User Problems:

- Packages get lost
- Packages get stolen
- Packages get delayed
Market Problems:

- Mailboxes too small
- No mailbox access for UPS / FedEx
- Package delivery outpacing letter delivery
ParcelPro Overview

- **Product Description**
  - User friendly electronic lockbox that receives and stores package deliveries when you're not home

- **Intended Customers**
  - Apartment buildings managers, small businesses

- **End User**
  - Apartment residents

- **Market**
  - Estimated market size: 0.5 million boxes
Solution:
Customer Needs:

- Our customer is a property manager of an apartment building
  - New feature for the apartment building
  - Reduce the labor cost and time to manage packages
## End user benefits:

<table>
<thead>
<tr>
<th>End user Needs</th>
<th>Product Attributes</th>
<th>Engineering Specifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Simple User Interface</td>
<td>Time to complete a process</td>
<td>Takes less than 2 minutes to deliver a package</td>
</tr>
<tr>
<td>Affordability</td>
<td>Pricing</td>
<td>Competitive with current products in market</td>
</tr>
<tr>
<td>Compatible with most common size boxes</td>
<td>Size and availability of boxes</td>
<td>Three different box sizes based on calculated averages</td>
</tr>
<tr>
<td>Package need to be kept safe until customer picks it up</td>
<td>Number of people who can access the package</td>
<td>2 - delivery person and resident with unique code</td>
</tr>
<tr>
<td>Fallback behavior in power outage</td>
<td>Unpowered state</td>
<td>Closed</td>
</tr>
<tr>
<td>Resilience to harsh weather and vandalism</td>
<td>Expected life span of building material</td>
<td>&gt; 5 years</td>
</tr>
</tbody>
</table>
# Competitors

<table>
<thead>
<tr>
<th></th>
<th>Amazon Lockers</th>
<th>BufferBox</th>
<th>Southwest Solution</th>
<th>Parcel Pro</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Installation Location</strong></td>
<td>Specific Locations</td>
<td>Specific Locations</td>
<td>Installed in large businesses</td>
<td>Installed in any location</td>
</tr>
<tr>
<td><strong>Cooperation with Carriers</strong></td>
<td>Amazon packages only</td>
<td>Universal</td>
<td>FedEx only</td>
<td>Universal</td>
</tr>
<tr>
<td><strong>Capacity</strong></td>
<td>Fixed - Large</td>
<td>Fixed - Medium</td>
<td>Fixed - Small</td>
<td>Custom based on building capacity</td>
</tr>
<tr>
<td><strong>Dimensions</strong></td>
<td>11.8&quot; x 11.8 &quot;x 11.8&quot;</td>
<td>20&quot; x 18&quot; x 25&quot;</td>
<td>18&quot; x 17&quot; x 24&quot;</td>
<td>18.6&quot; x 17.7&quot; x 23&quot;</td>
</tr>
<tr>
<td><strong>Price</strong></td>
<td>Free for Amazon packages only</td>
<td>$3 / package</td>
<td>$800/ unit (6 lockers), only works with FedEx</td>
<td>Less than $1000 for 1 unit (4 boxes)</td>
</tr>
</tbody>
</table>
Critical Risks:

- Physical design
- Complexity of interface
Risk 1: Box Capacity
Risk 2: Ergonomics

- Elevation of the base
- Lock mechanism
- Thickness of the door
Risk 3: Time for Delivery

Every delivery needs to:

- Selecting the recipient
- Choose an appropriate locker
- Authenticate as a parcel carrier
- Deposit parcel in Parcel Pro

First-time user: 1 minute 20 seconds
Average use case: 30 seconds
Risk 4: Management Interface
Future Considerations

- Prototype implementation
- Testing with actual parcel carriers
- Pricing estimate
- User testing
- Crowdsourcing