

Adobe CS6: 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 CS6 applications 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 performance and workflow productivity based on Adobe® Creative Suite® 6 with a previous release of the software. Highly detailed benchmarks separately covered four specific market segments: **design, digital imaging, web design**, and **video production**. A total of over 300 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.

Structure of this Report

This report is structured in 3 sections:

Creative Tools 2012: Market Trends (page 5) presents the trends and evolutions of the digital content creation market;

Adobe CS6: Pushing the Boundaries of Integration and Productivity (page 8) analyzes technology and features of Adobe CS6 applications, and presents key figures of the productivity benchmarks conducted for this project;

The Cumulative Effect of Productivity Gains (page 11) presents core

Major Points

- This report presents data from research conducted by Pfeiffer Consulting in the Spring of 2012.
- 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 CS6 Productivity Benchmark Report at 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 CS6 Productivity Benchmark Report" at www.pfeifferreport.com.

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**.

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Creative Tools 2012: Market Trends

Major Points

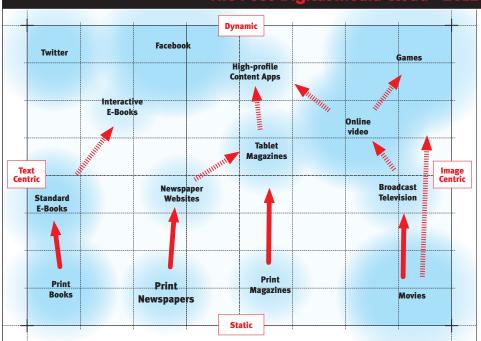
- Creative Tools are taking an increasingly important place in technology development.
- The needs and requirement of the modern content production workflow are becoming more and more complex as the number of devices and media instances multiply.
- Adobe Creative Cloud profoundly changes the way professionals access and use creative tools, providing access to a much wider potential user base.

Reinventing the creative workflow

In terms of computer-based tools, few areas have evolved as dramatically over the past decade as creative software. Driven by the explosive growth of digital content devices, from smart-phones to tablets and e-readers, the need for an ever-greater variety of content has led to a dizzying variety of creative possibilities—and challenges. In addition, well-established fields such as video and cinema production have witnessed technical revolutions that redefine production workflows from the ground up; graphic design and web-development had to scramble to accommodate new content and experience requirements such as multi-device content development, sophisticated user experiences and app development.

To add another layer of complexity, the much-hyped shift from PC-based local software applications to cloud-based technologies, and the emergence of tablets as useful tools in the creative workflow has forced software developers to redefine their development strategies from the ground up. We're definitely not in Kansas any more...

The Post-Digital Media Cloud - 2012 Edition

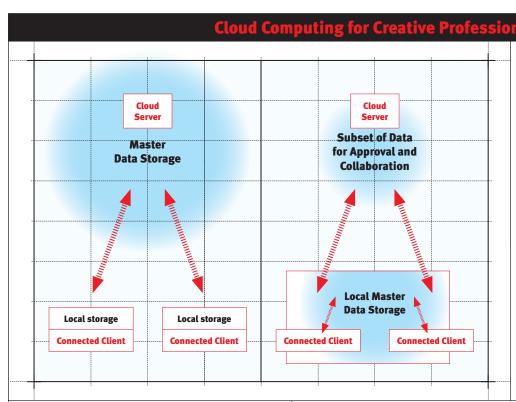


Since the post-digital media cloud was first defined* five years ago, the contemporary media landscape has significantly evolved: tablets and e-book readers have emerged as major content delivery channels, creating a slew of workflow challenges for content producers.

While 5 years ago, social media were still in their infancy compared to the current situation, they have become major forces in a media universe where boundaries are increasingly fluctuating.

Excellence-driven repurposing of content, is more than ever an essential aspect of content production, and drives the need for increasingly sophisticated tools.

^{*}The Emergence of the Post-Digital Media Cloud, Pfeiffer Report on Emerging Trends and Technologies, January 2007



Cloud computing has garnered enormous traction over the past few years, and it is clear that it will also play an increasingly important part in the creative workflow.

Nevertheless, it is important to realize that the way creative professionals will use cloud servers is likely going to be significantly different from other branches of cloud computing.

Specifically, for the near future, the role of the cloud server in creative computing is likely to be limited to sharing files for approval and collaboration, rather than as master storage for all project related data.

The challenges for professional creative software

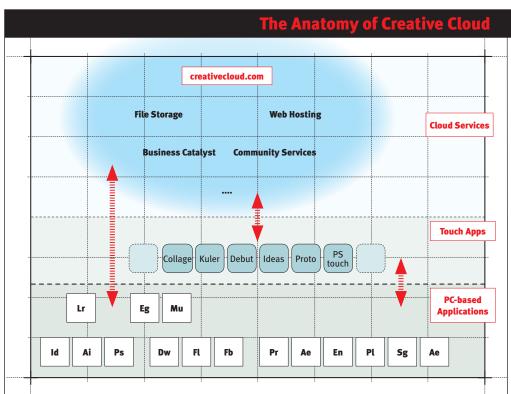
For developers of high-end professional creative software such as Adobe, this situation has created a unique set of challenges. Moving software to the cloud may be a brilliant idea if all you have to deal with is essentially a huge database of text-based client data with a few PDF and JPEG files here and there; for top-of-the-line graphics applications such as Adobe Photoshop®, Illustrator®, After Effects® or InDesign®, benefitting from cloud services has a completely different meaning. To do their job efficiently, these software applications will need all the hardware and processing power of a local workstation — at least for the foreseeable future.

Similar considerations apply to the emergence of tablet apps: in order to fulfill the potential of a lightweight, touch-enabled creative tools, this new breed of applications will have to add additional capacities to the core software programs, not just imitate their features.

2012: The vear of Creative Cloud

Creative Cloud is an ambitious attempt to redefine the creative workflow with regards to the developments outlined above— while preserving the unique capacities of the software applications Adobe is best known for. This means that while Creative Cloud includes all the applications of Creative Suite 6, they obviously do not run in the cloud, but on the local workstation. (And, as the benchmarks for this research project show, very efficiently so: Adobe Illustrator, rewritten from the ground up for this release, is much more efficient in handling complex files than previous versions of the program.)

In fact, as far as the CS6 applications are concerned, Creative Cloud is essentially a subscription and delivery mechanism: users who sign up for Creative Cloud can download and install any or all of the CS6 applications contained in Creative Suite Master Collection CS6, covering



Creative Cloud is not so much a cloud computing platform per se, but rather an original approach to delivering a wide—and constantly evolving—variety of technologies to creative professionals.

With this goal in mind, Creative Cloud combines the complete set of applications comprised in Master Collection CS6, several other applications only available by subsscription, as well as a growing number of Touch apps destined for tablet devices.

The aim is not to replicate desktop functionality on other platforms, but rather to build an intelligently integrated set of tools that draw the best of each environment.

design, web development, video production and of course Photoshop CS6 Extended. In addition, Creative Cloud users also have access to several other applications not included in CS6, such as Adobe Muse™, Edge and Photoshop Lightroom®, as well as cloud-based file storage, web-hosting and on-line services such as BusinessCatalyst®. More importantly, Creative Cloud subscriptions also include any upgrade - including major upgrades to the key software packages that are not included with the purchase of a permanent licence.

What Creative Cloud subscriptions mean for the market

While subscription-based software services have been around for years, Adobe has introduced a completely new approach to charging for the right to use its application software. By offering an all-inclusive access to its software at a very competitive monthly fee that includes all upgrades, Adobe essentially offers creative professionals the possibility to subscribe to their capacity to develop software that is relevant for their profession. In other words, Creative Cloud users do not subscribe to a specific software package: they get access to a pool of technical know-how and technology that evolves with the market.

This means that all of a sudden, users who are not sure they can justify the purchase of a software suite that can cost thousands of dollars suddenly can access this software potential in a completely different way.

It is too early to clearly understand what the long-term ramifications of this new way of accessing software will be, but from the strong positive reactions in the market it seems likely that Creative Cloud will have a profound impact on the market of creative software.

Adobe CS6: Pushing the Boundaries of Integration and Productivity

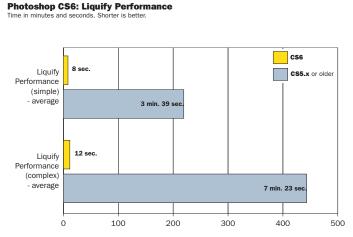
All Adobe CS6 applications benchmarked in this research project showed significant productivity increases over previous releases of the same application.

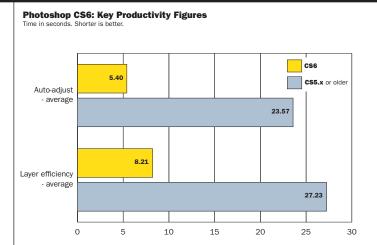
- Several CS6 applications, including Illustrator CS6, Photoshop CS6, After Effects CS6 and Premiere Pro CS6 provide architectural changes that result in a strong performance increase for time-consuming operations.
- Photoshop CS6 and Premiere Pro CS6, among others, support GPU acceleration using the OpenCL specification.

Welcome the age of creativity

A decade or two ago, creative software could have been viewed as a minor and (on the grand scale of technology evolution) relatively inconsequential branch of software development. Today, it has become one of the most active development sectors on the planet. As the needs of creative users evolve and diversify, so do the software tools that serve these needs. Developers are under constant pressure to make their applications both more sophisticated and more productive.

Adobe is of course on the front-lines of this development. Photoshop, Illustrator and InDesign (to name just three) are extremely mature software packages—Illustrator just turned 25 a few months ago. Yet it would be wrong to assume that recent releases only add minor improvements to these programs. Quite to the contrary, in fact. Take Illustrator CS6, for example. The new release represents a major revision of the code, adding 64-bit compatibility, a completely redesigned user interface, and significantly improved performance, as well as major feature innovations.





Photoshop CS6 accelerates the performance of the popular Liquify function very significantly— when working with high-resolution images it was almost 40 times faster than the CS5.x release. (Chart on the left.)

Streamlining of frequently used workflow operations such as the auto adjustment feature and operations for dealing with layers provide strong productivity enhancements over older releases of Photoshop. (Chart on the right.)

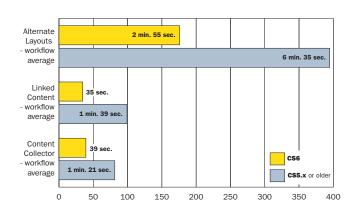
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Illustrator CS6: Key Benchmark Figures





InDesign CS6: Key Benchmark Figures



64bit compatibility and other architectural enhancements provide Illustrator CS6 with strong performance enhancements. New features such as the redesigned Pattern feature provide both higher productivity and increased creative potential (Chart on the left.)

40

InDesign CS6 brings several important new developments, such as Alternate Layouts and Linked Content that make content delivery to multiple devices much more efficient (Chart on the right.)

Similar considerations apply to all the other CS6 packages. In fact the constant pace of development at Adobe is certainly one of the factors that makes their Creative Cloud offering so attractive to creative professionals.

Reinventing the meaning of efficiency

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The rapid speed of software development is of course a direct result of the constantly growing and diversifying media landscape. In practice, the very meaning of the words productivity and efficiency has evolved amazingly over the past few years; in fact, some of the workflow issues that have become major productivity hurdles did not even exist a few years ago.

This is particularly true for the proliferation of digital content devices, from smartphones to tablets and e-readers: While the category barely existed five years ago, it has brought significant challenges to the publishing and content delivery workflow. Even seemingly simple operations such as creating variations for different types of devices and their display specifications have become bottlenecks that can be extremely time-consuming to cope with.

What CS6 brings to the table

If there is one common underlying theme to the applications that are included in Creative Suite 6 and Creative Cloud, it is to help users deal more efficiently with the issues of the modern media landscape—and in many cases this has led to major new features and developments that can have a significant impact on the productivity of the creative workflow.

Dealing with multiple devices is one of the key themes in **InDesign CS6**, manifest in the Liquid Layout and Alternate Layouts features, Linked Content, and the new Content Collector tool. In Design CS6 is arguably one of the most ground-breaking releases of this application, and it effectively redefines the graphic design process, not only for digital devices, but for the entire design-related workflow.

Illustrator CS6 not only innovates in terms of user interface, the performance enhancements have made working with complex files much more

OpenCL Acceleration

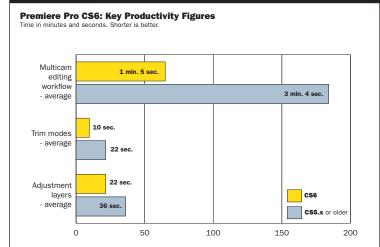
Adobe has been harnessing the processing power of video cards for some time, starting with OpenGL acceleration in Photoshop CS4 and CUDA-based acceleration in Premiere Pro CS5.x, After Effects CS5.x and Adobe Media Encoder CS5.x.

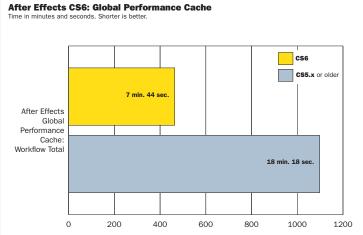
CS6 applications go even further, in provide acceleration using the OpenCL specification on selected video cards*.

This is particularly important for the growing group of creative professionals (particularly in professional video production) who rely on notebook computers rather than desktop workstations: while CUDA acceleration requires one of a handful of compatible graphics cards to be installed in the workstation, OpenCL is supported by recent laptop computers as well.

*GPU-accelerated performance in Adobe Premiere Pro is available for AMD Radeon HD 6750M and AMD Radeon HD 6770M graphics cards with a minimum of 1GB VRAM that are available on MacBook Pro computers running OS X 10.7.

Productivity Figures of the CS6 Video Production Workflow





Adobe Premiere Pro CS6 provides a streamlined and more efficient user interface and improves frequently used program options to provide significantly increased productivity. (Chart on the left.)

The Global Performance Cache in After Effects CS6 uses different caching mechanisms to speed up the effects and post-production workflow. (Chart on the right.)

efficient (see chart), and some of the key features introduced in the new release significantly accelerate common yet complex tasks such as the creation of repetitive patterns.

Photoshop CS6 not only brings a new user interface, but some spectacular new features, including tools for photographic blur effects, a real-time Liquify function (see chart), not to mention significantly improved ways of working with layers. On the performance side, Photoshop CS6 now supports OpenCL-based GPU acceleration.

Dreamweaver CS6 significantly improves on an area that has become crucial in modern web development: the capacity to rapidly preview a page on different device resolutions. As for the performance side, Adobe Dreamweaver® CS6 provides significantly faster FTP transfer speeds (see sidebar). **Adobe Flash CS6**® automates one of the most time-consuming aspects in games development: the creation of sprite-sheets for animation. Productivity gains in our benchmarks were significant.

Last but not least, **Production Premium CS6** provides an integrated post-production workflow that brings major new releases of **Adobe Premiere Pro CS6** and **After Effects CS6**, as well as several other key applications. Both Adobe Premiere Pro CS6 and After Effects CS6 use the Mercury Playback Engine for improved performance, and provide CUDA as well as OpenCL support for GPU acceleration (see sidebar); New features in Adobe Premiere Pro CS6 such as expanded multicam editing, powerful trimming tools, Adjustment Layers, and faster Project panel workflows provide measurable time savings for video editors. After Effects CS6 also brings the Global Performance Cache, which provides a significant boost to efficiency of the effects workflow, as the benchmarks for this research show (see sidebar.)

FTP Performance

Dreamweaver CS6 provides an essential under-the-hood improvement over previous releases of the program: the speed at which FTP uploads are performed.

This is particularly noticeable in transfers of folders containing a large number of small files: in our benchmarks, Dreamweaver CS6 was over 30% faster than the legacy release in uploading files.

The Cumulative Effect of Productivity Gains

Major Points

Even seemingly minor productivity gains on frequently repeated operations can lead to significant return on investment.

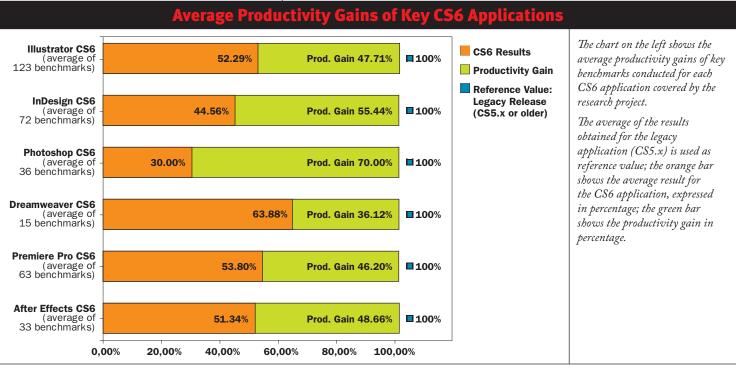
- The ROI projections provided in this report are based on over 300 benchmarks and productivity measures conducted with Adobe CS6 applications.
- The ROI projections derived from the cumulative effect of productivity gains can easily reach thousands of dollars per workstation.

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 a publishing house, advertising agency, or video production company—essentially, any company where the goods or services 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



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.

The invisible gains

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 a creative professional uses one of the enhanced layer management features introduced in the Photoshop CS6 release he saves on average 19.01 seconds over older versions of the same software. **Repeated just ten times a day, this can save a designer over an hour per month.** And we are only considering a small, isolated (and seemingly minor) feature group. Once one starts adding up the individual productivity gains provided by a variety of efficiency enhancements and features introduced in Adobe Creative Suite 6, 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 CS6 require little or no learning.)

Every click counts

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.

The bottom line

Pfeiffer Consulting has analyzed the data from the productivity benchmarks to establish the impact of productivity gains on return on investment. Adobe CS6 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 6 can be in excess of **\$10,000** per year and per workstation.

Adobe CS6 Design & Web Premium: Return on In	vestmen	it Scenar	rios (Per	Worksta	tion)
Over 300 individual benchmarks have been conducted for this project. The figures presented in this table are average values of groups of several benchmarks.	Prod. measures in Adobe CS5.x workflow (Time in seconds)	Prod. measures in Adobe CS6 workflow (Time in seconds)	Individual time savings (seconds)	Productivity gain (%)	ROI generated (1 hour @ \$100)
Incremental productivity gains (Return on Investment generated by	y individua	al operatior			
InDesign CS6: Workflow Efficiency					
▶ Align to Key Object: Average of 9 individual benchmarks	13.99	6.24	7.75	55.38%	\$0.22
► Alternate Layouts: Average of 9 individual workflow benchmarks	394.71	175.80	218.91	55.46%	\$6.08
► Linked Content: Average of 15 individual benchmarks	99.22	34.49	64.73	65.24%	\$1.80
Content Collector: Average of 12 individual benchmarks	81.42	39.26	42.16	51.78%	\$1.17
► Access to frequently used fonts: Average of 12 individual benchmarks	30.40	17.27	13.13	43.20%	\$0.36
Illustrator CS6: Performance and Productivity				I	
▶ Illustrator CS6 performance: Average of 81 individual benchmarks	67.03	38.03	29.00	43.26%	\$0.81
▶ Pattern workflow: Average of 18 individual benchmarks	99.13	22.91	76.22	76.89%	\$2.12
► Gradients on strokes: Average of 12 individual benchmarks	51.44	14.91	36.54	71.02%	\$1.01
▶ User interface efficiency: Average of 12 individual benchmarks	7.24	2.89	4.35	60.03%	\$0.12
Dreamweaver CS6: Performance and Productivity				1 - 2 - 2 - 7 0	75.22
► FTP performance (typical file-size): Average of 12 individual benchmarks	250.24	160.69	89.54	35.78%	\$2.49
▶ Preview webpage for 3 different devices: Average of 3 individual benchmarks	11.51	3.95	7.56	65.71%	\$0.21
Flash CS6: Animation Efficiency	11.01	0.00	1.00	3011270	Ψ0.21
► Create spritesheet for 10-frame animation: Workflow average	184.69	14.41	170.28	92.20%	\$4.73
Photoshop CS6: Performance and Productivity	10 1100		2.0.20	02.20%	ψσ
► Photoshop CS6 performance: Liquify performance - simple (average)	219.34	8.32	211.03	96.21%	\$5.86
► Auto adjustments: Average of 21 individual benchmarks	23.57	5.40	18.18	77.11%	\$0.50
► Layer efficiency: Average of 12 individual benchmarks	27.23	8.21	19.02	69.86%	\$0.50
	Time	Number of occurrences			ROI
ROI projections (based on incremental productivity gains)	saved (seconds)		(Per week)		(1 hour @ \$100)
InDesign CS6: Workflow Efficiency					
► Align to Key Object: Average of 9 individual benchmarks	7.75		10		\$2.15
► Alternate Layouts: Average of 9 individual workflow benchmarks	218.91	7			\$42.57
▶ Linked Content: Average of 15 individual benchmarks	64.73	5			\$8.99
► Content Collector: Average of 12 individual benchmarks	42.16	5			\$5.86
► Access to frequently used fonts: Average of 12 individual benchmarks	13.13		20		\$7.29
Illustrator CS6: Performance and Productivity					
▶ Illustrator CS6 performance: Average of 81 individual benchmarks	29.00		50		\$40.27
▶ Pattern workflow: Average of 18 individual benchmarks	76.22	5			\$10.59
► Gradients on strokes: Average of 12 individual benchmarks	36.54	5			\$5.07
▶ User interface efficiency: Average of 12 individual benchmarks	4.35		20		\$2.41
Dreamweaver CS6: Performance and Productivity					
▶ FTP performance (typical file-size): Average of 12 individual benchmarks	89.54		25		\$62.18
▶ Preview webpage for 3 different devices: Average of 3 individual benchmarks	7.56	30			\$6.30
Flash CS6: Animation Efficiency					
▶ Create spritesheet for 10-frame animation: Workflow average	170.28		1		\$4.73
Photoshop CS6: Performance and Productivity					
▶ Photoshop CS6 performance: Liquify performance - simple (average)	211.03		0.5		\$2.93
► Auto adjustments: Average of 21 individual benchmarks	18.18	10			\$5.05
▶ Layer efficiency: Average of 12 individual benchmarks	19.02		10		\$5.28
	Total ROI generated/week				\$206.40
Total ROI generated/month					
	Total ROI ge	nerated/mon	nth		\$825.61
		enerated/mon			\$825.61 \$9,081.71

Adobe CS6 Production Premium: Return on Investment Scenarios (Per Workstation)					
Over 300 individual benchmarks have been conducted for this project. The figures presented in this table are average values of groups of several benchmarks.	Prod. measures in Adobe CS5.x workflow (Time in seconds)	Prod. measures in Adobe CS6 workflow (Time in seconds)	Individual time savings (seconds)	Productivity gain (%)	ROI generated (1 hour @ \$100)
Incremental productivity gains (Return on Investment generated by	ndividual o	peration)			
Premiere Pro CS6: Performance and Productivity					
▶ Multicam editing: Create and edit 6-camera multicam sequence	269.08	64.96	204.12	75.86%	\$5.67
▶ Warp Stabilizer: Stabilize short clip	225.19	152.86	72.33	32.12%	\$2.01
▶ Trim modes: Select precise trim	21.60	12.91	8.69	40.23%	\$0.24
▶ Trim modes: Fine-tune trim	21.51	6.37	15.14	70.37%	\$0.42
► Adjustment Layers: Apply/modify effects settings for 5 clips	43.36	28.17	15.19	35.04%	\$0.42
► Adjustment Layers: Apply/modify effects settings for 3 sets of clips	101.40	58.16	43.24	42.64%	\$1.20
▶ Hover Scrub: Select 10 clips out of 50 rushes	86.33	18.63	67.70	78.42%	\$1.88
After Effects CS6: Global Performance Cache	00.00	10.00	011110	1011270	Ψ1.00
➤ Simple composition (2 min.): Preview after re-launch	310.00	125.00	185.00	59.68%	\$5.14
➤ Simple composition (2 min.): Undo, preview presentation	245.00	122.00	123.00	50.20%	\$3.42
► Effects-heavy composition (30 sec.): Display presentation after re-launch/restart	355.00	54.12	300.88	84.75%	\$8.36
► Effects-heavy composition (30 sec.): Undo, preview presentation	357.00	30.00	327.00	91.60%	\$9.08
Encore CS6: Performance and Productivity	337.00	30.00	327.00	31.0070	ψ3.00
► Dynamic Link: Send composition to Encore CS6	15.39	9.19	6.20	40.29%	\$0.17
► Encore CS6 performance: Transcode short sequence for DVD burning	122.20	80.64	41.56	34.01%	\$1.15
Photoshop CS6: Performance and Productivity	122.20	00.04	71.30	34.01/0	ψ1.15
► Liquify performance (simple): Average of 18 individual benchmarks	219.34	8.32	211.03	96.21%	\$5.86
► Auto adjustments: Average of 12 individual benchmarks	23.57	5.40	18.18	77.11%	\$0.50
► Layer efficiency: Average of 21 individual benchmarks	27.23	8.21	19.02	69.86%	\$0.50
ROI projections (based on incremental productivity gains)	Time saved (seconds)	Number of occurrences (Per week)			ROI (1 hour @ \$100)
Premiere Pro CS6: Performance and Productivity	(Seconds)				φ ψ100)
► Multicam editing: Create and edit 6-camera multicam sequence	204.12		2		\$11.34
➤ Warp Stabilizer: Stabilize short clip	72.33	10			\$20.09
► Trim modes: Select precise trim	8.69	20			\$4.83
► Trim modes: Scient precise time Trim modes: Fine-tune trim	15.14	20			\$8.41
► Adjustment Layers: Apply/modify effects settings for 5 clips	15.19	10			\$4.22
► Adjustment Layers: Apply/modify effects settings for 3 sets of clips	43.24	10			\$12.01
► Hover Scrub: Select 10 clips out of 50 rushes	67.70	10			\$18.81
After Effects CS6: Global Performance Cache	07.70				420.02
▶ Simple composition (2 min.): Preview after re-launch	185.00		5		\$25.69
➤ Simple composition (2 min.): Undo, preview presentation	123.00	10		\$34.17	
► Effects-heavy composition (30 sec.): Display presentation after re-launch/restart	300.88	5			\$41.79
► Effects-heavy composition (30 sec.): Undo, preview presentation	327.00	10		\$90.83	
Encore CS6: Performance and Productivity	321.00				430.00
► Dynamic Link: Send composition to Encore CS6	6.20		2		\$0.34
► Encore CS6 performance: Transcode short sequence for DVD burning	41.56	2			\$2.31
Photoshop CS6: Performance and Productivity	71.00				42.02
► Liquify performance (simple): Average of 18 individual benchmarks	211.03		1		\$5.86
► Auto adjustments: Average of 12 individual benchmarks	18.18	<u>1</u> 5			\$2.52
► Layer efficiency: Average of 21 individual benchmarks	19.02		5		\$2.64
- Layer emercine in Arciago of 21 individual penellinality		nerated/wee			\$283.23
	Total ROI generated/week Total ROI generated/month				\$1,132.92
		Total ROI generated/year			
Adoba CS6: Market Perspectives, Productivity and Peturn on Investment	IOLAI AUI E	,oneraceu/ y	vai		\$12,462.09
Adobe CS6: Market Perspectives, Productivity and Return on Investment					14

Digital Imaging: Return on Investment	Scenarios	(Per Woı	kstation	1)	
Over 300 individual benchmarks have been conducted for this project. The figures presented in this table are average values of groups of several benchmarks.	Prod. measures in Adobe CS5.x workflow (Time in seconds)	Prod. measures in Adobe CS6 workflow (Time in seconds)	Individual time savings (seconds)	Productivity gain (%)	ROI generated (1 hour @ \$100)
Incremental productivity gains (Return on Investment generated by	y individual o	peration)		<u>'</u>	<u> </u>
Photoshop CS6: Liquify Benchmark (Large Images)					
▶ Photoshop CS6 performance: Display Liquify Window (average)	65.88	1.11	64.77	98.31%	\$1.80
▶ Photoshop CS6 performance: Liquify performance - simple (average)	219.34	8.32	211.03	96.21%	\$5.86
▶ Photoshop CS6 performance: Liquify performance - complex (average)	443.06	11.71	431.34	97.36%	\$11.98
Photoshop CS6: Retouching Efficiency			<u> </u>		
▶ Retouching Efficiency: Content-Aware Move	30.34	14.24	16.10	53.06%	\$0.45
Photoshop CS6: Laver Management Efficiency		ļ.			
► Layer efficiency: Apply effect to group of 5 layers	23.12	8.23	14.89	64.40%	\$0.41
► Layer efficiency: Modify effect settings (5 layers)	22.61	4.96	17.65	78.08%	\$0.49
▶ Layer efficiency: Apply effect to group of 10 layers	33.97	8.56	25.41	74.80%	\$0.71
► Layer efficiency: Modify effect settings (10 layers)	40.47	7.73	32.74	80.90%	\$0.91
► Layer efficiency: Find layer by name	22.07	8.15	13.92	63.09%	\$0.39
► Layer efficiency: Find layer by type	37.81	10.03	27.78	73.47%	\$0.77
▶ Layer efficiency: Rename 5 layers	33.66	18.01	15.64	46.48%	\$0.43
Photoshop CS6: Color Correction Efficiency	00.00	10.01		1011070	700
Color correction: Auto adjust Brightness (50MB file)	23.28	5.46	17.82	76.54%	\$0.50
Color correction: Auto adjust Levels (50MB file)	19.96	4.93	15.03	75.32%	\$0.42
Color correction: Auto adjust Brightness (300MB file)	25.45	6.88	18.57	72.97%	\$0.52
Color correction: Auto adjust Engineers (300MB file)	25.59	4.31	21.28	83.16%	\$0.59
ROI projections (based on incremental productivity gains)	Time saved (seconds)	Number of occurrences (Per week)			ROI (1 hou @ \$100
Photoshop CS6: Liquify Benchmark (Large Images)					
▶ Photoshop CS6 performance: Display Liquify Window (average)	64.77	1			\$1.80
▶ Photoshop CS6 performance: Liquify performance - simple (average)	211.03	1			\$5.86
▶ Photoshop CS6 performance: Liquify performance - complex (average)	431.34	1		\$11.98	
Photoshop CS6: Retouching Efficiency					
▶ Retouching Efficiency: Content-Aware Move	16.10		5		\$2.24
Photoshop CS6: Layer Management Efficiency	_	Į.			
► Layer efficiency: Apply effect to group of 5 layers	14.89	10			\$4.14
► Layer efficiency: Modify effect settings (5 layers)	17.65	10			\$4.90
▶ Layer efficiency: Apply effect to group of 10 layers	25.41	10			\$7.06
► Layer efficiency: Modify effect settings (10 layers)	32.74	10			\$9.09
▶ Layer efficiency: Find layer by name	13.92	20			\$7.74
▶ Layer efficiency: Find layer by type	27.78	20			\$15.43
▶ Layer efficiency: Rename 5 layers	15.64	5			\$2.17
Photoshop CS6: Color Correction Efficiency	1	l	_		
Color correction: Auto adjust Brightness (50MB file)	17.82		25		\$12.38
Color correction: Auto adjust Levels (50MB file)	21.28	25			\$14.78
Color correction: Auto adjust Brightness (300MB file)	18.57	25			\$12.90
Color correction: Auto adjust Levels (300MB file)	21.28		25		\$14.78
	Total ROI generated/week				\$127.2
	Total ROI generated/month				\$508.9
	Total ROI generated/year				\$5,598.3
	iotal NOI g	onerateu/ yt	, ut		40,090.0