



Virtual Internship Program 2021

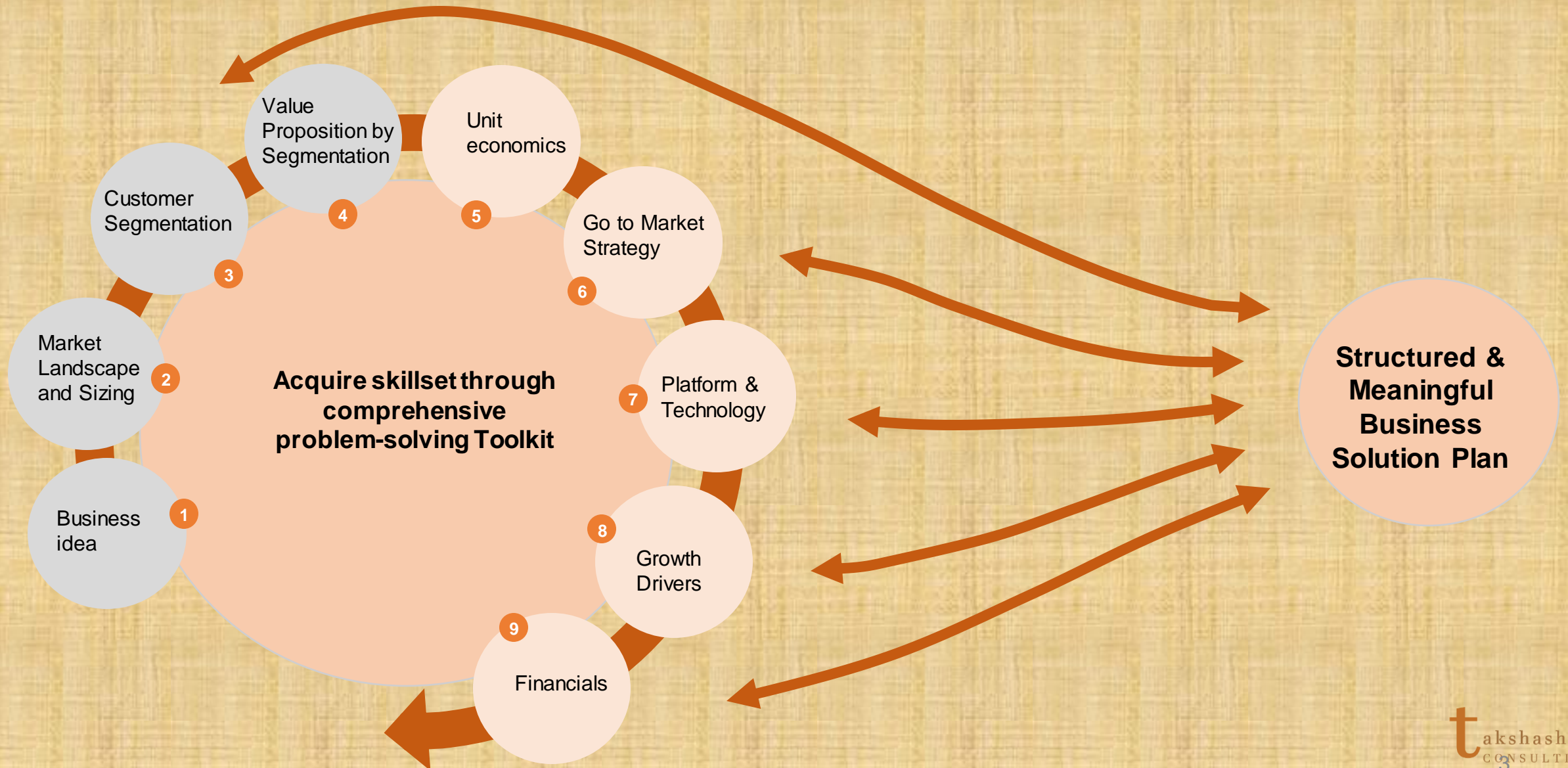


Table of Content

- Executive Summary
- Business Idea
- Issue Tree
- Market Landscaping and sizing
- Customer Segmentation and Value proposition
- Unit Economics
- Go to market strategy
- Platform & Technology
- Growth Drivers
- Financials



B An approach to formulate solution plan, an iterative process



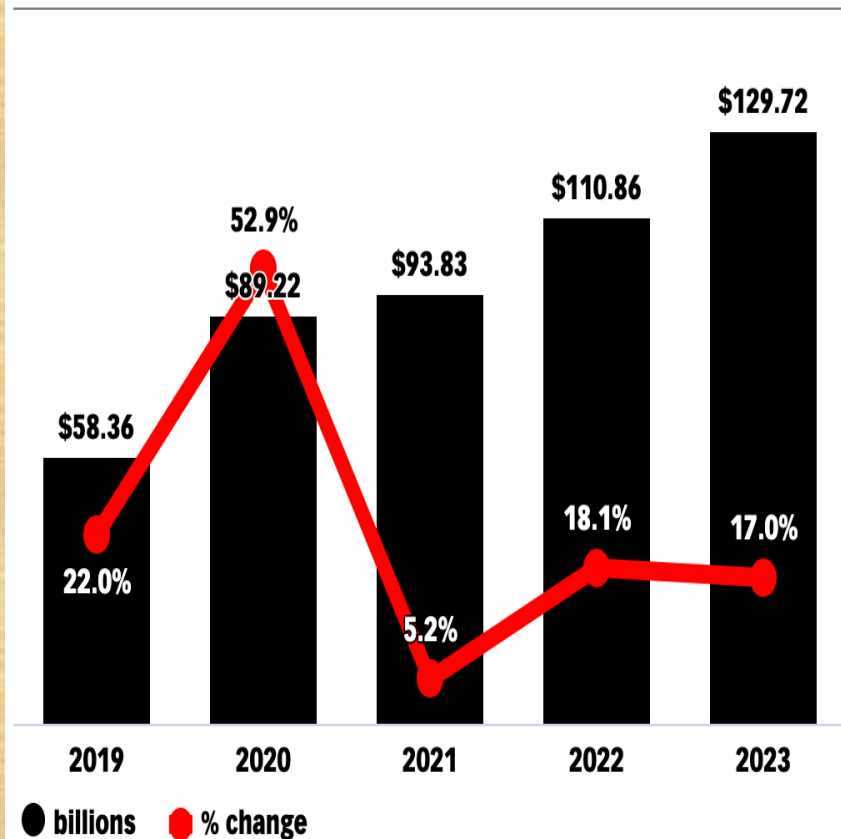
Group Details

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Name of the Project	Instacart
Number of group members	6
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Grocery Retail Ecommerce Sales

US, 2019-2023



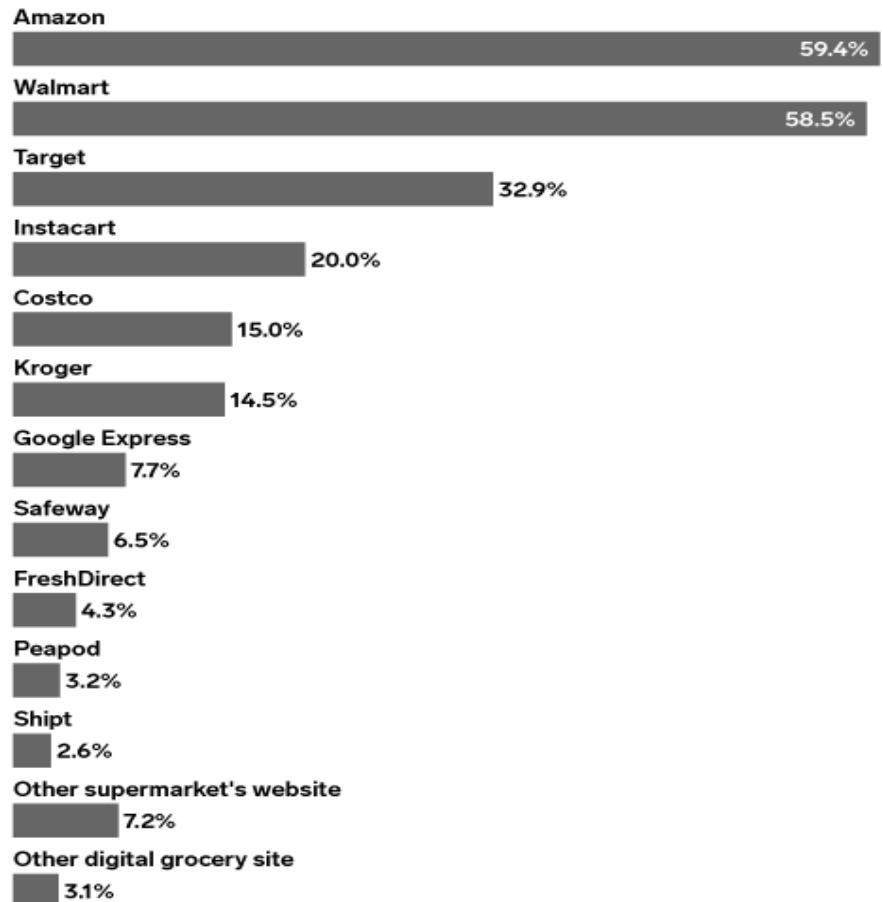
Source: eMarketer, September 2020

www.eMarketer.com

- The statistics show that there is a steady growth in the ecommerce grocery sector. Instacart has an upper hand in the prevailing situation
- In a way, the pandemic situation has led to the enormous growth of the sector in the previous years.
- The fact that the pandemic has not come to an end can help us to expand our target sector
- The fear of the contagious disease in the world could be tackled by an innovation using bots for delivery
- This could help us in making the delivery faster and help in decreasing the cost spent on employing huge number of man-force for delivery
- This might turn the attention of consumers towards us as it would be the first delivery service to implement bots/drones for the transportation

STATISTICS

Coronavirus Impact: Digital Grocery Sites Where US Digital Buyers Made a Purchase, June 2021 % of respondents



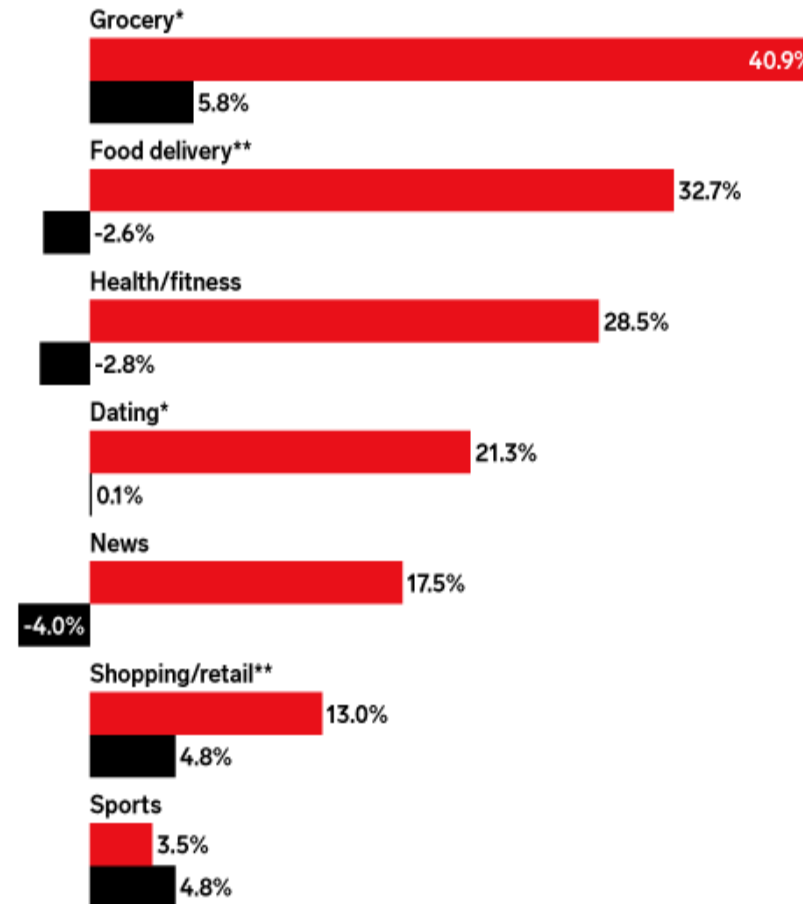
Note: in the past 30 days; among those who actively use digital grocery monthly
Source: Cowen and Company, "COVID-19 Consumer Survey Tracker: June '21 Update," July 20, 2021

267933

eMarketer | InsiderIntelligence.com

US Smartphone App User Growth, by Type, 2020 & 2021

% change



■ 2020 ■ 2021

- Having a large share in the market, Instacart has a potential to become the highest contributor in the sector.
- The constant demand of groceries will support the growth in all dimensions
- Here are a few stats supporting the arguments and facts

Overview of the plan

Providing a zero-contact delivery by drones and automated vehicles.

Autonomous drones have unlimited potential to improve everyday life, and our technology opens the way to safe, secure, environmentally friendly deliveries. Given the pandemic condition, the situation can get worse anytime, providing zero contact delivery of essentials might be a revolution in the existing era. This makes people safer and helps the company in cutting down a range of expenses that are spent in employing many people to assist delivery.

Business Case

- *To provide a solution for no contact delivery in pandemic*
- *Helps the company by decreasing the expenses and increasing the revenue*
- *Easy and quicker of delivery*

Scope of the Idea

- *This supports all consumers who are situated in the range of delivery*
- *This will be essential for old people as they are less immune and would like to have minimal contact during delivery*

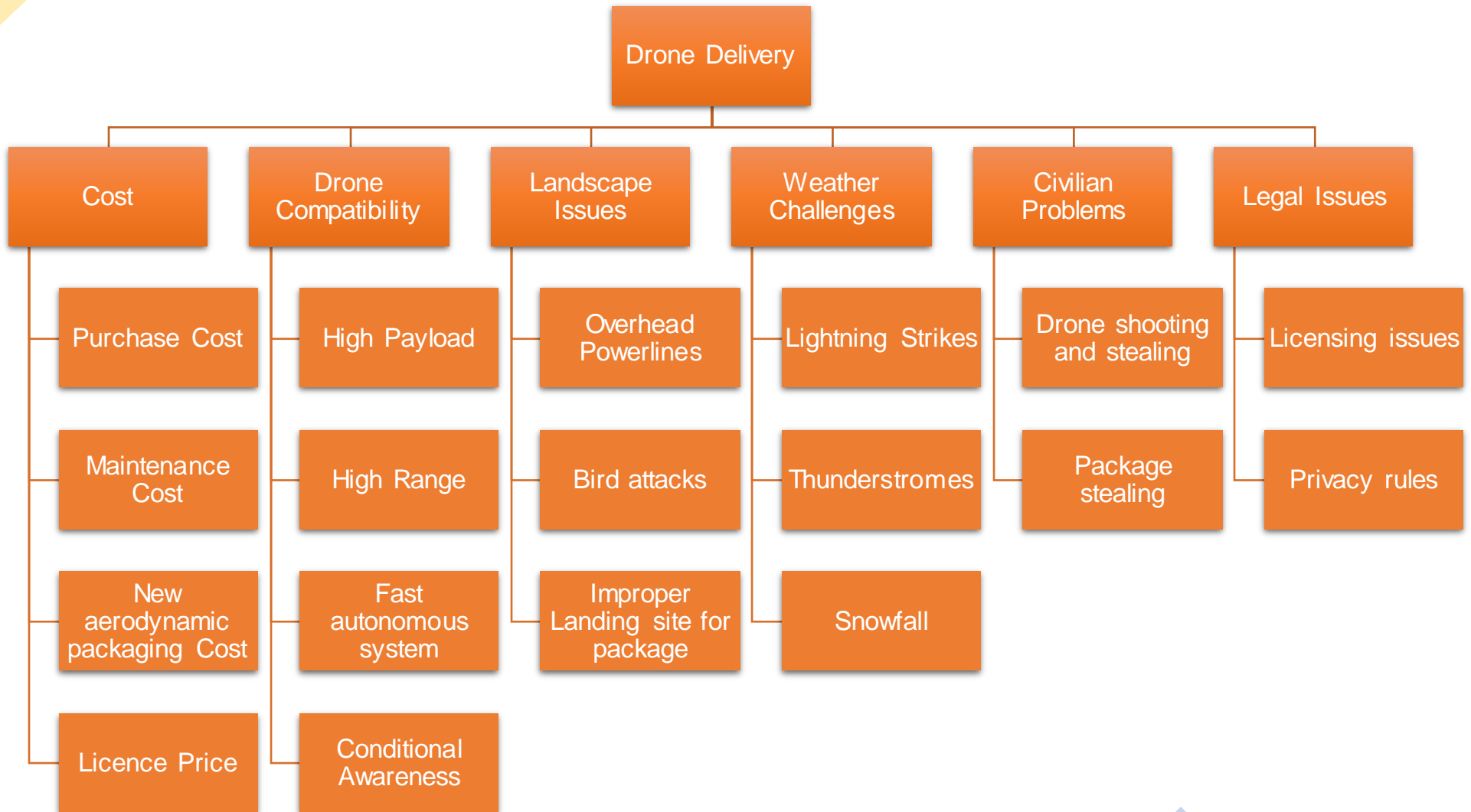
Critical Success Factors

- *Pandemic situation will push people towards opting for the option*
- *Ease of the plan would make the customers to repeatedly utilize this new technology for delivery*

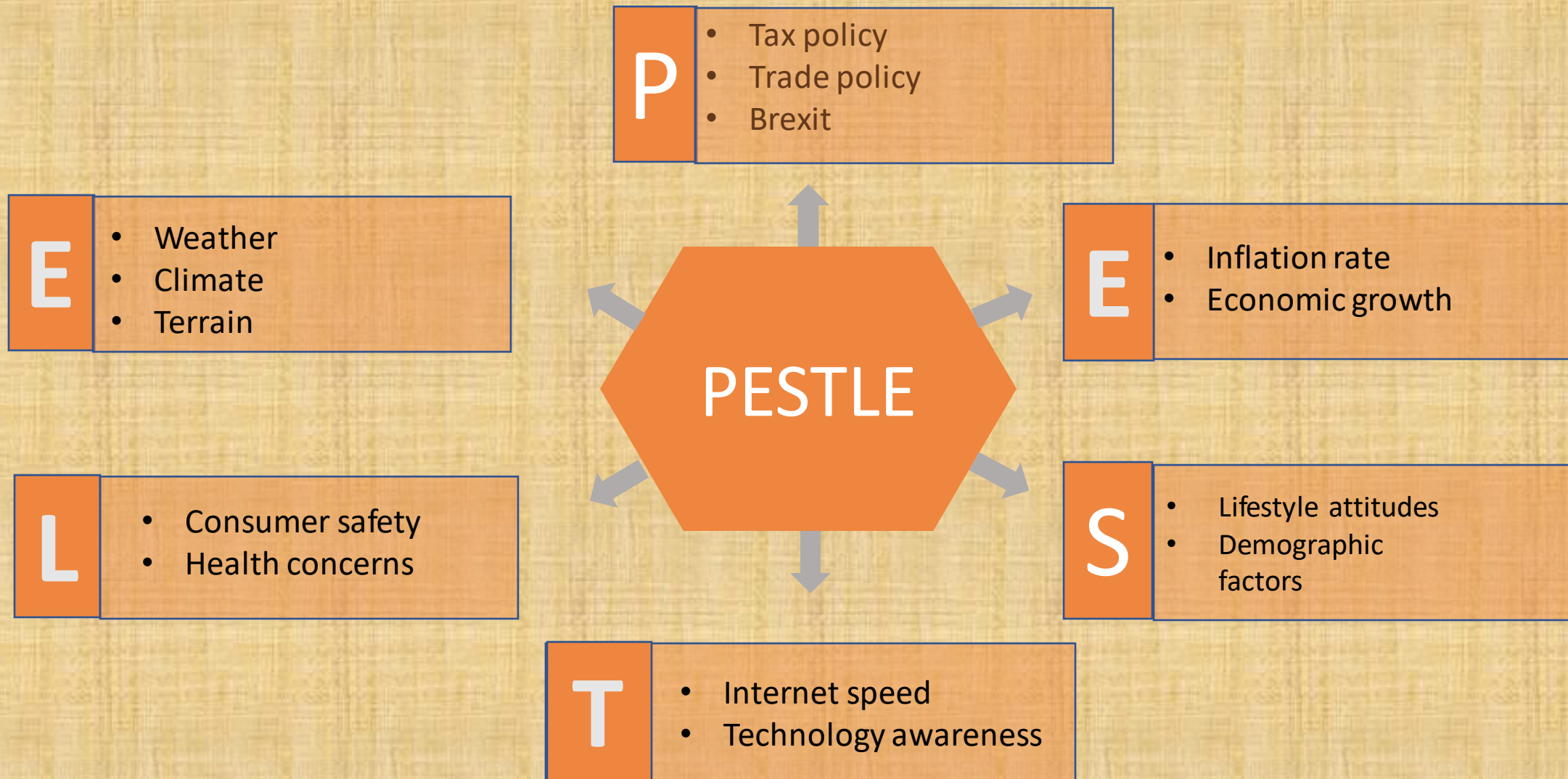
Value Proposition of the project

- *Minimize the contact*
- *Make customers feel safer and make the avail the offer*

Issue Tree for Drone Delivery



Factors affecting market landscape



i Competitive Landscape

Instacart revenue

Year	Revenue
2015	\$120 million
2016	\$185 million
2017	\$300 million
2018	\$525 million
2019	\$735 million
2020	\$1,500 million

Instacart users

Year	Users
2017	3.3 million
2018	4.3 million
2019	5.5 million
2020	9.6 million

- ❑ This statics shows that the revenue generated by the Instacart is getting double in 2019-20 year this shows that the preference on online delivery system.
- ❑ The health and safety of our community is our number one priority. We are excited to offer contactless delivery through our Leave at My Door delivery feature.
- ❑ This is pandemic "Leave at My Door" is now the default setting for all Instacart deliveries. Which is most unique and effective step and this leads increase the number of users approx. double that of 2019-20.

A vertical SWOT analysis diagram. On the left, four orange downward-pointing chevrons are stacked vertically, each containing a white letter: 'S' (top), 'W', 'O', and 'T' (bottom). To the right of each chevron is a rounded rectangular box with an orange border containing a bulleted list of points.

S

- Vast selection options
- Fast and reliable delivery
- Quick customer response towards booking and complains

W

- Brand limitations to a certain grocery stores
- Higher cost of membership and delivery charges
- Lesser competitive unit price

O

- Growing online shopping trends
- Improvisation of customer experience
- Automation technology at various stages of delivery

T

- Increasing competition in the sector
- Cheaper offline prices
- Dissatisfaction caused to a few workers of the company

INSTACART VS OTHERS



The general trend of the online market being single/double partnered, Instacart provides a variety of options to the customer and stands out from the crowd. But there are a few reasons why the competitors take a fair share in the market which include better offers, faster response to complaints, availability of products without substitution, cheaper price, etc.

ii Customer Segmentation

Five Key Criteria for Segmentation

1. Measurable

2. Substantial

3. Accessible

4. Differential

5. Actionable

Segmentation Type	Parameter	Example
Geographic	Regional	North, South, East, West,
	Living Style	Urban, Suburban
	Climate	Hot, Cold, Tropical
Demographic	Age	More than 12
	Gender	Male, Female, Transgender
	Income	20-30K, More than 30 K
	Occupation	Executive, Businessman, Govt Employee
	Education	School, Graduate, Post-Graduate
	Generation	Generation X, Millennials
	Nationality	United States, Canada
	Social Class	Middle, Upper

Segmentation Type	Parameter	Example
Psychographic	Lifestyle	Culture oriented, Technology oriented
	Personality	Ambitious, Enthusiastic, Compulsive, Gregarious
Behavioural	Occasions	Regular Occasion, Special Occasion
	Benefits	Speed, Quality, Service, Economy
	User Status	Potential user, Existing user
	Loyalty status	Medium, Strong
	Readiness stage	Interested, Desirous, Intended to buy
	Attitude toward product	Enthusiastic, Positive

Value proposition Structural Format

Describe the Transition phase (Past to Present) – Flashbacks

FOR	Young, Tech Savvy users
WHO	want cost-effective, fast and environment friendly delivery
OUR	Drone Delivery App
PROVIDES	fast, contactless deliveries to any region
WITH (Our brand)	this App, just buys things and high-speed drones deliver the groceries at doorstep, keep track of it on cell phone and pay easily through our app.

UNIT ECONOMICS

Defining one unit as "**One Customer**".

Unit Economics(UE) = Customer lifetime value (LTV) / Customer acquisition cost (CAC)

Customer lifetime value (**LTV**) = $(T \times AOV \times AGM \times ALT)$ / number of customers for a given period

Customer acquisition cost(**CAC**) = sales and marketing costs / number of acquired customers

T = average number of transactions

AOV = average value of an order

AGM = average gross margin

ALT = average lifetime of a customer (churn rate)

Total Revenue = \$ 1500 millions

Total users = 9.6 millions

Calculations

$T(\text{Avg. No. of transactions}) = 9,600,000 * 1.50 = 14,400,000$

$AOV (\text{Avg. value of an order}) = 1500,000,000 / 14,400,000 = 104$

$AGM (\text{Avg. gross margin}) = (1000,000,000 / 1500,000,000) = 0.66$

$ALT (\text{Avg. lifetime of a customer (churn rate)}) = (9.6 - 5.5) / 9.6 = 0.42$

Customer lifetime value (LTV) = 43.24

Customer acquisition cost(CAC) = 250,000,000 / 9,600,000 = 26.04

UNIT ECONOMICS (UE)= 43.24 / 26.04 = 1.66

ANALYSIS

- LTV is greater than CAC, it indicates that our business is strong.

Guesstimates

1. Cost = \$ 500 millions
2. Marketing cost = \$ 250 millions

Platforms and Technology Used

- Last mile of delivery is the most expensive part of the supply chain as it leaves a shipping containers and it enters the smallest vehicle with only a few items.
- Autonomous drones and UAVs could turn out to be a solution being cost & time efficient with technically viable.



Technology Needed

Company's End

- Fast & autonomous systems for drones
- Efficient sensors for real time flight data collection
- ML & AI for the better conditional awareness of the drones
- Data analysis
- High performance battery
- High payload capacity drones

Customer's End

- QR code printed landing sites for drones



Growth Drivers

1. Drones can reach all types of terrains.
2. Advancement in sensors.
3. Emergence of low-cost drones.
4. Increased funding offered by venture capitalists.
5. Emerging e-commerce and retail sectors worldwide.
6. Increasing demand for faster delivery.
7. Increasing demand for decreasing the carbon emissions.
8. Amendments in regulatory frameworks in encouraging drone-package delivery.
9. Lower maintenance cost.
10. Expansion into new customer segments.
11. Growth of emerging areas.
12. Expanded service offerings.
13. Possibility to reach in unsafe environments e.g. natural disasters.
14. Reduction of human involvement to save costs.

Go To Market Strategy

FRESH AND CONTACTLESS
DELIVERY TO YOUR DOOR STEP
WITHIN MINUTES



TARGET AUDIENCE

- House hold
- Grocery stores
- Fast food carts
- Restaurants



PLATFORM

- Mobile App
- Online Web Browser



PLATFORM FEATURES

- Online Package Delivery Tracking System
- User friendly search system
- Cashbacks and discounts on products
- Additional discounts and benefits on prebooking
- Fast and reliable customer support system
- Emergency Delivery for premium customers



PAYMENT OPTION

- Via Debit/Credit card
- Via Online Bank transfer
- Via payment apps

Go To Market Strategy



BUSINESS MANAGEMENT PERSONELS

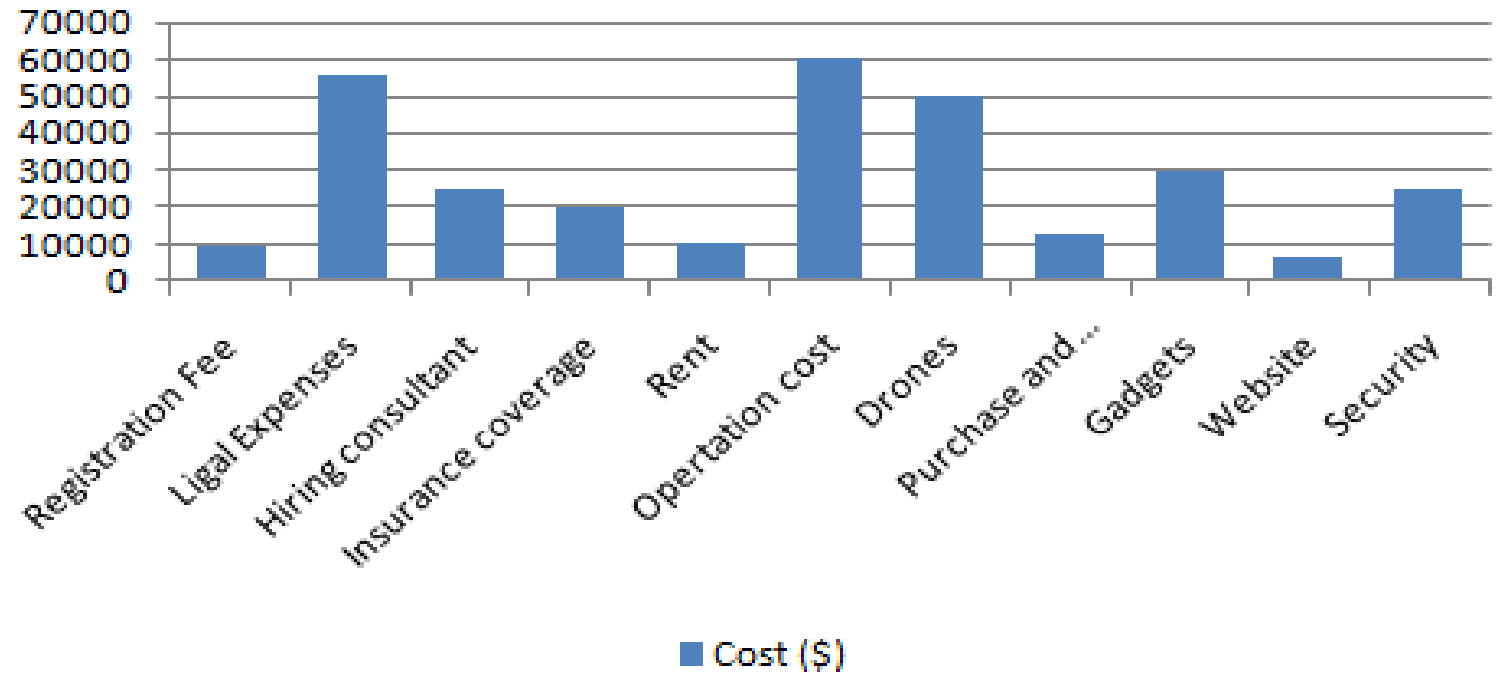
- Head Manager
- Warehouse manager
- Sales and Marketing Manager
- Information Technologist
- Accountant
- Client Service Executive
- Drone Delivery Operator



MARKETING

- Leverage on the internet and social media platforms like YouTube, Instagram, Facebook, Twitter, LinkedIn, Snapchat, Google+ and other platforms to promote our business
- Distribute our fliers and handbills in target areas in and around our neighbourhood
- Advertise our commercial drone delivery services business in our official website and employ strategies that will help us pull traffic to the site
- Brand all our drones, official cars and trucks and ensure that all our staff members and management staff wear our branded shirt or cap at regular intervals

Cost analysis



- ❑ The coronavirus pandemic, drives the finance of Instacart hit its first profitable month, netting \$10 million.
- ❑ "Leave at My Door" concept made Instacart to reach on large scale of user for varied demographics and according to report 2020 it has an estimated 9.6 million active users along with over 500,000 shoppers who pick up the items with 600 Partners refers to retail and grocery companies that operate on Instacart.
- ❑ According to Fortune and TechCrunch valuation of Instacart in 2021 is \$39 billion which is 3fold then 2020.

References

- <https://www.businessofapps.com/data/instacart-statistics/>
- <https://gigsdoneright.com/amazon-fresh-vs-instacart/>
- <https://www.supermarketnews.com/online-retail/target-launches-enhanced-online-grocery-pickup>
- <https://www.emarketer.com/topics/category/instacart>
- <https://www.entrepreneur.com/article/378694>
- <https://www.digitalcommerce360.com/2021/07/29/instacart-invests-in-robots-in-bid-to-boost-fulfillment/>
- <https://nocamels.com/2021/07/instacart-israel-fabric-automated-fulfillment/>
- <https://www.forbes.com/sites/brittainladd/2019/02/11/killing-instacart-why-the-company-is-at-risk-of-crashing-to-the-ground/?sh=31e6c26a36e8>
- <https://www.digitalcommerce360.com/2020/06/12/why-independent-grocers-should-avoid-instacart-and-similar-services/>