A Heuristic Evaluation of eGo CarShare

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Introduction

eGo CarShare (EGCS for this report) aims to build a unique business model in the car rental sphere. Their goal is to reduce the number of cars on the road via a service style structure where users rent vehicles on an "as needed" basis. Typical rental cars may not be used every day, but the renter will still have to pay for that time. With EGCS, members can pay for a one- or two-day usage return the car, then use it again a few days later. EGCS's goal is to reduce the number of vehicles on the road, alleviate the high costs of full-time vehicle ownership, and ultimately help lower a person's average carbon footprint. The goal of this report is to explore the EGCS website and evaluate its usability with Jakob Nielson's 10 Heuristics for User Interface Design. The heuristics will be tested primarily through EGCS' website as accessed through a computer. Each heuristic will relate directly to the EGCS website's design, and each will be assigned a rating from 1-5. The ratings will signify the efficacy of the website under the tested heuristic. They will be graded as such:

- 1 Ineffective Execution
- 2 Needs Improvement
- 3 Meets Expectations
- 4 Exceeds Expectations
- 5 Perfect Execution

Heuristic 1—Visibility of System Status—"The system should always keep users informed about what is going on, through appropriate feedback within reasonable time."

The majority of the website is dedicated to teaching users about EGCS and their functions. There are tabs for finding vehicles and locations but most of the website is meant for informing new users. Upon first entering the website, vision is drawn to the middle of the screen where a box outlines text for new deals for weekly flat rates (**Figure 1** pg. 14). For a new user, this is a flaw because they might not even completely know what the service is yet. Calling the number listed would likely provide them with more information, but for visibility purposes, key information on how EGCS works should be first and foremost on the front page. Scrolling down the main page will offer more clickable buttons that give important information on EGCS. Most buttons a user would expect to be clickable are. A good example of this can be seen in **Figure 2** on page 14.

After finding the team list under the "About" tab on the main page, there is a list of EGCS team members. Because of our experience with web design, we expect each team member's portrait to be a clickable link that brings us to a separate page with more information on that member. This is true on this website as well, which is a nice visibility touch. The same cannot be said for lists of vehicles found under "Vehicles and Locations" though. This will be discussed further in heuristic 4.

Overall, EGCS' website does well with the first heuristic evaluation. Tabs and buttons are clearly shown in the top right of the screen, and nearly every facet of the website can be accessed through these tabs (**Figure 3** pg. 14). Generally, users will know when a request is being processed by the website and load times are consistent and fast.

FINAL RATING: 4/5

Heuristic 2—Match Between System and the Real World—"The system should speak the users' language, with words, phrases, and concepts familiar to the user, rather than system-oriented terms. Follow real-world conventions, making information appear in a natural and logical order."

The idea of carsharing is relatively niche when compared to the larger automobile market. Leasing, outright ownership, and renting are concepts the majority of car owners will be familiar with. Thus, EGCS faces a challenge in marketing due to the fact that carsharing is similar to renting, but different enough to be distinguishable. The website needs to educate new users on what carsharing is, how it's different from renting or owning, and why they should choose it over renting or owning. Most of the language on the website is easy to understand. They don't go into specific auto jargon that only business insiders would understand, and they make their goals easy to relate to.

For example, clicking on the "About" tab would lead users to find all they need to know about the company and its mission. This would be what one would expect to find when they asked an employee in person about the company. This is one example of how the language of the site is relatable and makes sense. One button click will show new users how carsharing works. This link can be found a number of ways, one of which is a large icon that can be found by scrolling a bit down the main page (**Figure 4** pg. 14). More information on the service model can be found under the "How it Works" tab that is among the grouping of tabs that follows users to any page of the website (**Figure 3** pg. 14). All of these sources essentially explain how the carshare model differs from traditional car renting. This is very important because the two are

not the same. Though there are several ways to discover this difference, this could create some confusion because it isn't all located under one central tab or button.

EGCS also makes use of color for important links on their website. For example, their call link and sign in links are highlighted by an easy to see green box (**Figure 5** pg. 15). If a user didn't notice this at first and instead was already looking up locations and vehicles, they'll quickly find that they can't access EGCS services without first becoming a member. **Figure 6** (pg. 15) shows the large "Join Today" button highlighted in an identical green box. These are nice additions that translate well for new users looking to move further with the website's services.

FINAL RATING: 5/5

Heuristic 3—User Control and Freedom—"Users often choose system functions by mistake and will need a clearly marked "emergency exit" to leave the unwanted state without having to go through an extended dialogue. Support undo and redo."

Well-designed websites will almost always share a button or function that allows users to quickly retract from a page and go back to square one. This is what Nielsen coins as the "emergency exit." EGCS' website has a great link back to the main page in the form of their logo that's always present in the top left corner on any page on the site. **Figure 7** (pg. 15) shows this button present on the "Sign Up" page. Like the multiple tabs that follow users across any page on the site, the logo button is always there to allow users to quickly and painlessly return to the home page. This feature would be even better with a little house icon to show that the button will lead back to the home page, or even some subtext that says, "return to home page" or any other small signifier that tells users the function of the logo button directly. Most web savvy users will

know what this button does, but some older users or users unfamiliar with these universal functions on websites might not think to click the logo to return to the home page. Otherwise, the website does very well with this evaluation due to its multiple escape options and the lack of longwinded text when using them.

FINAL RATING: 5/5

Heuristic 4—Consistency and Standards—"Users should not have to wonder whether different words, situations, or actions mean the same thing."

Consistency is important for users to feel like their experience is streamlined and natural. Across the entire website, baseline language is consistent. User expectations are often fulfilled. "How it Works" contains consistent information on different aspects of the company's services. This example holds true for almost all the info tabs that can be found on every page of the website (**Figure 3** pg. 14). This is a great consistent way to easily locate information or answer questions. It is also the primary example of consistency on the website. From here, some of the actions become a little more inconsistent.

The first example can be found under the "Vehicles and Locations" tab. Users will immediately see three categories of vehicles that they would be able to choose from at one of the locations pinned in maps farther down the page. The vehicle groups are: Hybrid + Fuel Efficient, Pickup Truck, and AWD. As seen in **Figure 8** (pg. 15) each vehicle's type is written in a blue font. This is identical to how the team members are listed in **Figure 2** (pg. 14). On the team member page, clicking on the portrait of a team member will bring users to a page with extended information on the team member they selected. Using these context clues and consistency standards, a user might expect to click a vehicle group to browse specific makes and models and

maybe see where those models are located. Clicking on a vehicle group does nothing though. None of the groups or icons lead to a different page. This is a major inconsistency and could easily confuse or frustrate users.

Next, there is a minor inconsistency with the structure of the info tabs. When hovering over the "Partners" tab, a number of options are listed in the drop-down menu. One of these options is the "Donate" option. **Figure 9** (pg. 16) shows the minor inconsistency in structure, as "Donate" is the next tab over from "Partners" but can also be found under "Partners." While minor, this inconsistency is redundant and shows a small issue with the structure of the info tabs. While the website shows great consistency across multiple pages, there are several issues that hold it back from a satisfactory rating on this evaluation.

FINAL RATING: 3/5

Heuristic 5—Error Prevention—"Even better than good error messages is a careful design which prevents a problem from occurring in the first place. Either eliminate error-prone conditions or check for them and present users with a confirmation option before they commit to the action."

EGCS, like any service, deals with money. In particular, the money of the individual using their service. Not having bars in place to prevent the accidental spending of money can be trouble for both the service provider and the user. EGCS' website has great error prevention across multiple platforms on the site. No money can be spent on the website without first making an account. No money can be spent on the service through the website without making a member's account. Donations can be made anonymously through a guest function on coloradogives.org but all payment info needs to be added manually and the site ensures that the

user has chosen the correct non-profit and donation amount before the transaction completes.

Figure 10 (pg. 16) shows a guest donation screen before entering payment info. It is the first thing the guest will see, even before any of the lines meant for filling out payment info.

Similarly, Figure 6 (pg. 15) shows that even on the "Vehicles and Locations" tab, there are no buttons to complete transactions. Just a big green "Join Today" button signaling to users that vehicles and locations can be safely browsed without accidently spending money. Only members can use the service, and new users will probably want to explore the service first before committing to membership. These are both solid error prevention methods concerning money, and these methods are consistent across other facets of the website.

FINAL RATING: 5/5

Heuristic 6—Recognition Rather than Recall—"Minimalize the user's memory load by making objects, actions, and options visible. The user should not have to remember information from one part of the dialogue to another. Instructions for use of the system should be visible or easily retrievable whenever appropriate."

This website contains a lot of information. It juggles service-based info with background on the mission of EGCS and the story of the company. Users are presented with a ton of information, and not all of it is directly related to carsharing as a service. There are multiple drop-down menus that come from each info tab in the top right, and each page has its own load of info. This is both good and bad for this evaluation. Starting with the good, users often don't have to recall where they saw something or how to get somewhere thanks to the info tabs.

Because they follow the user around to every page on the site, all the website's info is accessible at all times no matter where the user is. If they get lost filling something out or want to verify some information, they can search the info tabs and open the necessary page in another window

or web tab. Note that this functionality is more easily accessible on a computer than it would be on a mobile device.

While these are all positives for the website, these very same features can also act as a negative. Users shouldn't have to search through tabs of information for critical information. Experienced users to the website would have no problem recognizing where they need to go for what they need, but new users might find themselves lost in all the information being presented. Take signing up for carshare as an example. The primary purpose of EGCS is to promote their own service: carsharing. On the home page of the website, there isn't a distinct button that directly tells new users that they'll be signing up for carshare. There are log in buttons and call buttons seen in **Figures 5 and 6** (pg. *) but even these don't explicitly tell new users that they are signing up for carshare services. It's an implied meaning that users will need to recall when signing up or getting more information.

The "Rates" info tab shows another fault. Under the individual rates tab (found under "Rates") there are explanations for the three uniquely named rate packages available. These are: Peace of Mind, Free Wheelin', and Simply Hourly. Farther down the page are the dollar totals per hour with each of these deals. **Figure 11** (pg. 16) shows a blank trip calculator before any information is given. Nowhere on the page is a reminder of what these rate packages charge per hour; it just lists names. This is an important design flaw that could confuse users. While the names are unique, they unfortunately don't give any payment info on their own. They aren't like standard packages that are often named after their price. For example, a package could be named the "\$5/mo" deal. This tells a user that they will be paying five dollars per month for this deal (with added tax). While the name "Peace of Mind" sounds cool, it doesn't tell a user anything about price ranges. That information needs to be on the same page as the trip calculator so that

users can recognize which deal is best for them before plugging in a bunch of numbers and seeing what the calculator spits out. With some small rearranging of information, this website could do a lot better in this evaluation.

FINAL RATING: 2/5

Heuristic 7—Flexibility and Efficiency of Use—"Accelerators, unseen by the novice user, may often speed up the interaction for the expert user such that the system can cater to both inexperienced and experienced users. Allow users to tailor frequent actions."

As previously stated, EGCS' website is filled with information. There is a lot to take in, and new users might find themselves struggling to find what exactly they're looking for in the beginning. Thankfully, there are a lot of clear info dumps for them to click through and read. This will be helpful albeit time consuming, and eventually they're bound to figure their way around. Overall, this website seems much more tailored to the returning user, or a user who is already familiar with the idea of carsharing. For example, a new user might click through the info tabs (**Figure 3** pg. 14) to get to their destination whereas a more experienced user will just scroll down the home page to find vehicles and locations faster.

Figures 12 and 13 (pg. 17) show off the quick scroll down to immediately find vehicles and locations—what a customer is ideally on the website for. Note the position of the scrollbar. The info isn't buried by other graphics or pages. It is easily accessible just farther down the page. The website also has multiple ways to reach the same info which helps its flexibility. It can sometimes make finding a specific piece of information more difficult for a new user. While this could be seen as a flaw, it does prove that the website is flexible and doesn't lead users to dead ends.

FINAL RATING: 4/5

Heuristic 8—Aesthetic and Minimalist Design—"Dialogues should not contain information which is irrelevant or rarely needed. Every extra unit of information in a dialogue competes with the relevant units of information and diminishes their relative visibility."

Though there is a lot of information available on the EGCS website, it is presented in a very minimalist way. There is seldom extra text that isn't related to where a user clicked, and the wording is mostly clear and concise. Some websites overuse graphics and flashing images to draw attention, but this website looks very clean for the most part. One area where this isn't true is the home page. It's plagued by a massive rotating image in the lower middle part of the screen.

Figure 14 (pg. 17) shows a massive rectangular picture of mountains with the text "Get there better. Grab your gear and take an eGo adventure," displayed across it. This image will change about every 5.5 seconds to a different image with different text. There are four different images that cycle endlessly as long as the user stays on the home page. The idea of these images is fine, but the use of them is distracting and takes up far too much of a user's screen. This is a rare example of the website not being minimalist enough. The design seems to be there to fill white space, and this isn't a good enough reason to keep it. It isn't functional or important enough to be there

The next flaw is a more common flaw for the site—it's often too minimalist. The best example of this happens to fall into a flaw discussed in heuristic four. On the vehicles and locations page (**Figure 8** pg. 15) three categories of vehicles are present. Clicking on them doesn't bring the user anywhere, and they instead act as static images to spruce up the page. This is a far too minimalist approach because new users are now stuck questioning if these three categories are the only cars EGCS offers or if the graphic is just showing off *some* of what is

available. This is a major flaw that could turn potential customers away or confuse new users, wasting their time and potentially frustrating them.

FINAL RATING: 2/5

Heuristic 9—Help Users Recognize, Diagnose, and Recover from Errors—"Error messages should be expressed in plain language (no codes), precisely indicate the problem, and constructively suggest a solution."

As stated before, EGCS' website does a great job of preventing user errors. There are multiple bars in place to make sure users aren't signing up for things they don't know about and aren't accidently spending money. The error reports and images used across the website are pretty standard for most websites, but they do a good job of alerting users to errors in a painless fashion. There are no flashing boxes or cryptic codes. Figures 15 and 16 (pg. 18) show the standard error message for failing to fill in critical information correctly in a form. This specific form is for donating a car to EGCS's service. The error lets the user know that they need to fill out more information and highlights each missing (or mistaken) box with a noticeable red color. It doesn't obscure the box in any way, and everything is still easy to read. This is a pretty standard error message feature, but it still works fantastically across different forms on the site.

FINAL RATING: 5/5

Heuristic 10—Help and Documentation—"Even though it is better if the system can be used without documentation, it may be necessary to provide help and documentation. Any such information should be easy to search, focused on the user's task, list concrete steps to be carried out, and not be too large."

EGCS consolidates frequently asked questions under the "How it Works" tab shown in Figure 17 (pg. 18). While by no means a step by step tutorial on how to sign up for carsharing services, the FAQ tab answers most of the critical questions users will have. Figure 18 (pg. 18) shows off the bottommost portion of every EGCS site page. There, users can find the email address, mailing address, phone number, and more if they have any more questions. Figure 19 (pg. 18) shows all the options a user can find after clicking "Contact us" at the bottom of the web page. This information includes office hours for calls and more. While all of this information is very helpful, its main drawback is visibility. Users might not think to scroll all the way down a web page or even read what's at the bottom. The FAQ under "How it Works" is visible enough though. The site does well in this category with only minor faults.

FINAL RATING: 4/5

Conclusion

eGo Carshare has an amazing idea. Taking a proven model in the form of auto renting and modifying it to be more affordable and better for the environment is a smart albeit niche idea. The website contains an impressive amount of information, for better or worse. New users may be intimidated at first, and some will be pushed away by some major consistency flaws or issues finding the correct information. Veteran users will be happy with the site's flexibility and relative ease of use once they're established with how the site works. The website does a lot of things very well. It has great error prevention and easy to navigate tabs. If users feel like they need to return to the home page quickly, they can do so in one click, and the website itself isn't hard to use. That being said, the site suffers from consistency issues and minimalist wording and presentation. There are terms that are difficult to remember and rely on users' implied knowledge or for the user to have multiple instances of the site open on their platform of choice.

13

With all of this in mind, the site still provides a good service and presents it well. There are a

number of quality of life changes that could easily elevate the website to be even better.

Final Heuristic Score: 39/50

Appendix

Now Offering Weekly Flat Rates – \$275*

*Taxes not included; Includes gas, insurance, and first 250 miles (\$0.20/mile after) for Standard 2WD vehicles (additional \$10/day or \$70/week surcharge for AWD or truck)

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Team eGo

Core Staff

We couldn't do what we do as a small community nonprofit without stellar staff members. Lucky us that we have found the best of the best to assist our members at all times of the day, keep our fleet running smooth, and lead our organization to the next level. Find out more about these hardworking folks!



Peter D. Krahenbuhl Executive Director & CEO



Karen Worminghaus Co-Founder & Strategic Advisor



Aubrey Garner
Member Services & Admin Manager

About How It Works Rates Vehicles & Locations Partners Donate Log In Sign Up



How CarSharing Works

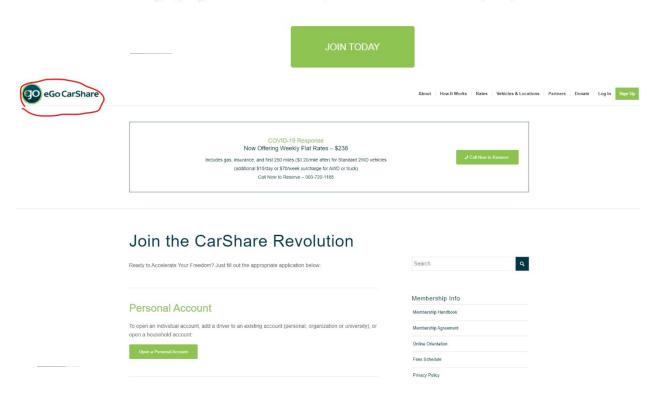
Live a car-free or car-lite lifestyle without owning a personal vehicle.

LEARN MORE



Is CarSharing Right for Me?

eGo CarShare is also great for those who wish to reduce their carbon footprint; who commute using public transit, walking, bicycling, or other alternative modes; or who want to reduce their monthly transportation costs.

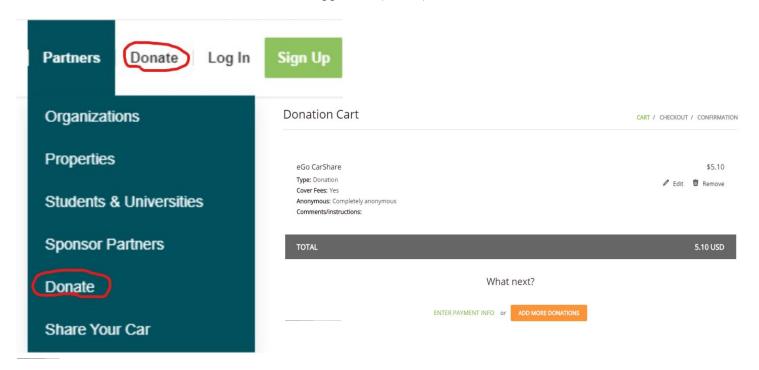


Vehicles & Locations

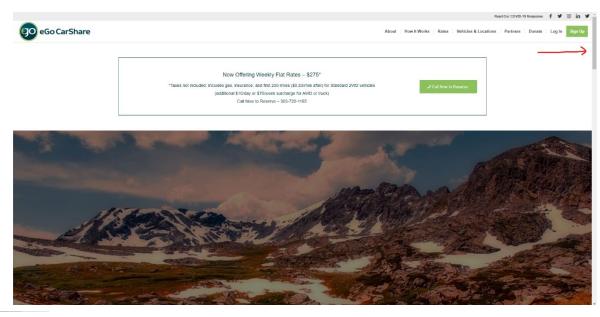


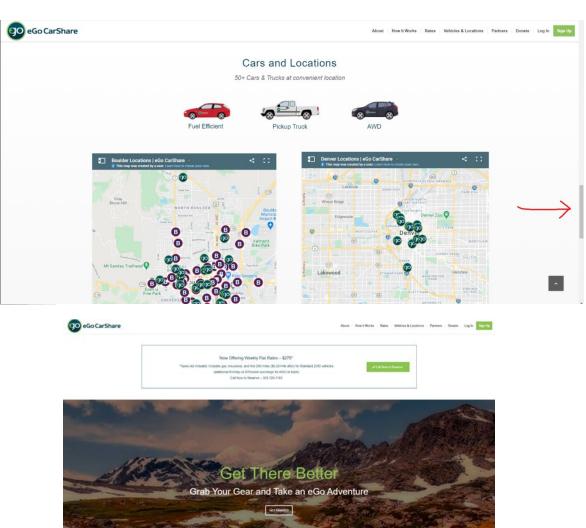






Trip Calculator Q Search Length of Trip in Hours' Distance Driven in Miles* Membership Info Rate Plan* O Peace of Mind O Free Wheelin' O Simply Hourly Membership Handbook Vehicle Type* O 2 Wheel Drive O 4 Wheel Drive O Truck or Mini Van Membership Agreement Subtotal Online Orientation O Denver O Boulder Tax Jurisdiction* Fees Schedule Total + Tax \$0.00 Privacy Policy Foreign Driving Records

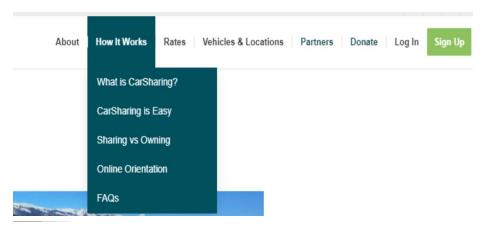




Vehicle Donation Form

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Please see our Frequently Asked Questions page for answers to most common questions. Otherwise, feel free to contact is during normal business hours.

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For billing questions, please e-mail billing@carshare.org