

MY INNOVATION IS CALLED P.O.D (Proof of Delivery)

MY NAME / TEAM NAME IS Erin Moore

I / WE GO TO SCHOOL AT Aquinas College

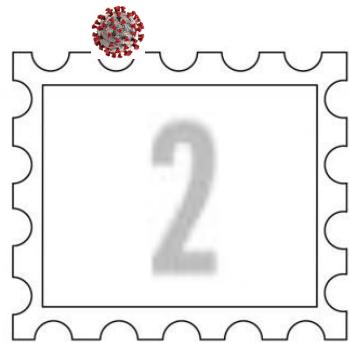
MY / OUR BIG IDEA IS To create an App allowing Courier drivers to get proof of delivery & receipt of packages by customers

AND IT HELPS Courier businesses and their drivers as well as companies offering online sales plus their customers.

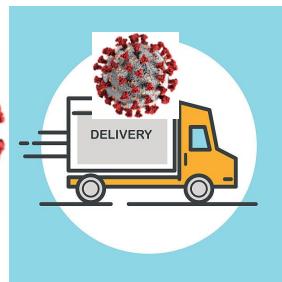
BY SOLVING THE PROBLEM OF The COVID-19 restrictions have made it impossible for Courier drivers to get people to sign for their parcels when they are delivered. This has created a risk of parcels being stolen from the customer's doorstep and people making false claims that they did not receive a parcel.

# THE PROBLEM

## What a problem! Courier deliveries aren't signed for due to social distancing during the COVID-19 pandemic.



Sustainability problems



Fake signatures, courier packages left at the neighbours', all part and parcel of service  
Matthew Rosenberg · 15:02, May 25 2018

NZ Couriers employee caught stealing \$22,000 worth of parcels  
7 Mar, 2018 8:00am

Fears as track and trace parcel delivery scam targets unsuspecting Kiwis  
8 Sep, 2019 9:49am

Even after the Pandemic, my App still prevent this from happening

When New Zealand went from level 4 to level 3, the online shopping increased by **350%**, meaning that the need for Couriers increased too. NZ Post had alone gained a new record of 200 parcels per minute when the levels changed. With all these packages needing to be delivered, social distance would become impossible.

### On the [New Zealand Couriers Contactless delivery page](#), they say:

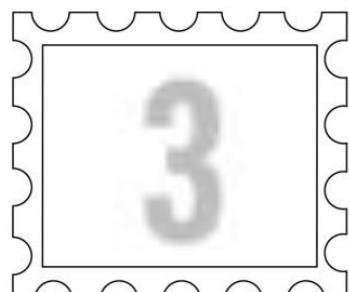
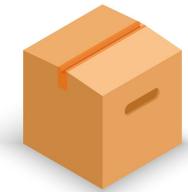
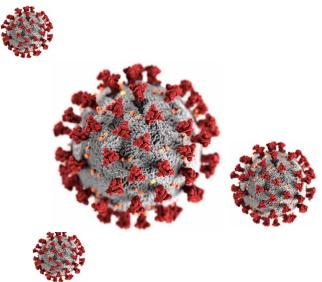
1. Our delivery driver arrives at your premises and alerts you that they have arrived e.g. knock on your door
2. Our delivery driver will stand about 2 meters away from you and ask for your name, then they will enter it and sign CV-19 on your behalf (this will show in the tracking information)
3. They'll then place your parcel down in front of them to complete the delivery or in a more appropriate place you indicate e.g. the doorstep

As mentioned on the NZ Courier website, the courier signs your package for you. This leaves room for identity theft and stolen goods.

I believe there is a lot of room for improvement with this system to protect the customer and the Courier driver. My App can provide safety and protection for those that are especially vulnerable to Covid-19 e.g. those with compromised immunity, lung conditions, the elderly etc. I myself have a lung condition that makes me vulnerable to the virus so I can personally relate to how these people feel during the Covid-19 pandemic.

My innovation will help everyone in New Zealand, the Courier companies and many other delivery services, by allowing products to be sent safely within bubbles during the COVID-19 pandemic.

From my research I decided I had to make an innovative solution that had no need for physical contact between the Courier driver and the customer, or even the need to get within 2 meters of each other. This is to make it far safer for everyone involved. My solution will help employers and their employees meet the health and safety obligations aimed to protect workers in the workplace and allow them to operate safely at Alert Level 2 and above.



I was prompted with the problem of Courier deliveries not being able to be officially signed off.

First started planning out ways to sign off via an App.

Initial App design included identification methods and multi level security to enter the App.

Idea was exchanged for a simpler method of scanning a barcode for Proof of Delivery after speaking with potential users of the App.

Fake signatures, disappearing items and parcels thrown over fences have left some Kiwis wondering whether they can still trust courier deliveries. In particular, the "signature required" option is supposed to offer security, but Aucklanders claim couriers are using it as an opportunity to practise their own autograph. ( Source - Stuff.co.nz. Site link [here](#) )

In light of the Coronavirus (COVID-19) outbreak, our primary priority is the health and well-being of our people and our customers. As a result we have temporarily updated our delivery protocols to limit interaction between courier and receiver, and we will be enacting a blanket Authority to Leave policy. To minimise physical contact, couriers will be required to leave customer parcels at a safe location, out of public sighting at the designated delivery address. If a signature is required, couriers will be required to take a photo as proof of delivery, if they are able to leave the parcel in a safe and secure place. Otherwise, the item will be available for collection from your local depot. (Briscoes' email to a customer)

### Sustainability

My innovation will be sustainable in multiple areas. Healthwise, it's very sustainable because of the lack of physical contact during the Covid-19 pandemic. And since my App has a Location pinning system, people will no longer be able to make false claims of missing deliveries. This is Economically Sustainable (saves money from fuel, etc) Environmentally Sustainable (no vehicle trips = no pollution), and can save the Couriers and Police, if it gets to that point, a lot of time. And not having to worry about false claims can reduce the businesses stress, therefore helping with Mental Health.

First concept drawings of the App design ensuring text to be large enough for the elderly and those of poor sight to read when using the App.

Began finalizing the design. Continuing to interview potential users for what they would see as needed in the App.

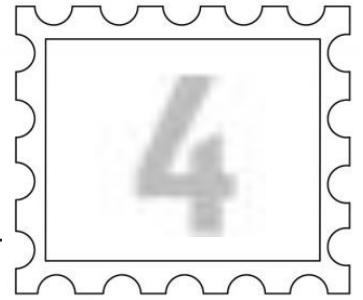
Spoke to several end users. All thought that adding a location feature that pinpoints when and where the delivery happened (using a Google maps like system) would increase security and reduce false claims of lost packages.

## Final product!

- App includes
- Barcode Scanning Method for sign off
  - Family pickup / Account linking
  - Easy reading for the elderly/poor sighted people
  - Map for pinpointing where and when the package was delivered



# YOUR INNOVATION



## How P.O.D works

- 1, An alert is sent to the recipient's phone, via the App notifying them the courier is close to arriving at their address. (The App uses Google maps and location services for this function).
  - 2, The Courier arrives at the address with the package and places it where previously stipulated by the recipient through the App.
  - 3, The Courier then scans the barcode, they click delivered on their device. This drops a pin on the Google map, confirming where the package has been left, with a time and date. The delivery confirmation is sent to both the parcel's sender and recipient's Apps.
- For valuable items – Senders can pay for a sighted delivery. This requires the Courier to wait for a receipt.*
- 4, The recipient must go out to collect their item and scan the barcode on the parcel. This notifies all other parties that they have possession of the item. This is a far better feature than the previous signature required option.

## Family pickup / redirection / security

If the customer is unable to be there in time to scan the package, they would be able to get one of their family members or trusted friend to collect it for them. To do this, they would 'link' their accounts, allowing their nominated person to collect that specific delivery. The person that ordered the package would choose who they allow to pick it up. When the package is scanned, the original person that ordered it would receive an email, telling them that it has been scanned. The email will confirm to them the name, time and location that the package was scanned. If the details don't match then they know that someone has stolen their package. Although the probability of this happening is low given the security measures in place.

## Courier driver account sign up

When the Courier driver gets the App, they will sign up as normal customers would, but they would enter a code that they received from their company. The couriers company would join the POD App. They will then receive a code that will authenticate their use of the App. This allows them to be able to scan and deliver the parcels while maintaining physical distancing protocols. The driver, when they are not working, will be able to toggle on and off their work version of the App so that they can also be a customer.

## Completing the delivery

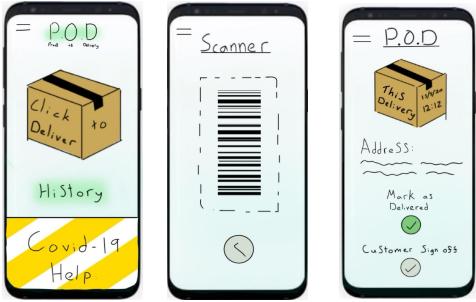
Once the driver scans the parcel, their screen changes to a screen where it shows the time, date and address, along with 2 circled ticks. The first tick represents the Couriers scan. This tick turns green once Courier had delivered and scanned the parcel. The Courier will then wait for the customer to 'sign off' their package via scanning it. When it has been completed, the second tick on the page changes to green, letting the Courier driver know that the delivery has been accepted and completed. This is the App's version of 'signing the package off'.



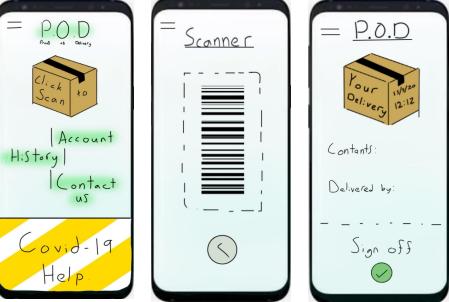
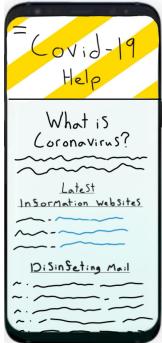
This is the Sign up page. The Couriers enter the code that they received from their company at the bottom of the page under the 'Done' button.

During scanning, the App checks the email address attached to the barcode to ensure that it is the same as the one scanning it. (Or one of the linked emails.)

## What the Courier sees



At the bottom of the homepages and in the sidebar, there is a Covid-19 Help button. When clicked it will take the user to a page where all the links to the latest Covid information is. It will also have help line numbers and a how-to for disinfecting mail.



## What the Customer Sees