

# CRITERIA REQUIRED FOR SUCCESSFUL FREELANCING IN THE WEB DEVELOPMENT INDUSTRY

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## **Criteria Required for Successful Freelancing in the Web Development Industry**

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This purpose of this study is to determine how to penetrate the market as a freelance web developer. Two freelance web developers and three CEO's of successful web design firms had elite and specialized interviews conducted on them. The series of questions explored: What is quality web work? What tools and skills are needs to be successful? How are customers satisfied? What should be included in a online portfolio? How to establish a profitable pricing structure? These questions brought a wide range of answers that broaden the job set originally required by a freelance web developer. It was found that quality web work is defined by meeting the client's needs, meeting the developer's goals, being functional, and presentational. Using a Macintosh platform with Adobe's creative suite is the software and hardware suggested for a web developer. Other skills include and ability to learn, have effective communication skills, and a broad understanding of business. Satisfying a customer was defined as having clear communication with the client during all stages of the web development process. Online portfolios should be designed to attract the type of work one wishes to get. Also include a resume, past work, and contact. Developing profitable pricing structures rely on accurately calculating ones costs. It became apparent through the course of this study that clearly defined contracts with room for price adjustment was essential for the freelance web developer. Also, having the ability to learn new technologies and techniques in web design will ensure the continued success of a freelance web developer.

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# INTRODUCTION

The World Wide Web has transformed the way people communicate. Since the World Wide Web's birth in 1989 by Sir Tim Berners-Lee, the web has matured into a new industry that is technologically driven and constantly evolving. Establishing oneself as a freelance web designer takes a dedicated, creative, and motivated individual. A freelance developer has no company to hide behind, no superiors to edit work, and no safety net of co-workers. Indeed, the stress and work involved is extensive, but the freedom to choose what projects are undertaken and ability to control workload and hours is rewarding. Being an entrepreneur is not a new idea, going into business for oneself is a common way of making money in today's economy. Going into business as a freelance designer takes a certain set of skills, knowledge, and tools. This study asks: What does it take to penetrate the web market as a freelance web designer in today's economy? As with any business, it takes quality work, satisfied customers, and profitable operations.

Quality work is the first step towards the success of any business. For web developers, this means strong web pages that are functional, aesthetically pleasing, and have clean code. Keeping up with new software, markup language, new web technology, and back-end web applications are all elements of producing quality work. A quality web page in 2008 may be considered outdated in 2012. Constantly learning and keeping up-to-date with web technologies and trends are keys to success.

Satisfied customers who will recommend a freelance web designer's services to others are the second step to penetrating any market. One must start small, with a few quality projects that produce

satisfied customers. These first projects not only act as portfolio pieces that showcase the skills of the web developer, but create powerful references. The satisfied customers will recommend them to others and in part act like free sales personal for the web developer. This is called “word of mouth” advertising and is necessary to the success of the web developer. If poor work is produced, then unsatisfied customers can damage the reputation and client base of the web developer.

Profitable operations create revenue and success. One must not under or over price their skills but create a competitive pricing structure that not only wins bids but creates profit. This is a challenging task for web developers as they are trying to put a price on something that is always evolving and changing. Every project is different and requires a different design, elements, and structure. One project may only take three hours while another may take fifty hours. Should it be billed on an hourly basis or on a job by job basis? What is the startup cost to being a web developer? What tools, skills, and knowledge are required and how much time and money does it take to acquire them? These and other questions are explored in this study.

The purpose of this study is to access the necessary actions one must take to become a successful freelance web developer in today’s industry. Defining what quality work is, how to create satisfied customers, and what pricing structures will produce profitable operations are the elements to understanding the success of a freelance web developer.

# LITERATURE REVIEW

The three aspects that contribute to the success of a freelance web developer are quality work, satisfied customers, and profitable operations. Functional, aesthetically pleasing, and search-optimized websites that have the foundation of clean code makes for quality work. The best way for a web developer to demonstrate their capacity of knowledge to potential customers is through a excellent online portfolio. Satisfied customers refer future clients and are a huge source of free advertising. Having a profitable pricing structure that is competitive will ensure continued existence in the industry.(Airgrid)

There are many opinions in web development market concerning how to construct a web page. This study will only analyze the method used to create websites for business that are search engine optimized. This requires for the structure to be broken down into three parts: content, presentation, and behavior. Hypertext markup language (HTML) and Xtensible hypertext markup language (XHTML) code holds all the content to web page and is searchable by search engines. The industry is currently transitioning from HTML to XHTML. All information pertaining to the client's company should be held in the HTML structure of a page. Presentation is defined by cascading style sheets or CSS. (Stylin with CSS) A good web developer should "use flexible as opposed to fixed design and to make use of CSS media-type declarations to ensure the maximum accessibility of the content." (Wisniewski) Using ID's and class's efficiently and correctly will help to create an aesthetically pleasing web site that is easily updatable. Behavior is defended by JavaScript code. This turns a normal web page into an interactive user experience. Music, video, and animation are all

functions of JavaScript. Web developers should also “step up their game to meet the expectations users have formed on the rich personalized, visual, user driven, interactive web as a whole.”

(Wisniewski) Having the ability to create dynamic web pages will set the web developer above the rest. They should also maintain a mastery of the fundamentals of designing a solid usable site and offering well-organized information. (Wisniewski) Keeping in mind that not all users have the latest technology in browser support such as Flash, creating web sites that are graded support structures are important to. This means designing a site so that any user can view the site from an old to new browser. Keeping all-important information in the HTML code is key to this method. It insures that your content will be searchable and promote better search engine optimization. Using an external CSS file allows for the same styles to be applied throughout the site seamlessly and makes it easy to change styles. Keeping JavaScript's separate form HTML produces clean code and also allows for JavaScript behaviors to be easily applied throughout the site.(Stylin with CSS)

Another important aspect of a web site is functionality. Functionality begins with the first page the user views, the home page. The home page should provide information about the business in a clear and concise manner. Consistent navigation techniques from the homepage to links must be used because customers are not ready to learn individual site navigation. The homepage should include basic information about the business such as the logo, mission statement, links to products, on-line shopping if offered, and contact information.(Blum) The homepage does what a point of purchase package design does for a product, it sells the goods.

The speed of load up time is another functionality factor that can keep customers viewing or drive customers away from a site. If the site takes ten minutes to load due to large graphics, customers will

give up and move on to the next competitor's site. Reducing the size of graphic file to optimize download time will help create a web site that is easy and fast to use. Graphic files should be saved in JPEG, GIF, or PNA format with a resolution of 72 dpi and in the size intended to be used on the website. Having images at a higher resolution will not increase the quality of the image on screen but will slow down load up time. When placing pictures with text contained inside the file, the GIF file format should be used to preserve the integrity of text. (Blum)

Browser compatibility is important to take into consideration when designing a web site. A company needs to know the audience that will be viewing their web site and what the most commonly used browsers are for that market to make sure that the web site loads correctly. Using a web site analytics tracking system, such as Google analytics or W3Counter, documents web site track and gives valuable information as how to design a web site around a audience. W3Counter also calculates current web browser share which web developers constantly need to be aware of to ensure that their sites load correctly on the most popular browsers. As of April 2008, W3Counter reported that 37.5 percent of the population uses Internet Explorer 6.0, 24.14 percent of the population uses Internet Explorer 7.0, 23.31 percent of the population uses Firefox 2.0, and 4.19 percent of the population uses Firefox 1.5. Other web browser hold less than 4 percent of the market share combined. (W3Counter) Therefore web developers need to be designing sites that load correctly in Internet Explorer 6.0/7.0 and Firefox 1.5/2.0. (Wisniewski)

Ease of navigation is of the most importance concerning functionality when navigating and viewing a web site. Navigation provides the structure and organization for a website. Navigation can be

broken down into three sections: primary and secondary layers, required navigational elements, and familiarity.(Shannon)

Primary navigation consists of three methods: a bar down one side of the web page, along the top and bottom, or in a frame that stays with the user through out the site. The primary navigation must be “clear, structured, and intuitive.”(Shannon) This is done by breaking a site down into main topics or groups and presenting them in a logical manner. There should be 4-15 links on the primary navigation as to many can overwhelm a user. The primary navigation must be easily accessible on any web page as it directs traffic to there desired destination.(Shannon)

Secondary navigation hold commonplace links such as contact, about us, directions, and copyright information. A common place for secondary navigation is at the bottom of a web page in smaller text size or under the primary navigation. It must be clearly stated through graphical representation that the secondary navigation is of lesser importance than the primary navigation. (Shannon)

There are certain navigational elements that all web pages should have. A link back to the homepage is the most essential link to any page because, if designed correctly, the home page is the central hub that connects all parts of the web page. Using the graphic logo of the webpage is a simple way to establish a permanent link back to the homepage. A breadcrumb trail is a way for the user to easily indentify where they are on a site. This method displays the hierarchy of links that the user has navigated through to get to the current page. A breadcrumb trail can be placed at the top or bottom of page. If a page requires vertical scrolling to view content, page jump can be useful navigation elements. These allow the user to jump to designated sections of the web page without vertically

scrolling. A site map is essential to any page as it allows the user to go to any page on the site with one click. If the web site is large with lots of information a internal search utility can be helpful for users who are searching for particular content but don't necessarily know where to find it.(Shannon)

Using familiar navigational structures ensures that users will not have to learn how to navigate a webpage. People are most concerned with viewing the content easily and efficiently. This is no to say that originality is bad, it can in fact be a dynamic element that sets a webpage above the rest, but it must be used correctly (Shannon). The most important aspect of navigation as whole is for it to be consistent throughout the site. The user should not have to figure out how to navigate through every page as it will surely be time consuming and frustrating.

It is becoming increasingly important for a business to have a functional and aesthetically pleasing web site. The Web is a rapidly changing form of advertising and marketing for businesses that must be used for success. *Catalog Age* magazine even renamed itself *Multichannel Merchant* because the catalogers are now using the Internet with on-line catalogs.(Romano 25-31) When a customer enters a web site for a first time, the business wants to make a lasting impression on that customer. A strong impression can be made through aesthetics (design elements, appeal) and functionality (navigation, page load time). Pleasing aesthetics are key for first impressions but functionality will keep the customers' business. These are the most important aspects to web site effectiveness. If it does not work, customers will turn to competitors.(Arigrid)

First impressions count. People base lifelong judgments on first impressions and websites are no exception. Canadian researchers say that web users will make these first impressions within 1/20<sup>th</sup> of

a second. These impressions can greatly impact perceived credibility, usability, and purchasing decisions. (First Impressions Count in Web site Design)

A well-designed web site may look pleasing and may navigate smoothly for customers browsing the site, however, for such a well-designed web site to be viewed, as it should, it must be optimized for search engines. Search Engine Optimization (SEO) is a process that enables Internet search engines to easily find and access a web page with the overall goal of generating more traffic to that web site (Kay). Due to the fact that search engines are the most used method for directing traffic to a web site, web sites that do not focus on SEO will rapidly lose visitors and will not fully profit from existing on the web.(iprospect.com) Over 90 percent of Internet users use search engines to find products, services and information and if a web site does not show up in the first 10 to 20 listings, it will most likely not be looked at or found. (iprospect.com)

Recent research shows that companies that optimize their web site for search engines have tremendously increased traffic to their site and in turn, have increased business and profit. Sharp Electronics, a more recent entrant to the World Wide Web, had difficulties drawing traffic flow to their site. With the help of iProspect, a premier search engine marketing firm, SEO techniques were applied to the Sharp Electronics Web site. Overall, the Web site generated 276 percent more referrals from search engines than it did when the Web site was first implemented. (iprospect.com)

There are several ways to optimize a web site for search engine recognition. Two common strategic categories are referred to as “Natural SEO” and “Paid Placement SEO.” Natural SEO describes the process of optimizing a web site through simple adjustments such as keyword development, internal

and external links, and text based content and images. Through a “natural” method, SEO is implemented behind the scenes in the development and design of the Web site.

Some of the most beneficial “natural” methods are:

- **Linking:** include links to other web sites (with relevant information) within the company’s web site. The more a site links to outside sites, the more accessible it is to search engines.
- **Keywords and Phrases:** target ‘less competitive phrases’ as opposed to ‘competitive phrases.’ Through researching target markets as well as competitors, a company can produce a strong list of keywords and phrases that pertain to their product and/or service. Less competitive words and phrases generate more traffic since there are fewer competition for use of such words from other sites. Once a company gains ranking viability among the Web and search engines, they can then incorporate more competitive phrases.
- **Content:** including content such as articles, whitepapers that are relevant to information regarding the company. This often attracts ‘inbound links’ (other web sites put links on their site to web sites with relevant information). Search engines will place web sites at a higher ranking depending on the amount of inbound links found from other sites. The more inbound links a site has, the higher the ranking the site will have on search engines.

(Oneupweb)

Paid placement is a completely different approach to SEO than natural SEO and, though common, can be very expensive. When a company chooses to spend more money on SEO, they will often enlist the help of professional SEO firms to create ads that can be searched through search engines. Keywords, content, and design are all important considerations in paid placement and there is more of a guarantee that the ad will show up from searches. If the ad does appear and is clicked on by the

searcher, the company placing the ad has to pay a small fee (pay per click). The paid placement advertisements are often sorted separately from the sites brought up through natural SEO. For example, when searching google.com, the paid placement search ads appear to the far right side of the screen and are referred to as 'Sponsored Links'. (Oneupweb)

The methods in which search engines operate are highly automated and selective in order to deliver the best results to the person conducting the search. In order to find the most legitimate, informational web sites, search engines send out what is technologically referred to as a "Search Engine Spider." A "spider" is an automated program that "crawls" across the World Wide Web gathering information from web sites and then feeds that information back to search engines so that the search engines can index and easily retrieve the information about sites when a search is being conducted. The "spider" looks for certain text-based characteristics of a web page, such as rich page content and keywords, while skimming over elements of a page such as flash-based elements and image-based elements. Knowing what the "spider" is looking for is the key to understanding how to optimize a web site for search engine spiders. Sites that are more frequently updated attract more visits from the "Search Engine Spider" so it is crucial to maintain a web site with constant activity and updates (iProspect). Though many companies currently developing a web presence are learning about and implementing SEO, there are far too many who still have no knowledge of the benefits of SEO. Over 50 percent of web sites are not optimized at all (ipropect).

The best way for a web developer to demonstrate their capabilities is through a online portfolio in the form of a web site. This gives full creative freedom and allows for the web developer to sell themselves to potential clients. Here they can demonstrate their skills in HTML, CSS, and

JavaScript coding as well as specialized skills such as flash animation. Important aspects of an online portfolio include past examples of work, resume, and contact information. A stellar online portfolio can be a client winning element for any freelance web developer.(Airgrid)

Establishing a list of satisfied customers can propel a freelance web developer into success. When customers are satisfied with the process of hiring and working with a web developer they will in turn recommend the services to others. This is the most important form of advertising a freelance developer can take of advantage of because it's free and can result in many job offers. When trying to capture big clients, satisfied customers can give the potential client confidence in the skills of the web developer.(Airgrid)

Creating a pricing structure that produces profitable operations and entices clients with competitive prices is an important aspect to succeeding as a freelance web developer. The considerations that drive a pricing structure are cost of goods needed to develop web sites, cost of technology upgrades, and knowledge of competitions prices. Being aware of what competition charges for web development services is key to outbidding for a job. A simple way of researching a competitions price structure is to submit various types of estimates posing as a possible client to obtain their basic price structure. Applying these three things to your pricing structure will help to establish on that results in profitable operations.(Airgrid)

There are essential tools that every web developer must have in order to succeed. The following a list of tools, suggested by Paul Mycroft and Company. The first and foremost is a Apple MacBook Pro. This super laptop allows for the web developer to do work anywhere, at any place, and have all

the power of a desktop. The second tool is a PC laptop or desk top for the purpose of testing browser compatibility. However, Apple recently announced that all their computers will come with the ability to run windows as if it were PC. With over 90 percent of the business world using PC platforms, it is essential to have the ability to test a web site on both platforms. The third essential tool is Adobe Creative Suite. This suite of software includes Illustrator, PhotoShop, Indesign, Illustrator, Dreamweaver, Flash, Bridge, and Acrobat. All these programs are necessary for a web designer to create professional, quality work. These tools combined create a effective briefcase that gives the web developer the ability to create quality web sites.

The cost of goods needed to develop a web site include computers, Adobe Creative Suite 3, file storage, Internet access, and multiple browser testing capabilities on both the Mac and PC platform. Approximately every three years Adobe upgrades all their software. When this happens, it is important for web developers to update software on their computer to keep up to date with new file formats, technology, and design elements. If a web developer receives files in a newer version than what is available to them, the client could loose confidence in the web developer due to technology incompetence. The cost of updating Adobe Creative Suite 2 to Suite 3 is on average \$600 depending on which version. (Adobe)

To be a successful freelance web developer, one must deliver quality work, satisfy customers, and have profitable operations. Quality code is defined by separating content, presentation, and behavior and linking them together externally. Also designing pages with SEO in mind will boost search in rankings and direct more traffic. Satisfying customers is dependent on listening to the clients needs

and translating them into a finished product. Understanding the tools and time necessary to develop web pages will result in profitable operations.

# RESEARCH METHODS

The web development industry has dramatically advanced with in the last ten years, making it difficult to find current information on the field that is accurate and not outdated. Just in the past three years the standard of designing a web page has shifted away from table based designs to cascading style sheets. Because there is limited published data on this topic the methods of study this research used were elite and specialized interviewing and content analysis.

Elite and specialized interviewing is a form of research that “elicits a great deal of information from busy people” who perceive themselves as being important. This method, created by Lewis A. Dexter, calls for these people to be interview differently than the “average person.” Rather than creating a list of predetermined questions that can be seen as waste of valuable time to working professionals, the interview takes the form of intelligent conversation. (Levenson 22-23)

This study performed elite and specialized interviews on two types of people: freelance web developers and CEO’s of web development companies. Specific freelance web developers to be interviewed will meet the following criteria: five years experience in web development industry, well constructed portfolio, and a large satisfied customer base of small to medium clients. This excludes large corporations that are publicly traded with gross incomes exceeding one million dollars. Tom Adamkski, CEO of Level Studios located in San Luis Obispo was interviewed for his expertise in the web development industry. Ryan Miller, the CEO of Etna Interactive and Missy Retnier of iiiDesign were also interviewed. The topics discussed during these interviews will be the following:

1. What defines quality web development work?

2. What tools and skills are necessary?
3. How do you satisfy customers?
4. What should be included in a online portfolio?
5. How does one create a profitable pricing structure for web development work?

This study devised a process in which a freelance web developer can provide customers with an effective web site that satisfies the clients needs and promotes a positive customer relationship between the web developer and client. The information provided on pricing will be used to develop a pricing structure that is appropriate for web developers based on their skill, experience, and profit margins.

# RESULTS

Steven Knudsen is the communications director of Agri-Center located in Tulare, California. He has years of experience as a free lance web developer and managed such sites as ecoslo.com and centralcoastgrown.com. This interview was conducted via telephone. Steven defined quality web development work as fulfilling the usability requirements of the customer and meeting the clients needs. The tool necessary to complete work as defined by Steven was the Adobe program “Dreamweaver.” This was paired with knowledge of how to operate the program. Satisfying a customer was defined by timely updates and well constructed sites with few errors. Standing behind your product and guaranteeing the functionality of it is a key part of satisfying the customer. A online portfolio should include a resume, contact information, and past projects says Steven. To create a profitable pricing structure one must find out what other designers are charging around you area and charge competitively. It is important to note that equal amount of pay for equal amounts of work is important for this industry. An hourly rate is directly proportional to the amount of experience the web developer has. This interview was conducted July 8<sup>th</sup> of 2008.

Missy Reitner is the CEO of iii Design located in San Luis Obispo. It is a small design firm that is considered “hip” and “trendy” by the design industry today. Past web site projects include the award winning 2006 Sundance Film Festival website. This interview was conducted in person at the iii Design studio. Missy defines quality web development work as understanding the clients wants and translating that into what the client actually needs. Clients often do not understand what they actually need in a web site. The web developer, however, knows what kind of website will serve the

clients needs. Therefore, being able to communicate their expertise in structure and design of web sites effectively and at the same time educate the client will ultimately result in a better product. This is at the roots of quality work for Missy. The web developer should be able to listen to the clients wants and translate that into what actually needs to be on the website. As for tools and skills Missy's studio is run fully on a Macintosh platform. They have an inexpensive PC laptop for testing purposes, which is very important in today's PC driven economy. The creative suite is the key software that must be taken into to consideration when targeting costs. Missy also noted that open source software can be very good in terms of content management systems. The biggest key to satisfying the customer is communication says Missy. Being able to have open communication with the customer during the entire process will ultimately result in a happy customer. A online portfolio should be easy to navigate, simple, and current. Having the most current projects or links are key says Missy. The purpose of a online portfolio is to let your customers know what projects your are and have been working on. To establish a profitable pricing structure Missy suggests using a time tracking program to calculate how much time it actually takes to do a complete web site. One must also charge at a professional rate to be treated as a professional. New college graduates should charge anywhere from \$50 to \$70 an hour. Basing a hourly rate also depends on the client. Designers should adjust hourly rates according economic climate in their geographical area. Once established as a freelance web developer, one should adjust hourly rate accordingly to work. Professional hourly rates range from \$125 to \$200 per hour in big cities. Making sure that cost or covered, which include software, hardware, and time, is at the center to creating a profitable pricing structure. This interview was completed on September 16<sup>th</sup>, 2008.

Nancy Jo Ward is a freelance web designer in San Luis Obispo and manages web sites such as circlebarb.com, centralcoastcycling.com, and knightswaterpolo.org . She is also a part-time instructor at California Polytechnic State University , currently teaching a Digital Design and Production for Multiple Media course. Nancy defines quality web development work as functional and aesthetically pleasing. As for tools, Nancy has only used a Macintosh platform for all web design work. However, having the ability to test sites on a PC platform is essential in current PC driven market. Keeping the client informed during the entire process of creating a website is a key part to satisfying the client. She notes that the most important part of the process is the initial design stage where the site is structured is decided. The web developer should guide the client towards a feasible outcome and educate the client on good web design. Keeping the client engaged during the entire process will ensure that the final product meets the client's needs, which is key to client satisfaction. Nancy says that the most important skill for a web developer to have has a desire and appetite to keep learning. The industry is constantly changing and evolving with new technologies and techniques for web development. Being able to adapt to these new technologies is a key skill. She suggests building an online portfolio to attract the type of business one wants to obtain. This means if a web developer is looking to design sites with flash elements, than illustrate that skill on the portfolio. It should also include a resume, contact information, best work, and possibly a testimonial section for past clients. To create a profitable pricing structure one must be aware of the standard rates of their geographical location. Account for your costs such as computer, software, student loans, internet connection, and time when developing a pricing structure.

Tom Adamski is the CEO of Level Studios, formerly known as Web Associates. This company is an independent digital agency that amplifies global brands by innovating across desktop, web, and

mobile environments. Past clients include Apple, HP, Quicksilver, and Cisco. Tom defines quality web work as defining business goals and meeting them as well as meeting the clients expectations. When it comes down to design and structure, quality means different things to different people. Being able to set goals for you business at the beginning of a project and meeting them at the projects end is key to quality.

Tom and his company work on a Mac platform utilizing CS3 to create web sites. He suggest learning code behind interactive web pages to really excel in the industry. Being able to control the online environment will allow you to create a compelling user experience.

Satisfying the customer depends on communication. Keeping them involved in the process will ensure a positive customer relationships. Meeting the clients expectations both functionally and aesthetically are also key elements to satisfying the client.

Tom says to display your strengths in an online portfolio. Specialize in an area and excel in it, then show off the skill in your online portfolio.

To develop a profitable pricing structure Tom suggests meeting with a financial advisor to determine what an hour of your time is actually worth. As a freelance developer, charge an aggressive rate but charge the client for the actual time taken to complete a website. This means having a explicit contract with a comprehensive price that allows for adjustments if more hours are necessary to complete the project than expected.

This industry is constantly evolving and to be successful in it you need to assume the lifestyle. Keeping updated with new trends and technologies along with cutting edge design to meet clients the needs are all essential to a web developers success.

Ryan Miller is the CEO of Etna Interactive. Etna Interactive provides medical providers and high-end service professionals a one source solution for effective, efficient, ethical, results-oriented web site design and promotion. Past clients include plastic surgeons Dr. Grant Stevens and David Stoker of Nip and Tuc, Dr. Evan Sorokin of Delaware valley plastic surgery, and Scottsdale Center for Plastic Surgery. Ryan defines quality web work as meeting the business expectations. Meeting the clients needs, communicating the feel of company with the website, and proving that it makes money for the business are all signs of quality web work. Developing detailed specifications by communicating with the client what they need to do or provide in order for the project to be successful is key.

Ryan says the skills a web developer must have are business development and business management skills, and the ability to manage clients. Understanding how to help a business grow is essential for any web developer. Ryan runs on Mac based platform for all web development.

Key elements to a online portfolio as defined by Ryan are screen shots of projects and links, client testimonials, resume, and contact information.

Ryan's view on competitive pricing is to not think about it. One does not want to be the lowest price. A developer must determine what they need to charge to cover time, software, hardware, rent,

food, bills, and taxes. Estimate time to complete a project with 10-15 percent buffer. Penalize if the client is responsible for delaying the project because this delays you from moving on to another profitable project.

The developer needs to know when to say no, or push back. Do not let the client walk over you. You need to educate them. Why do they need a web page? What is their target audience? What functions does it need to perform? These are all essential questions to ask any client.

Of the five interviews conducted, three responded that quality work is defined by meeting the client's usability requirements while creating an aesthetically pleasing site. One responded that translating the client's wants into what the client actually needs and then fulfilling those needs is quality work. One responded that defining business goals personally before the project starts and then reaching those goals will produce quality work.

All five people responded that a Macintosh platform with Adobe's Creative Suite were the tools necessary for producing web sites. One noted the importance of an appetite for continued learning in the field due to the constantly changing technology. One responded that an important skill a web designer should learn is the hard code behind web page behavior (or JavaScript). Two responded that business management skills and the ability to communicate effectively with clients are key skills for any freelance web developer.

All five people responded that satisfying a client revolves around good communication with the client. If the client is engaged and informed during the whole process, than it produces a satisfied client.

All five people responded that an online portfolio should include an resume, past projects and links, and contact information. 1 suggested designing a portfolio around that type of work one wish's to get.

All five responded that to create a profitable pricing structure one must accurately calculate their cost. The costs of a web developer include hardware, software, and time. A freelance web developer also has to consider living expenses such as rent and food. One suggested meeting with a finical advisor to calculate what one hour of their time is actually worth.

## CONCLUSION

Through the course of this study much information was gathered about what it takes for a freelance web developer to be successful in today's market. As it turns out, the duties of a web developer extend far beyond the reaches of just web site design. A wide range of answers was collected for each question throughout the specialized and elite interviews. It was found that quality web work is just not a web site that is well design with few coding errors but that it meets the client's needs, is functional, profitable for the client, and meets the goals of the designer. Having clear communication with the client during all process of creating a web site is directly relational to how successful a project is.

All professionals that were interviewed worked on a Mac platform using Adobe's Creative Suite to create web sites. Missy suggest looking towards open source software for content management systems as affordable way to offer those extra perks to clients.

Satisfying customers depended on communication. Without clear communication it is impossible to meet the client's needs. A interesting fact that was taken away from the interviews was that web developers must have the ability to push back on a client. In this professional service industry, the provider often has to instruct and educate the client on web site structure, content, and design. Clients need to be informed about their responsibilities for the web site such as generating copy, images, and approvals.

The primary way for freelance web developers to advertise their skills and past work is through an online portfolio. Key elements are past projects and links, resume, contact information, and possible testimonials from past clients. The portfolio should advertise the type of work one wish to acquire.

To create a profitable pricing structure one must accurately assess their cost. For a freelance web developer these costs range from basic living cost such as rent and utilities to software and hardware. Once a developer's costs are known, one can then adjust their hourly rate according to skill, experience, and geographic area.

Through the course of these questions it became apparent that a clearly defined contract was an important part of the process. Having the costs clearly defined and room for adjustment if a project takes longer than expected is essential. In this industry it sometimes becomes difficult to charge for every hour of work due to contracts that have explicit quotes. Locking into a fixed price before a project starts is a death sentence for the developer. Often projects are delayed on the client part which prevents the developer from completing the project and moving on to other profitable projects.

Most importantly, it was concluded that a freelance web developer must have the ability to adapt to new technologies and methods of web design. This industry is one of the fastest growing and technologically advancing. If one does not have the desire or motivation for self-continued growth then this is the wrong industry to get in.

The service that a freelance web developer can offer to small business is huge. It can be a one source solution for an online presence. However the demands of these clients continue to grow and their

expectations are rising. No longer are simple brochure sites enough. Today's clients want newsletters driving by databases, blogs, e-commerce, and user login systems which are all adding to the job duties of free lance web developer. If a developer can successfully learn how to implement these into web sites as well as learn new methods than their opportunity for success is endless.

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