

CHAPTER SIX | WEB DESIGNERS and WORKFLOW

INTRODUCTION

Web designers are subject to the standards of the design and technology industry, regardless of their association with free software or working predominantly with nonprofits. As a result, web designers are not always attuned to the goals and values of their nonprofit clients, as their industry lies within the “for-profit” or business sector, which also seeks to provide services, but in return for financial gain. This matter of different logics functioning within two different systems can often be detrimental if a nonprofit desires a website that can be sustained by their organization; or to receive a product that more accurately reflects current design trends rather than the goals of the organization. However, new workflow methods in web design appear to be changing this norm, with the introduction of user-centered methods such as design ethnography and Wordpress that promote greater collaboration and feedback from clients and end-user. In this section I provide an overview of the past, present, and possible future of web designer workflows to emphasize where the design industry is moving. I further provide an example of my own workflow to help “outsiders”, such as nonprofit organizations, better understand what to expect and what is involved in the process of web design. More importantly, I want to impart that web design is not in fact an “exact science” and there is no one way to build a website.

DEFINITION of WEB DESIGNER

Due to the increasing diversity of job roles and descriptions, web designer is used as a blanket term to describe the variety of job roles involved in the process of building a website, as is common in its colloquial use, particularly when speaking to clients or those not involved in the tech industry.

Additionally, as many web designers work free-lance or independently, using the title of web designer often easily encompasses the number of tasks necessary to complete web projects by a single person. Within the technology and design industry the division of job titles and clarifying of skill sets has become important as people move from concentrating on more than just the aesthetics and functionality of a site to greater experiential qualities. In order to understand what a web designer does, I have provided a number of descriptions of various job titles within the web design industry.

- **Back-end developer** – A back end developer may work with higher level programming languages that organize the unseen functionality of a site, often times for the goal of data storage.
- **Front-end developer** - Works predominately with HTML, CSS, Javascript and PHP that affects the client-side code of websites. In other words, they work with what the website user can immediately see.
- **Graphic designer** – Responsible for creation of visual design, using a variety of creative techniques to achieve visual cohesion.
- **Information architect** - Creates the structure of a website's pages and navigational features often through the use of icons and schematics.
- **Interaction designer**- Creates graphic elements of the site that promote intuitive and engaging user interaction with the website. An example being the process of “checking out” on an e-commerce site and the visual cues that take you through this process.
- **Project Manager**- Oversees all elements of a project in the design or technology industry.
- **User-experience designer (UXD)** - Takes on the task of utilizing multidisciplinary design tactics to create an entire and positive user-experience for the end-user.

- **User-experience researcher** (UX researcher, UXR) - Complete research for projects utilizing a user-experience workflow often using design ethnography.
- **Web developer** - Also a blanket term for those who work on developing all aspects of a site, often excluding visual design.

JOB TITLE AND ROLE CONFUSION IN THE DESIGN and TECHNOLOGY INDUSTRY

As the structure of a design team constantly varies, the overlapping of these roles often causes confusion and task delegation that does not match what the individual is actually trained in. The intent in mentioning this disorder is the fact that in addition to nonprofits having a variety of technology options, the outcomes of a web design project are also dependent on the skill-set and values of a particular web designer. For many web designers, the choice of job titles comes down to the position they are applying for, what a client needs, or simply what they prefer to call themselves a result of lack of industry standardization. In fact, of the twelve web designers I interviewed, none provided me with a simple or concise job title. Here are three examples:

What would you consider to be your job title or area of expertise?

Area of expertise would be web developer, or sometimes I use WordPress developer, or WordPress hacker. In the past I have used WordPress hacker to describe my job. Officially I call myself code and design. That is my preferred rhetoric. [Interview with Jeremy, 8 June 2010]

I suppose my job title would be, well I started out as web designer, but it's probably grown into web designer to web developer to doing printed media, I change what I call myself really, pretty much just go with creative, and whatever comes after that. [Interview with Pete Cole, 27 April 2010]

I don't have a job title, as I am the owner of the company. We are WordPress specialists. [Interview with Ash Goodman, 27 April 2010]

A comment often heard from web designers is that clients or potential employers do not know what is possible or what they are asking for, leaving the

web designer to decipher what they are looking for. As one interview participant, a project manager specializing in user-experience design stated:

I try to figure out which one of those three things [research, design, and information architecture] is what the client is actually after. After I figure that out, then I can say to them okay I am generally better at this one than the other. [Interview with Simon Nixon, 6 June 2010]

This confusion affects the client – web designer relationship, as both the nonprofit and web design systems have ideas about what is encompassed in the job title and thus what that person hired or volunteering is able to accomplish. The ambiguity in job titles is another reason for the improvement of communication tactics, often manifested through workflows or processes that compartmentalize major aspects of the design and development process to produce a final product. I will outline basic workflows below, as understanding a designer's process is helpful in understanding why nonprofits and designers are not often able to share common ground.

SHIFTING WORKFLOWS

The fact that web design job titles and duties may be interchanged (unbeknownst to the postholder) with varying interpretations, allows us to see that web design workflows are a part of the constantly shifting, fast-paced and buzzword-producing industry, which is most easily understood if you are part of its movement. As it is impossible for everyone to be involved, the web design industry interacts with nonprofit clients through workflows that have begun to evolve in ways that value user input and collaboration.

As client and web designer cannot be made available to each other at every stage of the web design process, there is a certain degree of separation in a web design workflow. One aspect of the workflow involves the client at varying levels through preliminary background research, discussion over desires for the website, functionality and documentation approval and prototypes revisions. Another aspect requires that the web designer take this verbal or textual information out of the hands of the client to reconfigure it into schematics,

design, or code that will result in the creation of a website. In the past, processes were not as interested in the side of the workflow that involved user feedback, but more concentrated on the creation of technology that was functional in the eyes of the web designers.

Science and technology studies have shown us that just as scientific realities are constructed through the socialization of actants, so are the workflows and standards of the web design industry (Sismodo 2004: 58). The constructivist nature of technoscience allows for web designers to call something “correct practice” or “proper form” when there is agreement between the correct type or number of individuals surrounding an outcome that suits their needs and goals. For the below described workflows, their evolution and popularity is then a result not only of successful testing of workflows to produce better websites, but of a certain number and type of individuals putting their support behind these processes.

FROM WATERFALL...

The majority of web designers follow a staged workflow, often called the waterfall method as you move toward a finished product by completing one stage at a time. This workflow is quite straightforward, and can shorten the time span of smaller, simpler projects including clients (or web designers) who are unconcerned with anything but the look and basic functionality of the final product. Each of the cascading steps covers an aspect of the development process with small levels of iteration at each stage (Howcroft 2000: 2). Many web designers have taken the steps and renamed them to better fit their industry and own design ideals; an example being the authors of *Web Redesign 2.0 | Workflow that Works* and their five phases of web development: define the project, develop site structure, design visual interface, build and integrate, and launch and beyond (Cotler & Moto 2004). While many of these workflows are successful, their success is based upon the fact that they only work in well-understood environments with little variability (Abrahamsson et al. 2002). Failure will often result because the designer begins to make grand assumptions

about others based on previous experiences in completely different scenarios (Smith-Atakan 2006). If these assumptions fail, designers are left with the fact that a large portion of their efforts were put into perfecting each stage of the workflow and according to the waterfall model, if one step fails you must go back to start again at the necessary stage.

...TO AGILE DEVELOPMENT...

As individuals become more tech savvy, technology improves and options increase, many web designers find the waterfall process too restrictive. As a result designers have moved toward more flexible methods such as agile development. Agile development assumes an iterative process that is faster moving, knowing that changes are inevitable, many of which, aside from basic functionality requirements, can be dealt with “on the fly”. While agile development may function based on basic waterfall staging, strict adherence to order and flow of stages is unnecessary. Agile development also promotes greater interaction with clients, involving them in the decisions making process wherever possible. Below is quote from a case study on the redesign of NPR.org:

One of the main challenges was adapting to Agile methodologies. We had to think on our feet, be nimble, iterative and willing to fail often and fast. In some cases, we spent significant amounts of time working through a problem only to realize that our initial idea simply wasn't going to work. We had to be okay with scrapping time-intensive, developed ideas and completely starting over when necessary. [Neylan 2009]

...AND ONTO USER-EXPERIENCE (UX)

“If we know the things people care about, we can start to understand why certain technologies are successful. Only if technology allows people to do what they care about, can it be successful.”

- Genevieve Bell, Director of Intel's User Experience Group (2004)

User-experience (UX) is part of a greater movement under the umbrella of user-centered design (UCD). UCD recognizes the importance of understanding the user and their use of technology prior to the implementation of the design and both work to design with the end-user in mind at all times. It appears that UX

has become the more popular buzzword in the web design industry, due to UCD's past in other realms of software development and engineering, however, the terms UCD and UX are often used interchangeably. The website UX Matters provides this definition for UX:

[UX] [e]ncompasses all aspects of a digital product that users experience directly—and perceive, learn, and use—including its form, behavior, and content. Learnability, usability, usefulness, and aesthetic appeal are key factors in users' experience of a product. [Gabriel-Petit 2010]

UX incorporates a variety of agile tenets such as rapid iterations and flexibility, but unlike pure agile development includes user-experience research and/or design ethnography. In the web design industry the term design ethnography is often replaced simply with ethnography and the person conducting a study can be known as a user-experience researcher rather than design ethnographer. While UX researcher and design ethnographer are closely related, the UX researcher is considered to be part of the UX workflow, while a design ethnographer can be part of any project. Without UX and agile development as a workflow, design ethnography would not result in the completion or building of a new technology, only the study of the artifact or its users. In short, user-experience design employs design ethnography to aid the web designer in understanding client and end-user needs within an individual context as part of an entire process of building a website.

UX and agile development are the most recent proven models in the web design world, but are constantly shifting as trends come and go. As Lucy Suchman noted, members of a specific system will simply follow in the status quo until another professional designer comes along with a better “proven” model (2002).

“DELETION”

User-experience challenges the notion of “deletion” as introduced in the chapter *Context*, for its tenets based on the reintroduction of user collaboration and feedback. In the past and continuing presently, designers “delete” major aspects of the workflow by categorizing social or “nontechnical” interaction, as

unimportant work. The addition of “user-centered” methods to the web design workflow serves to change past methods that assumed the web designer as expert. Web designers had a view where the completion of a website was a straightforward process - One that only trained professionals could understand - thus one to which only they could contribute.

For the web designer, learning a specific workflow is one major social interaction where “deletions” occur as they learn to work within the confines of the industry and their own personal style. As it is difficult to treat each client as wholly unique, web designers often reuse code, design artifacts, and specific methodologies that have worked for them in the past. This is necessary in order for web designers to conduct their work in a timely manner, and one of main allures of Wordpress is having the core of a site built and ready to use. Difficulty comes in when homogenization of websites results in poor usability and mediation of a client’s goals.

MY WORKFLOW AS WEB DESIGNER FOR PEDAL POWER

In order to better understand what web design involves, for the benefit of nonprofits and others interested in knowing what can be expected in the web design process, I would like to provide a very brief description of my workflow. While many issues arose, I will limit discussion of such detours to further chapters (see Chapter 4, 5). In this position I would consider myself a web designer using a user-experience workflow while utilizing design ethnography as my primary research methodology.

1st stage: Design ethnography and participant observation

The research stage is where I completed my preliminary design ethnography with participant observation as my primary method. The initial cycling club sessions were dedicated to observing, taking part in cycling exercises with participants, speaking to various club members, acclimating myself to organizational structures and just generally helping out. All of this information

was input as field notes, which I have documented on my blog¹. While there were many levels of information that affected the design of the site, the overarching goal of Pedal Power was to use their website to begin the expansion of their organization. Therefore it would be a resource predominately for potential participants and donors, with basic information and news of current events for those already a part of the community.

2nd stage: Production of web design documentation informed by design ethnography

As the timeline for this master's degree is quite short, I had to begin creating documentation for the website within a shorter time frame than expected. After two or three, three-hour sessions, I began to organize my field notes into a series of documents that formalized what was expected of myself as the web designer and what was expected of the clients. It is here that I embraced agile development, knowing that these documents would need to be revised as the process moved forward and I continued to attend the cycling club events. It is these documents which have been created in place of a full written ethnography as in "traditional" anthropological methods (See Appendix 1 or <http://www.appliedanthrodesign.com/category/web-documents/> for all below listed artifacts). These documents are²:

- ***Understanding the project ecosystem:*** Document used to help the web designer or project team understand the goals of the project and to better situate themselves before starting out. This is rarely seen by the client, but in my case I posted it on my blog. Here I was able to translate what I perceived to be the structure of the organization and the type of site I would need to build for Pedal Power.
- ***Website proposal:*** This outlines the project requirements and functionality of the proposed website as well as the duties of both the web designer and the client. Also included is the timetable for the entire project. This proposal allowed me to delegate tasks, either through my

¹ <http://www.appliedanthrodesign.com/blog/>

² This workflow and documents are based on the book: *A Project Guide to UX Design: For user experience designers in the field or in the making*

own or the organization's requests, based on the individual skills of Pedal Power's volunteers.

- **Personas:** Personas profile a number of potential, semi-fictional website users and what their tasks and needs may involve. Through participant observation I found there to be three main website users: participants or members of the cycling club, support staff and/or parents of participants and the volunteers who ran the event. Personas allowed me to further clarify the needs of these three user groups.
- **Sitemap:** Visual depiction or schematic of the structural hierarchy of the site and how the pages' content will be divided. This was my initial space for mapping out what I found to be important issues to address for the organization and compartmentalizing them into individual pages.
- **Wireframes:** Visual layout the content of the site, situating major features such as the navigation or the logo in order to organize the following visual design. Here, I mapped out where many of the accessibility features would need to go and how they could be balanced with the rest of the content.

3rd stage: Visual design

The visual design of a website encompasses the graphic layout of the site, in particular the well thought out placement of various site features, navigation and other design artifacts, as well as color schemes, typography and branding. For Pedal Power, the logo was taken care of by one of the members, so my design was based on the simplicity of this logo as well as the need for a number of accessibility features which work better in simple designs. Additionally, as the turnaround time had to be quite quick, I based my design on a well supported Wordpress theme called Thematic³. It is highly flexible and customizable and the support ensures any future designers or Pedal Power volunteers who work on the site will be able to problem solve easily.

4th stage: Prototype

³ <http://wordpress.org/extend/themes/thematic>

Using Thematic, I was able to setup the framework for the site along with basic design features, making a few modifications in the HTML, CSS and PHP code. This stage is considered at prototype as it is the first iteration of the website and lacked the content which would allow us to fully view how the website can be used. The Wordpress CMS makes content changes and input relatively painless, which allows a certain amount of flexibility in the timeline for receiving content, as it does not need to be formatted with code. However, content input often changes the structure of the website when the client begins to see the site take shape as is what happened with Pedal Power.

5th stage: Review and Iterate

As Pedal Power saw the site evolve, this is where more suggestions began to come in, in terms of content and new pages to add. We are still partially in this stage, as members are too busy to fully complete the content that needs to go in the pages. As a result of Wordpress being easy to modify, it is simple to make new changes as they come in and the tech savvy member of the group who will be taking over the website when I leave, is also able to easily use the Wordpress CMS to input content at a later date.

6th stage: Completion, maintenance issues and education

Moving into this final stage, waiting for content, we have also scheduled a date for lessons in updating Wordpress, so one organization member is able to collate content from all others to maintain and update the website. A website such as Pedal Power, which has a blog and Flickr feed, is never really complete, but we do need to input more base content before the site can be presented to potential donors and their audience informed on events affecting the cycling community.

“KEEPING THE INTERESTED GROUPS IN LINE”

The web designers' ability to understand what is necessary in working with nonprofits is essential to furthering a more collaborative relationship, one that is currently being fostered by new methods in user-experience design and design ethnography. However, past views of science and technology have

cemented notions of web designers, both by nonprofits and web designer themselves, as all-knowing individuals with the skills to fix any technological problem. In reality, the series of relations attached to web designers, nonprofits, and technology are too vast to be controlled by any particular actant alone. Each nonprofit client – web designer relationship will result in a unique set of issues that require individual solutions, but the acknowledgement of web designers and nonprofits that investing in the creation of positive relations will result in a network of allies that have greater potential to continue to support any given organization’s website, is essential.

Just as the creation of a website plugin depends on a certain number of allies⁴, the success of the Pedal Power website depends on the continued participation of all actants. In order to build such a successful site, a complete black box, a web designer and nonprofit need to understand how to continue to keep all actants involved, or Latour’s notion of “keeping the interested groups in line” (1987: 121). Below I would like to outline, through Latour’s own headings, a few of the factors that may point toward the success or failure of Pedal Power’s website.

“(1) A chain is only as strong as its weakest link”

In order to turn the interest of having a website into one that is sustainable, the web designer must establish the website as an integral part of the organization. More specifically, the website must be a reliable technology that is user friendly and will not break in ways unfixable by the nonprofit. The threat of malfunction should be not present. “This ‘dangerous’ behavior should be made impossible; even better, it should be made unthinkable” (Latour 1986: 122). Even if the nonprofit is interested maintaining a website, they will lose interest and abandon the project if it continues to break down.

A movement toward this goal for Pedal Power is the use of a CMS, specifically Wordpress. Wordpress’ functionality allows fewer opportunities for less

⁴ See Chapter 5 for further definition and example of use.

experienced users to alter important files and the web designer can set restrictions on what aspects of the site are accessible in the first instance. Wordpress could be considered the web designer's version of Diesel, the inventor of the Diesel engine, as described by Latour. Upon Diesel's engine breaking down they added new allies in the form of powerful pumps, sturdy valves and extra plumbing. Instead of building Pedal Power a static website that could only be maintained through core files in coding languages, I chose a graphical user interface, a stronger support community and greater functionality to create a new type of website in the form of the Wordpress CMS. Therefore I, as a web designer have shifted my system of alliances from dependency on my own coding skills to that of higher powered, bug-checked and well-supported software, reducing the possibility for malfunction and increasing the trust and investment of Pedal Power in the website.

Having minimized the potential for breakage with the enrollment of a stronger overarching structure, the website is still vulnerable to a number of factors that often are invisible to nonprofits in the first instance. Such factors being: FTP functionality, hosting, servers, domain names, connections, functionality of design software and licensing restrictions, among many more. These actants must be managed by creating a series of allies that are able to monitor themselves. "Techniques are not fetishes, they are unpredictable, not means but mediators, means and ends at the same time, and that is why they bear upon the social fabric" (Latour 1999: 197). Possible alliances including automated updates, limited access areas in the CMS and design ethnography as a slow introduction and education to the use of technology.

"(2) Tying up with new unexpected allies"

The functionality of a technology is just one condition for interest. The other is successful collaboration with the web designer, who must know how to introduce this software in a way that is easy for nonprofits to take on. For Pedal Power, the idea of a Wordpress site was introduced and made interesting as a result of my research allowing me to use participant observation as a means of

data gathering for the website. Participant observation integrated the process of web design into current volunteer events which avoided any clashes with already busy schedules. Although no technology was in use, Wordpress was seen as a good option, because it was an extension of my own lack of invasiveness. Wordpress is now seen as part of the organization rather than an external tool. As the website continues to be built and is utilized to connect with their audience, Wordpress itself becomes the ally of the nonprofit as it becomes a greater tool for reaching their community.

“(3) Machination of forces”

As people interested in Pedal Power begin to use the website as a resource, new alliances are built that are dependent on the updating of content and existence of the site. The website has now become part of the nonprofit organization, not an external tool held by a singular person; the website itself a machine, “where borrowed forces keep one another in check so that none can fly apart from the group” (1987: 129). In this way, the website becomes a black box, dependent on the basic functional relationship of the web designer, nonprofit and Wordpress to continue to impart information and use to its audience.

CONCLUSION: TIES TO THE SYSTEM OF WEB DESIGN

The success or failure of a web design project is not dependent on either the web designer or the nonprofit, but a series of relationships that are being continually developed, most purposefully in the web designer industry. Moreover, the popularity of UX helps to lessen industry confusion over job roles and titles, as discussions of project requirements are had on a deeper level that requires both sides to communicate their expectations more clearly and more often. User-experience has given web designers, who are dependent on their status in the design industry and particular skill-set that reflects current trends, a method for both participating successfully in the industry and reaching out to nonprofit clients - thus better relating to the meaning of either system involved.