfeifferreport.com](http://www.pfeifferreport.com).

# The Cumulative Effect of Productivity Gains

## Major Points

- ▶ Even seemingly **minor productivity gains on frequently repeated operations can lead to significant return on investment.**
- ▶ The ROI projections provided in this report **are based on over 120 benchmarks and productivity measures** conducted with Adobe Creative Suite 4.
- ▶ The ROI projections derived from the cumulative effect of productivity gains **can easily reach thousands of dollars** per workstation.

## ROI can be a subjective notion

While in some sectors of activity, the exact meaning of ROI can be very clearly understood and easily defined, this is far from being the case in creative industries in general, and in particular when the investment in enabling technologies is concerned.

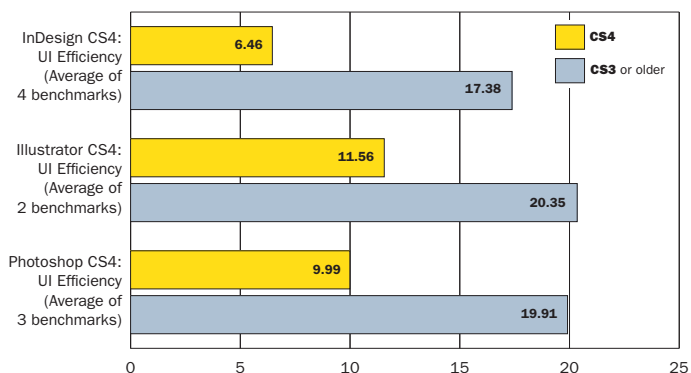
**ROI is essentially a matter of approach: what exactly is considered a valid return on investment?** While a decision maker in a bottling plant may have a clear idea of the return of a specific technology investment may bring, the situation is much less clear-cut in an a publishing house, advertising agency, or video production company—essentially, any company where the goods sold depend on creativity and not just production capacity.

**Perceived ROI also varies considerably depending on the size of an operation:** Smaller design studios and creative agencies frequently value the creative edge a new tool provides more than they do calculated cost savings, and thus base their equipment decisions on available funds

## The Impact of the User Interface on Productivity

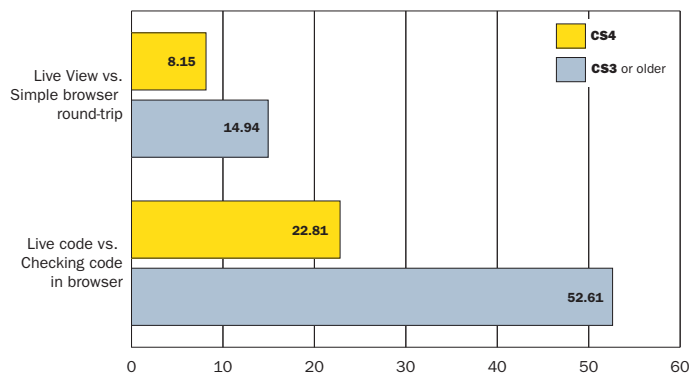
### Creative Suite 4 User Interface Efficiency

Time in seconds. Shorter is better.



### DreamWeaver CS4: Live View/Live Code

Time in seconds. Shorter is better.



*The new user interface for the individual applications of Adobe Creative Suite 4 provides considerable productivity gains in everyday operations such as managing multiple open documents, or combining elements from several open files in a design. The chart on the left shows average*

*productivity gains of common user interface operations benchmarked in InDesign CS4, Illustrator CS4 and Photoshop CS4. The chart on the right shows productivity gains linked to the Live View and Live Code features in Dreamweaver CS4.*

## About the ROI Projections

The ROI projections at the end of this document have been calculated using a simple methodology. The top half of the table presents the features taken in account, and calculates **the number of seconds saved by one individual operation** over a previous release. In addition, these time savings are mapped to the hourly cost of a creative professional.

The lower half of the table uses the same features and time savings, **applies a reasonable weekly frequency of use for each feature, and calculates the cost savings based on hourly rates.**

Finally, the bottom of the table presents **the cumulated cost savings of all features included in the table over a month and a year** (based on 20 workdays per month and 220 workdays per year).

and immediate usefulness; in larger operations such as agencies or media groups, cost of deployment and training will factor heavily in any decision to purchase or upgrade creative technologies.

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### The invisible gains

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There is one factor, however, that is almost universally underestimated when analyzing return on investment: **the considerable cumulative effect of small productivity gains in everyday operations** that a new software release can bring.

Let's take a simple example: each time one uses Smart Guides (introduced in several CS4 applications, such as InDesign CS4 and Fireworks CS4, and enhanced in Illustrator CS4) to position a design element precisely, one saves five to ten seconds over older versions of the same software. **Repeated just twenty times a day, this can save a designer close to an hour per month.** And we are only considering a single, isolated (and seemingly minor) feature. Once one starts adding up the individual productivity gains provided by a variety of efficiency enhancements and features introduced in Adobe Creative Suite 4, it is clear that the returns on investment can be very significant. (There is one caveat, however: to benefit from these efficiency gains, it is necessary to adopt the improvements a new release offers. Not surprisingly, users who continue to work in old ways will see much less increase in productivity. But that risk is small, since most efficiency improvements in CS4 require little or no learning.)

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### Every click counts

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It is a widely accepted fact in productivity research and ergonomics that **every click counts, and every trip to the menu bar slows the user down.** If one works in an office environment without particular time pressure, these gains may seem insignificant, but in highly competitive, deadline-driven businesses such as advertising, media production, and publishing, even seemingly minor productivity gains are immediately useful.

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### The bottom line

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Pfeiffer Consulting has analyzed the data from the productivity benchmarks to establish the impact of productivity gains on return on investment. **Adobe CS4 increases the productivity of average users by providing efficiency gains in a large number of everyday operations. The ROI can very easily reach thousands of dollars per workstation per year.**

These ROI projections have been established for each individual market segment covered, and show that significant ROI can be derived from productivity gains in every one of them. In some workflow situations, the ROI impact of Adobe Creative Suite 4 can be in excess of \$10,000 per year and per workstation.

# Adobe CS4 Design Premium: Return on Investment Scenarios (Per Workstation)

Over **120 individual benchmarks** have been conducted for this project. The figures presented in this table are **average values of groups of several benchmarks**. To see the list of individual benchmarks and results, **please refer to the Appendix** of this report.

	Prod. measures in Adobe CS3 workflow (Time in seconds)	Prod. measures in Adobe CS4 workflow (Time in seconds)	Individual time savings (seconds)	Productivity gain (%)	ROI generated (1 hour @ \$100)	
<b>Incremental productivity gains</b> (Return on Investment generated by individual operation)						
<b>Design and Print Workflow</b>						
▶ <b>InDesign CS4:</b> Smart Guides (Average of 3 benchmarks)	14.08	7.36	<b>6.73</b>	<b>47.76%</b>	\$0.19	
▶ <b>InDesign CS4:</b> Managing Linked Files (Average of 4 benchmarks)	35.63	9.53	<b>26.10</b>	<b>73.25%</b>	\$0.73	
▶ <b>InDesign CS4:</b> Smart Text Reflow (Average of 2 benchmarks)	12.57	3.47	<b>9.10</b>	<b>72.39%</b>	\$0.25	
▶ <b>InDesign CS4:</b> Live Preflight (Average of 2 benchmarks)	73.43	37.05	<b>36.37</b>	<b>49.54%</b>	\$1.01	
▶ <b>Illustrator CS4:</b> Gradients (Average of 4 Benchmarks)	13.52	7.60	<b>5.92</b>	<b>43.79%</b>	\$0.16	
▶ <b>Illustrator CS4:</b> Appearance Panel (Average of 3 Benchmarks)	33.58	22.96	<b>10.62</b>	<b>31.63%</b>	\$0.30	
▶ <b>Illustrator CS4:</b> Multiple Artboards (Average of 6 Benchmarks)	76.81	29.09	<b>47.71</b>	<b>62.12%</b>	\$1.33	
<b>Creative Environment User Interface Efficiency</b>						
▶ <b>InDesign CS4:</b> User Interface Efficiency (Average of 4 benchmarks)	17.38	6.46	<b>10.92</b>	<b>62.83%</b>	\$0.30	
▶ <b>Illustrator CS4:</b> User Interface Efficiency (Average of 2 benchmarks)	20.35	11.56	<b>8.80</b>	<b>43.22%</b>	\$0.24	
▶ <b>Photoshop CS4:</b> User Interface Efficiency (Average of 3 benchmarks)	19.91	9.99	<b>9.91</b>	<b>49.80%</b>	\$0.28	
<b>Web and Interactive Workflow</b>						
▶ <b>Dreamweaver CS4:</b> Workflow Efficiency (Average of 4 Benchmarks)	34.24	19.27	<b>14.98</b>	<b>43.74%</b>	\$0.42	
▶ <b>Flash CS4 Professional:</b> Simplified Animation Tools (Average of 6 Benchmarks)	29.36	10.80	<b>18.56</b>	<b>63.22%</b>	\$0.52	
▶ <b>Fireworks CS4:</b> CSS export	246.57	41.94	<b>204.63</b>	<b>82.99%</b>	\$5.68	
<b>Digital Imaging Workflow</b>						
▶ <b>Photoshop CS4:</b> Workflow Efficiency (Average of 7 Benchmarks)	26.84	15.20	<b>11.64</b>	<b>43.37%</b>	\$0.32	
▶ <b>Photoshop CS4:</b> OpenGL Support (Average of 7 Benchmarks)	12.11	7.91	<b>4.20</b>	<b>34.65%</b>	\$0.12	
▶ <b>Bridge CS4:</b> Image Management (Average of 2 Benchmarks)	47.31	21.92	<b>25.39</b>	<b>53.66%</b>	\$0.71	
<b>ROI projections</b> (based on incremental productivity gains)	Time saved (seconds)	Number of occurrences (Per week)		ROI (1 hour @ \$100)		
<b>Design and Print Workflow</b>						
▶ <b>InDesign CS4:</b> Smart Guides (Average of 3 benchmarks)	6.73	<b>50</b>		<b>\$9.34</b>		
▶ <b>InDesign CS4:</b> Managing Linked Files (Average of 4 benchmarks)	26.10	<b>15</b>		<b>\$10.88</b>		
▶ <b>InDesign CS4:</b> Smart Text Reflow (Average of 2 benchmarks)	9.10	<b>10</b>		<b>\$2.53</b>		
▶ <b>InDesign CS4:</b> Live Preflight (Average of 2 benchmarks)	36.37	<b>5</b>		<b>\$5.05</b>		
▶ <b>Illustrator CS4:</b> Gradients (Average of 4 Benchmarks)	5.92	<b>20</b>		<b>\$3.29</b>		
▶ <b>Illustrator CS4:</b> Appearance Panel (Average of 3 Benchmarks)	10.62	<b>10</b>		<b>\$2.95</b>		
▶ <b>Illustrator CS4:</b> Multiple Artboards (Average of 6 Benchmarks)	47.71	<b>10</b>		<b>\$13.25</b>		
<b>Creative Environment User Interface Efficiency</b>						
▶ <b>InDesign CS4:</b> User Interface Efficiency (Average of 4 benchmarks)	10.92	<b>30</b>		<b>\$9.10</b>		
▶ <b>Illustrator CS4:</b> User Interface Efficiency (Average of 2 benchmarks)	8.80	<b>30</b>		<b>\$7.33</b>		
▶ <b>Photoshop CS4:</b> User Interface Efficiency (Average of 3 benchmarks)	9.91	<b>30</b>		<b>\$8.26</b>		
<b>Web and Interactive Workflow</b>						
▶ <b>Dreamweaver CS4:</b> Workflow Efficiency (Average of 4 Benchmarks)	14.98	<b>10</b>		<b>\$4.16</b>		
▶ <b>Flash CS4 Professional:</b> Simplified Animation Tools (Average of 6 Benchmarks)	18.56	<b>3</b>		<b>\$1.55</b>		
▶ <b>Fireworks CS4:</b> CSS export	204.63	<b>5</b>		<b>\$28.42</b>		
<b>Digital Imaging Workflow</b>						
▶ <b>Photoshop CS4:</b> Workflow Efficiency (Average of 7 Benchmarks)	11.64	<b>40</b>		<b>\$12.93</b>		
▶ <b>Photoshop CS4:</b> OpenGL Support (Average of 7 Benchmarks)	4.20	<b>40</b>		<b>\$4.66</b>		
▶ <b>Bridge CS4:</b> Image Management (Average of 2 Benchmarks)	25.39	<b>10</b>		<b>\$7.05</b>		
				Total ROI generated/week		\$130.76
				Total ROI generated/month		\$523.02
				Total ROI generated/year		\$5,753.25

## CS4 Web Premium: Return on Investment Scenarios (Per Workstation)

Over **120 individual benchmarks** have been conducted for this project. The figures presented in this table are **average values of groups of several benchmarks**.  
To see the list of individual benchmarks and results, **please refer to the Appendix** of this report.

Prod. measures in  
Adobe CS3 workflow  
(Time in seconds)

Prod. measures in  
Adobe CS4 workflow  
(Time in seconds)

Individual  
time savings (seconds)

Productivity gain (%)

ROI generated  
(1 hour @ \$100)

**Incremental productivity gains** (Return on Investment generated by individual operation)

### Web and Interactive Workflow

▶ <b>Dreamweaver CS4:</b> Live View/Live Coode (Average of 2 Benchmarks)	33.78	15.48	<b>18.30</b>	<b>54.17%</b>	\$0.51
▶ <b>Dreamweaver CS4:</b> Photoshop Roundtrip (Average of 3 Benchmarks)	34.56	21.79	<b>12.77</b>	<b>36.94%</b>	\$0.35
▶ <b>Flash CS4 Prof.:</b> Simplified Animation Tools (Average of 2 Benchmarks)	27.09	13.46	<b>13.63</b>	<b>50.33%</b>	\$0.38
▶ <b>Flash CS4 Prof.:</b> Simplified Editing (Average of 4 Benchmarks)	30.50	9.47	<b>21.03</b>	<b>68.95%</b>	\$0.58
▶ <b>Fireworks CS4:</b> CSS Export	246.57	41.94	<b>204.63</b>	<b>82.99%</b>	\$5.68

### Design Efficiency

▶ <b>Illustrator CS4:</b> Gradients (Average of 4 Benchmarks)	13.52	7.60	<b>5.92</b>	<b>43.79%</b>	\$0.16
▶ <b>Illustrator CS4:</b> Appearance Panel (Average of 3 Benchmarks)	33.58	22.96	<b>10.62</b>	<b>31.63%</b>	\$0.30
▶ <b>Illustrator CS4:</b> Multiple Artboards (Average of 6 Benchmarks)	76.81	29.09	<b>47.71</b>	<b>62.12%</b>	\$1.33

### Creative Environment User Interface Efficiency

▶ <b>Illustrator CS4:</b> User Interface Efficiency (Average of 2 benchmarks)	20.35	11.56	<b>8.80</b>	<b>43.22%</b>	\$0.24
▶ <b>Photoshop CS4:</b> User Interface Efficiency (Average of 3 benchmarks)	19.91	9.99	<b>9.91</b>	<b>49.80%</b>	\$0.28

### Digital Imaging Workflow

▶ <b>Photoshop CS4:</b> Workflow Efficiency (Average of 7 Benchmarks)	26.84	15.20	<b>11.64</b>	<b>43.37%</b>	\$0.32
▶ <b>Photoshop CS4:</b> OpenGL Support (Average of 7 Benchmarks)	12.11	7.91	<b>4.20</b>	<b>34.65%</b>	\$0.12
▶ <b>Bridge CS4:</b> Image Management (Average of 2 Benchmarks)	47.31	21.92	<b>25.39</b>	<b>53.66%</b>	\$0.71

**ROI projections** (based on incremental productivity gains)

Time saved (seconds)

Number of occurrences (Per week)

ROI (1 hour @ \$100)

### Web and Interactive Workflow

▶ <b>Dreamweaver CS4:</b> Live View/Live Coode (Average of 2 Benchmarks)	33.78	<b>50</b>	<b>\$46.91</b>
▶ <b>Dreamweaver CS4:</b> Photoshop Roundtrip (Average of 3 Benchmarks)	34.56	<b>30</b>	<b>\$28.80</b>
▶ <b>Flash CS4 Prof.:</b> Simplified Animation Tools (Average of 2 Benchmarks)	27.09	<b>40</b>	<b>\$30.10</b>
▶ <b>Flash CS4 Prof.:</b> Simplified Editing (Average of 4 Benchmarks)	30.50	<b>25</b>	<b>\$21.18</b>
▶ <b>Fireworks CS4:</b> CSS Export	246.57	<b>10</b>	<b>\$68.49</b>

### Design Efficiency

▶ <b>Illustrator CS4:</b> Gradients (Average of 4 Benchmarks)	13.52	<b>10</b>	<b>\$3.76</b>
▶ <b>Illustrator CS4:</b> Appearance Panel (Average of 3 Benchmarks)	33.58	<b>10</b>	<b>\$9.33</b>
▶ <b>Illustrator CS4:</b> Multiple Artboards (Average of 6 Benchmarks)	76.81	<b>5</b>	<b>\$10.67</b>

### Creative Environment User Interface Efficiency

▶ <b>Illustrator CS4:</b> User Interface Efficiency (Average of 2 benchmarks)	8.80	<b>15</b>	<b>\$3.67</b>
▶ <b>Photoshop CS4:</b> User Interface Efficiency (Average of 3 benchmarks)	9.91	<b>15</b>	<b>\$4.13</b>

### Digital Imaging Workflow

▶ <b>Photoshop CS4:</b> Workflow Efficiency (Average of 7 Benchmarks)	18.30	<b>15</b>	<b>\$7.62</b>
▶ <b>Photoshop CS4:</b> OpenGL Support (Average of 7 Benchmarks)	12.77	<b>10</b>	<b>\$3.55</b>
▶ <b>Bridge CS4:</b> Image Management (Average of 2 Benchmarks)	13.63	<b>5</b>	<b>\$1.89</b>

Total ROI generated/week

\$240.09

**Total ROI generated/month**

**\$960.36**

**Total ROI generated/year**

**\$10,563.91**

# CS4 Production Premium: Return on Investment Scenarios (Per Workstation)

Over **120 individual benchmarks** have been conducted for this project. The figures presented in this table are **average values of groups of several benchmarks**. To see the list of individual benchmarks and results, please refer to the **Appendix** of this report.

Prod. measures in Adobe CS3 workflow (Time in seconds)	Prod. measures in Adobe CS4 workflow (Time in seconds)	Individual time savings (seconds)	Productivity gain (%)	ROI generated (1 hour @ \$100)
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## Incremental productivity gains (Return on Investment generated by individual operation)

### Video Editing Workflow

▶ <b>Premiere Pro CS4:</b> Apply Effect to Multiple Clips (Average of 2 benchmarks)	17.90	8.58	<b>9.32</b>	<b>52.09%</b>	\$0.26
▶ <b>Premiere Pro CS4:</b> Apply Multiple Effects (Average of 3 benchmarks)	52.38	33.60	<b>18.79</b>	<b>35.86%</b>	\$0.52
▶ <b>Premiere Pro CS4:</b> Remove Effects (Average of 2 benchmarks)	31.81	4.70	<b>27.11</b>	<b>85.23%</b>	\$0.75
▶ <b>Premiere Pro CS4:</b> Change Speed of Multiple Clips (Average of 2 benchmarks)	35.92	6.41	<b>29.51</b>	<b>82.16%</b>	\$0.82
▶ <b>Premiere Pro CS4:</b> Apply Trans. to Multiple Clips (Average of 2 benchmarks)	17.07	4.47	<b>12.60</b>	<b>73.79%</b>	\$0.35
▶ <b>Premiere Pro CS4:</b> Speech to Text (Average of 2 Benchmarks)	338.14	55.94	<b>282.21</b>	<b>83.46%</b>	\$7.84
▶ <b>Soundbooth CS4:</b> Adjust Volume of Multiple Clips (Average of 2 Benchmarks)	77.29	16.47	<b>60.83</b>	<b>78.70%</b>	\$1.69

### Direct-to-Disc Workflow

▶ <b>OnLocation CS4:</b> Import Footage (Average of 3 Benchmarks)	543.78	9.21	<b>534.58</b>	<b>98.31%</b>	\$14.85
▶ <b>OnLocation CS4:</b> Direct-to-Disc Workflow Test	691.41	57.99	<b>633.42</b>	<b>91.61%</b>	\$17.60

### After Effects Workflow

▶ <b>After Effects CS4:</b> QuickSearch Parameters (Average of 2 Benchmarks)	59.94	11.68	<b>48.26</b>	<b>80.52%</b>	\$1.34
▶ <b>After Effects CS4:</b> Navigate Project (Average of 2 Benchmarks)	15.50	7.42	<b>8.08</b>	<b>52.13%</b>	\$0.22
▶ <b>After Effects CS4/Premiere Pro CS4:</b> Dynamic Link	88.20	30.11	<b>58.09</b>	<b>65.86%</b>	\$1.61

### Digital Imaging Workflow

▶ <b>Photoshop CS4:</b> Workflow Efficiency (Average of 7 Benchmarks)	26.84	15.20	<b>11.64</b>	<b>43.37%</b>	\$0.32
▶ <b>Photoshop CS4:</b> OpenGL Support (Average of 7 Benchmarks)	12.11	7.91	<b>4.20</b>	<b>34.65%</b>	\$0.12
▶ <b>Photoshop CS4:</b> User Interface Efficiency (Average of 3 Benchmarks)	19.91	9.99	<b>9.91</b>	<b>49.80%</b>	\$0.28
▶ <b>Bridge CS4:</b> Image Management (Average of 2 Benchmarks)	47.31	21.92	<b>25.39</b>	<b>53.66%</b>	\$0.71

## ROI projections (based on incremental productivity gains)

Time saved (seconds)	Number of occurrences (Per week)	ROI (1 hour @ \$100)
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### Video Editing Workflow

▶ <b>Premiere Pro CS4:</b> Apply Effect to Multiple Clips (Average of 2 benchmarks)	9.32	<b>25</b>	<b>\$6.47</b>
▶ <b>Premiere Pro CS4:</b> Apply Multiple Effects (Average of 3 benchmarks)	18.79	<b>25</b>	<b>\$13.05</b>
▶ <b>Premiere Pro CS4:</b> Remove Effects (Average of 2 benchmarks)	27.11	<b>20</b>	<b>\$15.06</b>
▶ <b>Premiere Pro CS4:</b> Change Speed of Multiple Clips (Average of 2 benchmarks)	29.51	<b>10</b>	<b>\$8.20</b>
▶ <b>Premiere Pro CS4:</b> Apply Trans. to Multiple Clips (Average of 2 benchmarks)	12.60	<b>10</b>	<b>\$3.50</b>
▶ <b>Premiere Pro CS4:</b> Speech to Text (Average of 2 Benchmarks)	282.21	<b>2</b>	<b>\$15.68</b>
▶ <b>Soundbooth CS4:</b> Adjust Volume of Multiple Clips (Average of 2 Benchmarks)	60.83	<b>5</b>	<b>\$8.45</b>

### Direct-to-Disc Workflow

▶ <b>OnLocation CS4:</b> Import Footage (Average of 3 Benchmarks)	543.78	<b>3</b>	<b>\$45.32</b>
▶ <b>OnLocation CS4:</b> Direct-to-Disc Workflow Test	691.41	<b>3</b>	<b>\$57.62</b>

### After Effects Workflow

▶ <b>After Effects CS4:</b> QuickSearch Parameters (Average of 2 Benchmarks)	59.94	<b>20</b>	<b>\$33.30</b>
▶ <b>After Effects CS4:</b> Navigate Project (Average of 2 Benchmarks)	15.50	<b>20</b>	<b>\$8.61</b>
▶ <b>After Effects CS4/Premiere Pro CS4:</b> Dynamic Link	88.20	<b>10</b>	<b>\$24.50</b>

### Digital Imaging Workflow

▶ <b>Photoshop CS4:</b> Workflow Efficiency (Average of 7 Benchmarks)	11.64	<b>25</b>	<b>\$8.08</b>
▶ <b>Photoshop CS4:</b> OpenGL Support (Average of 7 Benchmarks)	4.20	<b>20</b>	<b>\$2.33</b>
▶ <b>Photoshop CS4:</b> User Interface Efficiency (Average of 3 Benchmarks)	9.91	<b>20</b>	<b>\$5.51</b>
▶ <b>Bridge CS4:</b> Image Management (Average of 2 Benchmarks)	25.39	<b>5</b>	<b>\$3.53</b>

Total ROI generated/week	\$259.19
<b>Total ROI generated/month</b>	<b>\$1,036.76</b>
<b>Total ROI generated/year</b>	<b>\$11,404.37</b>

## Digital Imaging: Return on Investment Scenarios (Per Workstation)

Over **120 individual benchmarks** have been conducted for this project. The figures presented in this table are **average values of groups of several benchmarks**. To see the list of individual benchmarks and results, **please refer to the Appendix** of this report.

Prod. measures in Adobe CS3 workflow (Time in seconds)	Prod. measures in Adobe CS4 workflow (Time in seconds)	Individual time savings (seconds)	Productivity gain (%)	ROI generated (1 hour @ \$100)
--------------------------------------------------------	--------------------------------------------------------	-----------------------------------	-----------------------	--------------------------------

### Incremental productivity gains (Return on Investment generated by individual operation)

#### Photoshop CS4: Workflow Efficiency

▶ <b>Adjustments Panel:</b> Simple adjustment	12.84	4.89	<b>7.95</b>	<b>61.93%</b>	\$0.22
▶ <b>Adjustments Panel:</b> Three adjustments	35.50	16.88	<b>18.62</b>	<b>52.45%</b>	\$0.52
▶ <b>Adjustments Panel Workflow example</b>	64.32	44.06	<b>20.26</b>	<b>31.50%</b>	\$0.56
▶ <b>Masks Panel:</b> Create simple layer mask	13.42	7.76	<b>5.66</b>	<b>42.16%</b>	\$0.16
▶ <b>Masks Panel:</b> Create mask from color range	16.14	8.79	<b>7.35</b>	<b>45.54%</b>	\$0.20
▶ <b>Masks Panel:</b> Create mask and refine edge of selection	21.34	13.10	<b>8.24</b>	<b>38.60%</b>	\$0.23
▶ <b>Masks Panel:</b> Create mask and feather edge	24.29	10.90	<b>13.39</b>	<b>55.12%</b>	\$0.37

#### Photoshop CS4 User Interface Efficiency

▶ <b>User Interface:</b> Manage Multiple Windows	17.09	7.78	<b>9.31</b>	<b>54.49%</b>	\$0.26
▶ <b>User Interface:</b> Combine elements from several documents	23.08	14.95	<b>8.13</b>	<b>35.23%</b>	\$0.23
▶ <b>User Interface:</b> Arrange 3 open documents	19.54	7.25	<b>12.30</b>	<b>62.92%</b>	\$0.34

#### Photoshop CS4 OpenGL Support

▶ <b>OpenGL Support:</b> Zoom/Pan (Average of 3 Benchmarks)	17.47	12.15	<b>5.32</b>	<b>30.46%</b>	\$0.15
▶ <b>OpenGL Support:</b> Change view (Average of 2 Benchmarks)	9.38	6.56	<b>2.83</b>	<b>30.13%</b>	\$0.08
▶ <b>OpenGL Support:</b> Live Preview of Brush (Average of 2 Benchmarks)	6.80	2.92	<b>3.88</b>	<b>57.04%</b>	\$0.11

#### Bridge CS4

▶ <b>Image Management:</b> Review and select 20 HiRes pictures	37.14	16.39	<b>20.75</b>	<b>55.87%</b>	\$0.58
▶ <b>Image Management:</b> Create PDF contact sheet	57.47	27.45	<b>30.02</b>	<b>52.23%</b>	\$0.83

### ROI projections (based on incremental productivity gains)

Time saved (seconds)	Number of occurrences (Per week)	ROI (1 hour @ \$100)
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#### Photoshop CS4: Workflow Efficiency

▶ <b>Adjustments Panel:</b> Simple adjustment	7.95	<b>40</b>	<b>\$8.84</b>
▶ <b>Adjustments Panel:</b> Three adjustments	18.62	<b>10</b>	<b>\$5.17</b>
▶ <b>Adjustments Panel Workflow example</b>	20.26	<b>10</b>	<b>\$5.63</b>
▶ <b>Masks Panel:</b> Create simple layer mask	5.66	<b>30</b>	<b>\$4.71</b>
▶ <b>Masks Panel:</b> Create mask from color range	7.35	<b>20</b>	<b>\$4.08</b>
▶ <b>Masks Panel:</b> Create mask and refine edge of selection	8.24	<b>20</b>	<b>\$4.58</b>
▶ <b>Masks Panel:</b> Create mask and feather edge	13.39	<b>30</b>	<b>\$11.16</b>

#### Photoshop CS4 User Interface Efficiency

▶ <b>User Interface:</b> Manage Multiple Windows	9.31	<b>50</b>	<b>\$12.94</b>
▶ <b>User Interface:</b> Combine elements from several documents	8.13	<b>30</b>	<b>\$6.78</b>
▶ <b>User Interface:</b> Arrange 3 open documents	12.30	<b>20</b>	<b>\$6.83</b>

#### Photoshop CS4 OpenGL Support

▶ <b>OpenGL Support:</b> Zoom/Pan (Average of 3 Benchmarks)	5.32	<b>50</b>	<b>\$7.39</b>
▶ <b>OpenGL Support:</b> Change view (Average of 2 Benchmarks)	2.83	<b>50</b>	<b>\$3.93</b>
▶ <b>OpenGL Support:</b> Live Preview of Brush (Average of 2 Benchmarks)	3.88	<b>10</b>	<b>\$1.08</b>

#### Bridge CS4

▶ <b>Image Management:</b> Review and select 20 HiRes pictures	20.75	<b>10</b>	<b>\$5.76</b>
▶ <b>Image Management:</b> Create PDF contact sheet	30.02	<b>3</b>	<b>\$2.50</b>

Total ROI generated/week	\$91.37
<b>Total ROI generated/month</b>	<b>\$365.49</b>
<b>Total ROI generated/year</b>	<b>\$4,020.36</b>

## **Appendix**

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### **Complete Benchmark Results**

# Adobe CS4 Productivity Benchmarks: Complete Benchmark Results

	CS3	CS4
<b>InDesign CS4</b>		
▶ Smart Guides: Simple alignment of two objects	10.17	5.80
▶ Smart Guides: Create object and align with two objects	22.11	10.60
▶ Smart Guides: Center object between two others	9.96	5.67
▶ User Interface Efficiency: Set up two windows for work	18.56	7.07
▶ User Interface Efficiency: Set up three windows for work	25.51	7.48
▶ Change 2-window setup	10.61	3.30
▶ Change 3-window setup	14.86	7.99
▶ Smart Text Reflow: Add text/insert required pages	16.63	4.47
▶ Smart Text Reflow: Delete text/delete empty pages	8.51	2.47
▶ Links Panel: Relink to Folder	74.96	12.98
▶ Links Panel: Check placed image for metadata	31.54	9.51
▶ Links Panel: Edit original with other application	16.60	6.73
▶ Links Panel: Check color space of 10 images	19.43	8.91
▶ Live Preflight: 4-page document with 1 error	43.54	21.65
▶ Live Preflight: 10-page document with 5 errors	103.31	52.46
<b>Illustrator CS4</b>		
▶ User Interface Efficiency: Move element between two open documents	8.48	4.19
▶ User Interface Efficiency: Combine elements from three open documents	32.23	18.93
▶ Gradient Tool: Modify simple gradient	8.17	5.55
▶ Gradient Tool: Change angle of linear gradient	11.21	4.61
▶ Gradient Tool: Modify simple gradient and change angle	15.12	9.82
▶ Gradient Tool: Modify complex gradient and save as preset	19.58	10.42
▶ Multiple Artboards: Change font in 3 different documents/artboards	71.83	24.46
▶ Multiple Artboards: Make 3 different changes in 3 different documents/artboards	117.07	57.02
▶ Multiple Artboards: Export 3-page project to EPS	52.76	24.86
▶ Multiple Artboards: Export 8-page project to EPS	99.20	27.90
▶ Multiple Artboards: Export 3-page project to PDF	45.60	19.87
▶ Multiple Artboards: Export 8-page project to PDF	74.38	20.44
▶ Appearance Panel: Change 2 parameters in Appearance panel	12.97	9.17
▶ Appearance Panel: Change 5 parameters in Appearance panel	39.94	26.96
▶ Appearance Panel: Change complex settings in Appearance panel	47.82	32.74
<b>Dreamweaver CS4</b>		
▶ Save and place PS file in Dreamweaver	21.55	20.34
▶ Simple Photoshop round-trip	20.74	11.05
▶ 3 Photoshop round-trips	61.38	33.98
▶ Live View vs. Simple Browser round-trip	14.94	8.15
▶ Live code vs. Checking code in browser	52.61	22.81
<b>Fireworks CS4/Dreamweaver CS4</b>		
▶ Create simple CSS style sheet, apply and modify	246.57	41.94
<b>Flash CS4 Professional</b>		
▶ Create simple Motion Tween	13.26	4.70
▶ Create four-step Motion Tween	40.92	22.22
▶ Adjust/scale single clip (2 Keyframes)	11.42	3.66
▶ Adjust/scale 3 clips (7 Keyframes)	39.68	8.51
▶ Create simple Motion Guide	43.50	14.33
▶ Move and modify Motion Guide	27.39	11.38
<b>Photoshop CS4: Workflow Efficiency</b>		
▶ Adjustments Panel: Simple adjustment	12.84	4.89
▶ Adjustments Panel: Three adjustments	35.50	16.88
▶ Adjustments Panel Workflow example	64.32	44.06
▶ Masks Panel: Create simple layer mask	13.42	7.76

# Adobe CS4 Productivity Benchmarks: Complete Benchmark Results

	CS3	CS4
▶ Masks Panel: Create mask from color range	16.14	8.79
▶ Masks Panel: Create mask and refine edge of selection	21.34	13.10
▶ Masks Panel: Create mask and feather edge	24.29	10.90
<b>Photoshop CS4: User Interface Efficiency</b>		
▶ User Interface: Manage Windows	17.09	7.78
▶ User Interface: Combine elements from several documents	23.08	14.95
▶ User Interface: Arrange 3 open documents	19.54	7.25
<b>Photoshop CS4: OpenGL Support</b>		
▶ OpenGL: Zoom into 1.3GB image (Full Screen to pixel level)	15.36	10.45
▶ OpenGL: Zoom out of 1.3GB image (Pixel level to minimum size)	23.51	18.60
▶ OpenGL: Pan 1.3GB image laterally	13.53	7.40
▶ OpenGL: Change close-up view	3.49	1.98
▶ OpenGL: Inspect 5 different details of large image	15.27	11.13
▶ OpenGL: Change size of brush	4.60	1.54
▶ OpenGL: Change size of brush, test and undo	8.99	4.30
<b>Bridge CS4</b>		
▶ Review and select 20 HiRes pictures	37.14	16.39
▶ Create PDF contact sheet	57.47	27.45
<b>Premiere Pro CS4: Editing Efficiency</b>		
▶ Apply video effect to 3 clips in a sequence	16.79	8.26
▶ Apply video effect to 10 clip sequence	19.01	8.90
▶ Apply multiple video effects to 3 clips	46.36	30.15
▶ Apply multiple video effects to 10 clip sequence	42.20	29.25
▶ Apply multiple video effects to three 10 clip sequences	68.58	41.39
▶ Remove all video effects from 3 clips	16.31	4.78
▶ Remove all video effects from 10 clip sequence	47.31	4.62
▶ Change speed of 3 clips in a sequence	17.76	6.47
▶ Change speed of 10 clip sequence	54.07	6.35
▶ Apply video transitions between 3 clips	9.25	4.35
▶ Apply video transitions to 10 clip sequence	24.89	4.59
▶ Speech to text: Search for point in 10 minute interview	88.21	16.46
▶ Speech to text: Search for point within 10 interview clips of 2/3 minutes each	588.08	95.42
<b>Premiere Pro CS4: Tapeless Workflow</b>		
▶ XDCAM Import: Simple clip (60 seconds)	18.88	18.32
▶ XDCAM Import: Long clip (5 minutes)	80.09	79.13
▶ XDCAM Import: Complete Project (8GB SxS card)	412.53	409.97
▶ Tapeless Workflow Benchmark (XDCAM)	195.47	181.33
<b>On Location/Premiere Pro CS4: Direct-to-disc Workflow</b>		
▶ Direct to disc: Single clip (60sec)	84.74	8.98
▶ Direct to disc: Single clip (5min)	322.28	9.02
▶ Direct to disc: Multiple Clips (20 min)	1224.33	9.62
▶ Direct to disc: Extract three 3-minute segments from source material	691.41	57.99
<b>SoundBooth CS4</b>		
▶ Adjust Volume of 5 individual clips	50.70	15.69
▶ Adjust Volume of 10 individual clips	103.88	17.24
<b>After Effects CS4</b>		
▶ Quick Search Parameters: Search for asset within a typical project	18.33	4.08
▶ Quick Search Parameters: Search for asset within a complex project	101.54	19.28
▶ Apply effect to Premiere Pro clip using Dynamic Link with After Effects	88.20	30.11
▶ Navigate 5-level nested composition	8.25	4.41
▶ Navigate complex nested composition	22.75	10.42