

# CONSTRUCTION EQUIPMENT RENTAL COMPANY

An eCommerce UX Case Study



Matthew T Rader

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# INTRODUCTION

A construction equipment rental company wanted to establish and differentiate themselves in a massive multi-billion dollar market of renting construction equipment. Currently the market is dominated by a few huge players who control the prices and availability of inventory.

One of the biggest challenges construction project managers face is the lack of transparency on availability and pricing. Typically, the project managers do not know the full amount until after they have returned the equipment. Additional fees they were not aware of upfront are added to their bill. This construction rental company wanted to have a high level of transparency with pricing and availability for users immediately when they are searching their needed equipment.

Another challenge is that currently most renting is coordinated over the phone instead of online. Competitors' websites do not make it easy for users to get all the information they need to move forward with renting equipment without having to make a phone call. Competitor websites typically show everything that they rent but not let people know what equipment specifically is available in their area.

This case study focuses on the solving the main problems identified by the construction rental company. Price transparency and availability during the searching and checking out phases of renting construction equipment online.



# EXECUTIVE SUMMARY

For this website we wanted to solve three problems that were widely known in the construction rental industry. Our designs and user testing were focused on the three main problems we believed users faced when renting heavy equipment online.

## Problems Addressed

1. Lack of transparency with rental costs
2. No information about proximity of equipment to job site.
3. Inability to easily choose attachments

## Competitive Analysis

I conducted a thorough competitive analysis of the four biggest rental companies' websites. We noticed several commonalities among them and some problems that we wanted to address to differentiate our services from theirs:

- General prices listed by day, week, and month
- A lot of imagery of equipment
- Search results are slow
- Lack of specific pricing information
- No proximity info of equipment
- Confusing filtering methods

## User Testing & Iterations

We went through three iterations of the design and users tested each iteration. We spoke with three different users with three different backgrounds. Two of them had experience ordering equipment online and one person that had never rented using a website. Two were men and one was a woman. We tested with the same three people through each iteration.

## Outcomes

The final design finished successfully after very positive feedback from our users and stakeholders. The final design captured the business goals we had for the search capabilities while being much more user friendly compared to all of our competitors. The goal was to make the process of renting equipment online feel as easy and intuitive like many other online experiences with renting, like Hotels.com and Amazon.com. In one session, a user said the website felt easy to use like Hotels.com which was one of our inspirations. The design of the MVP version of the website is finished and will be going to development and launched in 2020.

# COMPETITIVE WEBSITE ANALYSIS

## UNITED RENTALS - WEBSITE INTO



### unitedrentals.com

Web Presence Since:	1997
Global Web Rank:	67,021
Content Mgmt System:	Drupal

## FEATURES

- Prices listed by day, week, and month
- Multiple images of seemingly actual product
- Can choose product before signing up
- Hover bubbles to explain fees
- Registering is simple and fast, only 5 fields
- Can star favorite equipment

## PAIN POINTS

- Slow loading search results
- Tiny images in search
- No availability information
- No info about how close the product is to me
- Limited only to their inventory
- Product titles include too many details to scan easily

## OBSERVATIONS

Over all I thought their site seemed really well thought out, there still can be major improvements especially by showing availability and location of their inventory. Their sign up process was excellent, fast and easy, I also like that I could choose my products before signing up.

# UNITED RENTALS - WEBSITE SCREENSHOTS

## HOMEPAGE

## SEARCH RESULTS

Item Name	Category	Daily Rate	Weekly Rate	Monthly Rate	Availability
Scissor Lift, 20 ft.-21 ft., Electric Powered	Find Similar	-	-	-	Not available for online ordering in your selected location.
Scissor Lift, 24 ft.-26 ft., Electric Powered	Add to Cart	\$240	\$461	\$1,048	Available
Scissor Lift Diaper Kit	Find Similar	-	-	-	Not available for online ordering in your selected location.
Scissor Lift, 30 ft.-35 ft., Electric Powered	Add to Cart	\$287	\$949	\$1,430	Available
Scissor Lift, 39 ft.-40 ft., Electric Powered, Wide	Add to Cart	\$446	\$910	\$2,232	Available
Pipe Cradle for Scissor Lifts	Find Similar	-	-	-	Not available for online ordering in your selected location.
Scissor Lift, 19 ft., Electric Powered	Add to Cart	\$144	\$267	\$604	Available
Scissor Lift, 10 ft.-13 ft., Electric Powered	Add to Cart	\$137	\$260	\$660	Available
Scissor Lift, 14 ft.-18 ft., Electric Powered	Find Similar	-	-	-	Not available for online ordering in your selected location.
Scissor Lift, 30 ft.-33 ft., Electric Powered	Add to Cart	\$292	\$962	\$1,438	Available
Scissor Lift, 30 ft.-35 ft., 4WD, Electric Powered	Find Similar	-	-	-	Not available for online ordering in your selected location.

## SUNBELT RENTALS - WEBSITE INFO



### sunbeltrentals.com

Web Presence Since: 1997

Global Web Rank: 64,733

Content Mgmt System: Custom

### FEATURES

- Prices for day, week, and month
- Shopping cart shows also 4 hour rate
- Lists what that equipment is used for
- Large image of equipment
- Sidebar filtering
- When adding to shopping cart, shopping cart slides out from the right of the screen
- Shopping cart page has nice layout

### PAIN POINTS

- Search results are slow
- A lot of fields are required to create an account
- No location info of inventory
- No availability information
- The whole sign up process felt cumbersome, slow, and old
- When clicking to create an account you must confirm you don't already have an account

### OBSERVATIONS

I got lost in the sign-up/checkout process to find out the equipment I had chosen was located 580 miles away from me. They did have some really cool UI/UX features like the sliding out shopping cart and the detailed information about each equipment and their potential uses. Overall, the UX of signing up and checking out the equipment can be vastly improved and the homepage can be a little more inviting with helping me find what I'm looking for.

# SUNBELT RENTALS - WEBSITE SCREENSHOTS

## HOMEPAGE

**SUNBELT RENTALS**

EQUIPMENT LOCATIONS SOLUTIONS SERVICES INDUSTRIES ABOUT SAFETY

MY ACCOUNT 1 (800) 667-9328

Local hustle. National muscle.

Our U.S. and Canadian network of rental locations is poised to quickly deliver ready-to-work equipment when and where you need it.

Find Equipment Search

**Solutions**  
For customers requiring a high level of technical expertise, Sunbelt Rentals solutions offer the products and knowledge you need.  
[LEARN MORE](#)

**Industries**  
Our industry experience helps deliver solutions to your most pressing challenge – getting the right equipment and tools for the job.  
[LEARN MORE](#)

**Availability  
Reliability  
Ease**

**The Sunbelt Promise**  
We don't have a job to do until you have a job to do. Therefore, your challenges become our challenges, and your deadlines drive ours. Renting great equipment will be the easiest part of your job because we promise **Availability, Reliability, and Ease** – in terms of both our people and our products.  
[CREATE AN ACCOUNT](#)  
Already have an account? [Sign in](#)

**Command Center**  
Make reservations on the go, manage your rentals, schedule pick ups, and more.  
[Take Command](#)

**ToolFlex™**  
We understand that your daily equipment rental needs can vary by project stage or season.  
[Flex Now](#)

**Credit Application**  
We make it simple to apply for a line of credit to secure the equipment you need.  
[Apply Online](#)

Feedback

## SEARCH RESULTS

**SUNBELT RENTALS**

EQUIPMENT LOCATIONS SOLUTIONS SERVICES INDUSTRIES ABOUT SAFETY

MY ACCOUNT 1 (800) 667-9328

**EQUIPMENT**

CAT CLASS: 007-0008  
**10' Scissor Lift Light Weight**  
With the ability to lift to 750 lbs., this 10' Scissor Lift Light Weight is utilized where less reach and height but more work space and lifting capacity are required. The weight allows for work on delicate flooring. This scissor lift has non-marking tires, platform capacity up to 750 lbs, and a platform height of 10'. It is important to wear a safety harness, hard hat, safety shoes, and carry your training card while using this scissor lift.  
[DETAILS](#)

CAT CLASS: 007-0009  
**12' Scissor Lift Light Weight**  
With the ability to lift to 500 lbs., these scissor lifts are utilized where less reach and height but more work space and lifting capacity are required. The weight allows for work on delicate flooring.  
[DETAILS](#)

CAT CLASS: 007-0007  
**14' Scissor Lift Light Weight Rental**  
With the ability to lift to 670 lbs., this scissor lift is utilized where less reach and height is needed but work space and lifting capacity is required. The weight allows for work on delicate flooring.  
[DETAILS](#)

CAT CLASS: 007-0005  
**14-17' Electric Scissor Lift**  
Perfect for a job that requires less reach and height but demands more workspace and lift capacity. With a maximum platform height of 17' 6", a platform size up to 64" in. x 29" in. and non-marking tires- the electric powered lift should be used on flat and stable surfaces.  
[DETAILS](#)

1-4 of 124 results found for "boom lift" [1](#) [2](#) [3](#) [4](#) [5](#)

**SUNBELT RENTALS** GET HELP 24/7  
**1-800-667-9328**

**EQUIPMENT RENTAL**  
Find & Rent Equipment  
View MyMyCarCard  
Play Favorites  
Rental Protection Plan  
Commercial Credit Application

**LOCATIONS**  
Find a location near you

**SAFETY & TRAINING**  
Operator Training & Resources

**SERVICE**  
Mission Critical Link  
Find a Certified Expert

**TOOLFLEX™**  
Learn about ToolFlex™

**COMMAND CENTER**

**CUSTOMER SERVICE**  
Contact Customer Service  
Vendor Payment Status

**ABOUT SUNBELT RENTALS**  
About  
Explore The Power of Sunbelt  
Command Center  
Customer Success Stories  
Suppliers  
Careers

DOWNLOAD THE SUNBELT MOBILE APP  
Download on the App Store  
GET IT ON Google Play

Feedback

## HERC RENTALS - WEBSITE INFO



### hercrentals.com

Web Presence Since: 2015

Global Web Rank: 227.756

Content Mgmt System: Custom

## FEATURES

- Large clear and clean images on product pages
- Very legible text and nice clean modern font

## PAIN POINTS

- Obnoxious giant ad for their app at the top of every page till I closed
- Needless mid-level category that was repeat of main level
- No availability, pricing, nor location info
- No search from homepage, from homepage you find equipment by choosing icons that aren't easily identifiable

## OBSERVATIONS

This is site poorly done overall, seems like the designer has put in a lot of thought but did not test it with users. I found navigating the site complicated and confusing with unnecessary intermediary pages. Searching for equipment was not readily available.

# HERC RENTALS - WEBSITE SCREENSHOTS

## HOMEPAGE

**Herc Rentals app now available**  
for all Apple and Android tablets and smart phones. X CLOSE

PAY INVOICES
 Sign Up  
0 ITEMS ProControl Login

RENTALS / USED EQUIPMENT / SOLUTIONS / PROGRAMS / LOCATIONS / NEED HELP / CAREERS

**RENTALS / SOLUTIONS**

- Aerial
- Air Compressors & Tools
- Climate Control
- Compaction & Paving
- Concrete & Masonry
- Earthmoving
- Floor Care & Surface Prep
- Material Handling
- Power Generation
- ProContractor
- Pump
- Trucks & Trailers

**RENTAL SOLUTION**

→ READ NOW

WE ARE HERE TO ASSIST YOU.

Contact our customer care team to help better assist your needs.

CONTACT US

---

NEED MORE CONTROL?

ProControl combines Account Management and Telematics in an all-in-one tool that includes real-time reporting.

SIGN UP

//

CAREERS

Want to be a part of the Herc Rental team? Find out more about our career opportunities.

MORE >

//

ABOUT

We are a premier, full-service equipment-rental firm with a large North American presence.

MORE >

//

INVESTOR RELATIONS

Our latest presentations, news and other financial information.

MORE >

## SEARCH RESULTS

**Herc Rentals app now available**  
for all Apple and Android tablets and smart phones. X CLOSE

PAY INVOICES
 Sign Up  
0 ITEMS ProControl Login

RENTALS / USED EQUIPMENT / SOLUTIONS / PROGRAMS / LOCATIONS / NEED HELP / CAREERS

Search Results: 3 results for /

scissor lift

**Equipment Rental Results:**

Rough Terrain Scissor Lifts >

Electric Scissor Lifts >

Compact Electric Scissor Lifts >

Download on the **App Store** OR **GET IT ON Google Play**

**Contact Us**  
Need Help?  
800-654-9659  
[customerscare@hercrentals.com](mailto:customerscare@hercrentals.com)

Request Form

**Careers**  
Job Search  
Military Friendly  
Career Opportunities

**Services**  
Equipment Rental  
Used Equipment Sales  
Solutions  
Account Management  
Safety Training  
Credit Application

**About**  
Company Overview  
Investor Relations  
Press Releases  
In The News  
Blog  
Leadership  
International Operations

Site Map / Privacy Policy / Terms Of Use / App Privacy Policy / App Terms Of Use  
© 2019 Herc Rentals Inc. - 27500 Riverview Center Blvd, Ste 100, Bonita Springs, FL 34134

Affiliations:

Contract Holder

OMNIA

PARTNERS

## AHERN RENTALS - WEBSITE INFO



### ahern.com

Web Presence Since: 1996

Global Web Rank: 691,264

Content Mgmt System: Magento

## FEATURES

- Interesting sorting feature for equipment with dropdown boxes

## PAIN POINTS

- Search box hard to find, very tiny in header
- Massive horrible chat now bubble in header
- Most equipment missing images
- No pricing nor location info
- Product descriptions very sparse
- Has shopping cart icon header that doesn't do anything

## OBSERVATIONS

This is very poorly done, virtually nothing good about it, very outdated, glitchy, slow, and difficult to use, it's surprising that a big company has such a bad website.

# AHERN RENTALS - WEBSITE SCREENSHOTS

## HOMEPAGE

800-400-1610  
24/7 Customer CareAhern Access Login
Events

LIVE CHAT NOW!

Rent
Buy
Parts
Service
Locations
Company
Credit Application
Contact
Rental Catalog
Call Me!
Live Chat

NEW!

2019/2020 RENTAL CATALOG

CLICK HERE TO VIEW >>

**Ahern Rentals: Your Source for Equipment Rentals Nationwide**

With over 47,000 pieces of rental equipment available nationwide, Ahern Rentals is ready to support your next project.

Choose from our substantial rental inventory, ranging from heavy construction equipment to hand tools, and everything in between. Ahern Rentals stocks one of the largest selections of high reach equipment, including rough terrain forklifts, boom lifts and scissor lifts, ensuring that we always have a solution when you need to work at height.

In addition to equipment rentals, we offer sales of **new and used equipment**, plus spare parts and equipment servicing delivered by our factory-trained, certified technicians. Ahern Rentals works with all leading equipment manufacturers, including JLG, Genie, Kubota, Snorkel, Xtreme Manufacturing, Skyjack, Case, Stihl, Hyster, John Deere, Caterpillar, and many more.

Headquartered in Las Vegas, Nevada, Ahern Rentals is proud to be North America's largest independently owned rental company. With over 60 years experience, you can rely on Ahern Rentals to deliver the equipment you need, when you need it.

Call our friendly customer service team 24/7 or visit one of our **80 locations** today.

LIVE CHAT WITH AN AHERN PROFESSIONAL NOW!

LIVE CHAT

DIG UP DEALS ON USED EQUIPMENT

BROWSE OUR RENTAL FLEET

NEW STORE NOW OPEN ARLINGTON, WA

**Open your Ahern Rentals account today!**  
Download the credit application form here

Subscribe

**EQUIPMENT**

- Rent Equipment
- 2019 / 2020 Rental Catalog
- Buy Equipment
- Financing
- Credit Application

**COMPANY**

- About Us
- Careers
- Investor Relations
- Executive Bios
- Locations

**SUPPORT**

- Rental Protection Plan
- Repair Service
- Customer Support
- Safety Training & Classes
- Employee Support
- Vendor Login
- Ahern Access Login

**GET IN TOUCH**

- Get In Touch
- Live Chat
- Call Me
- 800.400.1610
- 1401 Mineral Avenue  
Las Vegas, NV 89106

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## SEARCH RESULTS

800-400-1610  
24/7 Customer CareAhern Access Login
Events

LIVE CHAT NOW!

Rent
Buy
Parts
Service
Locations
Company
Credit Application
Contact
Rental Catalog
Call Me!
Live Chat

**Search results for 'scissor lift'**

SKYJACK™ Lifts | Electric Scissor Lift | 3215

Snorkel Electric Scissor Lift | M1230E

Charleston Equipment Rental

SNORKEL S3008P Personnel Lift | Ahern Rental Equipment

JLG® Electric Scissor Lift Rental | Pickup & Delivery | M3369LE

SKYJACK™ Rough Terrain Scissor Lift | S/27135RT

Eugene Equipment Rental

Irving Equipment Rental

HY-BRID HB-1030 Electric Scissor Lifts | Ahern Rental Equipment

JLG® Electric Scissor Lift Rental | Pickup & Delivery | 2630ES

SKYJACK S/6832RT Rough Terrain Scissor Lifts | Ahern Rental Equipment

Greenville Equipment Rental

Items 1 to 12 of 572 total    PAGE: 1 2 3 4 5

**Open your Ahern Rentals account today!**  
Download the credit application form here

Subscribe

**EQUIPMENT**

- Rent Equipment
- 2019 / 2020 Rental Catalog
- Buy Equipment
- Financing
- Credit Application

**COMPANY**

- About Us
- Careers
- Investor Relations
- Executive Bios
- Locations

**SUPPORT**

- Rental Protection Plan
- Repair Service
- Customer Support
- Safety Training & Classes
- Employee Support
- Vendor Login
- Ahern Access Login

**GET IN TOUCH**

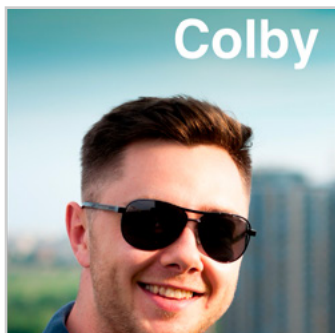
- Get In Touch
- Live Chat
- Call Me
- 800.400.1610
- 1401 Mineral Avenue  
Las Vegas, NV 89106

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# PERSONAS

## OUR TARGET CUSTOMERS

The rental process we were designing was for primarily three types of people that would need to rent construction equipment. We did some basic user research but mostly leaned on the sales team experiences with customers to construct these initial versions of our personas.



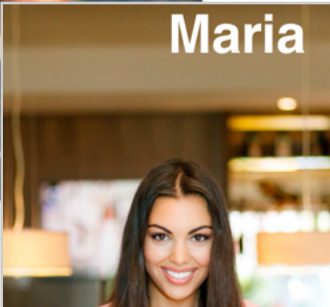
**Colby**

**PROJECT PLANNER (PROJECT MANAGER)**

“How can I put more time back in the day to focus on client needs more?”

<p><b>Goals/Needs</b></p> <ul style="list-style-type: none"> <li>Wants to reduce time searching for materials and equipment</li> <li>Help with follow up, service issues, and call off of equipment</li> <li>To easily utilizing software for managing 4-10 projects at a time</li> </ul>	<p><b>Motivations</b></p> <ul style="list-style-type: none"> <li>Staying engaged with his team</li> <li>Problem solving and prevention</li> <li>Finishing projects on time and under budget</li> <li>Seeing his team/company grow</li> </ul>	<p><b>Pain Points</b></p> <ul style="list-style-type: none"> <li>Spends too much time sourcing and managing material &amp; vendors</li> <li>Loses focus on the project due to service, delivery, and equipment / materials issues</li> <li>Incorrect billing and invoices increase his work load</li> </ul>
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32 Years old  
Married with two  
Always on the go



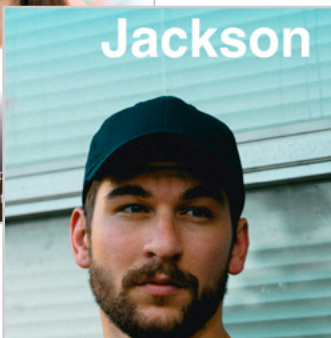
**Maria**

**PURCHASING DEPARTMENT (PURCHASER)**

“Who you are tomorrow begins with what you do today?”

<p><b>Goals/Needs</b></p> <ul style="list-style-type: none"> <li>To make purchasing or rental decisions quickly</li> <li>To easily access invoices, aging reports, and on rent reports</li> <li>To easily utilizing software for managing 4-10 projects at a time</li> </ul>	<p><b>Motivations</b></p> <ul style="list-style-type: none"> <li>Finding the best deal for payment terms, cost, and product quality</li> <li>Cost projections being correct</li> <li>Relaxed, comfortable, and managed atmosphere</li> <li>Making decisions that will</li> </ul>	<p><b>Pain Points</b></p> <ul style="list-style-type: none"> <li>Spends too much time managing invoices from multiple vendors</li> <li>Falls behind due to billing issues with vendors</li> <li>Has to constantly confirm with project managers within her organization that invoices are</li> </ul>
--	--	--

26 Years old  
Single and lives with her p  
Very internet and compu



**Jackson**

**SUPERINTENDENT (ON SITE)**

“My projects have to be completed on time.”

<p><b>Goals/Needs</b></p> <ul style="list-style-type: none"> <li>Planning, organizing, directing, and controlling project</li> <li>To get service, equipment pickup, and manage rentals from his mobile device</li> <li>To make sure project stays on track, and monitor field activities</li> </ul>	<p><b>Motivations</b></p> <ul style="list-style-type: none"> <li>A team that works fast and reliable equipment</li> <li>Producing results for promotions</li> <li>Extra time for himself on the weekend</li> <li>Incorporates value by adding products that assist him and his team</li> </ul>	<p><b>Pain Points</b></p> <ul style="list-style-type: none"> <li>Spends too much time facilitating and following up on service calls, equipment rentals, and pickup requests</li> <li>When on-site, needs support and follow through</li> <li>Difficulty in finding good, hard working hands on site</li> </ul>
--	--	---

24 Years old  
Single living with two roommates  
Dependent on office for job coordination

<p><b>Daily Tasks</b></p> <ul style="list-style-type: none"> <li>- Schedule Subcontractors, consultants, and vendors</li> <li>- Perform Quality control duties</li> <li>- Coordinate required inspections with local jurisdictions</li> <li>- Communicate and compile reports for the project team such as ASI's, RFI's submittals</li> </ul>	<p><b>Device and Internet Usage</b></p> <table border="0"> <tr> <td>Desktop</td> <td></td> </tr> <tr> <td>Mobile</td> <td></td> </tr> <tr> <td>Social Media</td> <td></td> </tr> <tr> <td>Technical Know-how</td> <td></td> </tr> </table>	Desktop		Mobile		Social Media		Technical Know-how	
Desktop									
Mobile									
Social Media									
Technical Know-how									

# STRATEGY

This strategy map is for searching for equipment on our site, creating an account, and checking out. This helped keep us aligned on strategy, goals, and direction.

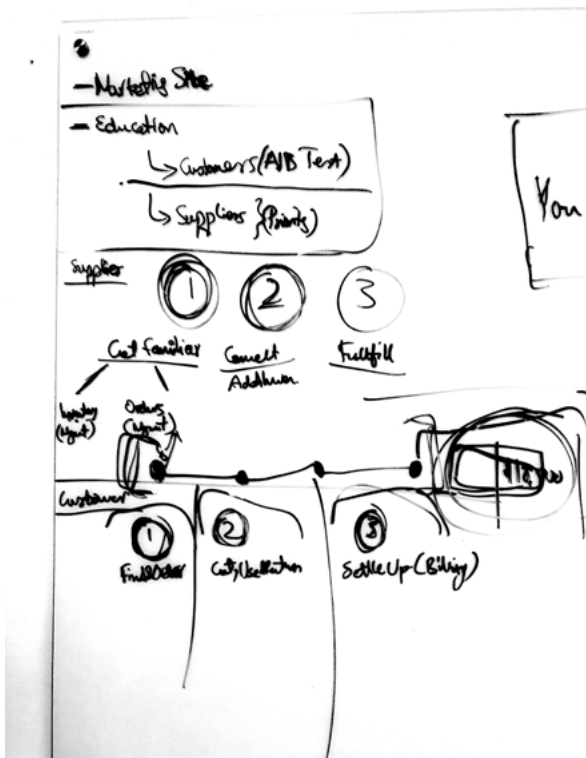
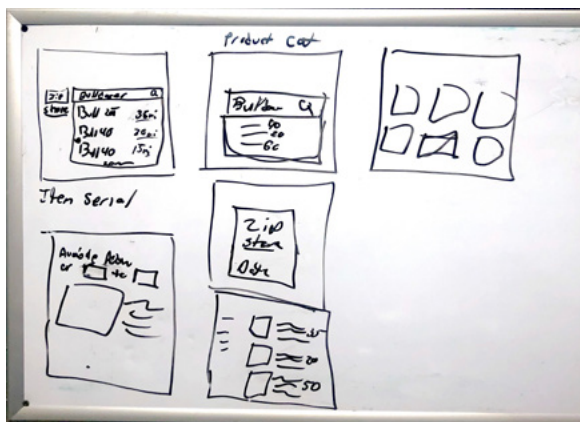
UX Strategy					
Feature/Problem	Users	User Benefit	Outcomes	Challenges	Measurement
<b>Finding Equipment</b>	Project Planners	The will be able see what equipment is available to rent	They can quickly determine if their needs will be met	Making sure the website is designed well and inventory data is consistent	Time it takes to find specific equipment
<b>Signing Up</b>	Project Planners	Save thier settings, history, and allow us to offer them more automated features	They become reoccurring clients	Helping users see the value in it and enouraging them to do it	Time it takes to go through signing up and abandon rate
<b>Checking Out</b>	Project Planners	They will know their transaction has been processed	We generate revenue and the client recieves their equipment	Providing a process that is secure, familiar, and easy to use	How long and many steps it takes to check out. User sentiment after ordering it

UX Strategy					
Feature/Problem	Challenges	Measurement	Solution Ideas	Hypotheses	Riskiest Assumptions
<b>Finding Equipment</b>	Making sure the website is designed well and inventory data is consistent	Time it takes to find specific equipment	Have the search bar immediately available and make results very visual easy to select	Users will enjoy searching for and choosing equipment	That our users will feel comfortable using an impersonal website to help the find and rent equipment
<b>Signing Up</b>	Helping users see the value in it and enouraging them to do it	Time it takes to go through signing up and abandon rate	Do not ask users to sign-up until they have found and chosen what they are looking for.	Users will be more apt to sign-up if we give information first about our inventory	We have the data the users want to see, and the data will be helpful for setting bid amounts and turnaround times
<b>Checking Out</b>	Providing a process that is secure, familiar, and easy to use	How long and many steps it takes to check out. User sentiment after ordering it	Solutions for new gaps will be presented once they are known	Have the check-out process happen in two steps and allow users to select additional check-out needs	Users will trust our company enough to order and pay for the equipment

# IDEATION

## WHITEBOARDING

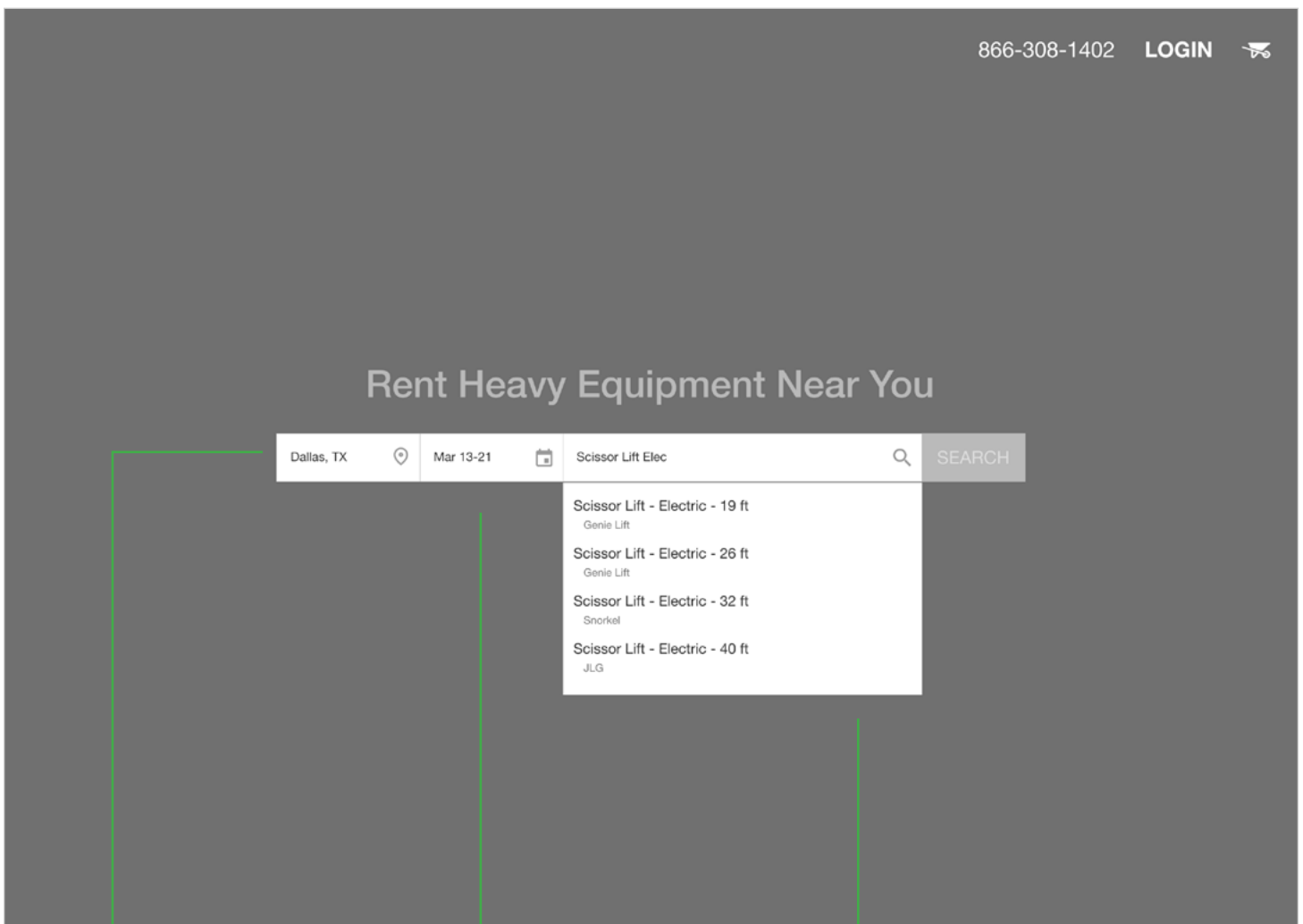
We had whiteboarding sessions to brainstorm possible solutions for pain points our competitors were not addressing to us a competitive advantage in the UX of our product.



# ITERATION 1

## PROTOTYPE - HOMEPAGE SEARCH

For the homepage we wanted search to be immediately accessible and front and center. We assumed that most visitors will be wanting to search for equipment as soon as they arrive to our site.



In order to give accurate proximity info we need users to input location info when searching

Accurate pricing is hugely dependent on date ranges, we ask for this upfront to get that data as accurate as possible

When typing their needed equipment it will immediately provide auto suggestions to speed up the search process

**PROTOTYPE - SEARCH RESULTS**

This first version was to figure out the overall layout and see what the various data points would look like together. The idea was to show search results in a contextual sentence, few filters, and big clear images.

866-308-1402
LOGIN
🔍


## 8 Results for Skid Steer - 3000 lbs

### In Dallas, TX on March 13-21

**Filters**

Track

Wheels



**Skid Steer - 3000 lbs**

Kubota - 2012 Model  
Track - Bucket 80" Smooth  
Four-Wheel Drive - Attachments Available


[MORE DETAILS](#)

35 miles away 📍

\$1,450 for 8 Days 📅

Day	Week	4 Weeks
\$125	\$800	\$3,000

**RESERVE NOW**



**Skid Steer - 3000 lbs**

Caterpillar - 2015 Model  
74" Low Profile Standard Bucket  
Four-Wheel Drive - Attachments Available


[MORE DETAILS](#)

24 miles away 📍

\$1,650 for 8 Days 📅

Day	Week	4 Weeks
\$145	\$900	\$3,800

**RESERVE NOW**



**Skid Steer - 3000 lbs**

Bobcat - 2013 Model  
4.7 psi Ground Pressure  
Feature Rubber Tracks

[MORE DETAILS](#)

48 miles away 📍

\$1,500 for 8 Days 📅

Day	Week	4 Weeks
\$136	\$870	\$3,650

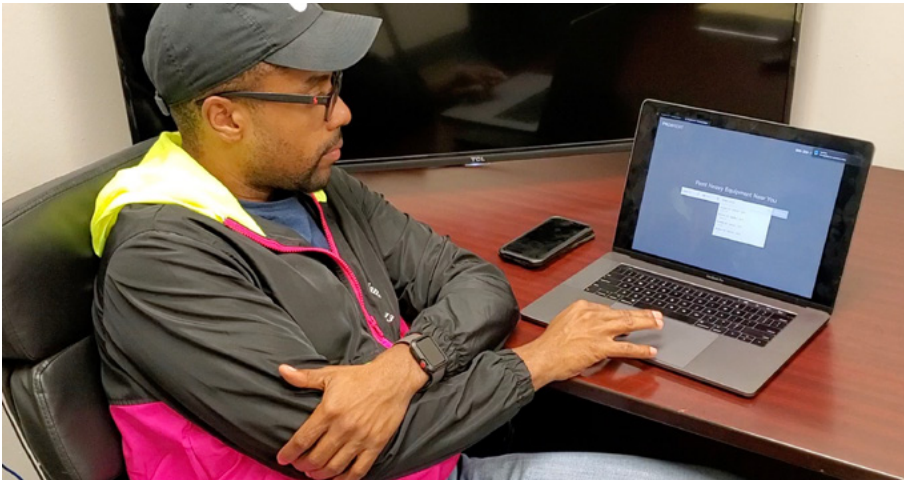
**RESERVE NOW**

We had few filters to encourage using search for refinement

One of challenges that users face is that lack of transparency on pricing and distance information, we wanted to depict this without it being too cluttered.

I made the search results conversational to help create context

## USER FEEDBACK FOR ITERATION 1



“I didn’t notice the underline at first and wouldn’t have thought of clicking it to change the search, I would have tried to go back to change the city.”

For the first iteration, feedback sessions revolved around making sure stakeholders were on the same page with the overall direction and then verifying that direction by getting some user feedback on the initial wireframes.

Here’s a summary of some of their feedback:

### Positive

- Very similar to Hotels.com - felt familiar and easy to use
- Finds zip and date fields convenient
- She likes the predictive type, fast and simple
- Images are very helpful and like the descriptions

### Pain points

- All the details on the page made him pause more and think more about each item
- He noticed the miles and price last - because the titles and photos and details drew his attention before the price and distance
- Didn’t know where she could change the date
- At first the underline was confusing, didn’t think to click on it at first. Didn’t think it meant was editable

“I like the large images that help me easily know which equipment I’m looking at.”


### New Ideas

- Ability to filter by brand




# ITERATION 2

## PROTOTYPE - SEARCH RESULTS


In Iteration 2 I removed the conversational display of search results due to confusion by users and added icons. I also added the ability to add attachments since we discovered that is a crucial part of selecting construction equipment and evaluating its cost.


866-308-1402
LOGIN



### 8 Results


Scissor Lift - Electric - 26 Ft  Dallas, TX  March 13-21 

**Filters**

Price Range 

Distance Range 

Min Height 


Max Height 

Scissor Lifts

Boom Lifts




Gas/Deisel


Electric








**Scissor Lift - Electric - 26 ft**

Genie Lift: GS-3246  
Capacity: 700 lb  
Machine Width & Height: 3 ft 10 in x 8 ft


Distance - 35 Mi   
8 Day Rental - \$1,271   
Delivery est. - \$400 

Choose Aattchments 

+ Tube Caddy  + Panel Carrier  + Work Light Accessory 




+ Pipe Cradle Accessory  + Lockable Control Box Cover 


**RESERVE NOW**




**Scissor Lift - Electric - 26 ft**

Snorkel: S3370RT  
Capacity: 700 lb  
Machine Width & Height: 3 ft 10 in x 8 ft

Distance - 26 Miles   
8 Day Rental - \$1,1152   
Delivery Est - \$350 

Choose Aattchments 

**RESERVE NOW**



**Scissor Lift - Electric - 26 ft**

I added more filters due to a request from stakeholders

Here we simplified the pricing and included the ability to add attachments to the machine based off of user feedback and checking out requirements

Added icons and removed conversational search info

## USER FEEDBACK FOR ITERATION 2



For the second iteration of the prototype, we didn't change the homepage but made a lot of changes on the search results page which was the focus of our user testing in this session.

Here's a summary of some of their feedback:

### Positive

- She likes the predictive type, fast and simple
- She like there's a lot of information right off the bat
- She likes that you can change the search criteria is right on top
- Icons beside search parameters made it more clear that area was interactive

### Pain points

- Underline wasn't clear at first about the underline but then tried clicking on it. Interaction wasn't clear, would have tried to go back to change the city.
- 1 in the shopping cart, it's a little too small
- Would like to see how price is broken down by day, week, and month rates.
- Overall prices should update when choosing an attachment

"I want to see how all the things I'm doing are affecting the price in real time, like changing distance, adding attachments, updating date ranges, etc"

"I really like that I can see a lot of the information about the equipment I searched for right-off-the-bat."

### New Ideas

- Would find a rating system very helpful to know how to choose which item is better quality
- Have the ability to request service, doesn't like to keep asking for stuff knowing when everyone is so busy

# ITERATION 3 - FINAL

## PROTOTYPE - SEARCH RESULTS

For the final iteration I implemented some of our biggest changes based off user feedback. I created sliders to use as filters, added attachment category dropdowns, and made each editable search parameter underline with blue.

866-308-1402
LOGIN

### 8 Results

[Scissor Lift - Electric - 26 Ft](#)
[Dallas, AL](#)
[March 13-21](#)

**Filters**

Max Distance (miles)

40

---

Price Range


\$1,500 - \$3,500

---

Min Height

Max Height

By Attachment



**Scissor Lift - Electric - 26 ft**

Genie Lift: GS-3246  
Capacity: 700 lb  
Machine Width & Height: 3 ft 10 in x 8 ft


Distance - 35 Mi

(1 week & 1 day) - \$1,271

Delivery est. - \$400

Choose Aattachments

RESERVE NOW



**Scissor Lift - Electric - 26 ft**

Snorkel: S3370RT  
Capacity: 700 lb  
Machine Width & Height: 3 ft 10 in x 8 ft


Distance - 26 Miles

(1 week & 1 day) - \$1,1152

Delivery est. - \$350

Choose Aattachments

RESERVE NOW



**Scissor Lift - Electric - 26 ft**

JLG: LE Series 4069LE  
Capacity: 700 lb  
Machine Width & Height: 3 ft 10 in x 8 ft

Distance - 48 Miles

(1 week & 1 day) - \$1,348

Delivery est. - \$420

Choose Aattachments

RESERVE NOW

Added simpler and better filters that communicated clearly to users

I added a dropdown to reveal attachments since they won't always be needed to create a cleaner display of available machines

Underlining search results with blue and adding icons made it more clear to users they can search again from there.

# PROTOTYPE - ADDING ATTACHMENTS

This first version was to figure out the overall layout and see what the various data points would look like together. The idea was to show search results in a contextual sentence, few filters, and big clear images.

866-308-1402 [LOGIN](#)

## 8 Results

[Scissor Lift - Electric - 26 Ft](#) [Dallas, TX](#) [March 13-21](#)

### Filters

Max Distance (miles)

40


Price Range

\$1,500 \$3,500

Min Height

Max Height

By Attachment



### Scissor Lift - Electric - 26 ft


Genie Lift: GS-3246  
Capacity: 700 lb  
Machine Width & Height: 3 ft 10 in x 8 ft

Distance - 35 Mi  
(1 week & 1 day) - \$1,271  
Delivery est. - \$400

[RESERVE NOW](#)

Choose Aattchments

Attachment	Price	Action
Standard Flow - 14'	\$125	<a href="#">ADD</a>
Standard Flow - 16'	\$125	<a href="#">ADD</a>
Standard Flow - 18'	\$125	<a href="#">ADD</a>
Standard Flow - 19'	\$125	<a href="#">ADD</a>
Standard Flow - 22'	\$125	<a href="#">ADD</a>
High Flow - 22'	\$125	<a href="#">ADD</a>



### Scissor Lift - Electric - 26 ft

Snorkel: S3370RT  
Capacity: 700 lb  
Machine Width & Height: 3 ft 10 in x 8 ft

Distance - 26 Miles  
(1 week & 1 day) - \$1,152  
Delivery Est - \$350

[RESERVE NOW](#)

Choose Aattchments

A machine can have multiple attachments and attachments are in categories. I created a layout showing several dropdown fields from each category to allow users to select their attachment.

Each attachment displayed a price based off the dates they chose and added an add button and an attachment info popup on hover.

## USER FEEDBACK FOR ITERATION 3



This user session was focused on validating the changes on our final iteration of the prototype before sending it development. Overall, the response was very positive with some new pain points discovered that can be addressed in the future.

Here's a summary of some of their feedback:

### Positive

- Noticed the filters, looked new since last time and really likes the filters that are available
- Break down of pricing, showing segments of time was very helpful
- Being able to do another search without going back is really nice
- Like the “toast messaging” when adding to cart
- Really likes the price ranges and the images

### Pain points

- Wants to make sure the images are consistent with the actual item they are selecting
- Would like a toast messaging when an attachment is added as well.
- Max distance by miles wasn't clear what it was referencing to exactly

“I rarely use my computer, I much rather use my iPhone, I use that all the time, to order and track the equipment I need.”

“I really like the ability to use sliders for filtering instead of choosing from a limited list .”

### New Ideas

- Would prefer to manage most of this via an iPhone App
- Some verbiage to indicate that the search parameters can be changed at the top

# CONCLUSION

The Construction Equipment Rental Company wanted to create a new way rent construction equipment online with a focus on transparency and ease of use for users. The online world of construction rental is rife with misleading statements, hidden costs, and lack of information.

We wanted to set ourselves apart from our competition with more than just the service we are providing, we wanted to create an experience that helped people to make better and faster decisions.

When I started designing the entire search process, I quickly realized this was going to be a very complex process because of how complex the industry is. Also, we discovered that many people have never even ordered equipment online and I had to design an interface that would feel familiar to people who have never done it before while making sure it has all the of tools and info that experienced people need when renting equipment.

We conducted brainstorming sessions to determine how the search experience would look and function. In the brainstorming sessions, there was the CTO, CEO, Sales Director, Product Manager, and me. These sessions proved to be extremely beneficial in making sure we were all on the same page with all the business needs the experience must meet as well making sure we had a diversity of ideas.

I did several design iterations and tested them users. These sessions revealed many things I had overlooked while also confirming some of the assumptions I had made. The biggest take aways I learned from this process are the following:

- Because online renting is new for many users, interactions must be clearly indicated rather than alluded to.
- Users really like seeing all pricing upfront and updated in real time when they are making changes.
- Renting construction equipment is generally a very complex process, simplifying the process and reducing the need to email and make phone calls is hugely appreciated by users.

Going forward, we are going to create the account creation and order tracking processes that will integrate into the equipment search and selection. We will make sure all of the successful features are carried through all processes and continue the spirit of transparency and easy-of-use we have established.

