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## Gener8 Website Redesign

### 1 Category of the Website Business

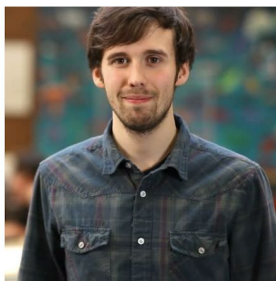
#### 1.1 Website goals

Gener8 was founded 2002 as a Silicon Valley company that provides manufacturing and product design services to high end tech and medical product companies. Their website serves to advertise their services to product companies, therefore the users of their website would be working professionals in industry, specifically executives such as CEOs and CTOs, product design managers, heads of manufacturing, etc. Typical users are looking for quick access to information about Gener8's services and the type of products they are suited to manufacture. The website should be optimized for industry professionals to understand Gener8's services and ensure that Gener8 is a good fit for their needs.

#### 1.2 User Personas

The following are three personas that represent potential clients of Gener8. Dan represents the traditional millennial that is tech-savvy and understands how to navigate websites quickly. Brent represents the group of elderly and non-native English speakers that may take longer to navigate a complex website, and may require accessibility features. Rosemary represents the population that has difficult and busy schedules but are technologically competent, experienced, and resourceful.

#### Dan Barksdale



**Age:** 26

**Occupation:** Product Design Manager, Medtronic

**Gender:** Male

**Education:** Stanford University, M.S., Product Design

**Hometown:** San Jose, CA

#### Computing and Web Experience

As a young working professional in his 20s, Dan is extremely resourceful and tech savvy. He is a millennial that is an expert in navigating websites and has had a lot of experience surfing through the Internet.

#### How they use the website

Dan is a product design manager, and is outsourcing work for a prototype of a new product. Before using resources at his own company, he wants to hire a third-party company like Gener8 to build a prototype of his idea so he can pitch a potential product to his executives. He needs specific information on the website about how Gener8 works and the types of products they build.

#### Personal Web Patterns

In his free time, Dan can be seen connecting with other young professionals on social media platforms, and reading numerous articles every day about updates in the medical devices startup industry.

#### Key Attributes

- Tech savvy millennial
- Needs some guidance and detailed information about company's services

## Brent Hosoume



**Age:** 62  
**Occupation:** CEO of Ekso Bionics  
**Gender:** Male  
**Education:** University of Tokyo, Japan, B.S. in Mechanical Engineering  
**Hometown:** Tokyo, Japan

### Computing and Web Experience

Brent is a CEO in his 60s, and as part of the older generation, does not have much experience with computer and web technology. He is also not originally from America, so it may take him longer to find items on the web as he is not a native English speaker.

### How they use the website

As a small startup owner, Brent is still working on growing and expanding his business. He has a lot of experience working with medical devices and has a product prototype but needs help with mass production of it. He needs step-by-step guidance of how to make his vision a reality, and thus requires extreme detail and info on the website.

### Personal Web Patterns

Brent prefers to read hard copy material, such as books and magazines, rather than Internet articles in his free time. He surfs the web only when he is required to, as to find new information or because it is part of his job duties.

### Key Attributes

- Elderly
- Not a native English speaker
- Very busy and needs information quickly

## Rosemary Cole



**Age:** 36  
**Occupation:** Director of Manufacturing, Intuitive Surgical  
**Gender:** Female  
**Education:** Santa Clara University, B.S. in Mechanical Engineering

### Computing and Web Experience

Rosemary is a middle-aged woman who knows the basics of how to navigate websites and use a computer. Though she is technologically competent, she is not as tech savvy or quick as a millennial would be.

### How they use the website

Rosemary is a busy working professional. As director of manufacturing, she needs mass production of small parts in their medical device products. She is familiar with companies like Gener8, and therefore only needs quick access to information and services to ensure Gener8 is a good fit for her needs.

### Personal Web Patterns

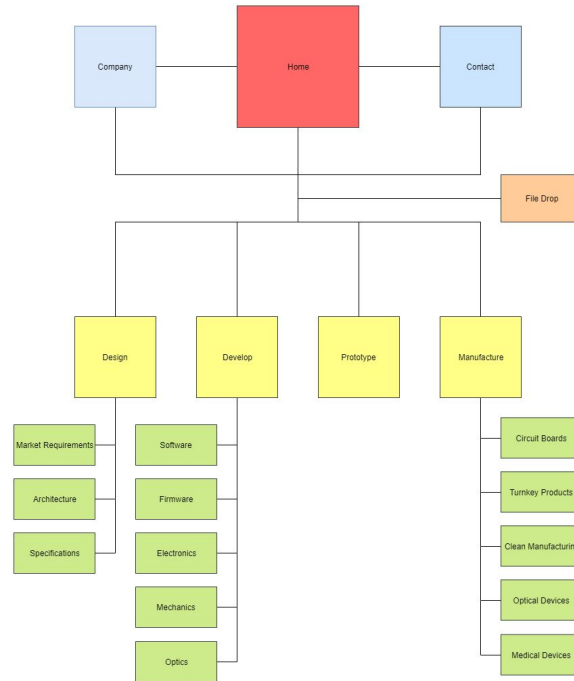
As Rosemary is a director, many of her job duties requires looking for information online, responding to emails, etc. which requires her to use the computer often. Aside from that, she often reads articles online and engages in the use of social media platforms.

### Key Attributes

- Needs quick access information
- Busy working professional

## 2 Website architecture and mapping

Below is a map of the site's architecture. Pages that are linked to one another are connected by lines. From the home page, the user can navigate to the company information page, the contact information page, the file drop page, or to one of the service pages (design, develop, prototype, manufacture). These pages are all linked to each other as well. Additionally, when the user is on a service page they can navigate freely among more specific sub-pages with the exception of the prototype page which does not have any sub-pages.



**Fig. 1.** Website Architecture

Looking at Gener8’s codebase, the code reflects the simple website and there are few HTML elements, helping the load speed of the webpage. There are also relevant keywords such as title tags, heading tags, meta-descriptions, script tags for JavaScript, etc. in use, showing that though simple and cluttered, the website utilizes proper coding techniques. Despite proficient coding techniques, the website does not have a evident sitemap available.

### 3 Usability Principles

The eight golden rules of interface design by Ben Shneiderman are consistency, universal usability, feedback, design dialogs, prevent errors, easy reversal of actions, keep users in control, and reduce short-term memory load. As not all of these apply to Gener8’s website, we have included the relevant usability principles considerations below.

#### 3.1 Consistency

Gener8’s website does not contain any visual hierarchy -- information is poorly organized and the website lacks proper structure. There is no distinguishable color scheme, as primarily all of the information on the website is grey text on a grey or white background. In a marketing perspective, this hurts their company brand, as users will fail to connect their website design (i.e., choice of color, logo, special features) with the company itself (for example, Starbucks is known for its logo and universal green color).



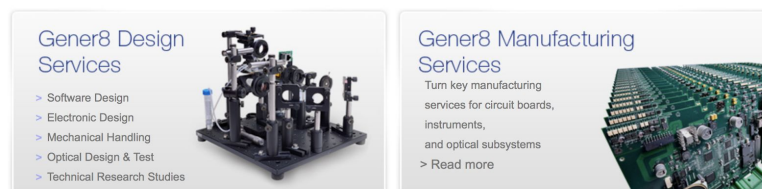
**Fig. 2.** Lack of contrast or color on homepage

### 3.2 Universal Usability

The website is not accessible for people with disabilities. The text on the website is miniscule, there is no contrast on the webpage, and there is no color scheme present. A lot of the text on the website is a faint light grey on a white background, which is hard for those with vision problems to read.

### 3.3 Feedback

Gener8's website lacks in offering informative feedback. On the homepage, there are two locations where the user is able to click to redirect to another page, but it is not apparent because there is no feedback animation (i.e. hovering, color changing) to portray that. The logo on the top-left corner also has no feedback, so it is unclear whether or not clicking on the logo will redirect you to the homepage.



**Fig. 3.** Clicking on both of these redirects the user to another page with more information, but there is no feedback animation to suggest that.

### 3.4 Keep Users in Control

Since the website is difficult to navigate with a lack of visibility, users may find themselves not feeling as if they are in control. It is unclear on the homepage where to click first, as there is no button or visual guiding the user to click on a particular link. Even though there is not much information on the website to begin with, this may overwhelm or frustrate users that are need to access information quickly.

## 4 Errors and Heuristic Violations

### 4.1 Visibility of System Status

#### H1. Company logo

**Description:** Many companies place their logo on the top left corner of all of their pages, as a way to get to

the homepage simply by clicking the logo. Gener8 follows that standard, however, the logo remains static and there is no feedback such as hovering to change the color of the logo to indicate that this is a feature of the website.

**Severity:** Medium

**Fix:** When the logo is hovered on, change the logo color or incorporate JavaScript to animate the entire logo.

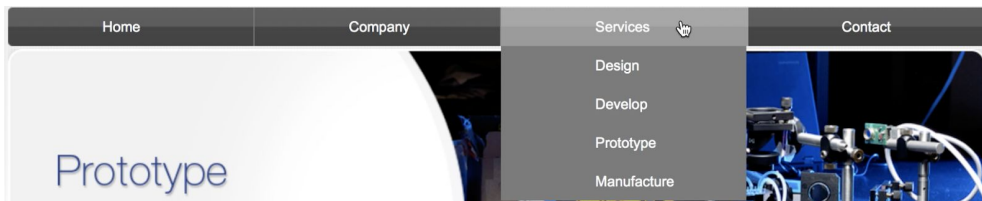
## 4.2 Consistency and Standards

### H2. Services in the navigation bar

**Description:** In the navigation bar, hovering over the “Services” tab will result in a drop down menu to display. However, when this happens, the “Services” title is still there, implying to users that you can still click on “Services” but it is not actually linked to anything (see Figure 4 below). This is inconsistent in terms of the general convention most websites follow.

**Severity:** Medium

**Fix:** When hovered on, the title “Services” should disappear.



**Fig. 4.** Website navigation bar

### H3. Design Page Links

**Description:** As there is limited information on Gener8’s website, much of the information is repeated across the homepage and individual pages. This is acceptable, but the website must be consistent throughout in doing so. On Gener8’s homepage, there is a link to view their “Design” services, where they list their different services and disciplines in the design process (see Figure 5). When actually clicked on, the user is taken to their “Develop” page, rather than their actual “Design” page. Furthermore, the tabs listing the different services on their Develop page do not match what is listed on the homepage (see Figure 6). This goes to show that the website lacks in consistency throughout their pages.

**Severity:** Major

**Fix:** Change title on homepage that does not include the word “design”, as that is misleading as one of their 4 stages is Design. Fix the subtitles listing the different engineering services to be consistent across pages.



**Fig. 5.** Design services listed on homepage.



**Fig. 6.** Develop services that is linked to that section of the homepage.

## 4.3 Flexibility and Efficiency of use

### H4. Responsiveness

**Description:** The site is completely unresponsive to different screen sizes. There is no mobile version. Users must navigate the desktop version of the site regardless of the device they are on, which can prove to be incredibly difficult, particularly when using a touch screen device.

**Severity:** Major

**Fix:** Make the site responsive to different devices and add a mobile version.

### H5. Alt-tags

**Description:** No images on the site have alt-tags. This causes accessibility issues and makes the site extremely difficult for the visually impaired to navigate.

**Severity:** Medium

**Fix:** Add alt-tags to images on the site.

## 4.4 Aesthetic and minimalist design

### H6. Redundant Services links

**Description:** On the landing page there is a “services” drop-down that links to the design, develop, prototype, and manufacture pages. However, these pages are also linked to on the bottom of the landing page via a flowchart graphic that serves no real purpose.

**Severity:** Minor

**Fix:** Remove the flowchart graphic from the landing page.

### H7. File Drop

**Description:** At the top right of every page on the site there is a “File Drop” link. It is unclear what exactly this does, but after some investigation it seems that it is a way of sharing files for Gener8 clients. This is very specific action that most users will not wish to accomplish, and as such it does not belong at the top of every page. Additionally, this feature could be more aptly named to give users a better idea of what it does.

**Severity:** Medium

**Fix:** Move the file drop feature to its own page, or rename it something like “Client login.”

## 5 Accessibility

The site has major accessibility issues. To begin with, the text on the website barely contrasts with the background and is at times incredibly small on the service subpages, making the site difficult to use for those with colorblindness or otherwise poor eyesight. Additionally, there are absolutely no alt-tags to be found on any of the site’s images, further impeding visually impaired users.

The site is also not responsive to different devices and screen sizes. It is virtually impossible to navigate the site on a cell phone, which restricts the site to users who are on laptops or desktops.

## 6 User Interface Design

The general visual aesthetic of the website comes off as dated and unprofessional. To begin with, the company logo is a real eyesore. It is quite out of style and poorly executed to begin with. When users see such a logo, they are likely to lose faith in the company as a whole. The color-scheme of the site (or lack

thereof) is also problematic, leaving little impression on users. The carousel on the home page moves too quickly for users to read it, which again feels very unprofessional. Additionally, the pages on the site leave a very large amount of unused space on either margin, cramming all of the information into the middle of each page in a claustrophobic way.

Navigating the site is simple enough, but there are a few design choices that may leave users confused when using the site. Many of these complaints are touched on above in the heuristic violations section, such as differing design subheaders on the home page and the design page, the unclickable services tab, and the bizarre file-drop feature. These problems, along with a general lack of feedback when navigated the site, leave the user confused and dissatisfied.

## 7 Design Responsiveness

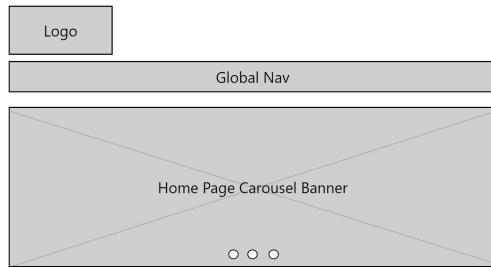
Gener8's website is not optimized across different devices. There is no mobile form of the website, and instead the desktop version of the website is displayed. This is a major issue because the desktop version, as noted in earlier sections of this report, has many issues regarding accessibility, contrast, and small text. As a result of no mobile version of the site, many of the buttons and links are too small to be able to click on in a time-efficient manner. A time-consuming website as such can result in potential clients getting frustrated and choose not to move forward with Gener8 for their services.



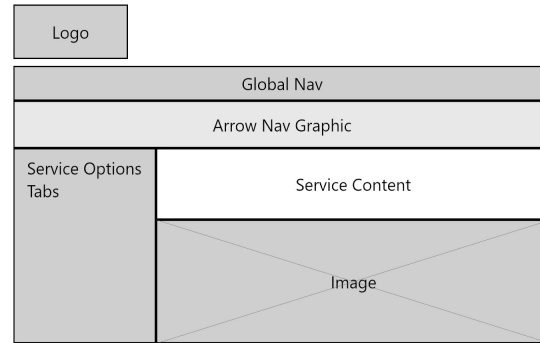
Fig. 7. Website on mobile

## 8 Wireframe Mockups

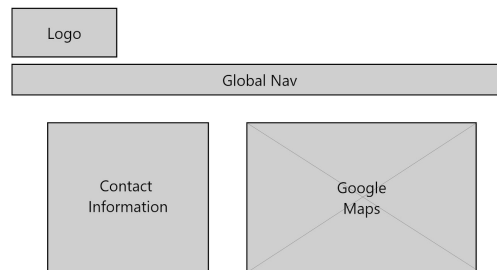
The following are some wireframe mockups that was used in building our redesign of the website.



**Fig. 8.** Wireframe for Homepage



**Fig. 9.** Wireframe for Services page



**Fig. 10.** Wireframe for Contact page

## 9 Redesign

When redesigning Gener8's website, we aimed to fix the errors that we found during the website evaluation. One of the problems on the homepage was the website's use of links. There were images and links that seemed redundant and only cluttered the page. Additionally, their link to 'design services', connected to their 'develop services' page. In order to avoid this confusion, we simplified the home page to only the essentials. This will help users better find what they are looking for. There are fewer options, which makes decisions easier for the user. We also changed the name of file drop button to "Client Login" because it's function was unclear, and now is clear that the function is meant for clients only, as even when you clicked the button, there was no clear indication of its purpose, or how to continue with the process. Additionally, on the Services page, we moved the flow diagram/arrow graphic to the top so that it could better serve its purpose. This way, the user clearly knows their status on the page and can feel in control. The arrows at the top serve as cues to the user to keep clicking and exploring. We also decided to switch from gradients to solid colors to provide more visual contrast and more readable text. The overuse of the grey gradient on the homepage was overkill and distracting. We also made the webpage mobile friendly, as there was previously no mobile version of the site.



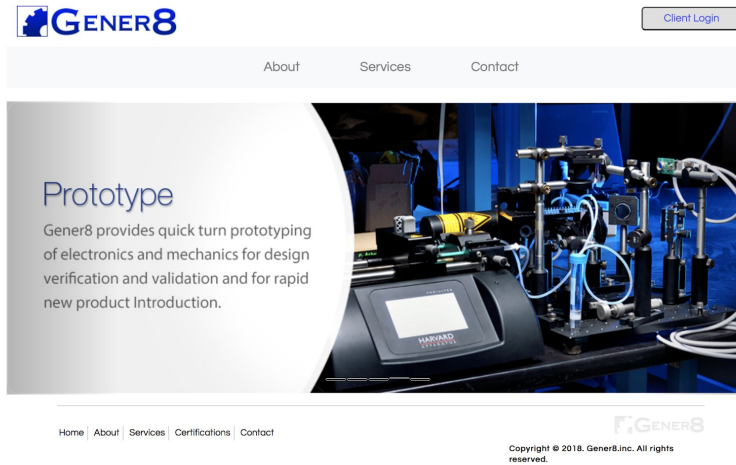


Fig. 11. Homepage redesign

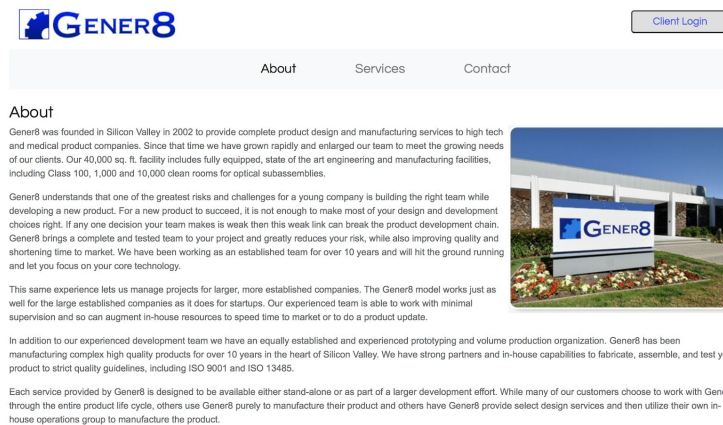


Fig. 12. About page redesign



Fig. 13. Services page redesign

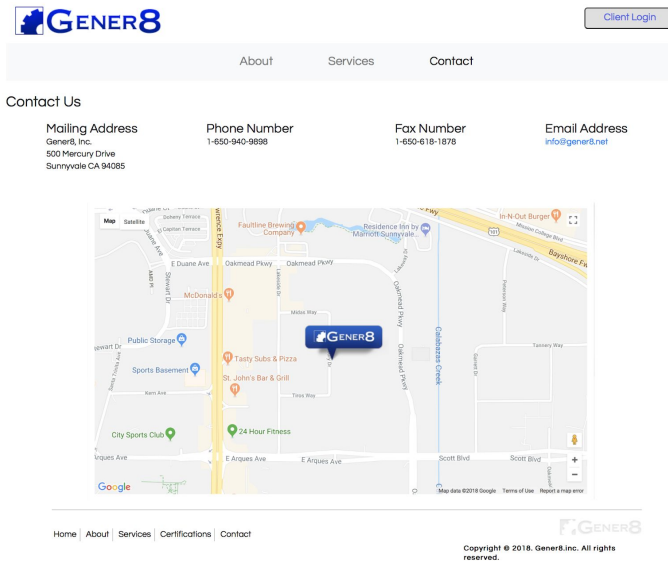


Fig. 14. Contact page redesign

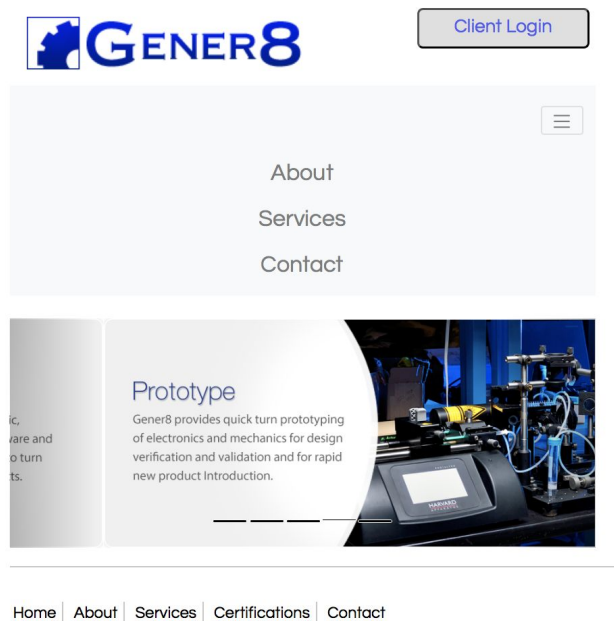


Fig. 15. The new design is now responsive instead of fixed.