

Developing a More Effective
Creative Operations Management System
For Creative Businesses

By

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Ryan Hembree

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of the University of Kansas in partial fulfillment of the requirements for the degree of
Master of Arts.

Chairperson Michael D. Eckersley

Richard L. Branham

Alan R. McClure

Wallace W. Meyer, Jr.

Date Defended: April 22, 2011

The Thesis Committee for Ryan Hembree
certifies that this is the approved version of the following thesis:

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Abstract:

Most creative businesses remain limited in organizational size, sales, and profitability, primarily due to a lack of efficient management. Unless the principal or owner of a creative business delegates some of the functional aspects of operations to other staff, or finds a way to automate core processes and procedures, the firm will experience volatility, growth struggles, and possibly even failure. By developing a project and knowledge management system that is tailored to the unique needs of creative businesses, many of the daily tasks and management issues that currently overwhelm owners and principals will be streamlined and automated.

The C.O.M.mand Center (Creative Operations Manager) system is an online project, time and knowledge management system accessible through any web browser. The purpose of this project is to prove the value of such a system to creative businesses by researching user needs, determine why existing project management systems are not adequately meeting those needs, and then develop a design and “proof of concept” for a more appropriate solution.

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COMmand Center
Creative Operations Manager

By: Ryan Hembree

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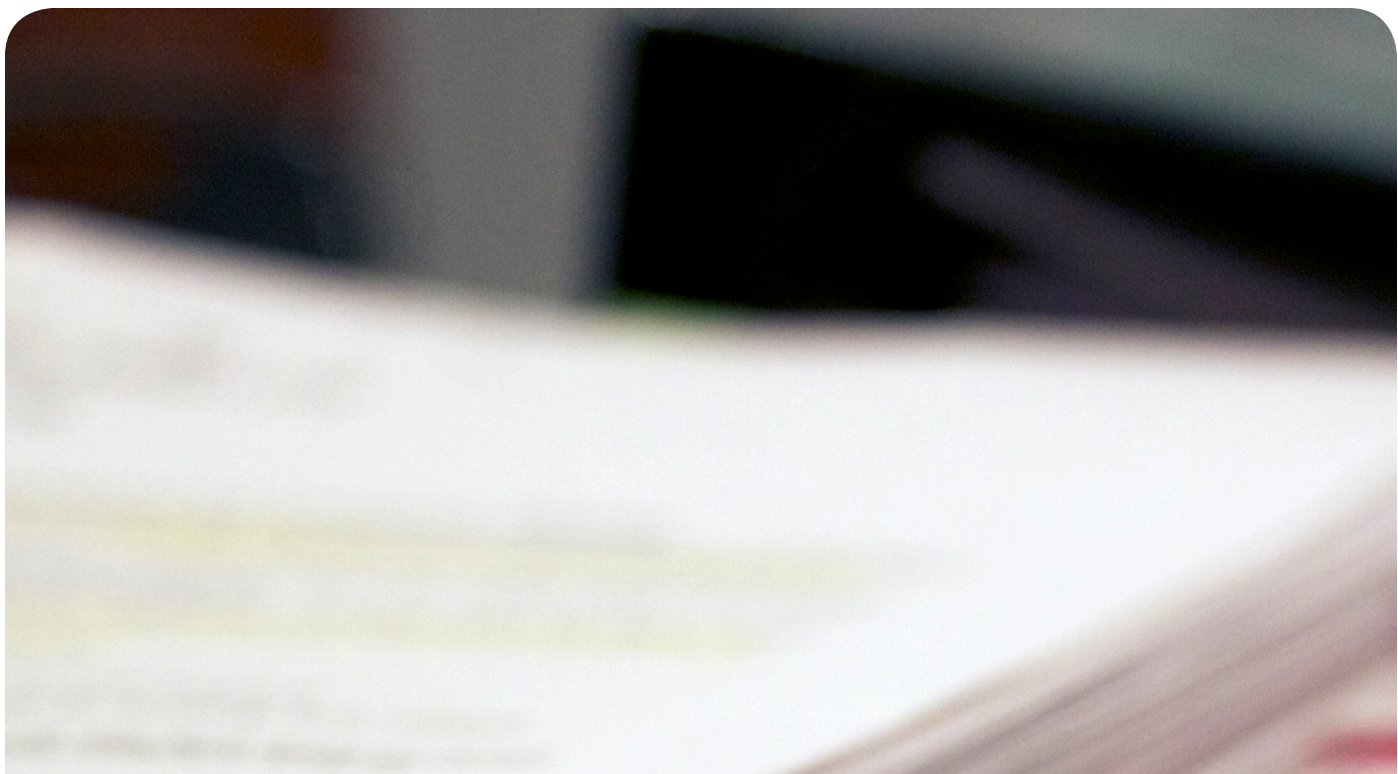
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SECTION 1
SITUATION ANALYSIS



1.1 Size constrains the manageability of a creative business

Managing creative businesses such as graphic design firms, marketing firms, and small- to medium-size advertising agencies is a unique challenge. In traditional businesses with multiple product offerings or scalable services, the functional aspects of the business are divided into different “silos” within an organization. These silos, all managed by different individuals or a dedicated team, include Operations, Marketing, Management, Product / Service, and Finance¹.

In small to medium size creative firms, however, there are neither the resources nor effective systems in place to manage all aspects of running a business. Typically, the principals or business owner must wear many different hats and assume responsibility for these operational aspects, including Marketing, Operations and Management. The exception to this rule is in the area of finance, as most owners will enlist the help of an outside bookkeeper or CPA to ensure that billing, payroll, and taxes are handled according to the law.

The challenge for creative business owners (whether as a sole practitioner, partner, or as the business owner) is to not only to effectively manage their own time, projects, and prospects, but also those of the people who work for them. Exacerbating this problem is that owners are typically the “rainmakers” for their companies, and responsible for generating new business for the firm. By devoting time to non-billable, administrative tasks such as project and time management, they are not able to pursue more profitable or strategic initiatives. Furthermore, most owners and principals use manual processes and procedures that are repetitive, time consuming, and often require the use of multiple software applications and platforms. These processes often are not adequately documented, and therefore not easily delegated.

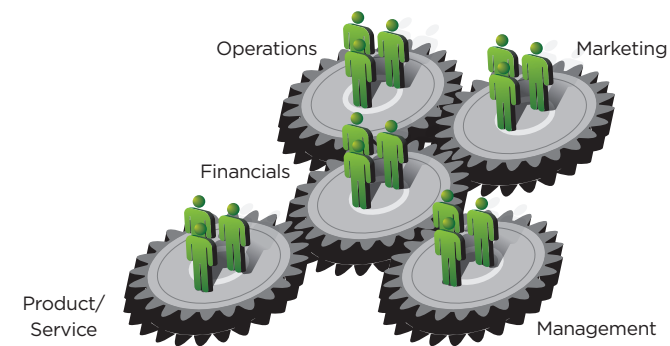


Figure 1-1: The five functional areas of business. In traditional businesses there are different teams, or “silos,” responsible for running an organization.

Adapted from FastTrac® GrowthVenture Entrepreneur Manual, 112



Figure 1-2: The functional areas of business as they relate to creative businesses. Due to their smaller size, creative business owners must take on more day-to-day operational tasks.

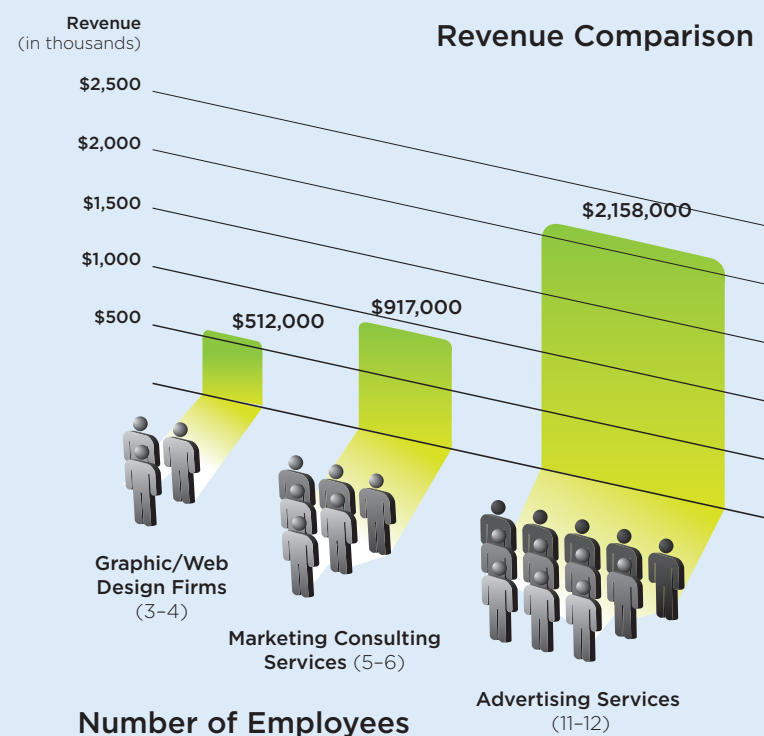
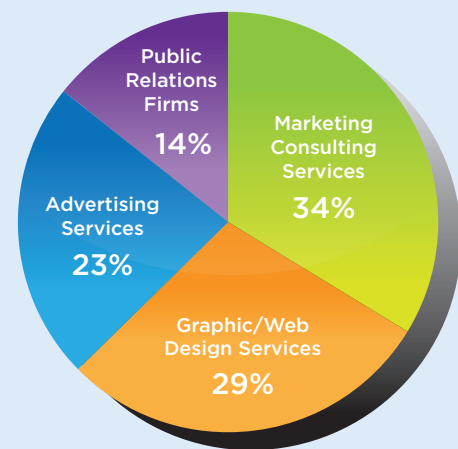
¹ FastTrac® Growthventure Entrepreneurship Manual, pg. 126

Figure 1-3: The Creative Industry within the United States.

There are approximately 55,000 creative businesses in the United States—most are small businesses with as few as 1–3 employees and as many as 12 employees. Graphic design and marketing firms, as well as advertising agencies, account for 86% of the industry.

Source: United States Department of Commerce Census Bureau Economic Survey, 2007

Creative Industry Breakdown



1.2 The need for an effective management system for creative businesses

According to the U.S. Census Bureau’s Economic Survey, last conducted in 2007, there were approximately 54,884 creative services firms in the United States. In response to the unique challenge of managing and growing a creative business, this project will focus primarily on meeting the project and knowledge management needs of graphic design firms, marketing firms, and small- to medium-size advertising agencies, which account for approximately 86% of creative businesses as classified by the North American Industry Classification System (NAICS) codes².

In *The Design of Business*, Roger Martin discusses the concept of a “knowledge funnel,” in which processes and workflow (“mysteries”) are broken down into manageable tasks or rules of thumb (“heuristics”), and then turned into a formula (“algorithm”) to develop better understanding within an organization. In essence, what he is describing is a project and knowledge management system that would allow for a more efficient way to manage a creative firm’s operations. Once a system like this is put into place within a creative business, tasks such as prospecting, preparing proposals, scheduling, and project and time management could all be automated. Employees could keep track of their projects, as well to ensure that they are on task and within budget, while also being able to manage communications with clients and vendors. Many of the processes and tasks that are typically confined to the owner’s mind may also be off-loaded into this system, allowing for everyone to share in the benefits of this knowledge.

While there are several project and studio management systems available for creative businesses, they are often overly complex and built to support much larger agencies that have the human and financial resources to implement them throughout the organization. They incorporate a full suite of project management, time management and accounting features. However, these feature-rich systems are often too expensive and complicated for most users. They require the purchase of additional hardware or software, or are delivered via a subscription service (and if the subscription is terminated, all data is lost). According to interviews with actual small creative business owners, all of them outsourced financial tasks such as accounting, payroll and taxes to a bookkeeper or CPA, therefore integrated accounting is not essential to a new project and knowledge management system.

According to Shel Perkins³, an author and expert on the subject of creative firm management, the following project management systems are predominantly in use by creative firms with fewer than 10 employees (and in which Accounting features are not included):

1. *Clients & Profits* (90% of users)
2. *Studio Manager* (79% of users)
3. *Studiometry* (80% of users)
4. *TimeFox* (81% of users have fewer than 10 employees)

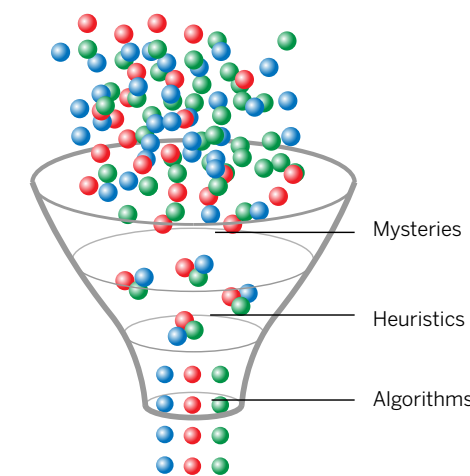


Figure 1-4: The Knowledge Funnel, from Roger Martin’s *The Design of Business*.

² For the purposes of this project, NAICS Codes utilized include: **541430** Graphic Design Services; **541613** Marketing Consulting Services; and **541810** Advertising Agencies.

³ See **Table C-2: Comparison of Project Management Software for Creative Firms** in the Appendix for Shel Perkin’s complete comparison chart of popular project management systems.

Table 1-1: Pricing for some of the most popular, existing project management systems

System	Cost	Design firm 3 employees	Marketing firm 6 employees	Ad agency 10 employees
Clients & Profits (stand alone)	\$4,999.00 (plus \$749.85/yr support)	\$5,748.00 up front; \$749.85 /yr	\$5,748.00 up front; \$749.85 /yr	\$5,748.00 up front; \$749.85 /yr
Clients & Profits ASAP (online)	\$25.00/user/month	\$900.00/yr	\$1,800/yr	\$3,000.00/yr
Studio Manager	\$895.00–\$2,495.00 (plus FileMaker Pro at \$150.00 per user)	\$1,845.00 up front	\$2,895.00 up front	\$3,995.00 up front
Studiometry	\$199.95/user; \$925.00/5 users; \$1,800.00/10 users	\$599.85 up front	\$1,124.95 up front	\$1,800.00 up front
TimeFox	\$35.00/user/month + \$5.00/extra user/month	\$540.00/yr	\$720.00/yr	\$960.00/yr
BaseCamp	\$99.00/month, unlimited users	\$1,188.00/yr	\$1,188.00/yr	\$1,188.00/yr

“For a small shop, [Function Fox] just wasn’t efficient or worth the money.”

—Kevin Fullerton, Springboard Creative



1.3 Why creative businesses do not use a project management system

There are several reasons why creative businesses may choose not to use existing project management systems. First, due to their limited resources (revenue), most firms are simply unable to afford one of these systems. Second, there are too many choices⁴, so knowing which system might be best the firm would require too much time comparing various features. Finally, most of the systems available are not tailored to the unique needs of the firm, and the business might be forced to change their natural workflow and processes in order to accommodate the new system.

Price is an important barrier to overcome when selecting a project management system. The more feature-packed the system or software, the more expensive it is. Clients & Profits, for example, costs \$4,999.00 and then \$749.85 per year for ongoing support. Studio Manager is a relational database that costs \$1,845.00 up front, and requires the purchase of multiple licenses of another software application (FileMaker Pro) in order to use it. Online project management systems are less expensive, but require an ongoing, monthly investment in the form of a subscription plan. To ensure users stick with these systems, data entered is usually not transferable or able to be exported—if the user decides to stop using the system, all information entered up to that point would be lost forever.

While it is important for users to consider life-cycle costs of a software program or project management system, not simply the up-front charges associated with it, most users interviewed were opposed to paying high priced, ongoing charges. Since most creative businesses such as design firms, marketing firms and small advertising agencies have fewer

resources, high monthly subscription plan pricing, such as those used by Basecamp (\$99.00 per month for their “most popular” package) or Salesforce.com (\$25 per month per user) are not feasible. Complex pricing that is based on the number of system users, the number of projects tracked, or the amount of storage space needed are not only confusing, but difficult to anticipate since these numbers can fluctuate from month to month.

The choice of project management systems is daunting as well. According to Wikipedia, there are over one hundred project management systems to choose from. Faced with an abundance of options, time constraints, and the inability to distinguish between features, most small creative businesses have given up on the use of project management systems. Instead, they rely on manual processes utilizing Microsoft Excel® and Word®, QuickBooks®, and outside parties such as bookkeepers or accountants to help manage the firm’s operations.

Many project and knowledge management systems are built for generic purposes and industries, not necessarily for creative firms. Often these systems require a steep learning curve in order to use them. Without sufficient resources in terms of personnel, it is difficult to train employees to use the system. Furthermore, they might require that the firm’s processes be built around the software’s capabilities. Those systems that may be tailored to the needs of the creative market, such as Workamajig and Sohнар Traffic, are geared toward much larger firms and agencies.

“Right now our [manual] system works because of the nature of our employees... Individual employee accountability is the only thing holding it all together.”

⁴ Please refer to Appendix D: Project Management System Research

—Paul Weber, Entrepreneurship Advertising Group

Number of Systems Used

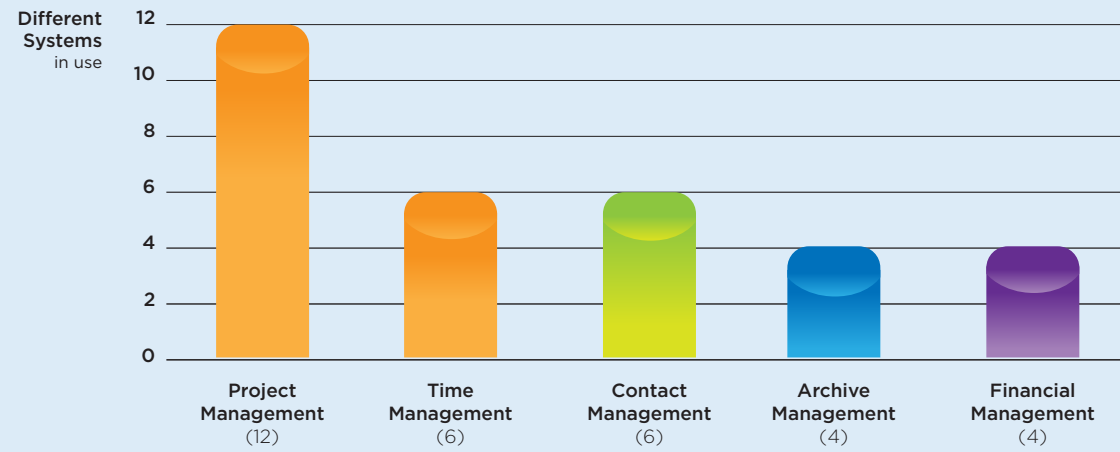


Figure 1-5: Number of different “systems” employed by the user group.

Users interviewed utilized a total of sixteen different management systems for the tasks listed above. Because there is no consensus or one system built to manage all of the necessary operational functions of their business, most owners complete these tasks manually.

Project Management
 33% Microsoft Excel
 25% Manual processes
 42% Other systems

Time Management
 25% QuickBooks
 25% Manual processes
 50% Other systems

Contact Management
 44% Manual processes
 56% Other systems

Archive Management
 56% Manual processes
 44% Other systems

Financial Management
 50% Manual processes
 30% QuickBooks
 20% Other systems

Jonathan Arnold, of Arnold Imaging, spends approximately \$500 per month (\$6,000 per year) to automate his business processes.

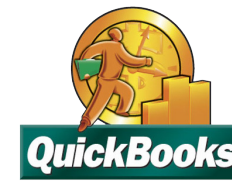
1.4 What systems creative business owners are using

In order to fully understand the management needs of graphic design firms, marketing firms, and small- to medium-size advertising agencies, a small focus group of users for the design and development of a new, more effective project and knowledge management system was selected. Representing freelance designers, small design and marketing firms, and a small advertising agency, the input of actual creative business owners allows for greater understanding of the unique needs of the industry. Through questionnaires and personal interviews, it was determined that automating and streamlining some of the operational processes of a creative firm is highly desirable.

According to Jonathan Arnold of Arnold Imaging, his goal for several years has been to “automate all of the stupid grunt work” when it comes to developing proposals, tracking time spent on projects, and determining his five-person creative firm’s profitability. Arnold incorporates Harvest (getharvest.com) for time tracking, Salesforce.com Enterprise edition for managing contacts and proposals, Microsoft Excel for estimating projects, and QuickBooks Pro for invoicing and accounting. For these four different systems, he spends approximately

\$6,000.00 per year (\$500 per month) to automate all of his business’s processes, yet he complains that his staff “[doesn’t] know where to look for anything because everything is hobbled together.”

According to research conducted among the selected user group, all users are aware of the need for a project and knowledge management system, but there appears to be no consensus as to which one is best. Several users incorporate more than one “solution” for managing their firm’s operations, but are frustrated by the lack of integration between them. Kevin Fullerton of Springboard Creative tried using FunctionFox, an existing project management system built for the creative industry, but discontinued use due to cost. Without an effective alternative, most users have resorted back to the time consuming, repetitive, and manual processes they attempted to streamline—including using Microsoft® Excel® for tracking projects, budgets and time. Proposals and work orders are typed into word processing programs such as Microsoft® Word® (with project descriptions being re keyed or copy-and-pasted from one proposal into another), and invoicing and financial tasks are completed through accounting programs such as QuickBooks or are sourced to outside bookkeepers or accountants.



Substitutes for project management systems

According to the user group, 33% utilized Microsoft® Excel® for project management (in the form of manually created spreadsheets) and 25% used QuickBooks’s time tracking features.

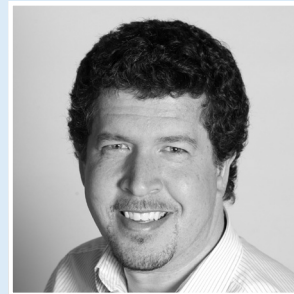
“[As a] small agency, the majority of our processes are still being completed manually,”

— **Brandon Myers,**
 Lundmark Advertising & Design

USER GROUP



Brandon Myers
Lundmark Advertising
Employees: 7



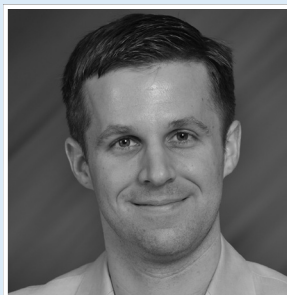
Kevin Fullerton
Springboard Creative
Employees: 2+



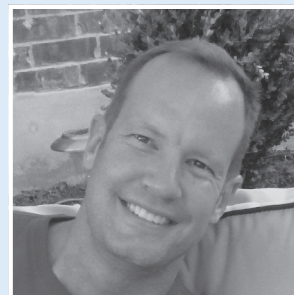
Paul Weber
Entrepreneur Advertising Group
Employees: 7



Melissa Dehner
Honeybee Creative
Employees: 7



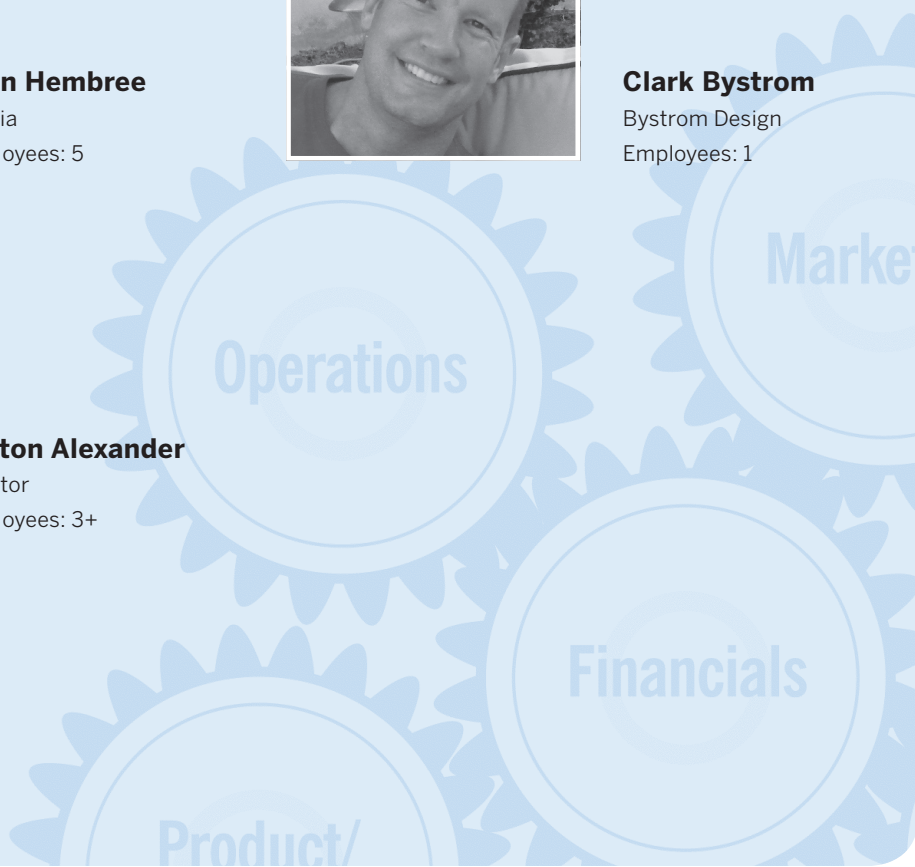
Ryan Hembree
Indicia
Employees: 5



Clark Bystrom
Bystrom Design
Employees: 1



Clifton Alexander
Reactor
Employees: 3+



1.5 What users want in a project and knowledge management system

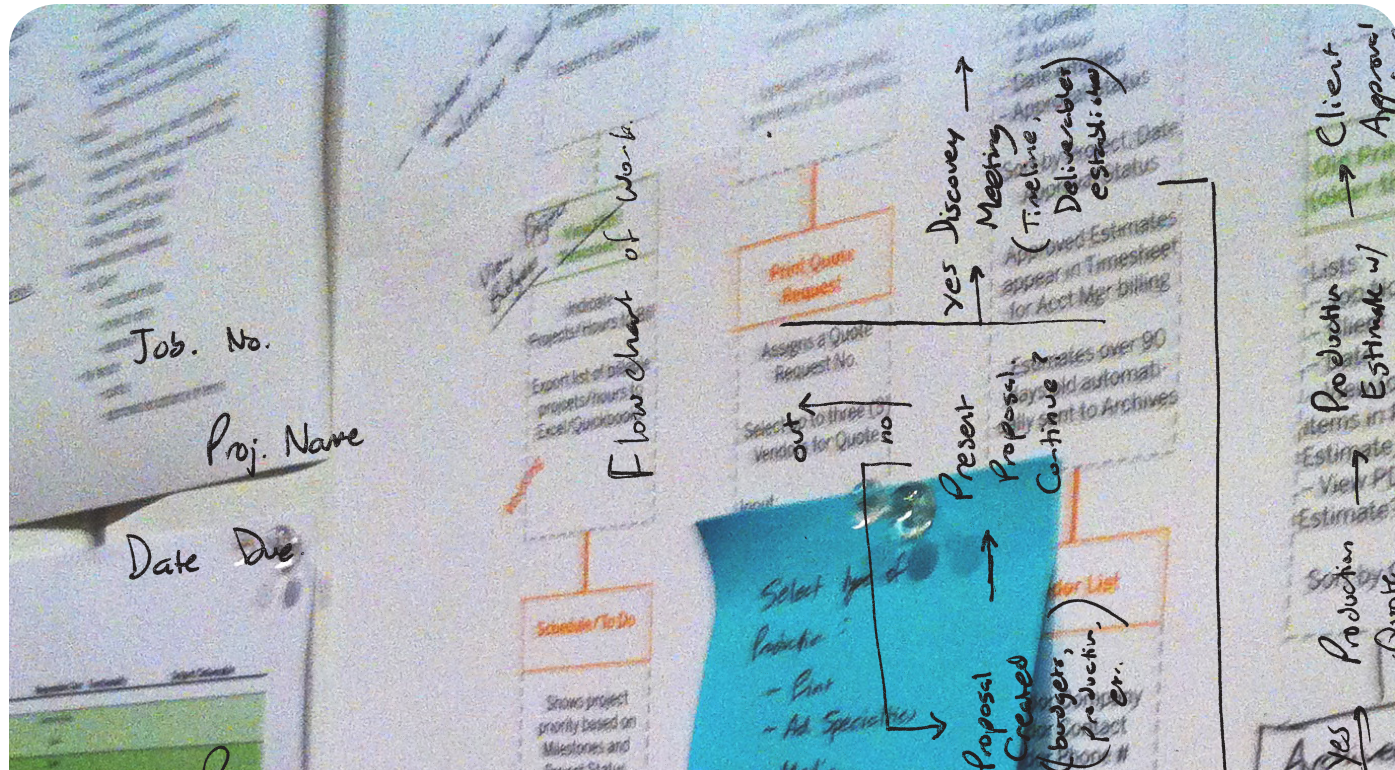
Most creative business owners interviewed for the project desire a new project management solution due to several factors. Whether it is to keep a record of and track locations of previous client projects, benchmarking how much time was spent on projects (i.e. had they budgeted enough time to complete a certain type of project), or to automate certain operational tasks such as proposal creation, most creative business owners are looking for a way to improve efficiencies in their day-to-day routine. Features that the selected user group most desires in a project management system include customization and the flexibility to integrate the system within their existing workflow and processes. These include the:

1. Ability to integrate with QuickBooks, Excel and Salesforce.com, as well as LinkedIn
2. Ability to track time spent on projects
3. Ability to schedule and prioritize projects
4. Ability to notate projects, client contacts, etc.
5. Ability to have standard pricing for similar projects in order to help automate the proposal process

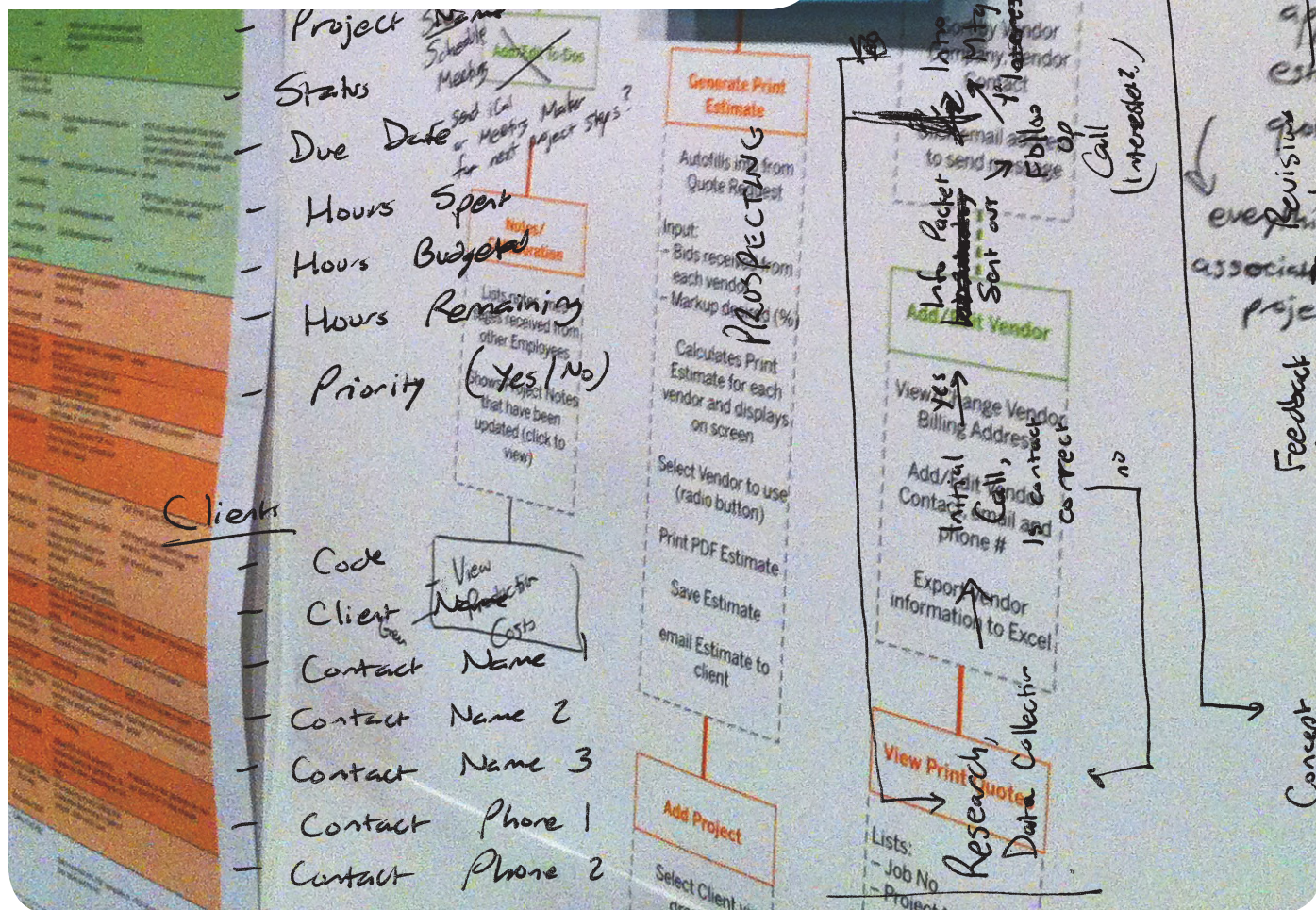
Affordability and simplicity of pricing are other needs that creative business owners have when it comes to selecting a project and knowledge management system. Many systems are perceived as being too high in price, and those that offer monthly, subscription-based pricing are often confusing when trying to determine the appropriate “package” for the user’s needs (how many employees, the number of ongoing projects, the amount of storage space needed, etc.). Some owners may be hesitant to pull the trigger because they are not sure that after all of the investment their employees will actually use the system.

Name	Company	Type of Firm	# employees
Brandon Myers	Lundmark Advertising	Advertising	7
Paul Weber	EAG	Marketing/Advertising	7
Ryan Hembree	Indicia	Design/Marketing	5
Jonathan Arnold	Arnold Imaging	Design/Architecture	5
Clifton Alexander	Reactor	Design	3+
Kevin Fullerton	Springboard Creative	Design	2+
Melissa Dehner	Honeybee Creative	Design	1
Clark Bystrom	Bystrom Design	Design	1

Table 1-2: User Group selected for insight into the design and development of a new project and knowledge management system.



SECTION 2
DESIGN



2.1 Conceptual framework for the new system

The five functional areas of business operation (as defined in the Kauffman Foundation's Entrepreneurship Manual, 126), in practical application, can be reduced to three basic functions within a creative firm: project management, time management, and knowledge management. These are the common functions that owners must contend with when managing their creative business, whether a graphic design firm, marketing firm, or small advertising agency.

Project Management encompasses many different aspects. According to whatis.com, project management is "a methodical approach to planning and guiding project processes from start to finish." Most of the systems researched take a waterfall (linear) approach to project management, in which one task must be completed sequentially before another can begin. This is particularly the case in systems where milestones must be defined and then checked off like a to-do list. Creative projects however, by their very nature, are more fluid and less well defined, thus requiring a more flexible method of scheduling and management.

Time management is a challenge for any type of business, and particularly for creative businesses in which services are rendered and deliverables are more intangible (i.e. intellectual property). Creative business owners must be able to accurately estimate the amount of time it takes to complete a project, ensure that the production team is adhering to the budgeted amount of time, and then be

able to document the time spent in order to bill clients. Thus, the overlap between time and project management allow for Billing and Financial Management for the business owner.

Knowledge management requires that a business have a way to store information regarding its customers, vendors, employees, and the processes used to complete various tasks. The ability to deposit this information in a central location that is easily accessible and searchable saves an organization time (and money) while retrieving it. When it comes to completing projects, the ability for effective Contact Management becomes one of the C.O.M.mand Center (Creative Operations Manager)'s compelling features and benefits.

In addition to managing projects, time and information, the C.O.M.mand Center will focus on Archive management, allowing owners to find old project files, estimates, and benchmark against future projects. Currently these tasks are manually completed and time consuming, preventing the creative business owner from being able to expand their businesses—if automated, more time could be freed up, allowing owners to focus on more strategic and profitable activities.

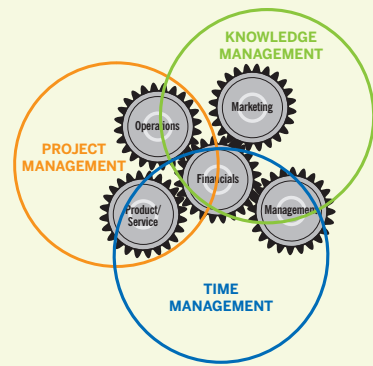


Figure 2-1: Simplifying the functional aspects of business for creative firms. The functional aspects of business can be simplified to three basic needs for creative owners. The ability to reference old project information directly correlates to all three of these operations.

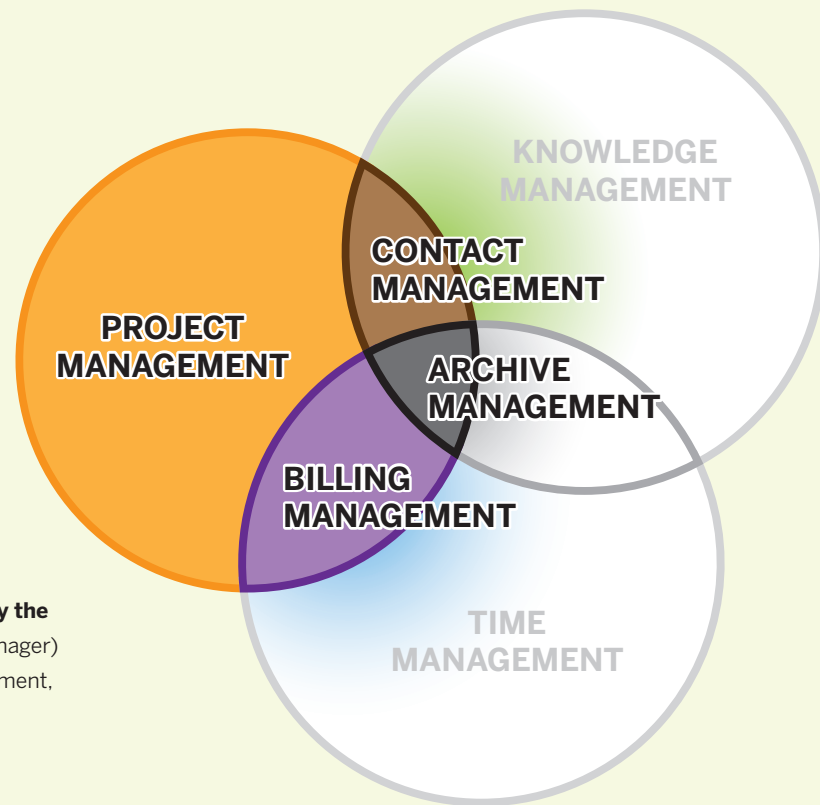
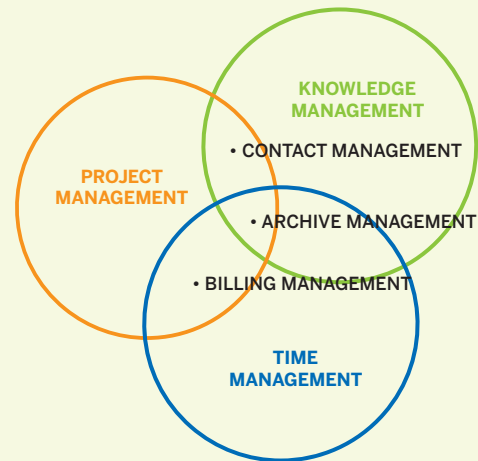


Figure 2-2: Functional aspects addressed by the C.O.M.mand Center (Creative Operations Manager) include project management, contact management, billing management and archive management.

2.1.1 User tasks addressed by the system

According to users interviewed, there are common tasks and procedures relating to their workflow, regardless of whether they operated a design firm, a marketing firm, or a small advertising agency. These challenges include finding new business (utilizing contact management), producing and delivering work for clients (via project management), and saving pertinent information about each job for future reference and organizational learning (through archive management). As illustrated in Figure 1-2, most management functions within a creative business are usually accomplished by one person, the owner, and by using a series of files (usually spreadsheets or Word documents), printed documents in loose-leaf binders, or other heuristics.

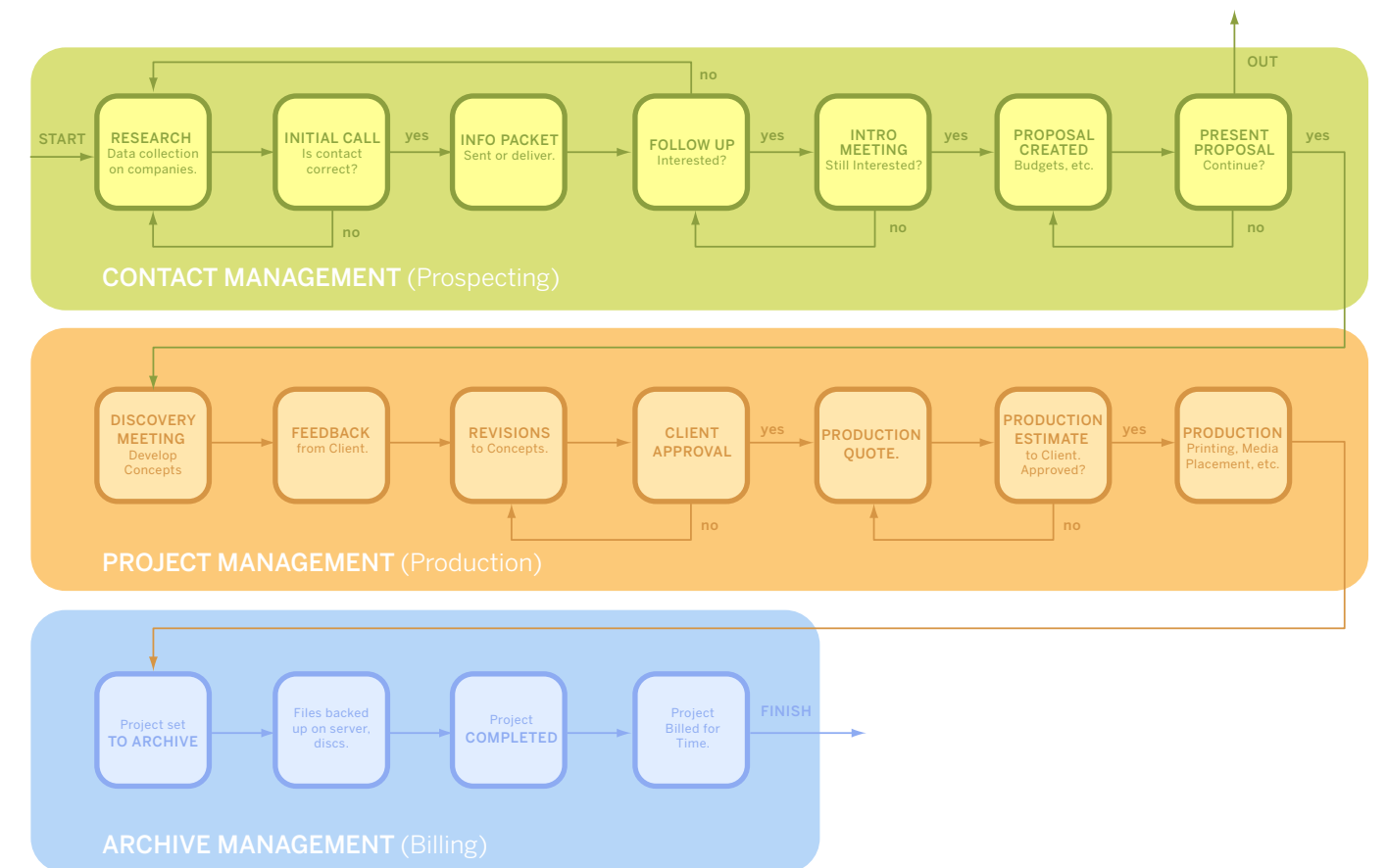


Figure 2-3: Example of workflow addressed by the C.O.M.mand Center. At Indicia Design, one of the users studied for this project, workflow processes and related tasks consist of contact management, project management, and archive management.

C.O.M.MAND CENTER FUNCTIONALITY BY USER TYPE

Production Staff Login

- Projects
 - List of current projects by client name
 - sort by date due, status
 - indicate/show priority projects
 - view Creative Brief for client
- Production Quotes
 - View production quotes requested
 - View production estimates to client
- Archives
 - Search for old projects and all related info
- Time Tracking
 - input time sheet information
 - Indicate projects over budget
 - Show hours remaining for projects
 - Timer/stop watch function
- Directory
 - Client contacts (shows only name, email, phone)
 - Vendor contacts (shows only name, email, phone)
 - Employee contacts
 - Emergency contact info (landlord, network issues)
- Notate projects

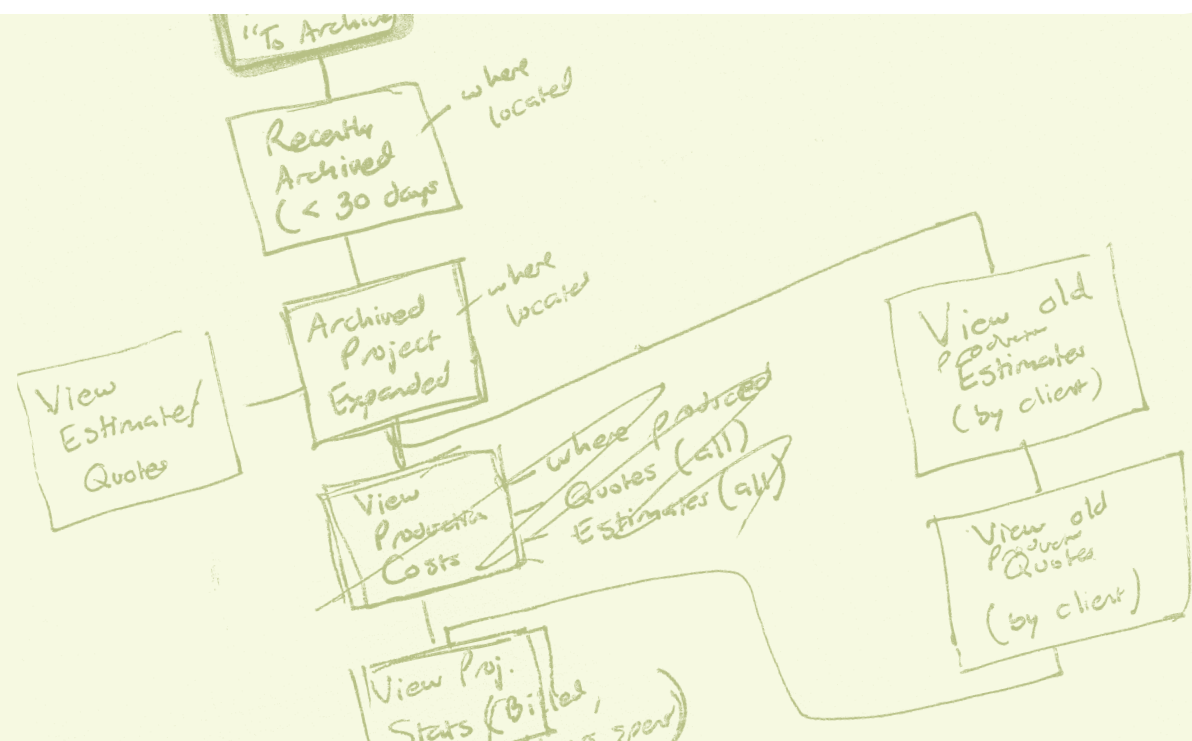
Sales/Acct Manager Login

- Prospects
 - List by name, status
 - Notes, next steps
 - Convert Prospect to client (without rekeying information)
- Proposals
 - Create proposal
 - Show current proposals, sortable
 - searchable by project type
- Clients
 - List by name, click to reveal proposals, current projects, job status
 - Contact information
 - Production estimates (with original print bids)
- Vendors
 - Contact information
 - Production quotes requested
 - Production estimates to client
- Projects
 - List of current projects by client name
 - sort by date due, status
 - Projects over budget
 - Hours remaining for projects (?)
 - Hours billed for project
 - Define project types and edit them
- Archives
 - Search for old projects
 - Search for old proposals
 - Search for old production estimates
- Time Tracking
 - input time sheet information
 - billable projects, hours
 - export data to Quickbooks

Admin Login

- System Configuration
 - Staff set up, priveleges
 - Upload logo, customize look/feel
 - Upload templates for PDFs
 - Billing Preferences
 - hourly rate
 - production mark-up
- Prospects
 - List by name, status
- Proposals
 - Create proposal
 - List by prospect/client, date sent
 - searchable by project type
- Clients
 - List by name, click to reveal proposals, current projects, job status
 - Contact information
 - Production estimates (with original print bids)
- Vendors
 - Contact information
 - Print quotes requested
 - Print estimates to client
- Projects
 - List of current projects by client name
 - sort by date due, status
 - Projects over budget
 - Hours remaining for projects (?)
 - Hours billed for project
- Archives
 - Search for old projects
- Time Tracking
 - input time sheet information
 - billable projects, hours
 - export data to Quickbooks
- Billing
 - Create PDF invoices or export data

Figure 2-4: Functionality for the C.O.M.mand Center (Creative Operations Manager) based on type of user and login privileges.



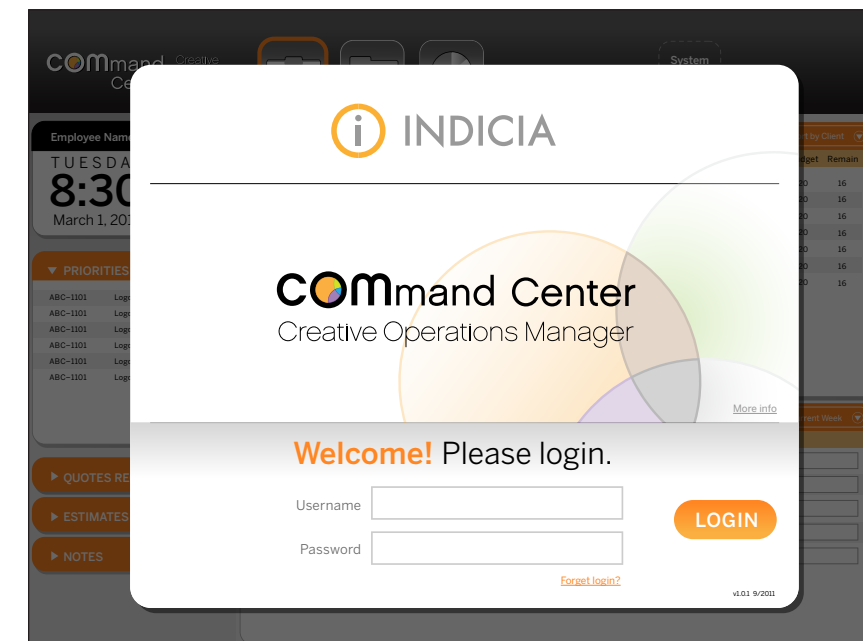
2.2 System Architecture

The C.O.M.mand Center (Creative Operations Manager) is comprised of six main areas of functionality, each accessible depending upon a user’s definition and access privileges as defined by the system administrator. The three main user types are:

- 1. Production Staff**—These are the people within a creative business who are responsible for developing and delivering a final creative product or project. They can be designers, production artists, illustrators, office managers, etc. In Figure 2-5 on the next page, areas accessible by these users are in Orange.
- 2. Sales/Account Managers**— Anyone within the firm who is responsible for new business development, including sales people, account executives or managers, and art or creative directors who generate new business for the firm. They have more access and editing privileges to the system’s information. In Figure 2-5, additional areas accessible by these users are in Green (orange areas are also accessible).
- 3. Admin**—Principals, owners, IT managers, and other high level people within a creative business who need to be able to configure the C.O.M.mand Center have access to all areas of functionality. Usually this would be one or two people. In Figure 2-5, additional areas accessible by these users are in purple (orange and green areas are also accessible).

Depending on a user’s access privileges, certain functions of the system may be hidden or restricted. Upon login, each user would see a “home screen” displaying current projects and priorities, as well as an electronic “time sheet” for the current week. More information is accessible via collapsing and expanding windows on the homepage sidebar, including a list of priorities, production pricing information, and notes.

The C.O.M.mand Center is highly flexible for creative business owners. The ability to tailor the look and feel of the system with their company logo, as well as customize pre-formatted forms for PDF output is highly beneficial. Job numbering conventions, milestones, project descriptions and pricing information are all editable using the system. The ability to store contact information for prospects, clients, vendors and employees makes the system an invaluable knowledge database for creative firms, simplifying the task of managing client relationships and projects while saving both time and money.



Login screen for the C.O.M.mand Center (Creative Operations Manager). Users of the system are able to upload their company logo to customize the login screen’s header.

2.2 System Architecture (continued)

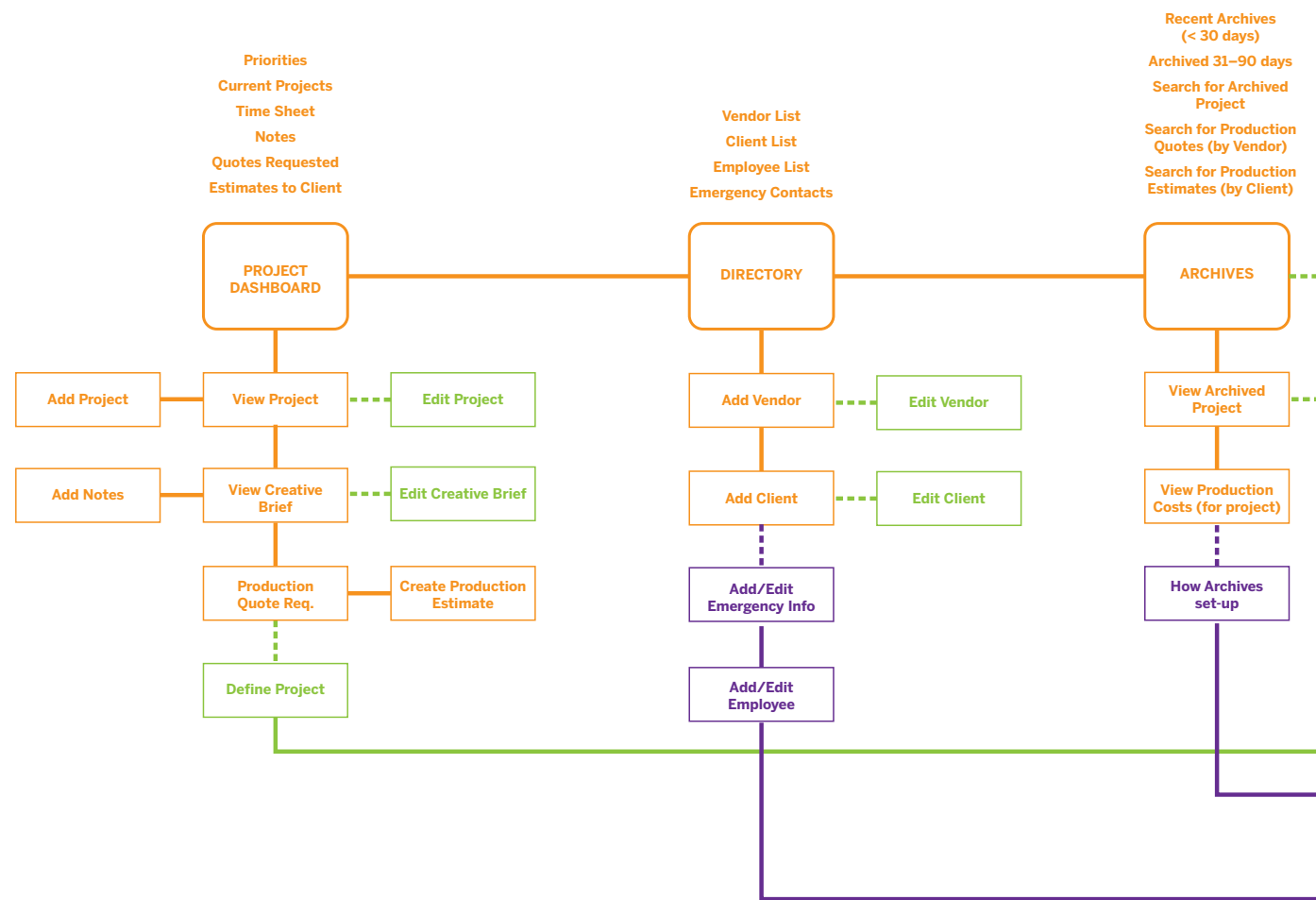
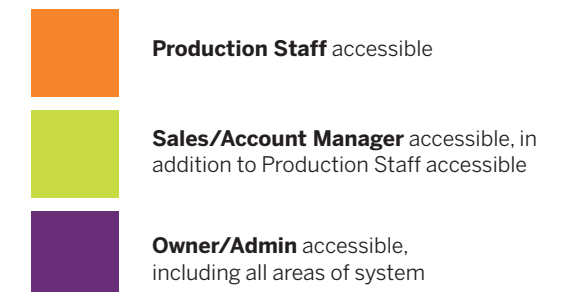
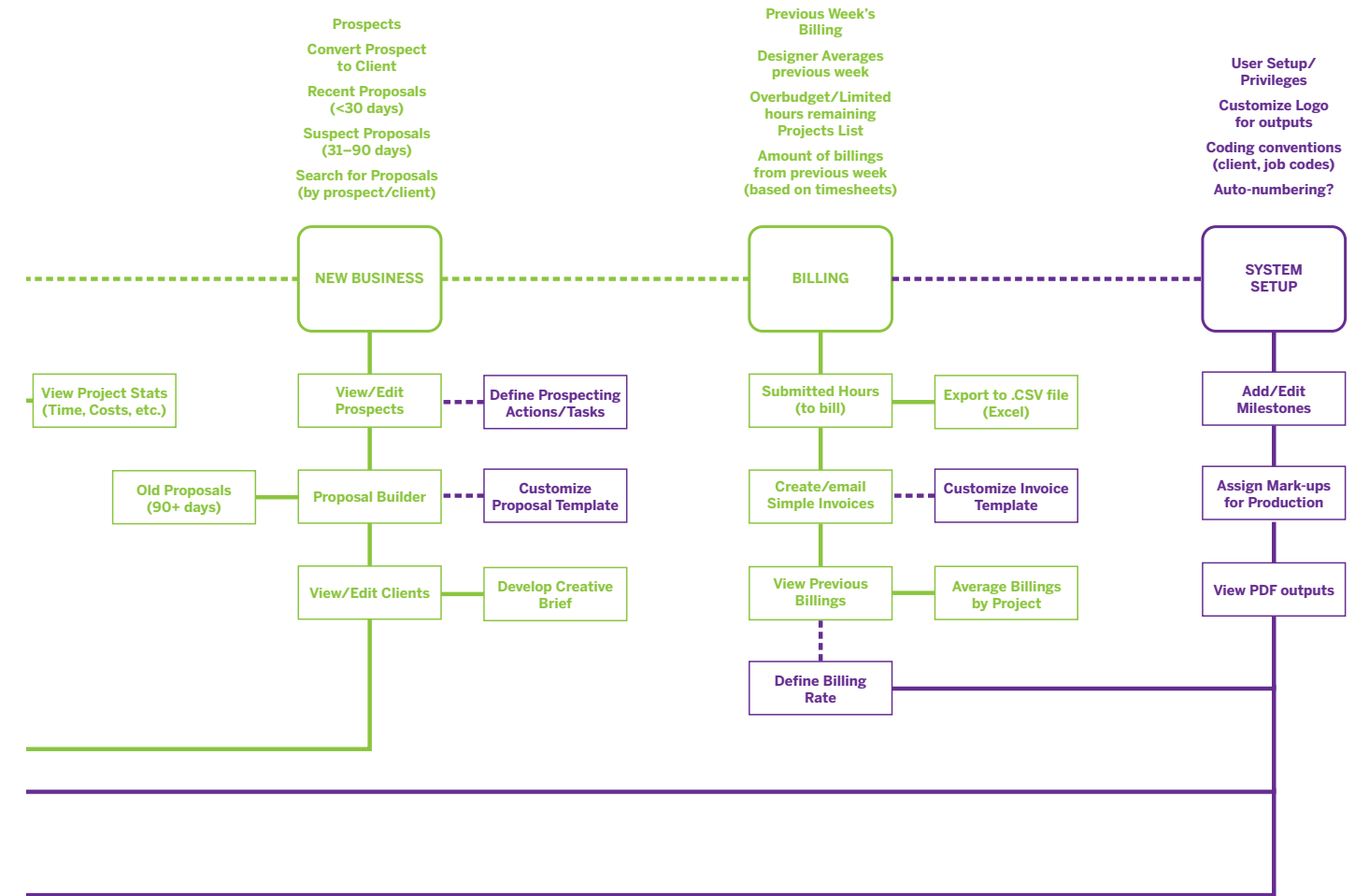
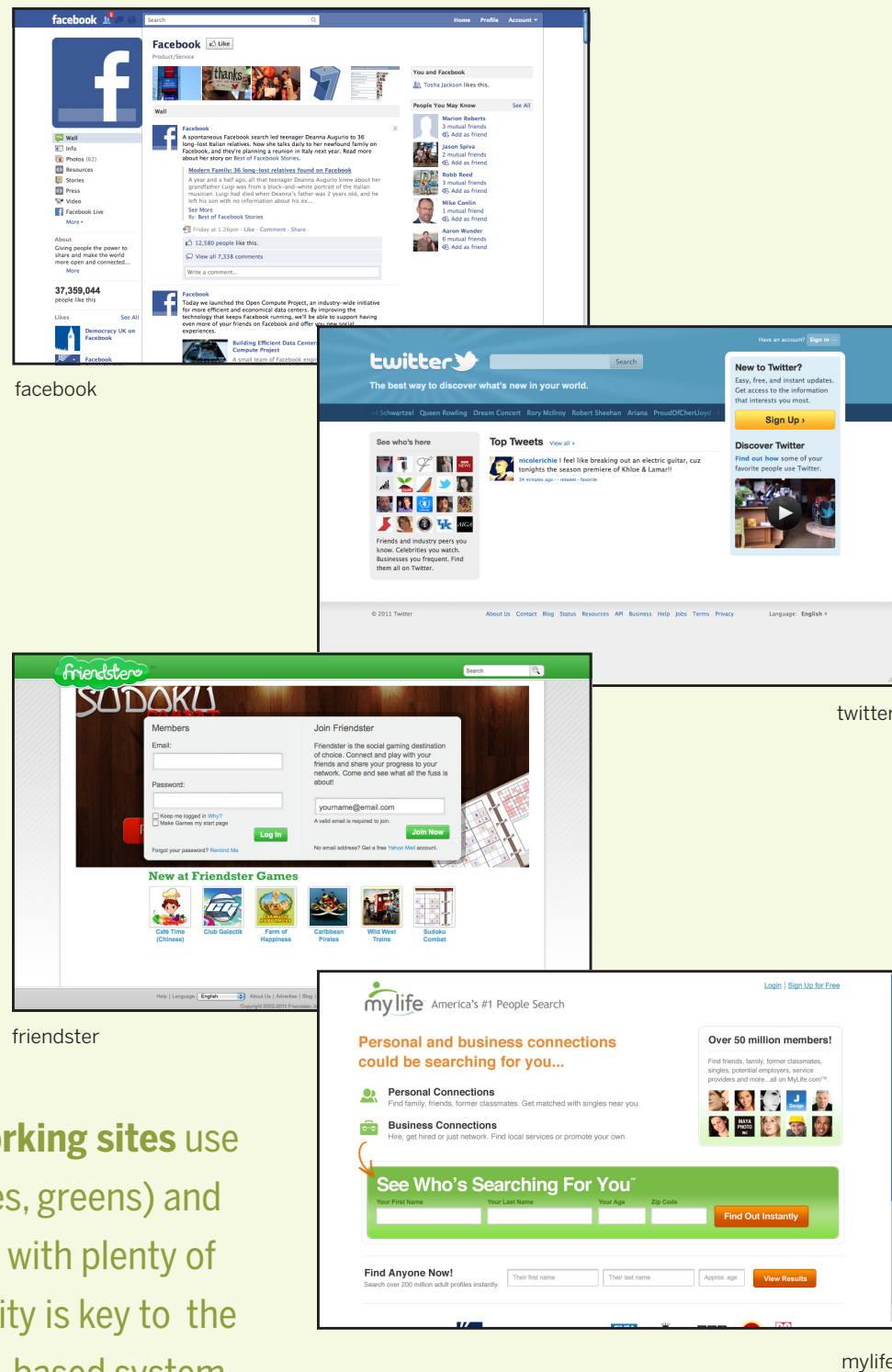


Figure 2-5: Site architecture for the C.O.M.mand Center.



Some popular social networking sites have been referenced for inspiration in the design and development of the C.O.M.mand Center.

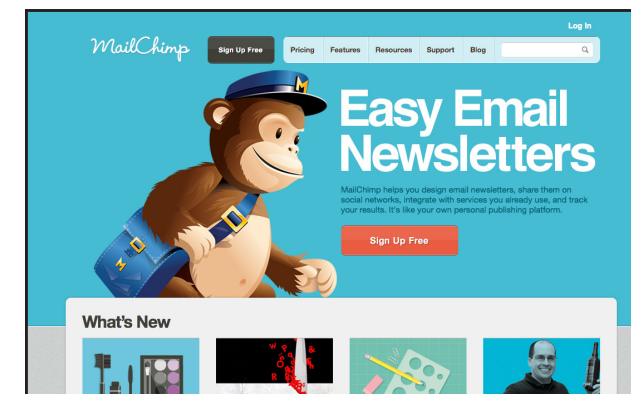


Most social networking sites use vibrant colors (blues, greens) and crisp, clean layouts with plenty of white space. Usability is key to the success of any web-based system.

2.3 User interface design

The C.O.M.mand Center (Creative Operations Manager) will be designed with user needs and capabilities in mind. Simplicity is important to both users and creative business owners. Many of the current systems on the market are complicated in that they require the purchase of additional software or the help of an on-site specialist to install and train users on using the system. Even if in larger firms there may be a “dedicated” person responsible for learning how to use the system and training others, if they should leave, this knowledge would be lost. Online videos or tutorials and frequently asked question (FAQ) pages may help alleviate this issue, but can be time-consuming if the user doesn’t know where to look for information or if they are unsure of what questions to ask. Commonly used vernacular within the creative industry, that avoids as many overly-technical terms as possible, will make it easy for users to understand what is required of them.

To prevent users from getting “lost” within the system, the architecture of the C.O.M.mand Center is designed to be “flat,” meaning there are few main screens for users to learn and adapt to. Depending on access privileges, there are only three to five screens to control the entire system, designated by large, friendly graphic icons. More specific tasks will be accomplished through pop-up information windows that are layered on top of these main areas of usability. Design and functionality cues from popular social media web sites such as Twitter, Facebook, and Pandora have been incorporated into the look and feel, as well as those from other popular project management systems, such as Harvest or Basecamp. Interface designs from Apple-branded applications such as iTunes, iCal, and the AppStore have also been taken into consideration because of their simple layout and usability. Approachable graphics and color schemes will also be incorporated into the design of the system.



Email marketing tools such as MailChimp and MailerMailer must be simple to use and appeal to consumers. They display a lot of important information in an easy-to-read manner.

Figure 2-6: Main “Projects” screen displayed when a user logs into the C.O.M.mand Center. A list of the only user’s Current Projects are listed unless they “View All.” Clicking on the Stopwatch icon (1) will start a timer to track time expended on a task. While going, the whole window with the user name and time flashes red to indicate it is started. Click again to stop the timer. Projects can be checked as “Priorities” (2) and they appear in the expandable window to the left until the current job status has been changed (4). Clicking on the name of a project (3) will open a Project Log window to display that project’s attributes. Users may manually enter time into the electronic “Timesheet” below (5 and 6), where they will be tallied against budgeted hours and placed into a queue for the business owner to invoice. Windows within the sidebar navigation collapse or expand depending on the user’s need.

2.3.1 Simplifying scheduling with the C.O.M.mand Center

Numerous systems researched use a “waterfall” approach to project management. The user must define a linear progression of “milestones” to be achieved and then checked-off like a to-do list. While this type of linear progression of tasks may be well suited for engineering, construction and even software development, creative projects are typically not as well defined from the beginning. Often there is an iterative approach in which concepts are presented to clients for feedback, then revisions to those concepts are sent and so forth until an appropriate solution is developed. Adding to this complexity is the fact that different types of creative projects have varying deliverables and tasks associated with them.

In order to make the C.O.M.mand Center (Creative Operations Manager) as user friendly as possible, the following simplified “status” are defined within the system, but can be edited or added to:

1. **New** – when a project is first input into the system.
2. **Concepts** – the production team selects this option when developing first round concepts.
3. **Feedback** – when project concepts have been sent to the client for review and feedback.

4. **Refinement** – After client review, the account manager or production staff switches the project status to this option to designate they are making tweaks to the project per client feedback.
5. **Approval** – Depending on how many rounds of revisions account managers give clients, a project, after being in the “Refinement” state, can be switched back to “Feedback” or to this state, signifying that the firm is waiting for final approval before sending a project to print, programming, or purchasing media placement.
6. **Production** – Once approved, every type of creative project has final execution and implementation that needs to occur—a logo needs to have final files created in multiple formats for the client; a brochure must go to a printer; and a web site or animation must be coded. Production is a generic enough term that it can apply to almost any type of project.
7. **To Archive** – When a project is completed, this status lets the account manager know that it is ready to be prepared for final archiving, whether that means it is burned to a CD or DVD, or copied onto another hard drive or file server for storage.
8. **Complete** – Projects that have been archived, and their physical file location notated within the C.O.M.mand Center. Once a project is in this status, it is only accessible via the Archives screen (Figure 2–17).

Figure 2-7: Project Log screen
Clicking on a project in the Current Projects window opens this detailed project view, showing hours expended and hours remaining on a project. It is possible to view the Creative Brief, and any production information, such as Quotes or Estimates, generated for the client. The user has the ability to add notes to the project or upload a PDF image of the project for future reference.

2.3.2 Tracking time with the C.O.M.mand Center

In the creative industry, the main “product” delivered to clients is the time it takes to develop a marketing strategy, an advertising campaign, or promotional collateral. Since there are only so many hours in a day, it is imperative that the creative business owner is able to account for and bill all of the time spent on a project. According to Cameron Foote in [The Creative Business Guide to Running a Graphic Design Business](#), design firms should bill at least 60% of their time in order to maintain optimum profitability. The C.O.M.mand Center (Creative Operations Manager) makes it possible to track all time spent, apply it to specific projects, and then output that data for billing.

Production staff and creative teams will find it easy to record their time without the need for paper time slips (which can be lost, take up file cabinets of space, and are wasteful). A weekly email generated by the system will remind them to fill out the system’s “online” time sheet by the end of each week. Drop down selection of designer-specific projects eliminate the need for memorization of project codes and names. Hours input into the system will be applied to each project and deducted from the total budgeted hours remaining, which is then displayed on the employee’s list of projects and when a Project Detail screen is opened. To simplify billing, an Excel file can be downloaded directly from the C.O.M.mand Center for reporting purposes and invoicing.

Figure 2-8: Billings Screen accessible to Sales or Admin user. Hours that have been recorded in the Timesheet window appear in this window (2), along with the project’s budget (hours and cost) and the remaining amounts to bill. Click on “Invoice” (1) to generate a pre-formatted PDF invoice (customizable with company logo) that may be emailed to the client, or click “Export to .CSV” to save weekly hours to an Excel file for accounting purposes. “Budget Alert” projects are listed in a collapsible sidebar window (3), while all designer or production hours are listed in the Time Log window (4). Users can generate invoices, view production estimates that need to be billed, as well as historical data for previous, like projects (5).

Figure 2-9: Time Sheet functionality of the C.O.M.mand Center. Staff can record hours spent on projects from the home/Project screen of the C.O.M.mand Center.

Figure 2-10: It is easy to add a new project to the C.O.M.mand Center. Dropdown menus allow user to choose the client, type of project, and the title of the project. If a project type is not listed in this menu, they can "Add new project title" and then enter information into the fields below.

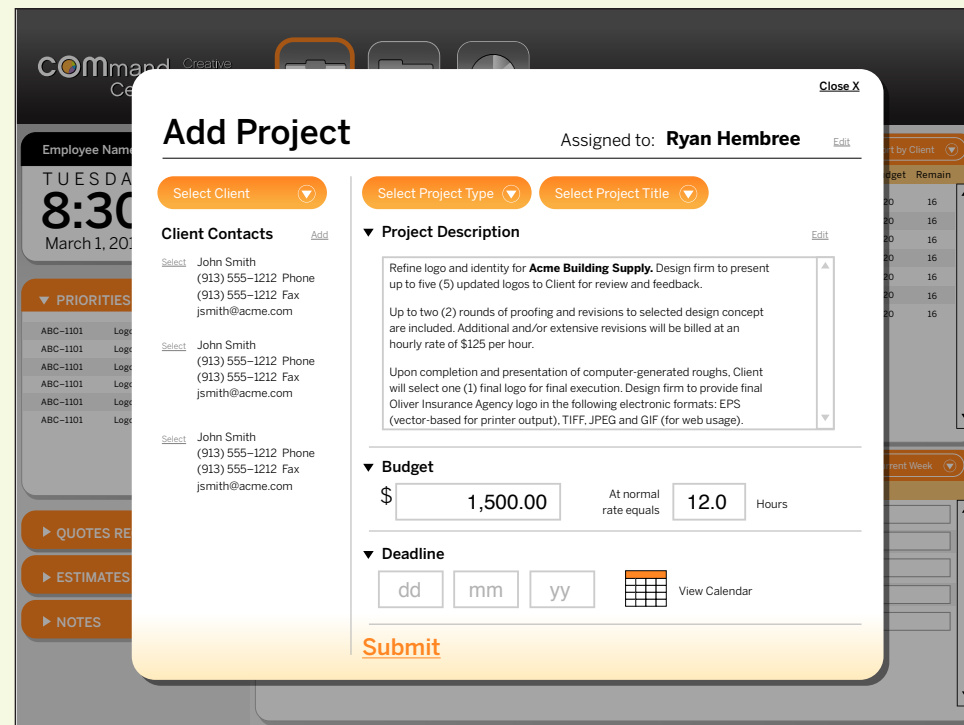
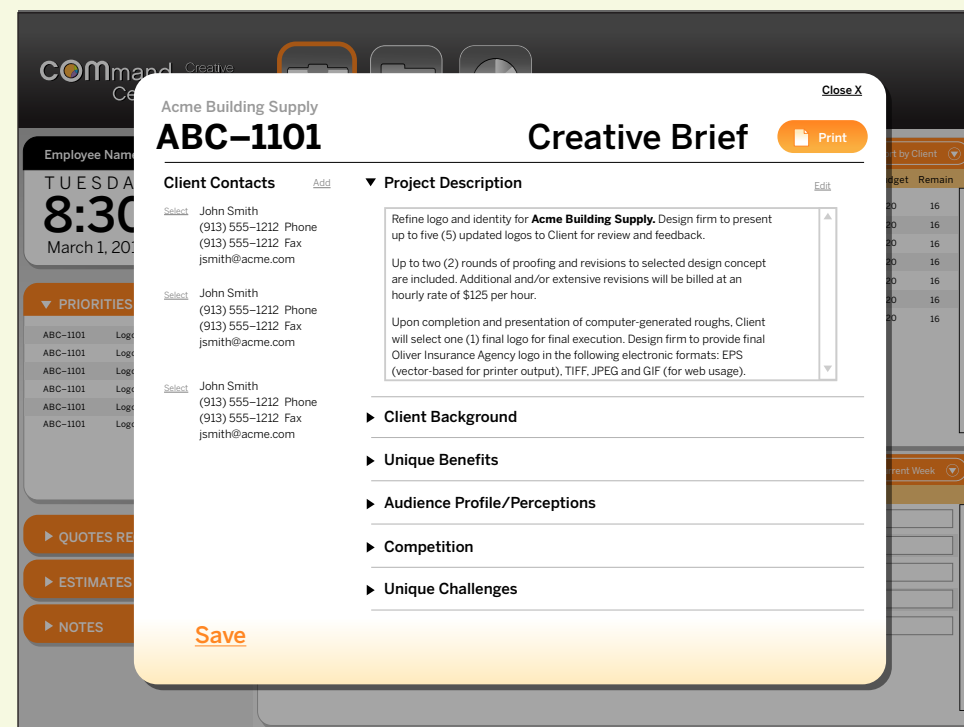


Figure 2-11: Ensure consistency among client projects through the use of the Creative Brief pop-up window. This gives designers essential background information on screen or the ability to print off hard copies for insertion into client job folders.



2.3.3 Collecting and managing client information with C.O.M.mand Center

Managing client information is an important issue for creative business owners, based on feedback from user group research. While creative quality is important, their business is more about establishing and maintaining client relationships than it is about the work produced. Consistency from project to project, even during times of employee transition, will be optimized and maintained by keeping all client information and project logs stored in one convenient and accessible location. Using the C.O.M.mand Center (Creative Operations Manager) for prospecting, a business development, sales or account manager would input all of a client's background information and preferences throughout the sales cycle, including when they were last contacted, items required for follow-

up, and next steps. Proposals and production estimates sent to the client would be archived and searchable for future reference by any employee of the firm.

Production staff would benefit from the C.O.M.mand Center by having all client contact and background information available for viewing or printing in a pre-formatted and customizable Creative Brief. Completed client project files (typically stored on backup drives or discs) can be referenced with the system, along with detailed information such as the amount of time spent and budgeted, production quotes and estimates, project notes, and thumbnail proofs of final artwork.

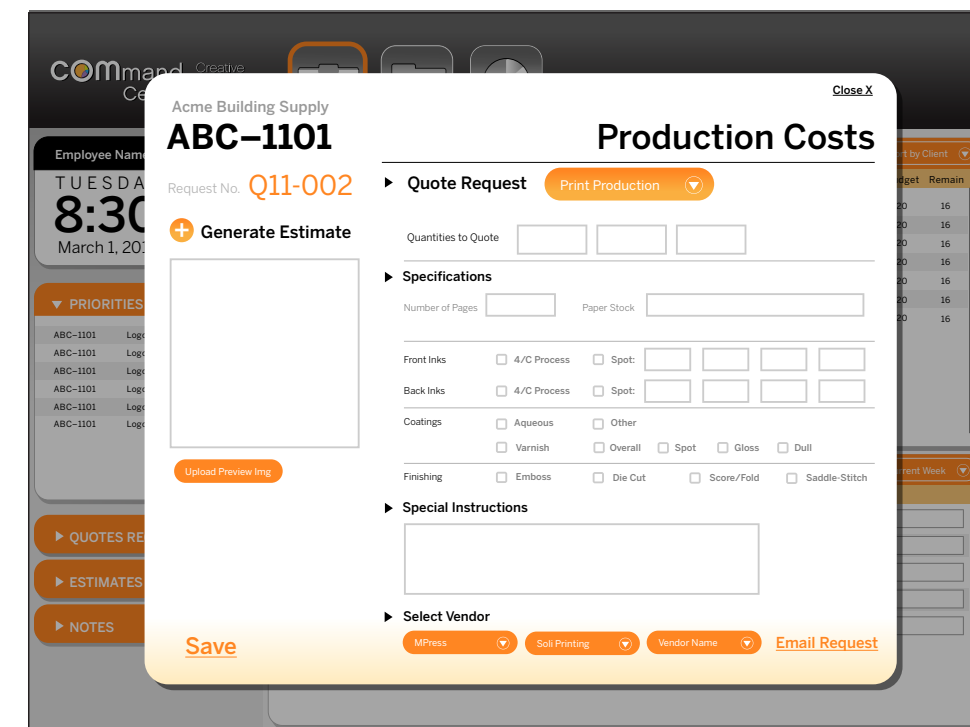


Figure 2-12: Requesting and generating production quotes is automated with the new system. Simply input the various fields, and a standardized request form can be sent to up to three different vendors. Save the Quote Request and when numbers are received, simply generate an Estimate for the client.

The screenshot shows the C.O.M.mand Center interface. At the top left is the logo 'Command Center Creative Operations Manager'. Below it are navigation icons for folders, a building, and a CD. The main area is divided into several sections:

- Employee Name:** Shows the current date and time (TUESDAY 8:30 AM March 1, 2011) and a stopwatch icon.
- CLIENTS:** A table with columns: Code, Client, Contact, Phone, Email, and Edit. The first row is highlighted, and a red circle '1' is around the 'Contact' field.
- VENDORS:** A table with columns: Type, Vendor, Contact, Phone, Email, and Edit. The first row is highlighted, and a red circle '3' is around the 'Vendor' field.
- EMPLOYEES:** A table with columns: Name, Mobile. Lists employees like Ryan Hembree, Josh Christie, etc.
- EMERGENCY INFO:** A table with columns: Name, Phone. Lists emergency contacts like Police, Fire, etc.

Figure 2-13: Directory screen of the C.O.M.mand Center (Creative Operations Manager). The knowledge management portal of the system, creative businesses are able to collect all of their contact information (whether clients, vendors, employees or important emergency information) into one easily accessible place. Clicking on a Client or Vendor name (1) brings up an information window. Click on the contact person's email address (2) to send an email communication. Vendors may be categorized (3) and then sorted based on type of production/materials provided.

2.3.4 Streamlining communication with C.O.M.mand Center

One of the time-consuming (and sometimes non-billable) tasks that employees within creative firms spend much time on is coordinating final production of projects—whether that project is printed, coded, filmed, photographed, or distributed in multiple media. Quotes must be requested from various vendors; a markup or profit margin must be applied to the received quote; and then final estimates must be sent to the client for approval. There is a lot of communication and paperwork that must be documented and retained for each project.

ized database for storing Production Quote Requests, Production Quotes, and Production Estimates that are sent to clients. To avoid duplication of effort, the same production quote request may be sent to multiple vendors at the same time. Once received back from the vendor, quotes may be input into the system, along with any mark-up or profit margin for the system to auto-calculate what the final Production Estimate should be. Simply clicking on the desired, or approved, vendor's estimate will generate a pre-formatted PDF that can then be emailed to clients for approval.

The C.O.M.mand Center (Creative Operations Manager) will provide creative business owners with a central-

The image shows two overlapping PDF documents from INDICIA. The top document is a 'PROPOSAL' dated 02-11-2011 for a '2. eNewsletter template'. It lists a cost of \$1,500.00 and includes terms like 'Client Approval' and 'Rights Ownership'. The bottom document is a 'TERMS OF AGREEMENT' dated 11-116, covering sections like 'Services', 'Reimbursable Expenses', and 'Warranty of Originality/Quality and Liability'. Red circles highlight specific areas in both documents.

Figure 2-14: PDF output onto consistent forms. The C.O.M.mand Center makes it possible to generate standardized forms and Proposals quickly and easily. "Boilerplate" information, such as contracts, verbiage, etc. would automatically be inserted into these forms or invoices.

Figure 2-15: New Business screen of the C.O.M.mand Center. This screen is only available to those with the appropriate login. Prospects are listed with next steps (2) and are able to be converted into Clients (1) with the click of the mouse button. Proposals are simple to create using this system, with recent proposals and their respective projects appearing in this window (3). If a project within a Proposal is “accepted,” a new project number and Log is automatically created. Sales and/or account managers may define new types of projects and input their descriptions, pricing information, and other critical information in this collapsible sidebar window (4).

2.3.5 Automating the proposal process with C.O.M.mand Center

One of the unmet user needs of existing project and knowledge management systems is the ability to create standardized pricing for similar project types, according to the business owners interviewed for this project. Currently, creative business owners tend to “reuse” content from multiple documents for developing proposals, since verbiage used typically remains consistent regardless of the client, such as background of the creative firm, the basic design process used, or the number of revisions. Project rates and pricing tend to remain the same as well.

Copying and pasting information between several different documents is typical. This places an enormous cognitive load on the business owner: not only do they have to remember which clients or proposals had similar project scopes, they must be able to locate the old proposal, find the desired text within the document, and then switch between multiple windows to paste it into a new document. Being able to store “boiler-plate” and off-used information in a centralized location for all proposals is highly beneficial and desirable. On average, the selected user group

spent 40 minutes to 2+ hours (and sometimes as many as 4 hours) preparing each proposal sent to clients or prospects. Hypothetically, if business owners or account managers worked on only one proposal per week (a low estimate), they could spend as many as 100 non-billable hours per year on this task. Reducing the amount of time spent developing proposals means more time can be spent on profitable and more strategic activities.

The C.O.M.mand Center (Creative Operations Manager) streamlines the proposal generation process. It stores a database of all project types (including project descriptions and standard pricing) that are accessible via drop-down. On occasion, some customization is desirable, such as the client name, deliverables or pricing, and this can be changed on a case-by-case basis by the sales or account manager. New project types can be added as needed, and are stored within the system for future use. By automating the proposal process, users are able to quickly create professional, custom-formatted proposals that are printable or email-able to clients or prospects.

Figure 2-16: Creating proposals is easy with C.O.M.mand Center. Add projects, change pricing, or use the built in calculator to experiment with different pricing options.

The screenshot shows the C.O.M.mand Center Archives screen. The interface is divided into several sections:

- Header:** Command Center Creative Operations Manager logo and navigation icons (Folder, Folder with person, CD/DVD).
- Left Sidebar:**
 - Employee Name: [Blank] Logout
 - Date/Time: TUESDAY 8:30 AM March 1, 2011
 - Search bar with 'SEARCH' and 'Go' buttons.
 - Buttons for 'SEARCH QUOTES' and 'SEARCH ESTIMATES'.
- Main Content Area:**
 - RECENT ARCHIVES Table:**

Job No.	Client	Project Name	Date Completed	Disc #	Edit
ABC-1101	Acme Building Products	Logo Design	Mar 1, 2009		Edit
ABC-1101	Acme Building Products	Logo Design	Mar 1, 2009		Edit
ABC-1101	Acme Building Products	Logo Design	Mar 1, 2009		Edit
ABC-1101	Acme Building Products	Logo Design	Mar 1, 2009		Edit
ABC-1101	Acme Building Products	Logo Design	Mar 1, 2009		Edit
ABC-1101	Acme Building Products	Logo Design	Mar 1, 2009		Edit
ABC-1101	Acme Building Products	Logo Design	Mar 1, 2009		Edit
 - ARCHIVED IN LAST 90 DAYS Table:**

Job No.	Client	Project Name	Date Completed	Disc #	Edit
ABC-1101	Acme Building Products	Logo Design	Mar 1, 2009	123	Edit
ABC-1101	Acme Building Products	Logo Design	Mar 1, 2009	123	Edit
ABC-1101	Acme Building Products	Logo Design	Mar 1, 2009	123	Edit
ABC-1101	Acme Building Products	Logo Design	Mar 1, 2009	123	Edit
ABC-1101	Acme Building Products	Logo Design	Mar 1, 2009	123	Edit
ABC-1101	Acme Building Products	Logo Design	Mar 1, 2009	123	Edit
ABC-1101	Acme Building Products	Logo Design	Mar 1, 2009	123	Edit

Figure 2-17: Archives screen of the C.O.M.mand Center. One of the main rationales for this project and knowledge management system is the ability to find information about old client projects that may be stored on backup servers, discs or other types of media. Users are able to search for old projects and then click to view more details (1); input the location of recently completed projects (2) whose Job Status has been changed to “To Archive;” and are able to view the most recently completed projects (3). Old print quotes from vendors, as well as estimates sent to clients, are able to be found using this feature of the system (4).

2.3.6 Locating past projects quickly with C.O.M.mand Center

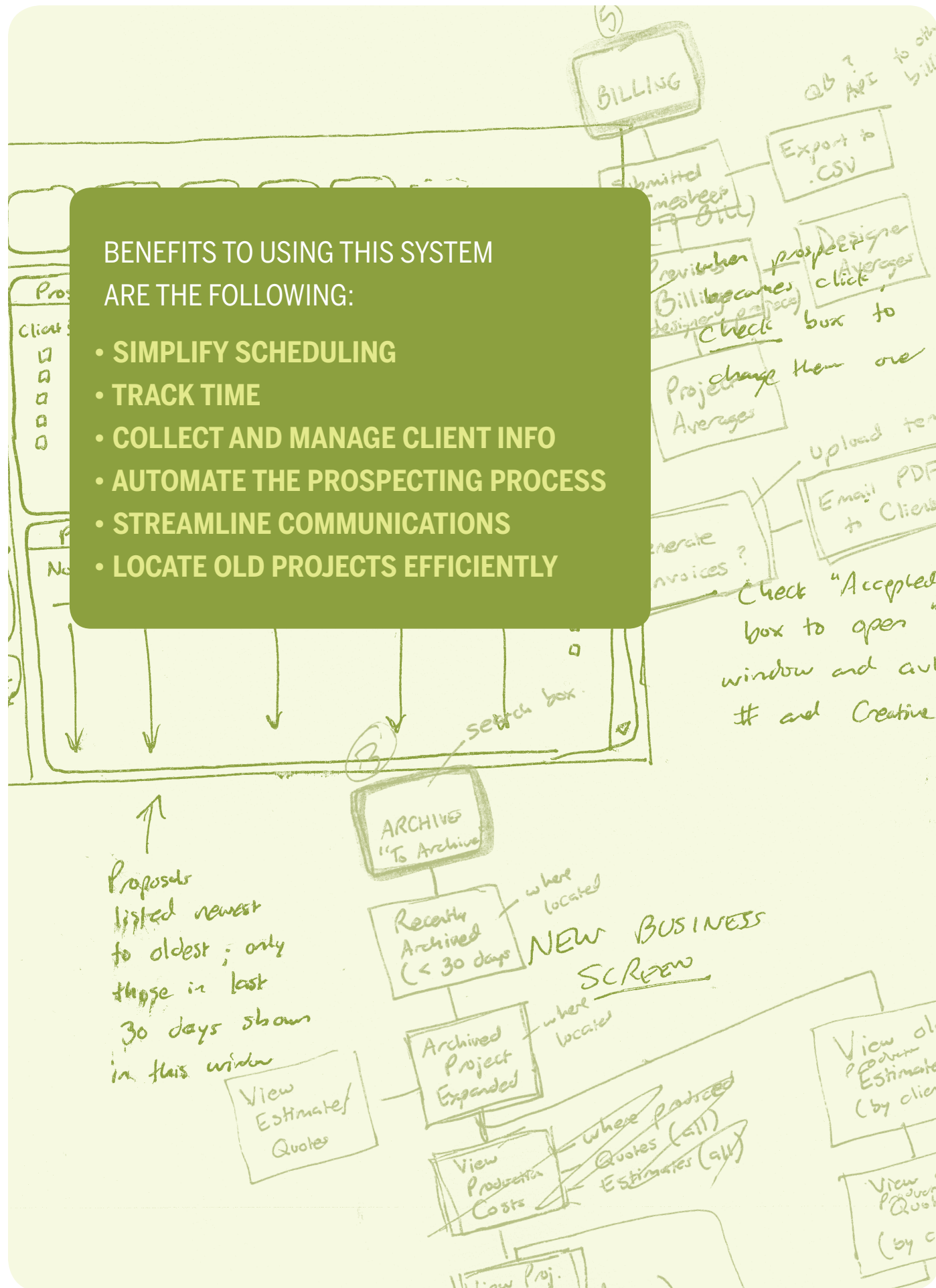
Over several years a creative business will complete hundreds, if not thousands of different projects for a variety of clients. Clients expect creative businesses to retain backups of all files created for them in case those files are needed in the future: perhaps the client may lose the files that were originally sent to them, or perhaps they desire a slight change to a project. From a legal and client convenience perspective, it simply makes sense for creative business owners to keep a record of all work completed—however, being able to quickly find this information is a challenge.

At Indicia Design, all completed projects, including preliminary concepts and support files, are burned onto CD or DVD archive discs that are then numbered and stored within the studio. A printed list of each Archive Disc is created and placed into a binder for future reference. Over nine hundred of these discs have been filled with old client projects; to manually search for an old client project might require hours of an employee or owner’s time. Locating old project files quickly and easily is a need addressed by the Archive functionality of the C.O.M.mand Center (Creative Operations Manager).

CDs are not the only method used to store old files—removable hard disk drives, thumb drives, tape backups, RAID servers or other data storage methods may be used by creative businesses. Regardless of the storage conventions used, the C.O.M.mand Center will indicate where to find old client projects by allowing creative business owners to make a note of which disc, drive or server is used for storage. What was once a time consuming and arduous task is reduced to a few minutes, allowing the employee or owner to improve productivity and efficiency.



Old projects are typically saved onto discs or servers. At Indicia, client projects spanning almost ten years are saved on over 900 CDs or DVDs. Searching for and locating previous projects can be a time consuming task, one that the C.O.M.mand Center alleviates.



2.4 Benefits of the C.O.M.mand Center

Within creative firms using the C.O.M.mand Center (Creative Operations Manager), there are three main user types. Business owners and managers will have the ability to configure and customize the system and administer user privileges, as well as access all system features. Account managers, business development and sales personnel would have the ability to help manage customer relationships. Finally, Production staff would be able to manage their time and workload by using the system.

Business owners in many small design and marketing firms or advertising agencies are responsible for monitoring project budgets and billing for work completed. By having “dashboard” type access to all of the company’s projects, they can benchmark time spent versus time budgeted for each project. This capability allows them to better estimate the actual time needed for future, similar type projects; determine profitability of projects; and see which designers are performing as efficiently as possible. The C.O.M.mand Center helps achieve this goal by recording production staff time and allowing it to be exported to a Microsoft® Excel® file for billing and tracking purposes. Also beneficial to business owners and managers is the ability to customize the look and feel of the system and its output based on their own unique internal processes and needs.

The owners of creative businesses, particularly smaller ones, are often also responsible for business development. Whether there is a dedicated Sales person or Account manager or not, this system benefits that role by helping track the lead generation and prospecting process. Since many project descriptions and time requirements are the same (and stored in the system), proposals can be quickly generated without copying and pasting old information. Once accepted and approved, proposals can quickly be converted into new projects, complete with client contacts, background information, and preferences.

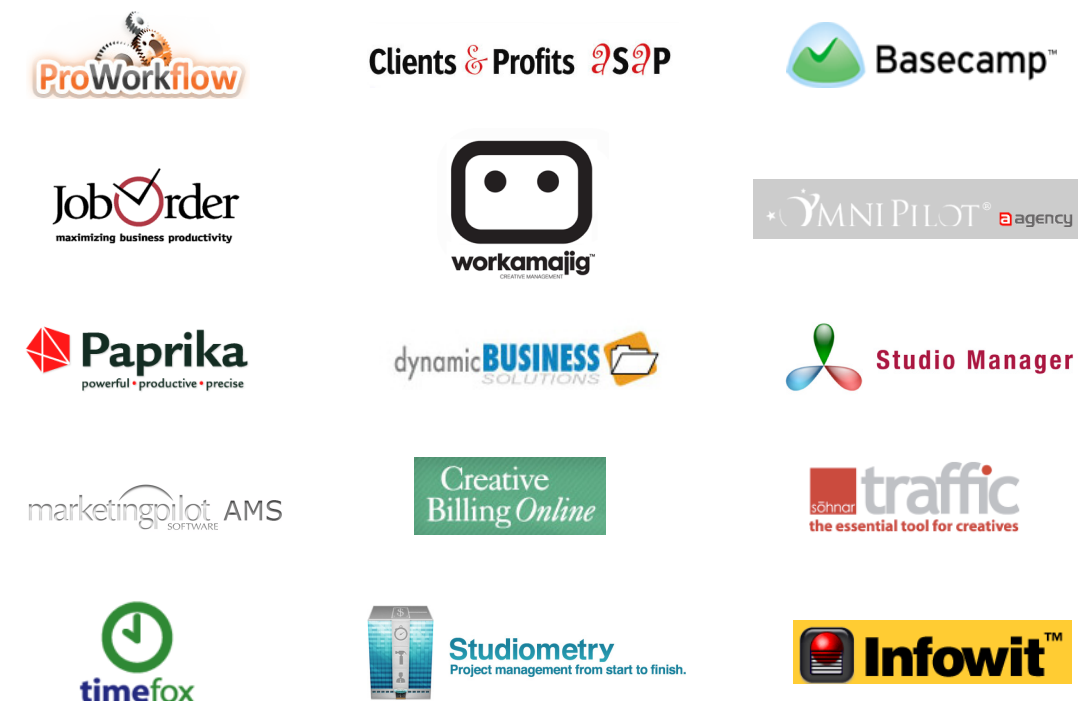
Production staff, such as designers and production artists, will find that some of their most time-consuming administrative tasks, such as filling out time sheets; sourcing, contacting and preparing print/production quotes; and documenting client requests and revisions, would all be automated. The ability to prioritize projects and quickly find archived project files would save valuable time and increase efficiency and productivity. Standardized, consistent forms are also generated by the system, further enhancing the company’s brand image in the mind of clients and vendors.

SECTION 3
FEASIBILITY

3.1 Is there a need for another project and knowledge management system?

It is arguable as to whether or not another project management system is really necessary. After all, research has shown that there are over one hundred such systems on the market today, with more than a dozen specifically tailored to the creative industry. In Chris Anderson's *The Long Tail*, he refers to a new "world of abundance," in which the Internet has brought about an increasing amount of choices available to consumers. This conflicts with what he describes as the old world of scarcity, "in which there just wasn't enough room to carry everything for everybody: not enough shelf space for all the CDs, DVDs, and video games produced; not enough screens to show all available movies; not enough channels to broadcast all the TV programs..." The principles of this "long tail" of marketing and abundance of options exist everywhere, not only in the entertainment industry to which he is referring.

In the realm of project management software, the question of the marketability of another "system" in such a competitive marketplace must be addressed. While it is true that there are several systems available for use, the simple fact of the matter is that most creative businesses do not use them because they are overly complex or do not address some of their basic needs. According to research, most firms within the selected user group average at least three different systems to meet their operational needs. Having to switch between multiple systems to accomplish tasks such as prospecting, tracking time, managing project workflow, and billing is time consuming, redundant, and frustrating for users. The C.O.M. Center (Creative Operations Manager) offers a compelling alternative and fills a gap in the project and knowledge management software marketplace between the simple, one- or two-task web-based solutions (such as Basecamp or Billings)—and the more robust, full-featured systems designed for agencies with hundreds of employees (Workamajig or StudioManager).



A plethora of project management systems are available. Research found fifteen project management systems that are specifically marketed to creative businesses.

Amount of U.S. dollars required to design, program and launch C.O.M.mand Center

50,000

104 Dollars per hour is the Average Hourly Rate for selected user group

100 Number of hours spent on proposal generation in a year

130 Number of hours spent on invoicing and finances in a year

230 Potential Billable Hours saved annually

23,920 U.S. Dollars per year saved by creative business owners using the C.O.M.mand Center

2 Number of years required to recoup investment if built.

3.2 Resources required to develop the C.O.M.mand Center

Determining needs for a more efficient project and knowledge management system for creative business owners is one thing, actually implementing and coding the newly conceived system (that is a fully functional and marketable product) is another thing entirely. DigitalCrowd, Inc., a professional web- and application-development firm based in Kansas City, was contacted about this project to determine the feasibility and resources required to build such a system. Developed as a web-based, MySQL database, the C.O.M.mand Center (Creative Operations Manager) would work on multiple operating platforms and with a variety of web browsers. The time required for coding and testing, according to the bid received, amounts to approximately 160 hours of programming and development time at \$150 per hour, or \$24,000.00. Along with time spent designing the functionality, architecture, and look and feel of the system (approximately 200 hours), the total investment to build the C.O.M.mand Center is approximately \$50,000.00.

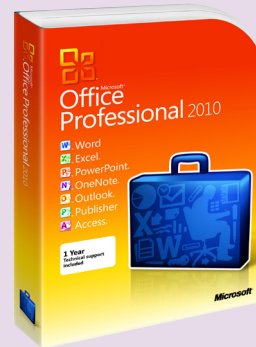
Paying for this system's development would be a challenge for even the largest of creative firms—fortunately this amount would be spread over several months of

coding and development. To help absorb some of the costs, if this system is co-created and developed with the needs and desires of actual users in mind, the chances of other creative firms adopting and paying to use the system would increase, thus lowering the total investment required.

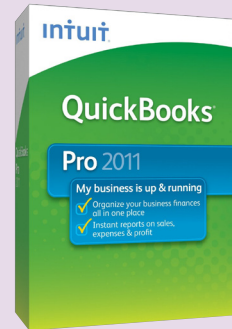
Another way to justify the cost of deploying this project and knowledge management system is to consider it in terms of productivity gains. Users surveyed for this project, on average, spend 40 minutes to 2 or more hours (and sometimes as many as 4 hours) preparing each proposal sent to clients or prospects. If only one proposal per week (a low estimate) was generated, they could save as many as 100 hours per year on this non-billable yet necessary task. Billing-wise, users surveyed spend on average 2 to 2.5 hours per week on invoicing and financial management tasks, up to 130 hours per year. While 230 hours might not seem like a lot, at the average hourly rate of \$104 per hour (the average for the selected user group), using the C.O.M.mand Center amounts to a savings of \$23,920.00 in the first year alone.



\$1,299.00 to
\$2,599.00



\$279/user



\$12.95/mo. (Online)
\$229.95 to \$399.95

Figure 3-2: Essential tools for creative business owners. Mission critical software that all creative firms use. Costs above are per licensed user. C.O.M.mand Center pricing is to the right. Users may host the system on their own server, or pay for a hosted solution, and pricing remains the same.

COMmand Center Creative Operations Manager

Option 1	Option 2
\$499.00 one-time \$179.95 upgrades	\$499.00 one-time \$14.95/mo. hosting

3.3 Determining pricing for the C.O.M.mand Center

In Sections 1.3 and 1.5, pricing, or more specifically the complexity of different pricing “packages,” was determined to be an objection that creative business owners had toward adopting an existing project management system. High up-front costs were a turn off for many, as were recurring, monthly subscription plans (no matter how miniscule they might seem). Table 1-1 illustrates the complexity of pricing structures for existing systems. For the C.O.M.mand Center (Creative Operations Manager), a hybrid approach to pricing would be pursued to make it more attractive and affordable for mass market.

To determine a reasonable price point for the system, the pricing and support options of other creative software was examined. The most common of these software packages include Adobe® Creative Suite (Photoshop, Illustrator, InDesign, Dreamweaver, etc.) and Microsoft® Office® (Word, Excel, and PowerPoint). Creative firms typically pay anywhere from \$1,299.00 to \$2,599.00 for full versions (1 user) of Adobe® Creative Suite software, and from \$499.00 to \$899.00 for upgrades to those products, typically every 18–24 months. For a full version of Microsoft® Office®, the cost is \$279.00 per licensed user. An effective project and knowledge management system should also be included in this list of mission critical software, but doesn’t have to be a budget-buster.

The C.O.M.mand Center would be marketed and sold to creative business owners as a stand-alone product for \$499.00 (regardless of the number of users or projects managed) that could be downloaded via the Internet and installed onto customers’ own web-enabled file servers. Updates and system enhancements would be made available on a regular or annual basis for a small upgrade fee of \$179.95. If owners desire an alternative option that eliminates some of the technical knowledge required for installation, a “hosted” solution would also be available. It would be priced the same as the stand-alone version at \$499.00 upfront, plus an additional hosting fee of \$14.95 per month (\$179.88 per year). All data would be kept on an outside and redundant server. Automatic updates, as they become available, would be included in this hosting fee.

At a \$500.00 price point, only 100 customers would be needed to recoup the \$50,000.00 initial investment of developing the C.O.M.mand Center. This small number is entirely achievable if the system were marketed as a product, as it represents only a fraction of one percent of the entire creative services industry within the United States (approximately .2% of 54,884 creative firms nationwide). Furthermore, if only 1% of the creative industry, or 548 customers, were to adopt the system, potential gross revenue would be \$274,000 plus an additional \$98,763.75 per year for hosting and upgrades.

If only 1% of the Creative Industry (548 users) was to adopt the C.O.M.mand Center, potential revenue generated would be approximately \$274,000 in up-front fees, plus an additional \$98,763.75 per year for hosting and upgrades.

CONCLUSION

4. Conclusion

As research shows, an abundance of project and knowledge management systems within the marketplace does not necessarily mean that there is not a need for a more specific solution to managing the operations of a creative business. The C.O.M.mand Center (Creative Operations Manager) fulfills this need by providing creative business owners and their employees a web-based, automated system to simplify and streamline daily tasks, operational processes, and workflow. As a customizable solution, business owners do not have to alter their processes and procedures to meet the requirements of the system—rather, the system may be custom-tailored to meet their needs.

For business owners, the C.O.M.mand Center provides a more efficient way to schedule, track time, manage and bill for projects. Client and prospect information, as well as standard project rates, all exist in one centralized location for easy reference and proposal generation. For employees of the design, marketing or advertising firm, it allows for more efficient communication with outside vendors and clients, as well as other employees. Previous projects and information collected are saved for future utilization, and help grow the organization's knowledge. Finally, the C.O.M.mand Center allows for everyone in the creative business to save time by avoiding manual tasks and processes, thereby helping to improve the firm's bottom line. With this system, creative businesses will no longer remain limited in organizational size, sales, or profitability.

APPENDIX

Appendix A: Creative Industry Statistics

Source: (United States Department of Commerce Census Bureau Economic Survey, 2007)

NAICS	Type of Firm	Firms nationwide	within 50 mi. radius
541613	Marketing Consulting Services	18,887	460
541430	Graphic/Web Design Services	15,851	375
541810	Advertising Agencies	12,489	350
541820	Public Relations Firms	7,657	136
TOTAL		54,884	1,321

Average number of employees:

Graphic/Web Design firms	3–4
Marketing Consulting services	5–6
Advertising agencies	11–12

Average annual revenues (gross):

Graphic/Web Design firms	\$512,000.00
Marketing/Consulting services	\$917,000.00
Advertising agencies	\$2,158,000.00

Gross revenue per employee:

Graphic/Web Design firms	\$146,285.71
Marketing Consulting services	\$166,727.27
Advertising agencies	\$187,652.17

User Profile: Clifton Alexander

Clifton is owner and creative director of Reactor Design Studio, a three plus-person graphic design firm in Kansas City, Mo. For over seven years, he has been providing innovative print design solutions for business-to-business clients.

Clifton has done extensive research into project management systems, as he is actively pursuing a solution that is tailored to meet his unique needs. He has switched between several different systems due to difficulty of use and cost, but as of late uses three different systems to help him manage Reactor's operations: Cashboard for estimating, tracking time and invoicing; Task-Paper for generating lists of projects and to-do's; and HighRise for basic contact management.

His wife currently manages the firm's finances by using QuickBooks, however, all the information he generates using CashBoard has to be manually re-entered for accounting (Accounts Payable and Receivable), payroll and tax purposes. When building proposals, Clifton uses an Apple word-processing program called Pages, from which he will copy and paste project descriptions and information from previous proposals and insert estimates from CashBoard.

Clifton is searching for a customizable system that will fulfill the needs of his organization. He has developed "a lot of 'workarounds' that help [him] use the software the way [he] wants," but he would like an integrated solution that ties into billing and accounting, perhaps through a QuickBooks plug-in. Some specific features that Clifton would like to see implemented into a new management system is an all-in-one collaboration, scheduling, and time-tracking functionality.

User Profile: Clark Bystrom

Clark is the owner of Bystrom Design, an independent graphic design firm located in Austin, Texas. As a sole practitioner with over 20 years of experience, he is perfectly suited to handle all aspects of managing a creative business. This doesn't mean, however, that he isn't looking for a way to improve efficiency and better manage his operations.

Clark uses three systems to manage his design firm. For project management, he uses an off-the-shelf application called Daylite because of its detail and ability to integrate with multiple applications and mobile devices. Billings is an application that allows him to generate customized invoices and automate billing processes. Finally, he uses Excel® to manage finances for Bystrom Design. Proposals are still prepared manually, as is tax preparation.

Although his current system is very robust, Clark feels there is some repetition and redundancy. He would like to find a way to better automate some tasks such as proposal generation.

User Profile: Melissa Dehner

Melissa is the designer and illustrator behind Honey Bee Creative, a freelance design firm in Fairway, Kansas. As a sole practitioner, she has to handle all aspects of managing a creative business, from marketing the firm, to doing the work, to billing and collecting payment.

All of Melissa's operational processes are manual. She uses a dry-erase board for managing her current workload, updating it on a monthly basis. Estimates are typically proposed via email, then printed out and filed for future reference. Hours spent on each project are tracked in a binder, and invoices are generated using Adobe® Illustrator® software and then emailed as a PDF to clients. Old invoices and project files are burned onto CDs each year.

Melissa hasn't invested in a management system yet, although she acknowledges that she needs a better system and way of doing things. "Being just one person, [my system] has worked so far," she says. She would like to develop a Standard Project & Pricing list so that she and her clients can "avoid the 'vague' feeling...[they] get from not knowing where your price comes from."

User Profile: Kevin Fullerton

Kevin is owner and creative director of Springboard Creative, a graphic design firm in Mission, Kansas. Kevin is an industry veteran with over 20 years experience. Before launching his own business in 2006, he was creative director for a large communications and marketing firm. Now he and one other designer complete branding and print projects for business-to-business clients.

For project and time management, Kevin used FunctionFox, but discontinued use after a couple of years. According to him, "it took much time to enter basic items. For a small shop, it just wasn't efficient or worth the money." Furthermore, the time tracking information collected by this system didn't transfer over to his billing software, or that of his accountant. Now he does most of his time tracking and invoicing through QuickBooks, an off-the-shelf accounting application used by many small businesses. He is able to archive hours spent on projects and use that information for estimating future work, and estimates are filed away by client and date. He currently has no way of managing contact information.

Kevin's current QuickBooks solution "doesn't do most things I need. [It] lets me track time and bill. That's it." He desires an all-in-one system for estimating, scheduling, time-tracking, billing and customer relationship management. Customization is also important, so he can enter common expenses (such as deliveries), track pro-bono work, or even keep business related-goals in one place (knowledge management system).

User Profile: Ryan Hembree

Ryan is the founder and creative director of Indicia Design, a five-person branding firm in Kansas City, Missouri. For approximately ten years he has been in charge of running the firm's operations. In 2008 he brought in a business partner to help market and grow the firm, so that he could focus on streamlining the firm's operations.

In 2004, Ryan designed and developed an online MySQL database and system for project, client, and archive management. Over the years he added functionality to the system, including the ability to have standardized pricing for specific projects and the ability to quickly generate PDF proposals. As features and functionality has been added, the user interface has become too complicated for he and his team to use. He tried other off-the-shelf systems, including BaseCamp, FastTrack Schedule, and Salesforce.com to improve operational efficiencies, but they proved too difficult or costly to use.

Indicia's finances are handled through the use of Excel spreadsheets for time tracking, and then invoices are generated using QuickBooks. Payroll is handled by one of the firm's bookkeepers, while tax preparation is completed using a CPA.

The purpose of this Thesis project is to help Ryan develop a more robust and integrated solution for managing his creative firm. By incorporating the input and insight of actual users for the system, the functionality of his existing system will be evaluated and then modified so that a new solution can be built.

User Profile: Brandon Myers

Brandon is managing partner of Lundmark Advertising & Design, located in downtown Kansas City. A smaller advertising agency of seven people, Brandon and his two partners oversee this 40 year-old firm that completes packaging, point of sale and retail advertising design for consumer goods companies.

Currently the operations side of the business is run through manual processes. Projects are tracked via status reports and Excel spreadsheet, and upon completion filed away. Acrobat.com is an online collaboration tool that he is using with some of his clients, particularly those with offices spread across the country. Lundmark Advertising does not currently have any systems in place for time or contact management.

Brandon works with an outside CPA to manage the agency's finances, including tax preparation, payroll, etc. Proposals are typically generated using Microsoft® Word®, and after estimating agency time requirements and outside costs such as printing and photography. Once sent to the client, they are filed away by client, by date.

According to Brandon, the processes he uses are efficient. “[As a] small agency, the majority of our processes are still being completed manually, and at the current time are pretty efficient.” He has used management systems in the past, but found that they tended to limit, or “hand-cuff,” his processes due to the limitation of the software. He would prefer a system with flexibility in terms of estimating project costs, as well as a more fluid way to allow his design team to collaborate on projects.

User Profile: Paul Weber

Paul is president and Chief Entrepreneur Officer of EAG, Entrepreneur Advertising Group. This seven-person marketing and advertising firm has worked with small businesses, start-up companies and entrepreneurs to develop marketing strategies since 2003.

Currently Paul's company does not use any project management software, but instead relies on a series of Excel spreadsheets and individual employee accountability. Old art files are archived onto discs and then referenced using an Excel spreadsheet and binders for print production data, while printed samples for each project are filed by client. Since EAG also performs public relations and media functions for clients, these projects are not necessarily tracked using this method.

Paul relies on QuickBooks for time tracking and billing purposes. Estimating jobs and generating proposals is a manual process using Microsoft® Excel®. Adding to the inefficiencies of this system is the fact that this information is not centrally located, rather it is kept by different account managers. Paul has used contact management software in the past (an old version of ACT), however the information that resides in this system becomes redundant when it is transferred manually into QuickBooks for time tracking and billing. “Right now our system works because of the nature of our employees. With any additional growth we will have real problems with the process. Individual employee accountability is the only thing holding it all together,” admits Paul.

Paul desires a way to manage projects “from initial project scope to billing” by incorporating a series of checks and balances. Centrally locating project tracking and archival information is important to him, as is other knowledge about clients; such as brand standards, client preferences, copy and press releases. The ability to customize the system, and export the information to other systems (such as QuickBooks) would also be beneficial to him. As social media become more and more prevalent, he also desires a way to integrate contact management with Facebook and LinkedIn.

Questionnaire: Operational Issues Affecting the Management of a Design Firm

1. How do you currently manage and keep track of current client projects?
2. Do you currently use project management software or systems? (If not, please skip to question 3)
 - a. Which project management software or systems do you currently use?
 - b. Why did you choose your existing project management system? What were the most important features?
 - c. Does your current project management system fulfill all of your requirements?
If not, what needs does it not satisfy?
 - d. What features would make your project management software/system more efficient?
3. How do you currently manage and keep track of old client projects?
4. Do you currently use time tracking and/or scheduling software or systems? (If not, please skip to question 5)
 - a. Which time tracking software or systems do you currently use?
 - b. Why did you choose your time tracking/scheduling system? What were the most important features?
 - c. Does your time tracking/scheduling system fulfill all of your requirements?
If not, what needs does it not satisfy?
 - d. What features would make your time tracking/scheduling software/system more efficient?
5. Do you currently use contact management software or systems? (If not, please skip to question 6)
 - a. Which contact management software or systems do you currently use?
 - b. Why did you choose your contact management system? What were the most important features?
 - c. Does your contact management system fulfill all of your requirements? If not, what needs does it not satisfy?
 - d. What features would make your contact management software/system more efficient?
6. How do you currently manage finances for your company?
 - a. How do you determine the cost for a project?
 - b. How do you create invoices for client projects? What software or systems do you use?
 - c. How do you prepare estimates or proposals for prospective clients?
 - d. Do you keep a record of old proposals/estimates? How do you find them?
 - e. What tasks associated with billing and/or estimating could help you improve the efficiency and accuracy of your accounting processes?
7. What other operational processes do you still complete manually or require multiple systems?

Other informal questions asked of User Group

On average, how much time do you spend:

1. preparing estimates or proposals (each one)?
2. working on billing (each week) or accounting tasks?

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Project Management Systems

Software	Collaborative software	Issue tracking system	Scheduling	Project Portfolio Management	Resource Management	Document Management	Web-based	License
5pm	Yes	No	Yes	No	No	Yes	Yes	SaaS
24SevenOffice	Yes	No	No	No	No	No	Yes	Proprietary
ActiveCollab	Yes	Yes	No	Yes	Yes	Yes	Yes	Proprietary
Assembla	Yes	Yes	No	Yes	Yes	Yes	Yes	Proprietary
AtTask	Yes	Yes	No	Yes	Yes	Yes	Yes	SaaS
Basecamp	Yes	No	No	No	Yes	Yes	Yes	SaaS
Bontq	Yes	Yes	Yes	Yes	No	Yes	Yes	SaaS
BrightWork	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Proprietary
CA Clarity PPM	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Proprietary and SaaS
Central Desktop	Yes	Yes	No	No	No	Yes	Yes	Proprietary
Cerebro	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Proprietary
Clarizen	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Proprietary
codeBeamer	Yes	Yes	No	No	No	Yes	Yes	Proprietary
Collabtive	Yes	No	No	No	No	No	Yes	Open source
ConceptDraw Project	No	No	Yes	No	Yes	No	No	Proprietary
Contactizer	Yes	No	No	No	Yes	No	No	Proprietary
Copper Project	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Proprietary and SaaS
DeskAway	Yes	Yes	Yes	No	Yes	Yes	Yes	SaaS
Dolibarr ERP/CRM	Yes	No	No	Yes	Yes	Yes	Yes	Open source
dotProject	Yes	Yes	No	No	No	Yes	Yes	Open source
DynaRoad	No	No	Yes	No	Yes	No	No	Proprietary
Endeavour Software Project Management	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Open source
Easy Projects .NET	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Proprietary
eGroupWare	Yes	Yes	No	Yes	Yes	Yes	Yes	Open source
enQuire - Grants Project & Contract Management	Yes	Yes	Yes	Yes	Yes	Yes	Yes	SaaS
FastTrack Schedule	No	No	Yes	No	Yes	No	No	Proprietary
Feng Office Community Edition	Yes	No	Yes	Yes	No	Yes	Yes	Open source
FogBugz	Yes	Yes	Yes	No	Yes	No	Yes	Proprietary
GanttProject	No	No	Yes	No	Yes	No	No	Open source
Gemini	Yes	Yes	Yes	No	Yes	Yes	Yes	Proprietary
Genius Inside	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Proprietary, SaaS, Hosted On-Premise
Glasscubes	Yes	Yes	No	No	No	Yes	Yes	Proprietary
Goplan	Yes	Yes	Yes	Yes	No	Yes	Yes	Proprietary
GroveSite	Yes	Yes	Yes	Yes	No	Yes	Yes	SaaS
HP Project & Portfolio Software	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Proprietary
Huddle	Yes	No	No	No	No	Yes	Yes	Proprietary
Hyperoffice	Yes	No	No	No	No	Yes	Yes	Proprietary
iManageProject	Yes	No	No	No	Yes	Yes	Yes	SaaS
InLoox	Yes	Yes	Yes	No	Yes	Yes	Yes	Proprietary

Table D-1: Comparison of Project Management Software. There are over one hundred project management systems available. The following table of systems from Wikipedia highlights notable systems and compares their functionality. Source: Wikipedia.org

Project Management Systems (continued)

Software	Collaborative software	Issue tracking system	Scheduling	Project Portfolio Management	Resource Management	Document Management	Web-based	License
JIRA	Yes	Yes	Yes	No	No	No	Yes	Proprietary
Jourmyx	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Proprietary
Kayako helpdesk software	Yes	Yes	No	No	No	Yes	Yes	Proprietary
KommandCore	Yes	No	Yes	No	No	Yes	Yes	Proprietary
KForge	Yes	Yes	No	No	No	Yes	Yes	Open source
KKOOP	Yes	No	No	No	No	Yes	Yes	Proprietary
KPlato	No	No	Yes	No	Yes	No	No	Open source
Launchpad	Yes	Yes	No	Yes	No	No	Yes	Open source
LiquidPlanner	Yes	No	Yes	Yes	Yes	Yes	Yes	Proprietary
LisaProject	No	No	Yes	No	Yes	No	No	Proprietary
MacProject	No	No	Yes	No	Yes	No	No	Proprietary
MantisBT	Yes	Yes	Yes	No	No	Yes	Yes	Open source
Mavenlink	Yes	No	Yes	Yes	Yes	Yes	Yes	SaaS
MatchWare MindView 4 Business Edition	Yes	No	Yes	Yes	Yes	Yes	Yes	Proprietary
Merlin	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Proprietary
MicroPlanner X-Pert	Yes	Yes	Yes	Yes	Yes	No	No	Proprietary
Microsoft Office Project Server	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Proprietary
Microsoft Project	No	No	Yes	No	Yes	No	No	Proprietary
Microsoft SharePoint Server	Yes	Yes	Yes	No	No	Yes	Yes	Proprietary/SaaS
MindGenius	Yes	No	Yes	No	Yes	No	No	Proprietary
Mingle	Yes	Yes	No	Yes	No	Yes	Yes	Proprietary
NetPoint	No	No	Yes	No	Yes	No	No	Proprietary
NavalPlan	Yes	No	Yes	No	Yes	No	Yes	Open source
MyWorkPLAN	Yes	Yes	Yes	Yes	Yes	Yes	No	Proprietary
O3spaces	Yes	No	No	No	No	Yes	No	Proprietary
OmniPlan	No	No	Yes	No	Yes	No	No	Proprietary
Onepoint Project	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Proprietary and Open source
Open Workbench	No	No	Yes	No	Yes	No	No	Open source
OpenProj	No	No	Yes	No	Yes	No	No	Open source
Oracle Project Portfolio Management	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Proprietary
phpGroupWare	Yes	Yes	No	?	Yes	Yes	Yes	Open source
PHProjekt	Yes	Yes	Yes	No	No	No	Yes	Open source
Planbox	Yes	Yes	Yes	Yes	Yes	Yes	Yes	SaaS
Planisware 5	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Proprietary
Planner	No	No	Yes	No	Yes	No	No	Open source
Planner Suite	No	No	Yes	Yes	Yes	Yes	No	Proprietary
Primavera Project Planner	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Proprietary
Principal Toolbox	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Proprietary
Project KickStart	No	No	Yes	No	Yes	No	No	Proprietary
ProjectManager.com	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Proprietary
Project.net	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Open source
Project-Open	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Open source
Projectplace	Yes	Yes	Yes	Yes	No	Yes	Yes	Proprietary
ProjectSpaces	Yes	Yes	Yes	No	No	Yes	Yes	Proprietary
Projecturf	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Proprietary
Projektron BCS	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Proprietary

Project Management Systems (continued)

Software	Collaborative software	Issue tracking system	Scheduling	Project Portfolio Management	Resource Management	Document Management	Web-based	License
Proliance	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Proprietary
Prolog Manager	Yes	Yes	No	Yes	No	Yes	Yes	Proprietary
PSNext	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Proprietary
QuickBase	Yes	Yes	No	Yes	Yes	Yes	Yes	Proprietary
Rachota	No	Yes	No	No	No	No	No	Open source
Redmine	Yes	Yes	Yes	Yes	No	Yes	Yes	Open source
Rplan	Yes	No	Yes	Yes	Yes	No	Yes	Proprietary
SAP RPM	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Proprietary
Sentient PPM	Yes	Yes	Yes	Yes	Yes	Yes	Yes	SaaS
Severa	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Proprietary
SharpForge (Defunct)	Yes	Yes	No	No	No	Yes	Yes	Open source
Smartsheet	Yes	Yes	No	Yes	No	Yes	Yes	Proprietary
TaskJuggler	Yes	No	Yes	No	Yes	No	No	Open source
Teamcenter	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Proprietary
TeamDynamixHE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	SaaS
TeamLab	Yes	No	No	Yes	No	Yes	Yes	Open source and SaaS
Teamwork	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Proprietary
TeamworkPM	Yes	No	Yes	Yes	Yes	Yes	Yes	Proprietary
Tenrox	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Proprietary
Tom's Planner	Yes	No	Yes	No	No	No	Yes	Proprietary
Trac	Yes	Yes	No	No	No	No	Yes	Open source
TrackerSuite.Net	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Proprietary
Ubidesk	Yes	Yes	Yes	No	No	Yes	Yes	Proprietary
Unaware	Yes	Yes	Yes	No	No	Yes	Yes	Proprietary
VPMi	Yes	Yes	Yes	Yes	Yes	No	Yes	Proprietary
web2project	Yes	Yes	No	Yes	No	Yes	Yes	Open source
Webforum Project	Yes	No	Yes	Yes	Yes	Yes	Yes	SaaS
WebSPOC	Yes	Yes	No	Yes	Yes	No	Yes	SaaS
WorkBook Software A/S	Yes	Yes	Yes	No	Yes	Yes	Yes	Proprietary
WorkEngine	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Proprietary
WorkLenz	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Proprietary
WorkPLAN Enterprise	Yes	Yes	Yes	Yes	Yes	Yes	No	Proprietary
workspace.com	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Proprietary
Wrike	Yes	Yes	Yes	No	No	Yes	Yes	Proprietary
Xplanner	Yes	No	Yes	No	Yes	No	Yes	Open source
Zoho Projects	Yes	Yes	No	No	Yes	Yes	Yes	Proprietary

Table D-1: Comparison of Project Management Software. (continued from page 52–53)

Project Management Systems (continued)

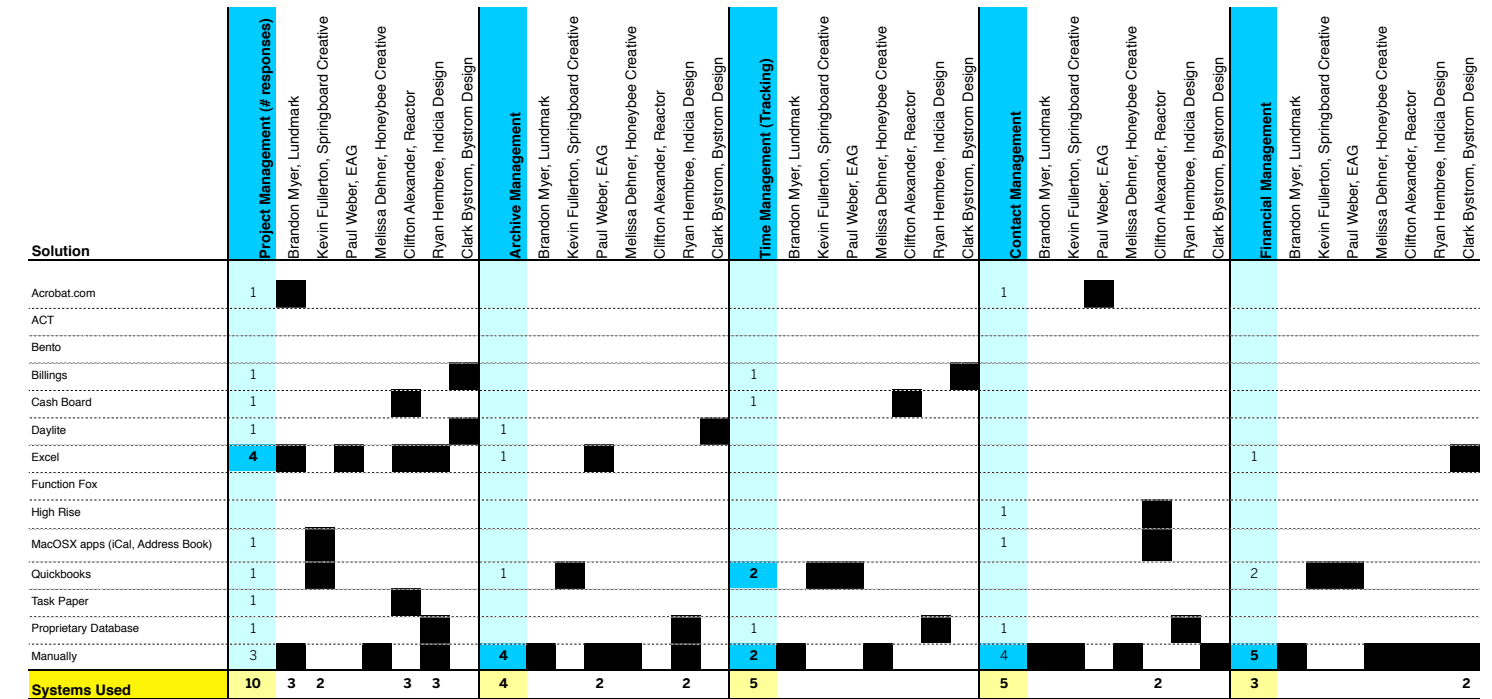


Table D-2: Systems used by creative business owners interviewed for this project. The cells in yellow represent the total number of systems used to complete each tasks, i.e. Project Management or Contact Management. Blue cells indicate which systems were used, with the most popular a darker shade of blue.

Project Management Systems (continued)

WITHOUT ACCOUNTING						
PRODUCT	Clients & Profits ASAP	Creative Management	Job Tracker	OmniPilot Agency	Studio Manager	
Year introduced	2005	2000	1995	2003	1996	
Number of sites using the system	N/A	60-70	200	n/a	500	
<i>Type of firm:</i>						
In-house departments	5%	5%	100%	15%	5%	
Independent agencies	95%	95%	—	85%	95%	
<i>Primary design discipline:</i>						
Graphic design	N/A	5%	100%	40%	75%	
Web development	N/A	1%	—	10%	10%	
Advertising	N/A	89%	—	40%	5%	
Other	N/A	5%	—	10%	10%	
<i>Size of firm:</i>						
Less than 10 employees	90%	45%	—	50%	79%	
10 to 50 employees	10%	50%	—	46%	20%	
More than 50 employees	—	5%	100%	4%	1%	
<i>Main features of the system:</i>						
Contact tracking/CRM	Yes	Yes	Yes	Yes	Yes	
Estimating	Yes	Yes	Yes	Yes	Yes	
Tracking of actual time and materials	Yes	Yes	Yes	Yes	Yes	
Invoicing	Yes	Yes	Yes	Yes	Yes	
Resource management, task-level assignments, milestones	Yes	Yes	Yes	Yes	Yes	
General ledger accounting	No	No	No	No	No	
Group collaboration, extranet, digital asset management	No	Yes	Yes	Yes	No	
If no general ledger, what accounting software should be used with it	Any	Quickbooks	Clients & Profits	QuickBooks	Any	
Available for outright purchase	No	Yes	Yes	Yes	Yes	
Mac or Windows or Cross-platform	—	Cross-platform	Cross-platform	Cross-platform	Cross-platform	
One-time purchase price starts at	—	\$1,500	\$7,799	\$489 per license	\$795 for a single user	
Available on a subscription basis	Yes	No	No	No	No	
What browser does it use	Safari, IE, FireFox	—	—	—	N/A	
Monthly subscription price per user	\$30 for 1st user, \$5 for each additional	—	—	—	N/A	
Minimum subscription amount	\$30	—	—	—	N/A	
Training for new users	web-based tutorials	30 days free phone support & training available if needed	classroom, online, or onsite available	4 one-hour live lessons, unlimited email support optional: \$1,150	users manual, pay for phone support or onsite training configured for each site	
Annual price for user support	included (forums only)	FileMaker Pro	Omnis Studio	FileMaker Pro	FileMaker Pro	
Underlying database program	MySQL/PHP	FileMaker Pro	Omnis Studio	FileMaker Pro	FileMaker Pro	

WITH ACCOUNTING						
Studiometry	TimeFox	Traffic	Clients & Profits	Workamajig (formerly Creative Mgr Pro)	JobOrder	Rebus
2003 est 2,500	2001 Over 1,800	2002 220	1986 2,500	2000 1,400	1995 More than 100	1991 400
20%	5%	5%	15%	15%	20%	4%
80%	95%	95%	85%	85%	80%	96%
30%	55%	65%	20%	40%	50%	41%
25%	15%	8%	10%	25%	—	22%
30%	25%	25%	70%	35%	50%	24%
15%	5%	2%	—	—	—	13%
80%	81%	55%	—	10%	10%	8%
15%	18%	40%	75%	60%	70%	72%
5%	1%	5%	25%	30%	20%	20%
Yes	Yes	Yes	Yes	Yes	Yes	Yes
Yes	Yes	Yes	Yes	Yes	Yes	Yes
Yes	Yes	Yes	Yes	Yes	Yes	Yes
Yes	No	yes	Yes	Yes	Yes	Yes
Yes	Yes	Yes	Yes	Yes	Yes	Yes
No	No	No	Yes	Yes	Yes	Yes
Yes	No	Yes	Yes	Yes	Yes	No
Quickbooks	QuickBooks, MYOB	MYOB, Quickbooks, Sage	(Included)	(Included)	(Included)	(Included)
Yes	No	Yes	Yes	Yes	Yes	Yes
Cross-platform	—	Cross-platform	Cross-platform	Cross-platform	Cross-platform	Cross-platform
\$190 for 1st user, \$100 for each additional	—	\$10,000 for 5 users	\$4,995-\$29,995	\$10,495 for 10 users, up to \$72,000 for 100 users	\$29,900 for 10 users	\$6,290 for 1st user
No	Yes	No	No	Yes	No	No
—	Safari, Firefox, IE, Netscape	—	—	Safari, Firefox, IE	—	—
—	\$5	—	—	\$38	—	—
—	\$35 for 1st user, \$5 for each additional	—	—	10 users	—	—
free online support & videos	unlimited phone, web, e-mail	full training online or onsite	classroom, online, or onsite	setup & web training included onsite assistance available	includes setup & training onsite & online	onsite & online
\$269/year phone support XML	free MS SQL	User support, maintenance and up FileMaker Pro	15% of software price Omnis Studio	N/A - support is included MS SQL	\$6,250 for additional 50 hours 4th Dimension	depends on number of users Omnis Studio

Table D-3: Shel Perkins's Comparison of Project Management Systems for Creative Firms. (Source: AIGA Center for Practice Management)

Project Management Systems for the Creative Industry

There are over one hundred project management systems available. Depending on the industry, the needs of businesses are very specific and unique. Below is a partial list of project management software/systems that are tailored to the needs of creative businesses (according to their product literature), and that were researched for this project. Most of these systems are designed for larger organizations with more than 6-7 employees—those having dedicated account managers, project managers, purchasing managers, traffic coordinators, etc. Since in small to medium size businesses there is often only one or two people responsible for all of these roles, these systems would require too much time commitment to be functional. Additionally, these more robust systems would require a steep learning curve to fully utilize their features, or require the transformation of the firm’s business processes to fit the capabilities of the system.

System	Platform	Cost (10 users)	Recurring Cost	Additional Software
Aero	Web-based	\$4,200.00	Yes	No
Basecamp	Web-based	\$1,200.00	Yes	No
Clients & Profits ASAP	Web-based	\$900.00	Yes	No
Creative Management	Stand-alone	\$6,700.00	No	Yes. FileMaker Pro, server
DesignSoft Creative Billing Online	Web-based	\$1,200.00	Yes	No
Infowit Creative Proj Mgmt	Web-based	\$5,800.00	Yes	No
Job Order	Stand-alone	\$14,950.00	No	No
OmniPilot Agency	Stand-alone	\$7,800.00	No	Yes. FileMaker Pro, server
ProWorkflow	Web or Stand-alone	\$3,600.00	Yes	No
Studio Manager	Stand-alone	\$5,500.00	No	Yes. FileMaker Pro, server
Studiometry	Web-based	\$1,800.00	No	No
TimeFox	Web-based	\$865.00	Yes	No
Workamajig	Web-based	\$4,560.00	Yes	No

Table D-4: Project Management Systems for the Creative Industry

Project Management Systems for the Creative Industry (continued)

Aero Ad Agency System www.aero-ad-agency-software.com

Features that were compelling about this system were that it allows for digital asset management, has full accounting capabilities, and allows users to have automatically generated thumbnails of projects. Proofs of projects can be uploaded to the system as well, thus keeping a record of changes and revisions.

Price for 10 users and up to 50GB of online storage: **\$350.00–450.00 per month, or \$4,200.00–\$5,400 per year.**

Basecamp www.basecamphq.com

Great collaboration tool allowing for the creation and editing of individual milestones. Based on critical path or linear projects, many organizations use Basecamp. Only allows for project management and nothing else. Is customizable, allowing for users to change color of the screens and upload their logos. Ability to upload files to share with others is possible through Basecamp. This web-based system is priced based on the number of projects that a company needs to track, and there is no way to extract any of the data that is entered into the system.

Price for up to 100 different projects and 30GB storage: **\$99.00 per month, or \$1,188.00 per year**

Clients & Profits ASAP www.cp-asap.com

Clients & Profits ASAP was the closest system found that would match the needs of small- to medium-sized creative business owners. Its reporting features, as well as the ability to cost outside services such as copywriting, photography and printing in order to determine profitability for each job was a definite plus, however, this information cannot be integrated or shared with QuickBooks or MYOB. Another disadvantage is that this system does not allow for users to export their data. If a user decides to quit using the system, their data will be purged after 90 days.

Price is \$25.00 per user per month **\$900.00–\$3,000.00 per year**

Creative Management www.creativemanagement.info

This solution from Dynamic Business Solutions is geared toward larger organizations, and requires the use of FileMaker Pro software (an additional startup expense). It can interface with Quickbooks and MYOB for accounting purposes, and allows for users to automatically generate purchase orders and manage digital assets. The interface of this particular system is user-friendly, with large icons to define different tasks.

Price for five (5) users **\$1,500.00 for software, plus \$1,700.00 for FileMaker Pro software**

Project Management Systems for the Creative Industry (continued)

DesignSoft Creative Billing Online www.designsoft.com

This solution is another close fit for the needs of small to medium sized creative businesses. It is web-based and similar in functionality to Base-Camp, available as a subscription plan for a defined number of projects. It also provides for time management, including a stopwatch feature and easy accounting reporting. Unlike Clients & Profits ASAP (which is another close contender), this solution allows for data to be exported from the system and used with other applications. Missing functionality that is essential includes a sales/prospecting capability, as well as the ability to quickly find locally archived jobs. The user interface appears to be more complex than necessary.

Price for up to 1500 projects **\$100.00 per month, or \$1,200.00 per year**

Infowit Creative Manager www.infowit.com

Creative Manager is a project management system designed for larger organizations with dedicated account managers, project managers, purchasing managers, and traffic coordinators. Feature-rich, this solution attempts to do everything that creative businesses need to do, including giving clients the ability to manage and approve their projects. The problem with this “everything but the kitchen sink” approach is that Creative Manager is too complicated for most users and costly—although available via subscription model or a one time fee, this solution could cost a creative business owner well over \$10,000.

Price for 10 users (including training and configuration) **\$5,800.00 first year, \$4,800.00 per year thereafter.**

JobOrder www.joborder.com

Another all-encompassing solution for creative business, JobOrder allows companies to manage the entire workflow, including estimating, scheduling, project management and billing. It is an expensive, stand-alone piece of software that will integrate with accounting software and allow for exporting of data. While there some nice, friendly graphics and capabilities such as drag-and-drop functionality utilized by this system, for the most part it does not have a user-friendly interface.

Price for up to 10 users **\$14,950.00**

Project Management Systems for the Creative Industry (continued)

OmniPilot Agency www.omnipilotagency.com

Much of the functionality proposed in the C.O.M. mand Center (Creative Operations Manager) is available in this stand-alone software program marketed to larger advertising agencies and in-house design studios. This system, however, is not web-based, and it also requires to purchase of FileMaker Pro, a database application. Additional plug-ins/modules for QuickBooks integration and training are also available at an extra cost.

Price for five (5) users **\$4,479.00 up front cost, \$1,150.00 training on system**

ProWorkflow www.proworkflow.com

This robust, web-based project management solution is feature packed, including most of those found in the C.O.M. mand Center. Primarily focused on time and project management, this system lacks sales/prospecting features, as well as accounting and billing modules. According to documentation it is built primarily for “service-based tech and creative companies.” Data is exportable to other applications.

Price for five (5) users with full functionality **\$30.00 per month, or \$1,800.00 per year.**

Paprika (formerly Rebus) www.rebus-software.com

No pricing information was available on the provider’s web site, requiring a demo and sales call.

Sohnar Traffic www.sohnar.com

No pricing information was available on the provider’s web site, requiring a demo and sales call.

Studio Manager www.studio-manager.com

Used by many creative businesses, Studio Manager offers some unique features that are not found in other project management systems. For example, it offers the ability to create standardized email or printed communication. It also offers some features that might leave one scratching their heads...for example, it gives users the ability to input Purchase Orders for items such a printing, etc., yet the system does not integrate directly with QuickBooks or other financial software, so this information would have to be re-keyed into another application anyway. Studio Manager is also built on the FileMaker Pro platform, requiring additional hardware and software in order to use it.

Price for five (5) users **\$1,595.00, plus \$2,499.00 for a dedicated server, \$1,000.00 for FileMaker Pro (5 users)**

Project Management Systems for the Creative Industry (continued)

Studiometry www.oranged.net

This project management system is actually two-in-one if purchased with Accounted, the developer's billing and invoicing option. Studiometry integrates with programs that most creative business owners (working on Mac platform) use on a daily basis, including iCal for scheduling and Address Book for contact management. Studiometry allows for tracking time and expenses, and even integrates with a full fledged accounting program. An iPhone app is also available for Studiometry, as well as Premium support plans for an additional charge.

Price for five (5) users **\$925.00, plus
\$79.00 for Accounted single-license**

TimeFox www.functionfox.com

At one time this was an industry standard project, time and billing management software used by many advertising and design firms. Its features have been stripped down for the web-based solution, but it still has many benefits. The strength of this system lies in its reporting functionality...colorful charts visually represent at a glance project budgets and billings to date, while many easy to read reports can be generated for staff and scheduling meetings. From a user interface perspective, TimeFox is not customizable with a creative firm's logo or color scheme. Likewise, data entered into the system is unable to be exported to other programs should the user decide to switch project management systems.

Price for five (5) users **\$594.00 per year**

Workamajig www.workamajig.com

An all-in-one solution for project, time and knowledge management, Workamajig is overkill for most small- to medium-sized creative businesses. It is capable of customer relationship management (CRM) as well as estimating, billing and full-fledged accounting. It is promoted as being the perfect solution for firms from 10 to 400 employees.

Price for 10 users **\$380.00 per month, or
\$4,560.00 per year**

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