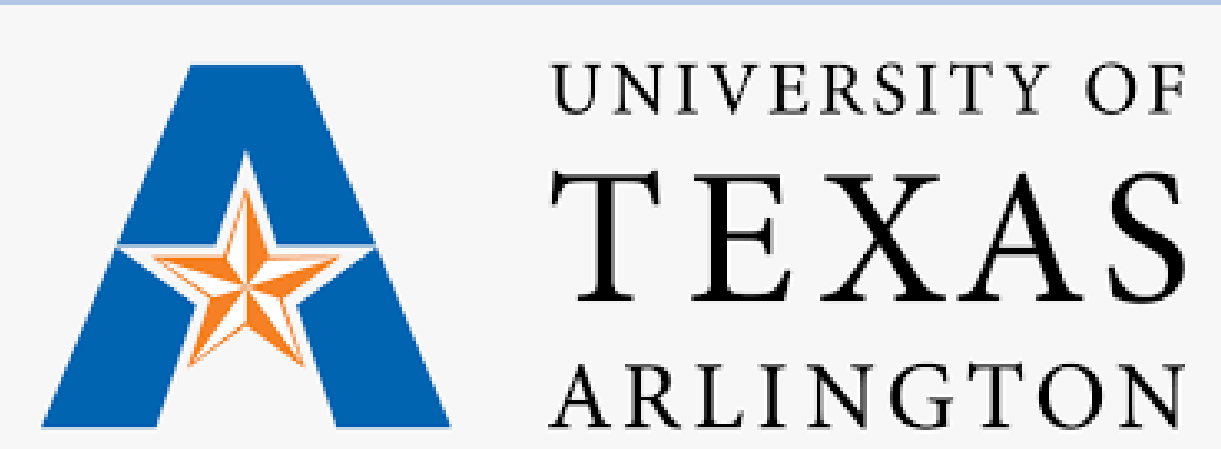


Designing Transportation Platforms for Texas Farmers and Ranchers

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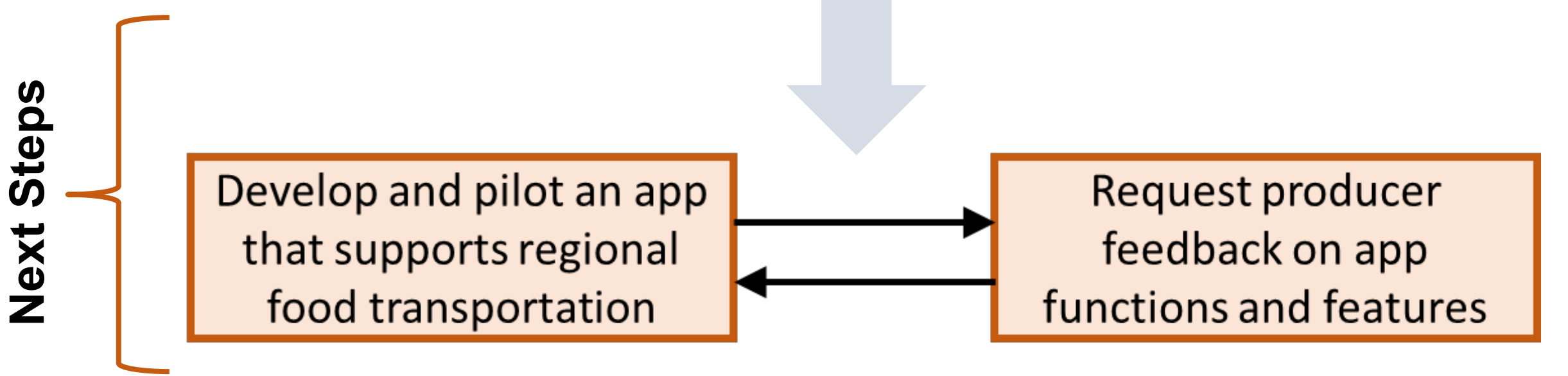
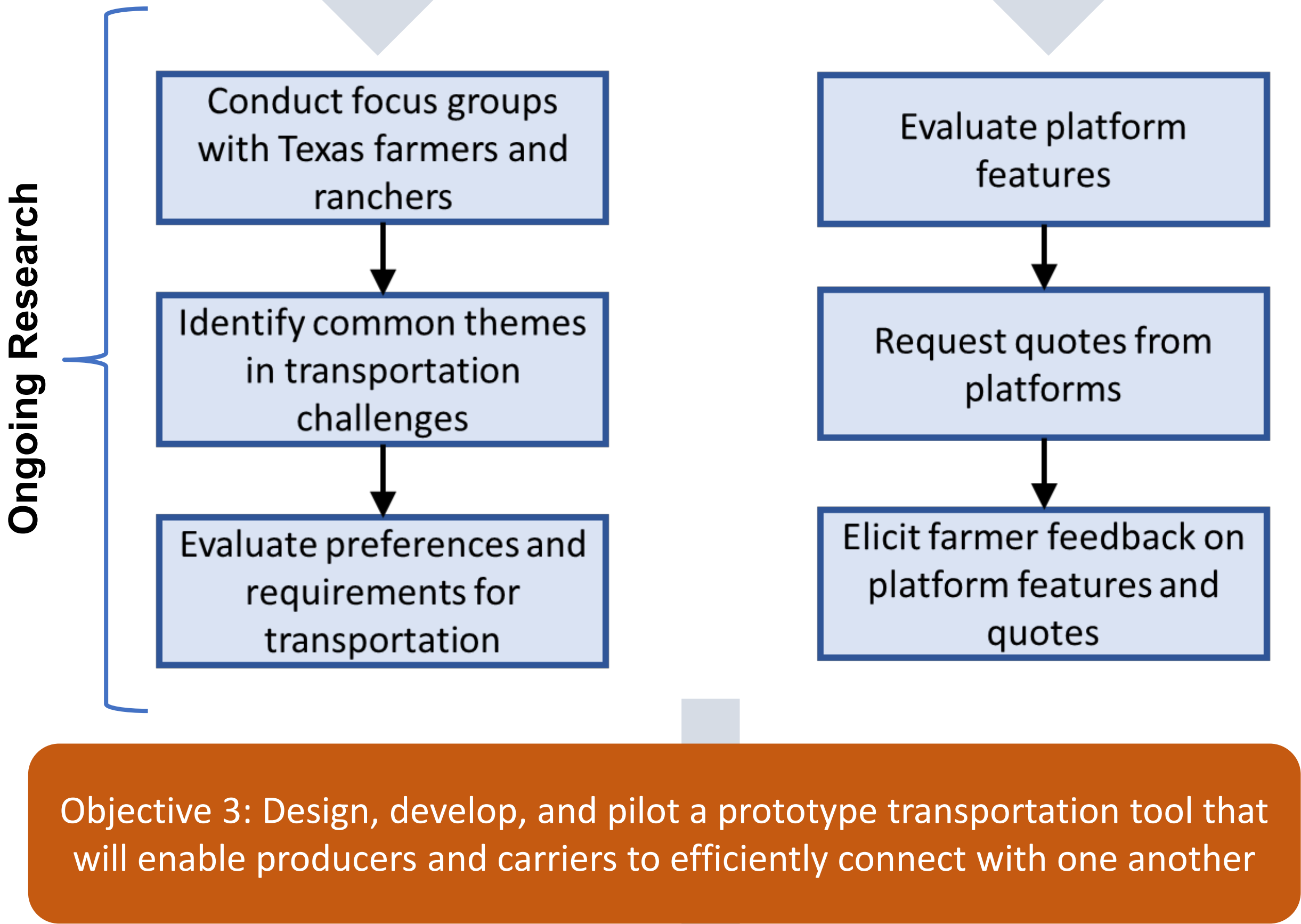
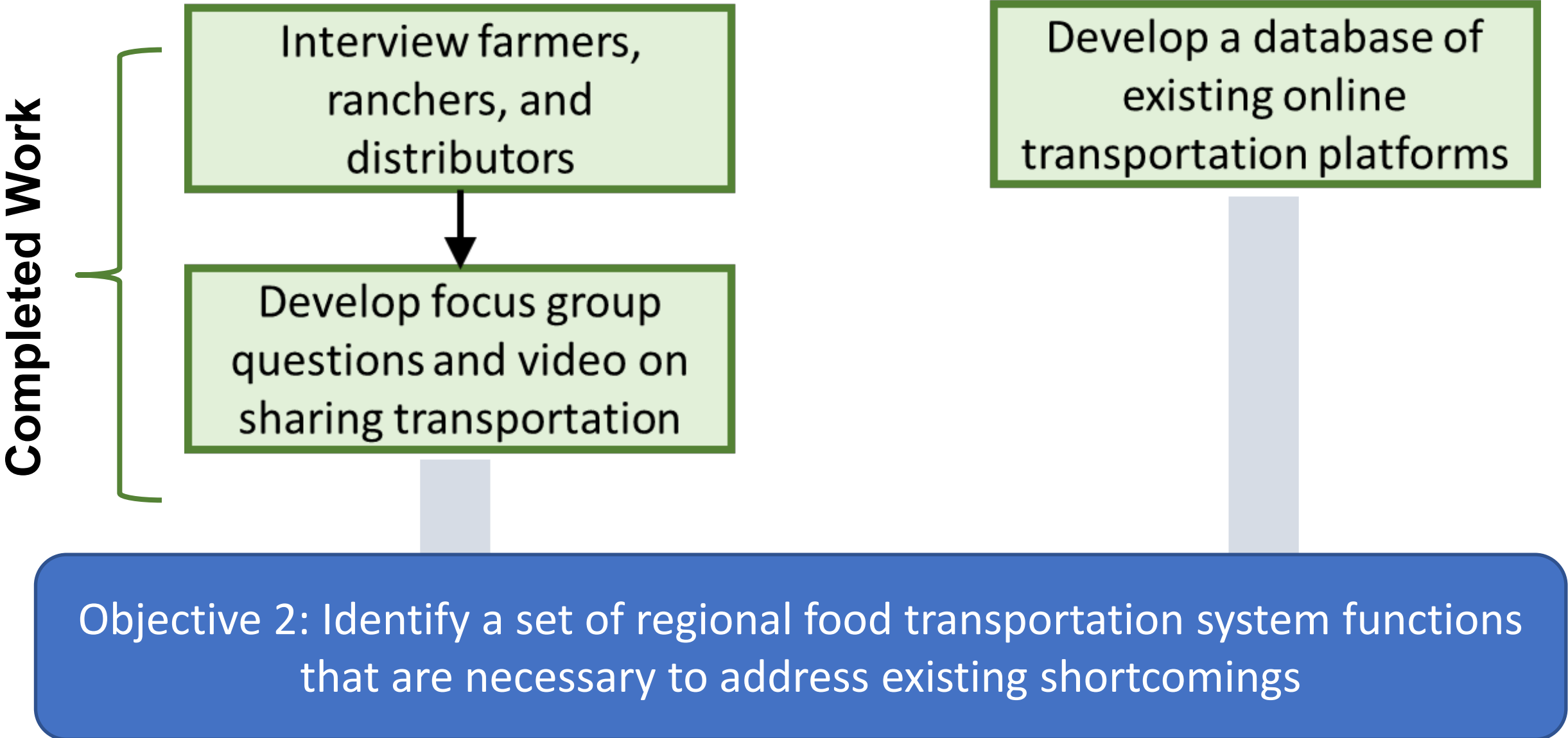
²Industrial Engineering Technology, Dunwoody College of Technology, Minneapolis, MN



Project Overview

- Small and mid-size farmers and ranchers spend a significant amount of time and money on transportation
- Texas is very large and has limited logistics infrastructure for producers with less-than-full loads to efficiently reach regional urban markets
- One potential solution: online transportation platforms that directly connect producers to carriers
- Challenges include trust, cost, and temperature control requirements
- The overall goal of this project is to evaluate producers' transportation needs and capabilities and develop an information-sharing platform that will help them connect with transportation providers

Objective 1: Increase our understanding of the transportation needs and capabilities of Texas farmers and ranchers



Scan the QR code to watch the video

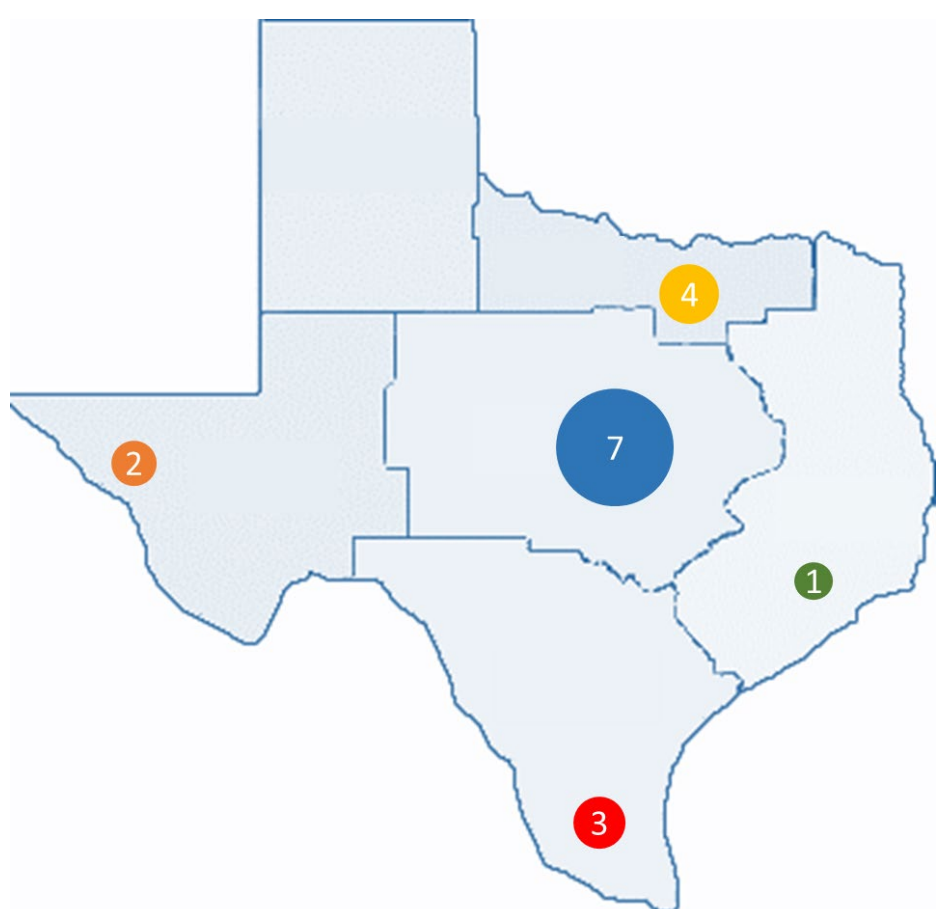


Video presented to focus group participants on the concept of sharing transportation via an online platform

Focus Groups

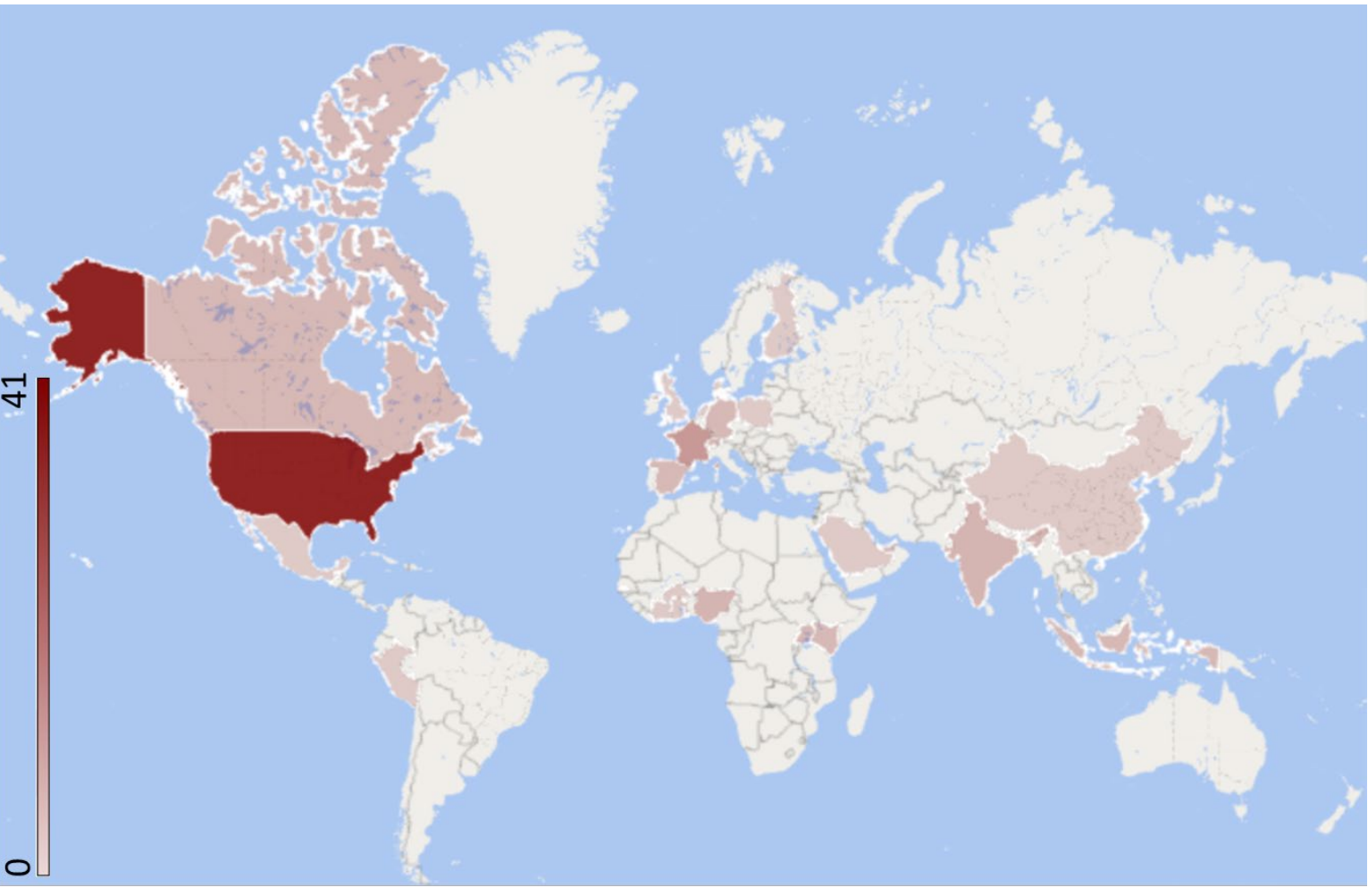
"I would think it would be fantastic to have a company like Uber, or some private driver, who would want to do deliveries instead of me. It usually takes around three hours of my time to do all of them."

"What's exciting about this to me is the opportunity for identifying new customers...it kind of creates a crowdsourced food hub or distribution network, where if I've got a bunch of X and you've got a bunch of Y and your customer wants X and my customer wants Y...I could see it being mutually beneficial to everyone."



Six focus groups with a total of seventeen Texas producers

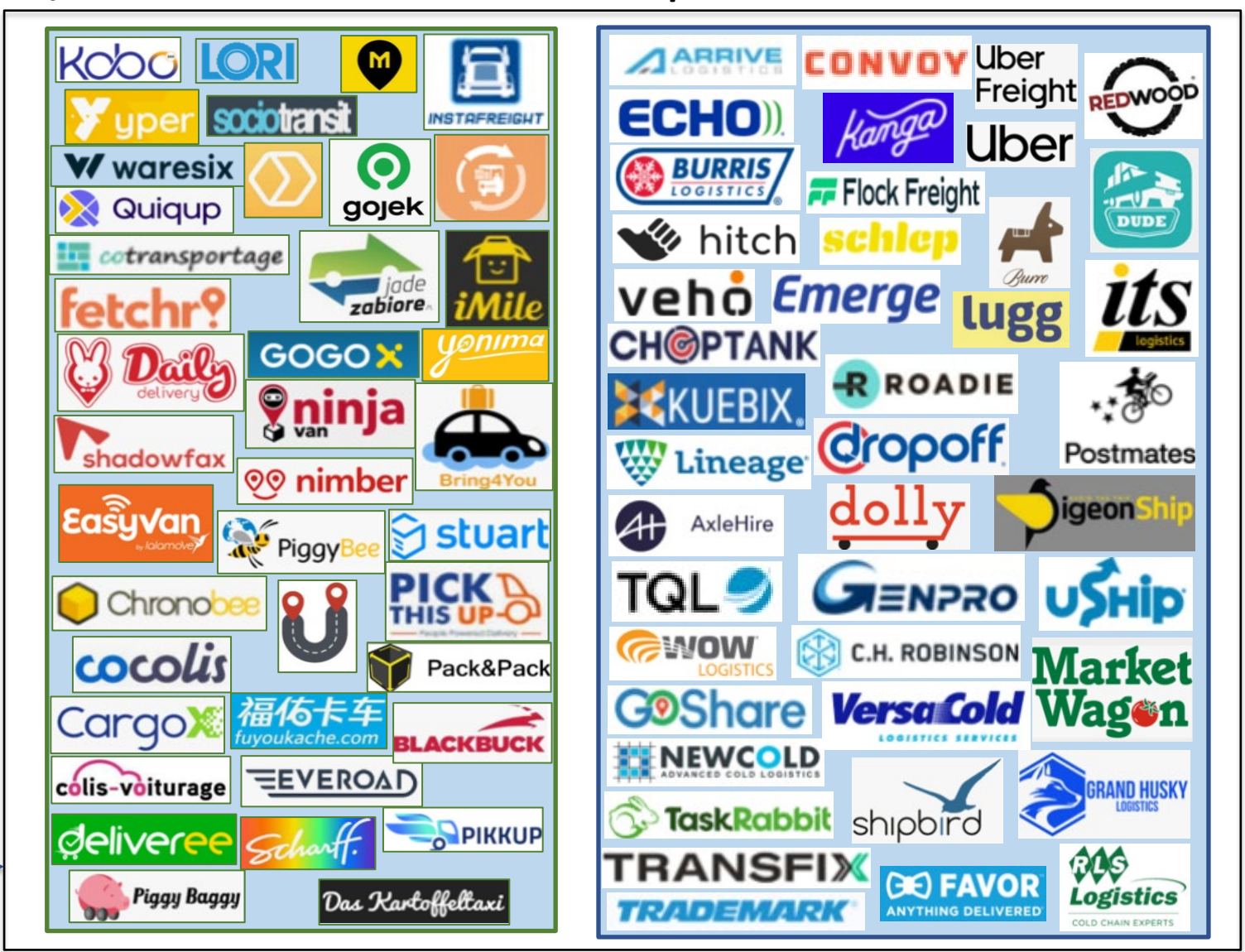
Review of Existing Online Transportation Platforms



400 platforms reviewed

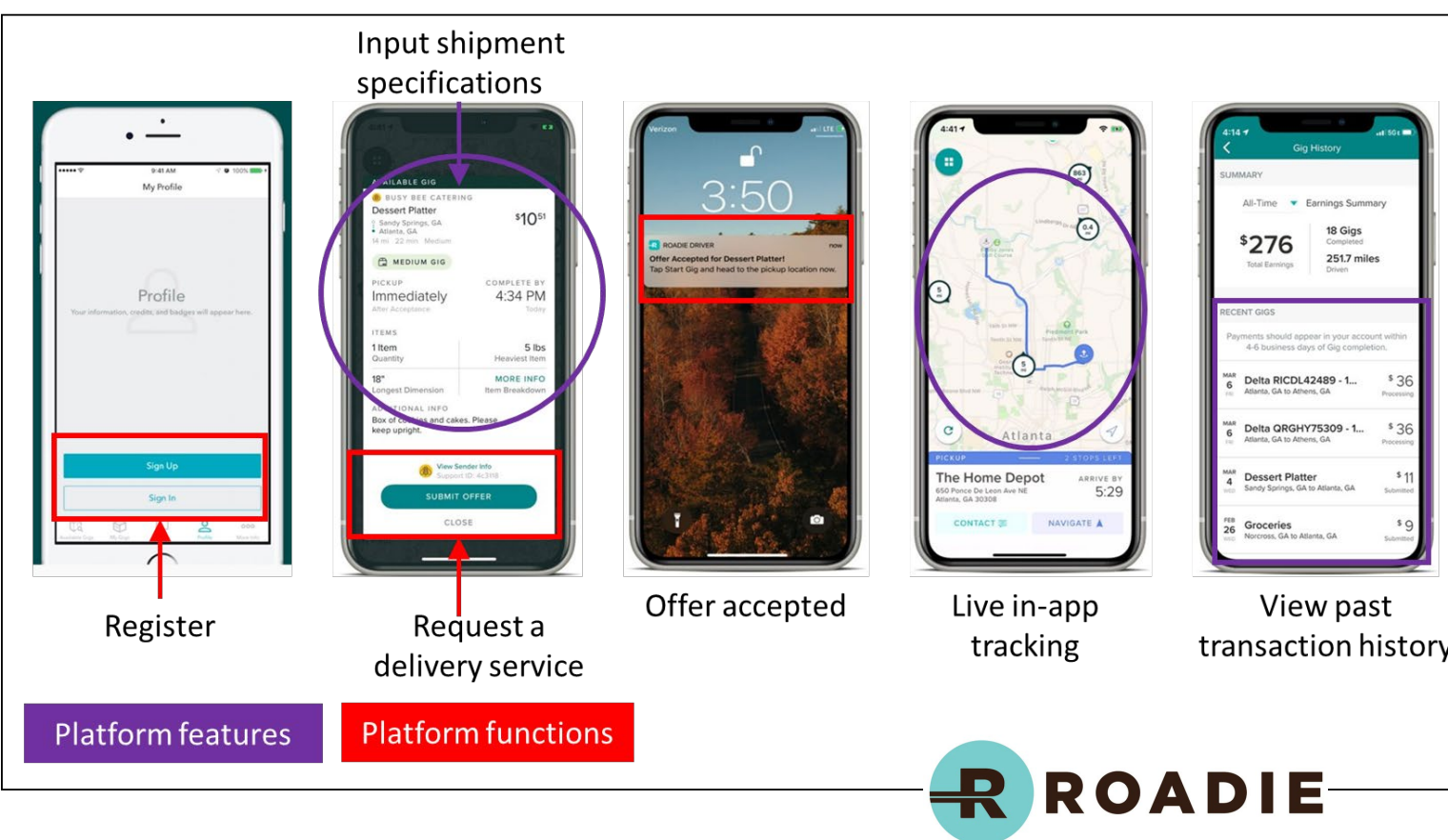
82 transportation platforms shortlisted

Operational **outside US** Operational **within US**



Analysis of Existing Platforms

Multiple platforms were analyzed in-depth to assess key features and functions



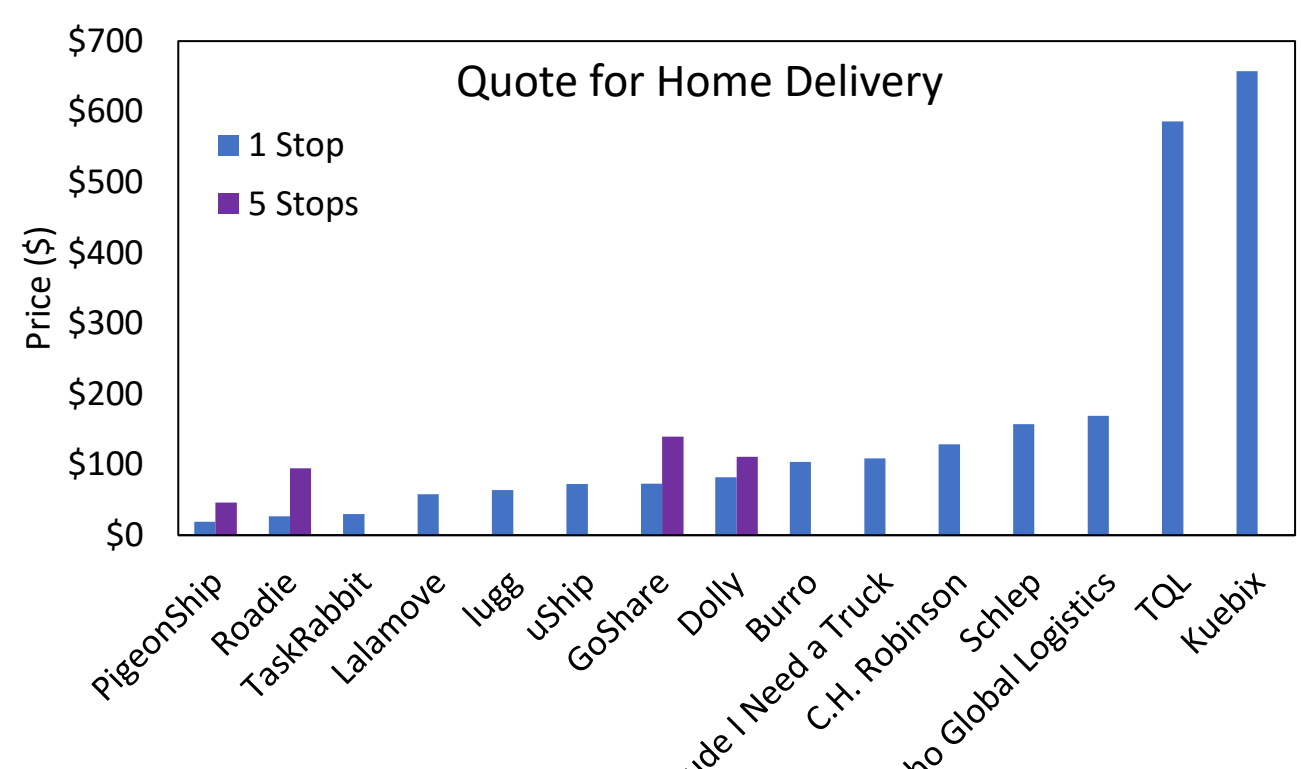
Case Study: Last-Mile (Direct-to-Consumer) and Long-Haul (Wholesale) Deliveries



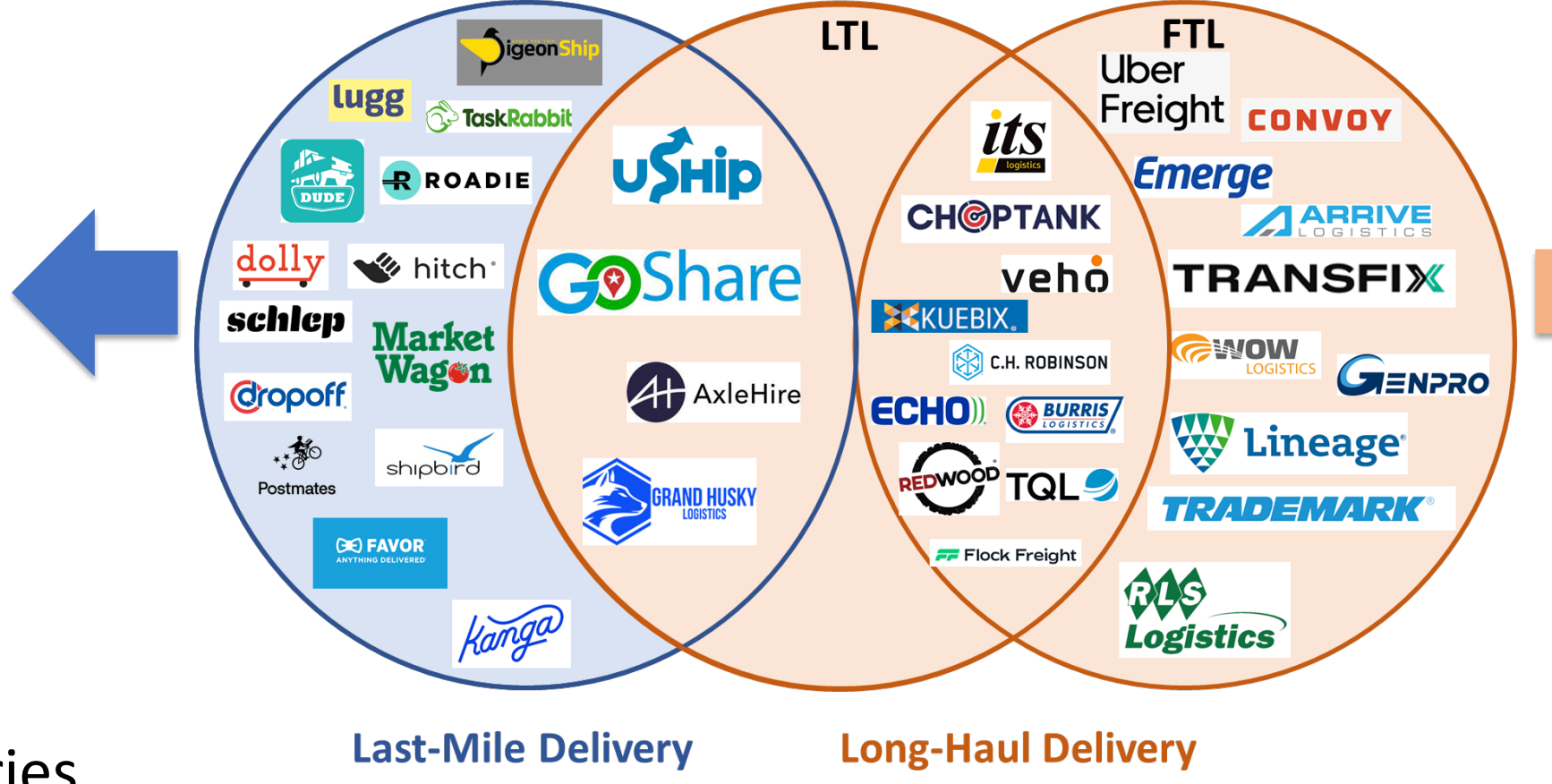
Shipment type	Packages/parcels
Dimensions	14x8x9 inches
Weight	5 boxes (each 15 pounds)
Refrigeration	Not required
Distance	Within 30 miles



Shipment type	Pallet loads
Dimensions	48x40x72 inches
Weight	500 pounds
Refrigeration	Required
Distance	120 miles



Only four platforms offered multiple deliveries



None of the platforms explicitly offered temperature control

Next Steps

- Conduct follow-up interviews with focus group participants to determine their preferences on the potential features and functions of a regional food transportation app
- Design, develop, and pilot a transportation app, based on farmer and rancher requirements and feedback

Acknowledgments

