

Safe Supply - Water Order

Matthew Worner

Project overview



The product:

Rural water suppliers in New Zealand are needing to demonstrate their compliance with new water regulations. The Safe Supply product will enable these water suppliers to demonstrate safety, compliance and they'll save money by moving to an electronic system instead of the current paper based system.



Project duration:

January 2020 - Present

9:41

Safe Supply

Welcome, select the report you would like to complete.

- Drinking Water Delivery
- Drinking Water Collection
- Truck Maintenance
- Drinking Water Sample

Help & Support
Each of the 'buttons' above clicks through to forms that collect data on Deliveries, Collections, Maintenance, and Water Samples. Driver needs to be connected to the internet to send these forms.

9:41

Drinking Water Delivery

Full Name
Matthew

Delivery Address
45 Kauika Road, Whangarei, 0110

Phone Number
0223765634

Delivery Time
10:30 am, Jun 07, 2022

Volume of water
10,000 m³

FAC Test Result at Delivery
12.34

Customer signature

Submit

Project overview



The problem:

Water suppliers need a quick way to record their water deliveries.



The goal:

To validate that an app and desktop platform could work together to collect and demonstrate that water is supplied safely.

Project overview



My role:

UX designer, UX researcher, PM from conception to delivery.



Responsibilities:

Conducting interviews, paper and digital wireframing, low and high-fidelity prototyping, conducting usability studies, accounting for accessibility, and iterating on designs.

Understanding the user

- User research
- Personas
- Problem statements
- User journey maps

User research: summary



We spoke with water suppliers in Hawkes Bay region of New Zealand to ask what tools they use to record their water deliveries and collections.

We assumed that water suppliers would be happy to switch to an electronic 'app' system, that wasn't always the case. We discovered that the compliance rules changes during the app development and we needed to adapt to that change and complete more research on users needs.

User research: pain points

1

Pain point

Paper based record keeping is cumbersome.

2

Pain point

Water delivery drivers needed to complete paperwork in their own time at end of shift due it being a slow process.

3

Pain point

Drivers needed quick access to customer details whilst making deliveries.

4

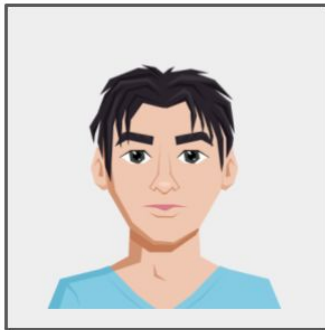
Pain point

Water suppliers wanted to access real time delivery information.

Persona: Zach

Problem statement:

Zach is a water truck driver who needs to document all water deliveries and collections because it's too slow doing it by paper and it takes away time from his kids.



Zack

Age: 27
Education: High School
Hometown: Napier
Family: 2 kids
Occupation: Water Truck Driver

"I have 5 deliveries a day throughout the region, need to get it done so can get home to see my kids"

Goals

- Getting water to the customers in need quickly
- Having the tools i need to get the job done

Frustrations

- Paperwork during and at end of day
- Admin should be sorted out in office not by driver

With new regulations coming for water suppliers, it's going to get more complicated for water truck drivers to do their job. Zack is already overstretched with doing paperwork, and so making his job simpler by giving him an app to record water deliveries will make his job easier and save company time.

User journey map

Persona: Zach

Goal: Deliver water to a customer at their home.

Mapping Zach user journey revealed how helpful it would be to have voice prompts and key delivery information on phone.

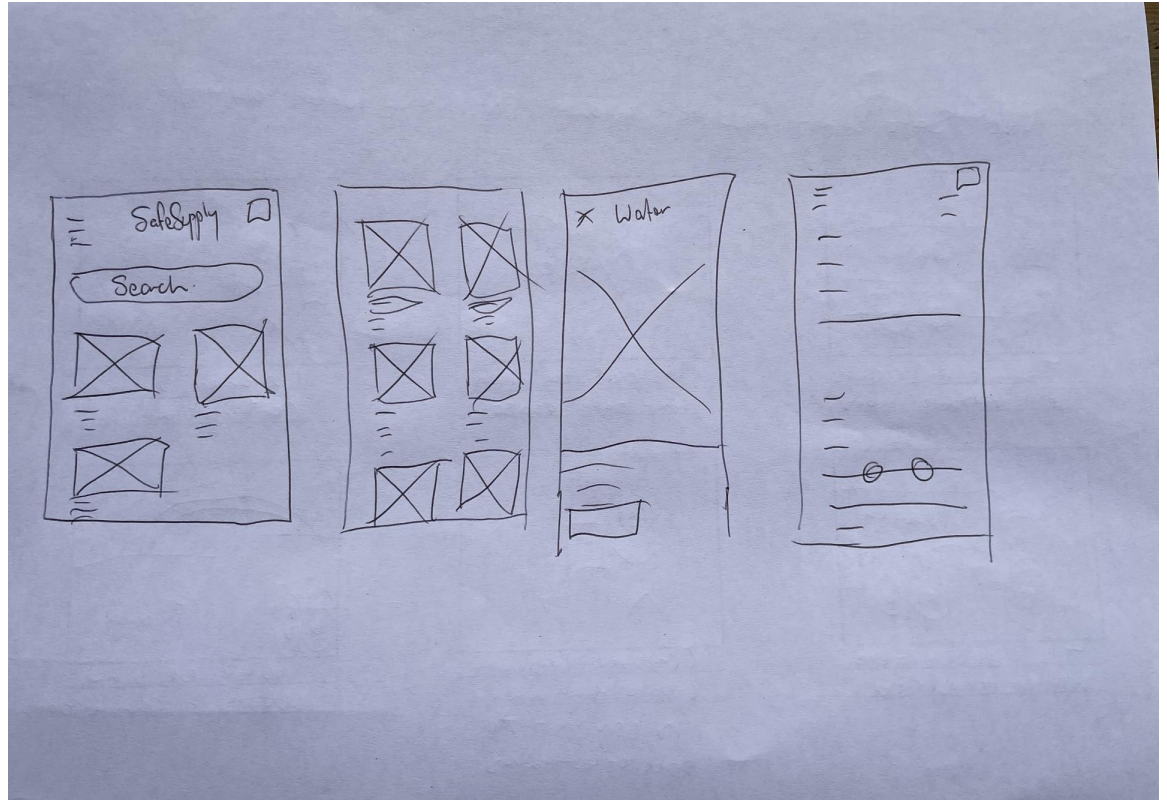
ACTION	Fill water truck with water volume customer wants	Find the customer delivery address	Arrive at customers home	Fill water tank	Give customer water delivery receipt
TASK LIST	Tasks A. Read customer booking to check water volume required B. Take FAC reading of water quality	Tasks A. Use map app B. Identify fastest route C. Check any tips from customer as to problems accessing property	Tasks A. Find customer B. Access water tank	Tasks A. Connect truck to water tank B. Prepare customer receipt and paperwork C. Check FAC quality	Tasks A. Ask customer to sign delivery receipt for water on phone
FEELING ADJECTIVE	<ul style="list-style-type: none">Rushedfrustrated	<ul style="list-style-type: none">Wondering whether details are correct	<ul style="list-style-type: none">HopefulSatisfied	<ul style="list-style-type: none">BusyConfident as used to this task	<ul style="list-style-type: none">SatisfiedGlad
IMPROVEMENT OPPORTUNITIES	<ul style="list-style-type: none">Show driver information required based on location	<ul style="list-style-type: none">Improve map Accessibility so that it large in size	<ul style="list-style-type: none">Phone provides voice prompts on delivery and txt's customer	<ul style="list-style-type: none">Send message to back office that delivery near completion	<ul style="list-style-type: none">Email confirmation sent to customer

Starting the design

- Paper wireframes
- Digital wireframes
- Low-fidelity prototype
- Usability studies

Paper wireframes

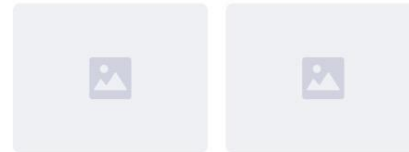
During this first iteration of the userflow, the priority was on showing all the bookings for the truck driver. This changed after user feedback and testing.



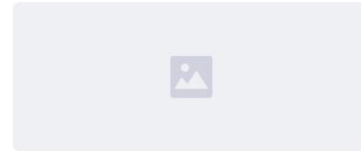
Digital wireframes

Creating a space where truck driver can see their deliveries with key information: address, water volume, time.

Search customer address

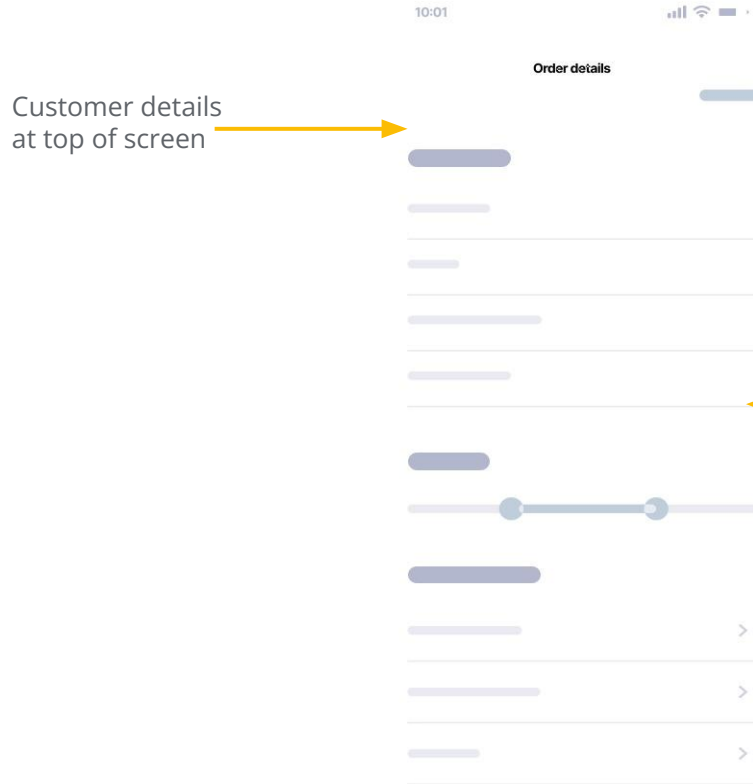


Water deliveries for truck driver



Digital wireframes

The water delivery booking details page which shows the full booking details for driver to access.



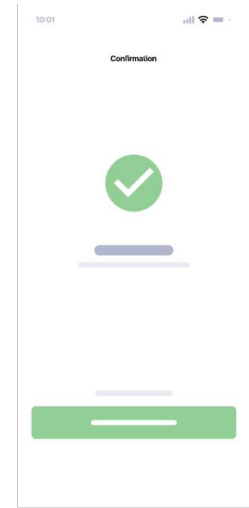
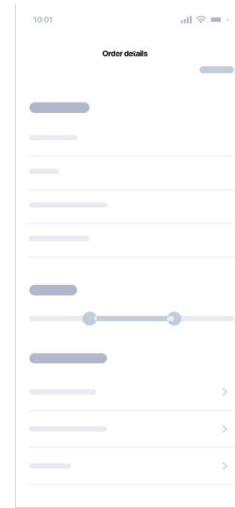
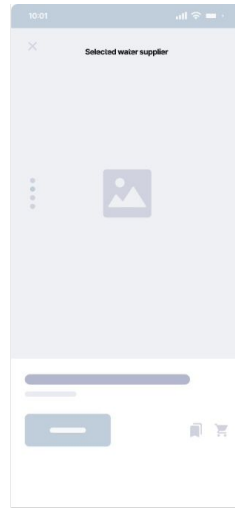
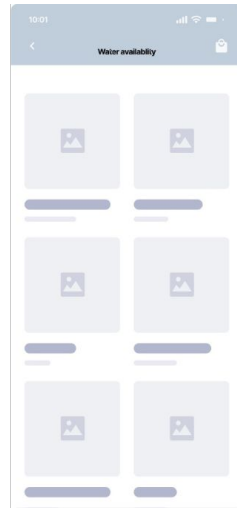
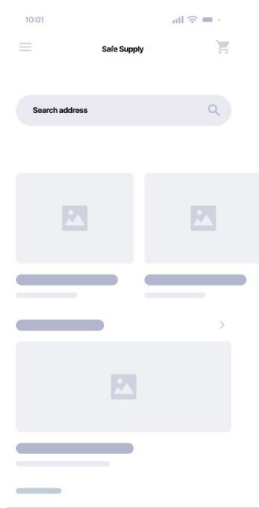
Customer details at top of screen

Demonstration of steps in delivery process, that we still need to get customer signature on final step to confirm delivery.

Low-fidelity prototype

This is the view the driver can have when viewing bookings and accessing individual bookings.

[Link to prototype in Figma.](#)



Usability study: findings

After demonstrating initial designs in a low fidelity design, truck drivers feedback was they wanted bigger buttons and easier access to reports. On the second round they asked for more colours and more customer details.

Round 1 findings

- 1 buttons should be bigger at start
- 2 Summary of water deliveries
- 3 Struggle to find reports

Round 2 findings

- 1 More colours for sections
- 2 More voice actions for truck driver
- 3 More customer details shown

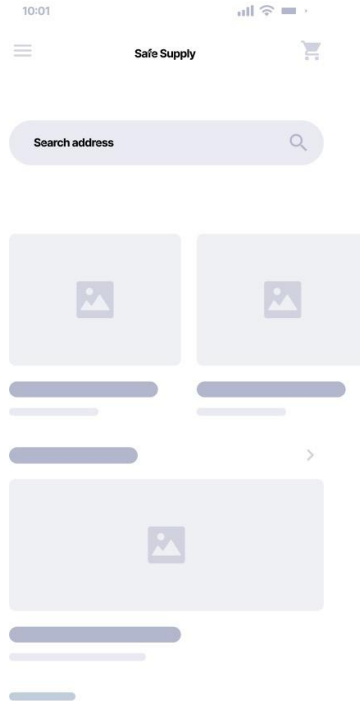
Refining the design

- Mockups
- High-fidelity prototype
- Accessibility

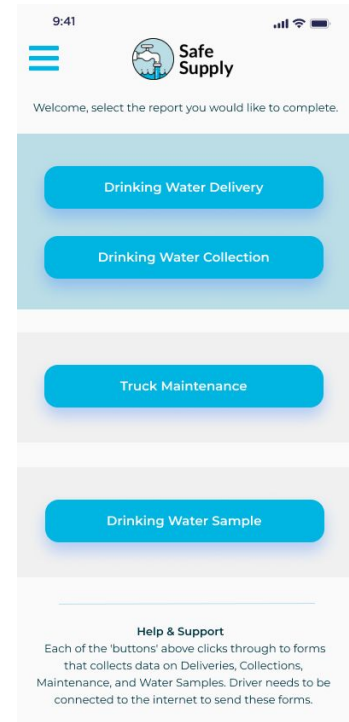
Mockups

Gather feedback to make bigger buttons at home page and clearer sections so truck driver can go directly to section they need to complete. Moved customer delivery to secondary page.

Before usability study



After usability study



Mockups

9:41

 Safe Supply

Welcome back,

Email
matthew@safesupply.co.nz


Password

[Log In](#)

[Forget Password?](#)

[Don't have an account? Sign up](#)

9:41

 Safe Supply

Welcome, select the report you would like to complete.

[Drinking Water Delivery](#)

[Drinking Water Collection](#)

[Truck Maintenance](#)


[Drinking Water Sample](#)

Help & Support
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FAC Test: Result at Delivery
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Customer signature

[Submit](#)

9:41

[←](#) Drinking Water Delivery
Confirmed

Customer

 Matthew
Payment method: Credit Card

Phone Number
0223765634

Delivery Time
10.30 am, Jun 07, 2022 [Add to Calendar](#)


Delivery Address
45 Kauika Road, Whangarei, 0110 [Open Map](#)

Additional Notes
I'm looking for someone to watch our baby boy 2-3 times per month. Must have experience working with babies.

[Cancel delivery](#)

[Send a Message](#)

9:41



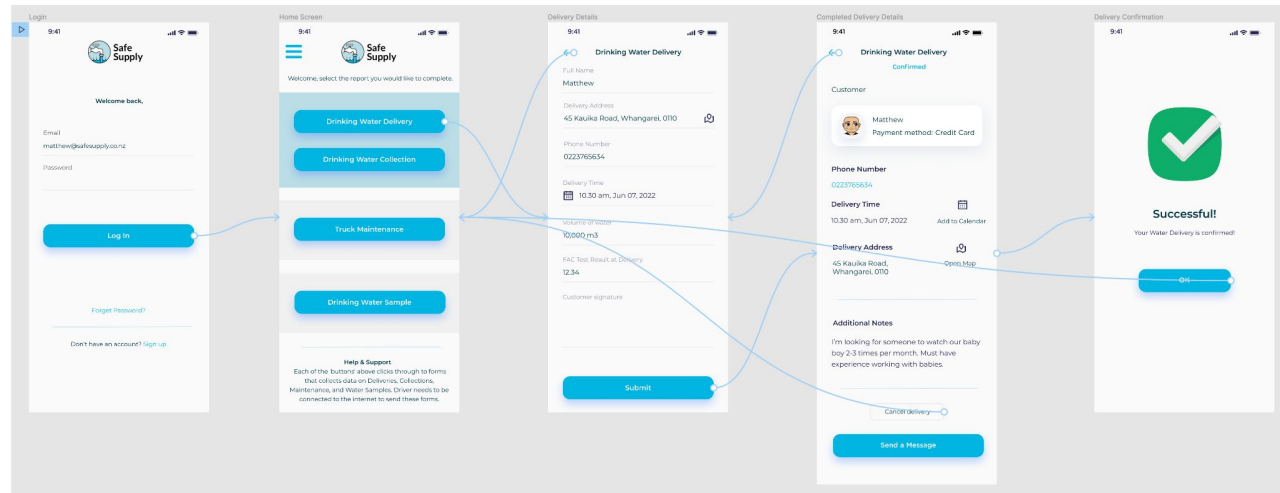
Successful!
Your Water Delivery is confirmed!

[OK](#)

High-fidelity prototype

The final high-fidelity prototype went through a simpler userflow and led the user along a pathway that encourages them to complete content quickly, saving truck driver time.

[Link to prototype in Figma.](#)



Accessibility considerations

1

Labelled each section with larger buttons to make 'reach' easier for users.

2

Used icons to help make navigation easier for users to recognise sections.

3

Added help and support section to homepage so users can quickly access area if they need help.

Going forward

- Takeaways
- Next steps

Takeaways



Impact:

Have pushed this app live to a test platform and have been working to try and get more funding to build it. Customer feedback has been positive as has interest from investors, though they still feel that the customer demand is not here yet.



What I learned:

Putting together all these elements in one document helped me understand the development of the project and how each step fits together to create a broader picture for myself and the user.

Next steps

1

Get more users to test app, and test on tablets as some drivers use these devices too.

2

Add more features from usability studies to make it a better product.

Let's connect!



Thank you for your time reviewing my work on Safe Supply! If you'd like to see more or get in touch, my contact information is provided below.

Email: matthew.worner@me.com