

RED^B

DUO SEAT



PRODUCT DESCRIPTION:

DuoSeat is a **bike seat attachment** with foldable feet support which allows you to carry a passenger while you bike and has the dual functionality of carrying cargo as well!

INTENDED CUSTOMERS:

- young professionals 25-45y/o (commuters and urban dwellers)
- bikers in developing countries

MARKET:

the bike accessories market
(annual growth of 22%)



OUR PRODUCT VISION

CUSTOMER NEED	PRODUCT ATTRIBUTES (UNITS)	ENGINEERING SPECIFICATIONS
Robustness	Passenger weight (lb)	Up to 200 lb
Easy installation	Time to install (min)	≤ 15 minutes
Compatibility	Works with most bikes (binary)	Yes
Balance	Easy to balance (binary)	Yes
Carry cargo	Weight (lb)	Up to 50 lb

THE PRODUCT
CONTRACT

STABILITY:

to ensure that a rider and passenger could balance safely and not crash

ERGONOMICS:

how to make the passenger comfortable? are handles/foot pegs/special seat needed?

DURABILITY:

that the rack would not fail, or that the frame and/or wheels would be able to withstand the weight.

CONVERTIBILITY:

from passenger-carrying mode to cargo-carrying mode.

**KEY
RISKS**



FIRST
MOCK-UP

- ✓ no **handles**
- ✓ better **balance** if hold onto rider
- ✓ **foot pegs** closer to the ground
- ✓ rack is very **uncomfortable** to ride on
- ✓ **front-facing** position is better for safety



FINDINGS FROM
1ST MOCK-UP



SECOND
MOCK-UP



LET'S SEE HOW
IT WORKS!

- ✓ Swaying motion while the passenger is on the bike
- ✓ Not all bikes can sustain the weight
- ✓ It's hard to balance for the rider at the start
- ✓ Seat and pegs improve the experience



FINDINGS FROM
2ST MOCK-UP



“it’s a very
interesting idea”



“I want to
make sure
it’s **safe**”



“It might be hard to
balance with other
person”

“It looks a little bit
dangerous, but also
very practical”



CHALLENGES

Convert
from cargo to
passenger seat

Sleek profile

Rack design

Handle design



NEXT
STEPS



**SEE YOU
IN PAPPALARDO!**