



**STEVENS**  
INSTITUTE of TECHNOLOGY  
THE INNOVATION UNIVERSITY®



# MIS 760 IT Strategy Final Presentation

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# 1: EXECUTIVE SUMMARY



CEO- RJ Scaringe



CFO- Claire McDonough



CIO- Madhavi Isanaka



CPO- Helen Russell

## 2: INTRODUCTION



Rivian Automotive, founded by Robert "R.J." Scaringe, is coming up fast in the rearview mirror of high-profile electric carmaker Tesla Inc.

The company filed for an initial public offering in 2021 that valued the electric vehicle maker at around \$80 billion, according to reports at the time.

The company is in a fiercely competitive space where more than 85 new models of electric vehicles will be coming to market over the next several years



## 2.1: COMPANY BACKGROUND

Rivian was founded in 2009 as Mainstream Motors by Robert "RJ" Scaringe. In 2011, the company began focusing on electric autonomous vehicles. In 2017, Rivian acquired a manufacturing plant formerly owned by Mitsubishi Motors for \$16 million. Rivian became the first automaker to bring a fully electric pickup to the consumer market in September 2021.

The company's shares began trading on the Nasdaq under the ticker "RIVN" on November 10, 2021. Rivian became a public company through an IPO in November 2021. Rivian entered into a commercial agreement with its investor Amazon, Inc. in February 2019.

By September 2019, Amazon's Logistics division had agreed to collaborate with Rivian to design, produce, and purchase 100,000 electric delivery vehicles (EDVs).

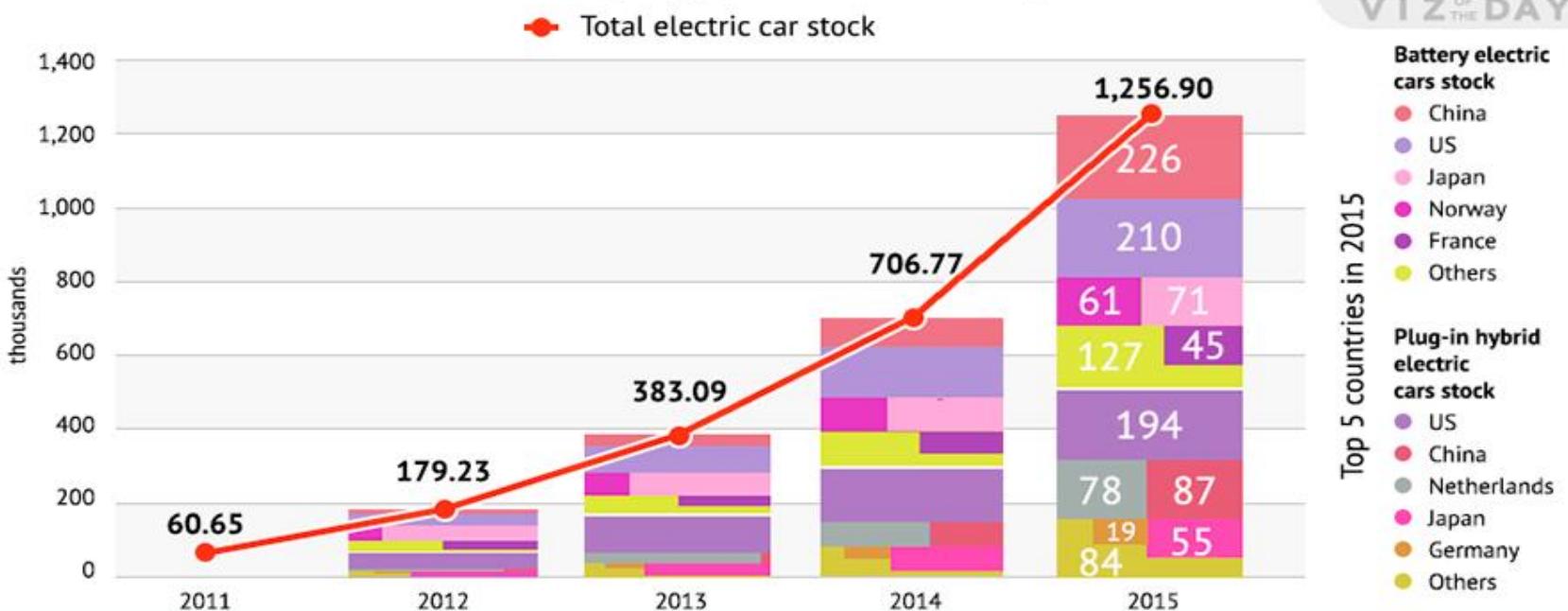
## 2.2: PURPOSE



“Rivian is on a mission to keep the world adventurous forever. We believe there is a more responsible way to explore the world and are determined to make the transition to sustainable transportation an exciting one. We designed our emissions-free Electric Adventure Vehicles to challenge what's possible.”

## 2.3: INDUSTRY

### World Electric Car Stock by Type and Country





## 2.4 SIZE, GROWTH RATE AND OUTLOOK

Rivian's total revenues to grow at a 34% CAGR from 2025 to 2030," noted Adam Jonas, equity analyst at Morgan Stanley. "Rivian's software services business can grow from \$641 million revenues in 2025, \$7 billion in 2030 and \$36 billion in 2040, as the installed base grows in size exponentially. Rivian is valued at \$147, 1.3x 2030 EV/Sales, expensive vs Auto OEMs but not versus software/tech companies and in-line with EV startups such as Tesla and Lucid." stock ratings for Rivian in the last three months forecast the average price in 12 months of \$85.00 with a high forecast of \$147.00 and a low forecast of \$35.00.

The average price target represents a 119.47% change from the last price of \$38.73.

## Key Highlights

**~83K**

R1 net preorders in the U.S. and Canada  
as of March 8, 2022

**100K**

EDV initial order from Amazon

**~600K**

Total planned annual capacity  
between Normal and Georgia plants

**11.5K+**

Employees as of March 8, 2022

**3 vehicles**

Launched in the United States:  
R1T, R1S, EDV

**2,425**

Vehicles produced as of March 8, 2022  
since start of production



## 2.5 CUSTOMERS

Rivian is targeting two audiences with its vehicles:

Consumers with "adventure and active lifestyles". Americans do love trucks. In fact, Rivian says trucks and SUVs accounted for over 70% of new vehicle sales in the U.S. Truck and SUV sales also made up a disproportionate share of profits for incumbent automotive companies.

EV trucks make up virtually 0% of this market. Rivian beat many of the biggest potential EV truck and SUV competitors — [including GM, Tesla and Ford](#)

Enterprises seeking to electrify their fleets. Amazon is one of the notable customers of Rivian, they have also purchased \$1.3 billion worth of shares.





### 3: CORPORATE STRATEGY



## Rivian Mission, Vision & Values





# MISSION AND VISION

Rivian exists to help drive this transition by building category-defining EVs that combine performance, efficiency, and technology, as well as a full suite of proprietary, value-added services that address the entire vehicle lifecycle.





# VALUE STATEMENT

Rivian aims to preserve the natural environment for the explorers of today while keeping the people adventurous.

This is accomplished through conservation projects, as well as the Forever Fund, in which 1% of the EV automaker's equity is donated to initiatives that address the climate crisis and protect critical biodiversity.



# OBJECTIVES

Dominate mainstream automotive market.

Create a more responsible way to explore the world with the transition to sustainable transportation.

Dominate renewable energy market with the EV's that are safer for the environment.

Tap into the commercial customers market and create more revenue.





# STRATEGY

Rivian has entered the market through expensive cars targeted to the more financially privileged class of people and commercial customers in mind.

Once it is more established and widely known as a successful idea, it would venture into a more competitive market of lower-level priced models.

Introduce EVs that combine performance, efficiency, and technology and are more economical.



## 4: BUSINESS STRATEGY

### MISSION

The company has outlined one of the broadest business strategies to capture revenue from the consumer well beyond the initial point of sale, citing an opportunity that full vehicle life cycle revenue could be as large as initial purchase revenue

# VISION



Rivian is aiming to build a platform -- a mountain of invisible network technology and data analytics -- that creates a sustained and dynamic relationship with the customer of every one of its vehicles. That platform, by the way, would theoretically cut out dealerships, gas stations, insurance brokers, independent auto repair shops, banks and other lenders, and fleet management firms.

# OBJECTIVES

Capture revenue from the consumer well beyond the initial point of sale.

Have highly efficient and autonomous electric vehicles

Rivian also needs to possess enough inventory to meet the expected demand.



RIVIAN IS NOW BIGGEST US COMPANY  
BY MARKET VALUE WITH NO REVENUE



# STRATEGY

Create a network of invisible network technology and data analytics and that creates a sustained and dynamic relationship with the customer of every one of its vehicles

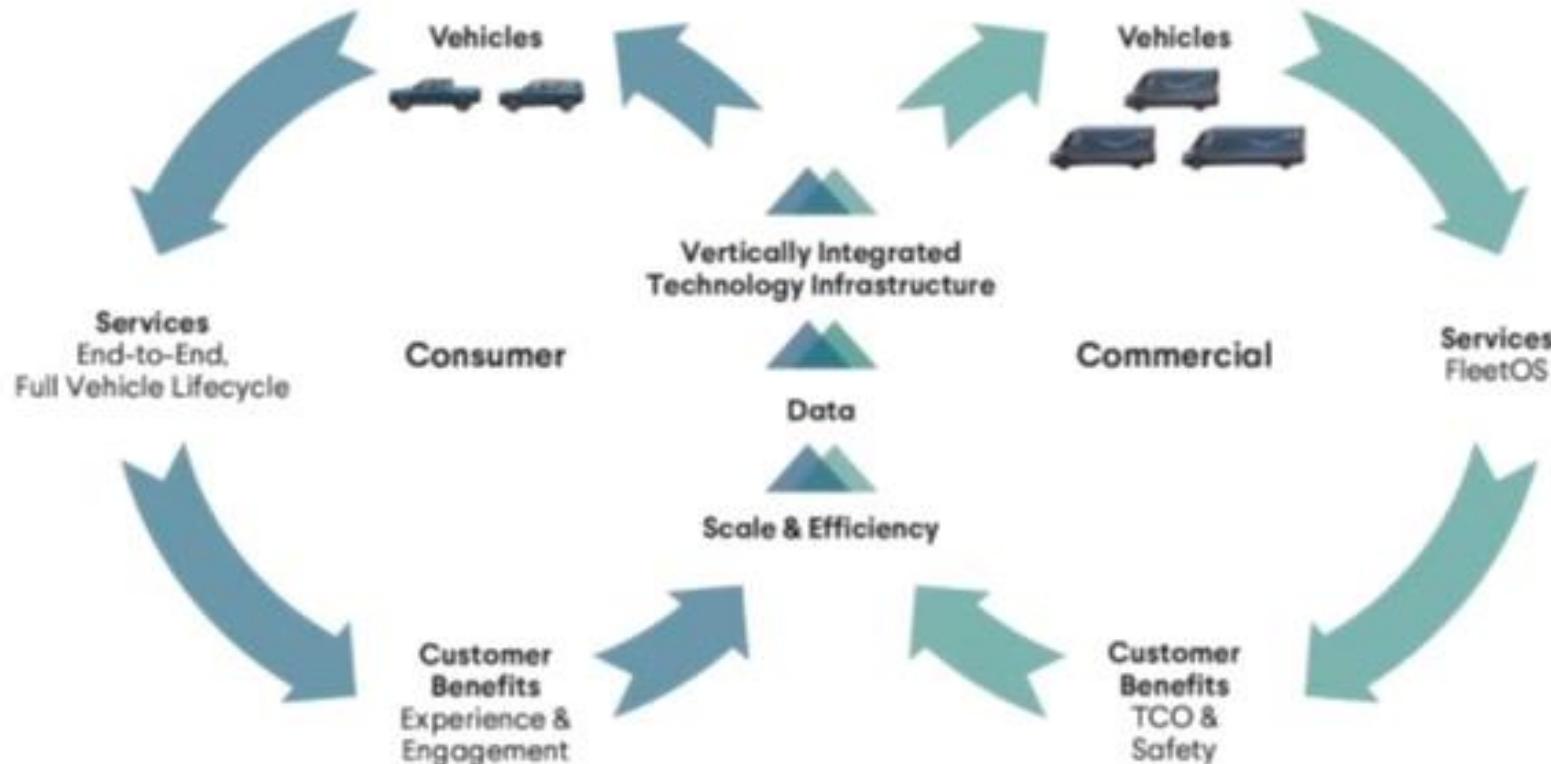
Extensively market new products and services

Cut out dealerships, gas stations, insurance brokers, independent auto repair shops, banks and other lenders

Follow a three-pronged approach to selling, servicing, and charging its electric vehicles.



# The RIVIAN Flywheel



# IT STRATEGY

- Dominating the car charging market by creating the best and efficient power charging stations.
- Smart mirror in car for health monitoring and daily health report for each driver.
- Smart self driving ambulance system to take you to nearest hospital in case of emergency.
- Creation of self-driving trucks and vans that can deliver without any driver with the help of analytics and AI. Manufacturing of more sedan and hatchback type of cars which would be cheaper and more cost effective for people.



# RIVIAN



# VISION AND MISSION STATEMENT

## Vision Statement:-

Invest and encourage innovation to enable Rivian to become a leader in electric cars and to extend its market share through the development of smart mirrors, Analytics, and AI platforms for self-driving cars.

## Mission Statement:-

To provide the best and most environment-friendly car experience that has guaranteed quality, expert tailoring, exclusive collections, superior technologies, and analytics.



# OBJECTIVES

- Create an online software platform and a proper hardware where the delivery companies can track their deliveries and self driving cars could deliver without any human assistance.
- Increasing the manufacturing and making the power station of cars scalable and standardised so all cars could be charged easily. Keeping the pricing competitive so we could own the market in the coming time.
- Creating a software platform functionality for the emergency ambulance systems in cars.
- Creating in-house smart mirrors or collaborating with a medical company that manufactures smart mirrors.
- Either investing in R&D or picking up the latest patents to create better batteries by outsourcing the work to those scientists.



# VALUE STATEMENT

**Customer Focused:** We provide quality products and services that meet our customer's needs by considering their preferences

**Worthy Of Trust:** We keep our promises and are committed to doing business the right way by protecting your data

**Winning With Integrity:** We are passionate about becoming the unrivaled industry leader by achieving superior results for our customers  
**Customer-Focused**





# DEFINITION OF IT STRATEGY

- To develop an online platform for delivery partners to easily track orders and gain profits from our system. Our system contains the following information :-
  - Name of the product
  - Customer name
  - Customer ID
  - Customer address
  - Warehouse address
  - Shortest distance and fuel savings
- Make the cars work on lithium iron phosphate batteries and be the first one in the market to tap into the lithium sulphur battery market. To do this we outsource the work of manufacturing our first sulphur battery to Drexel University as they are making breakthroughs in the field of EV sulphur batteries. This is immensely going to boost our business as sulphur is cheap.
- Collaborate with the company “Binah.AI” who manufacture smart mirrors to make them for according our cars .



- Partner with different hospitals for our emergency service as well as insurance companies and decide on a fixed percentage of profit for our company from the whole system made by the hospitals and insurance companies.
- Take into consideration the shortcomings of self driving cars of Tesla and other such EV companies and come up with better, reliable and safe self driving car softwares by having a team of AI experts run behind this goal.
- Manufacturing more of sedans and hatchbacks for the general public.
- Incorporate blockchain technology and supply chain analytics to improve supply chain management of the company.



# THE 5 P'S

## MINTZBERG'S 5 P'S OF STRATEGY

### Plan

Develop a software platform and advance analytics for driveless cars. Manufacture sedans and hatchback segment cars. Collaborate with medical companies and improve battery technology

### Ploy

Command the AI team to bring up a competitive software solution . Collaborate with insurance companies and hospitals for the emergency facility. Outsource the battery research work to Drexel University.

### Pattern

Start the manufacturing of sedan and hatchbacks. Reduce the cost of vehicles to a competitive level by 5-8% which was increased in the past few months. Work on the software platform with existing delivery partners like amazon

### Position

Consolidate position in the market by leveraging price and service advantages to improve profits. Also having a more customer centric approach in terms of health, battery, comfort and pricing.

### Perspective

Develop a customer centric attitude in every employee mixed with innovation and research so we get a competitive edge over our competitors.

### IT enabled strategy:-

- 1)Provides competitive edge through supply chain analytics.
- 2) Software platform in collaboration with Amazon.
- 3)Emergency ambulance service

IT capability enables innovative and competitive business strategies, and delivers business efficiencies.

Business

**Strategic alignment**

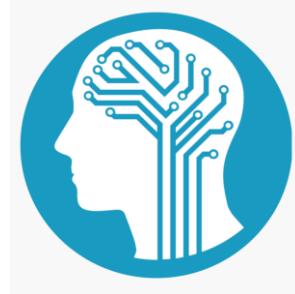
IT

Business Strategy and Business concerns drives the decisions and priorities for IT investment.

IT Strategy: -Technologies: Block chain, Machine Learning, Battery  
Applications:Software platform  
Capability: have great ability to provide excellent service to people and delivery partner  
-Governance: Top management→budget, IT infrastructure, IT technologies standard etc.



After sales in-house repair and servicing for customers and much more.



AI and data analytics for better quality of driverless cars, delivery services and business analytics .



Supply chain

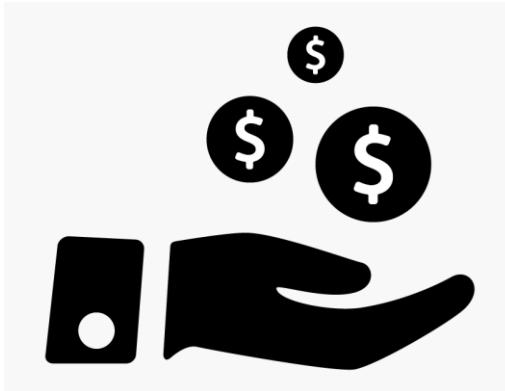
Improving supply chain through supply chain analytics and blockchain.



Collaborating with Binah.AI for smart mirrors and tie-ups with hospitals for emergency health service.



## Metrics to be used



Expense :

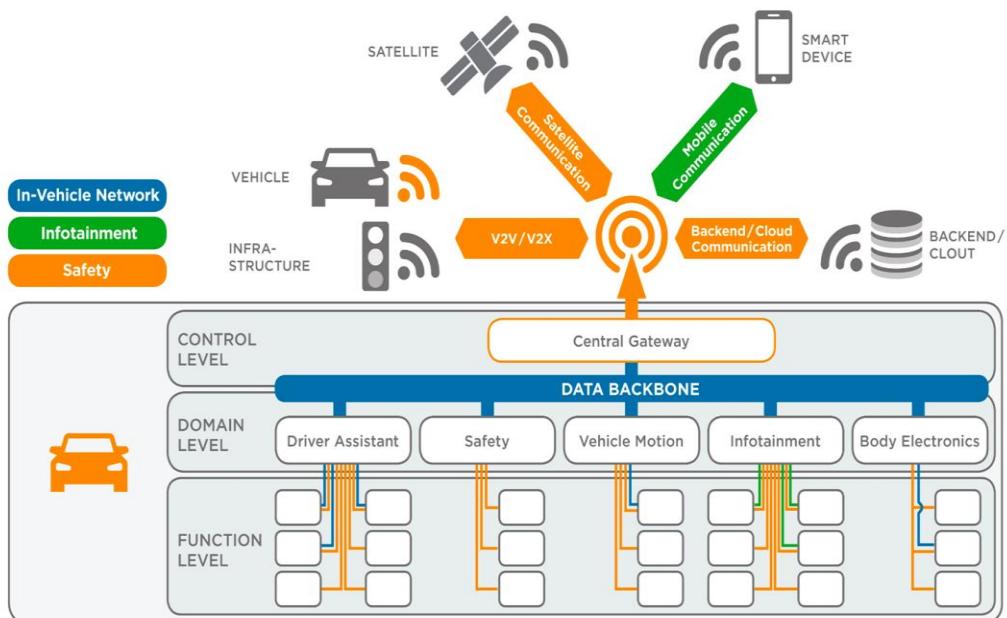
- Working capital requirements
- Cost for all new initiatives
- Collaboration profit percentage



Profit:

- Man power reduced
- Reduction in losses due to supply chain
- Miscellaneous cost

# ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING



● Adaptive Cruise Control (ACC)

● Emergency Brake Assist (EBA)

● Pedestrian Detection

● Collision Avoidance System

● Lane Departure Warning (LDW)

● Traffic-Sign Recognition

● Surround View Camera

● Cross Traffic Alert

● Blind Spot Monitor

● Rear Collision Warning (RCW)

● Intelligent Parking Assist System

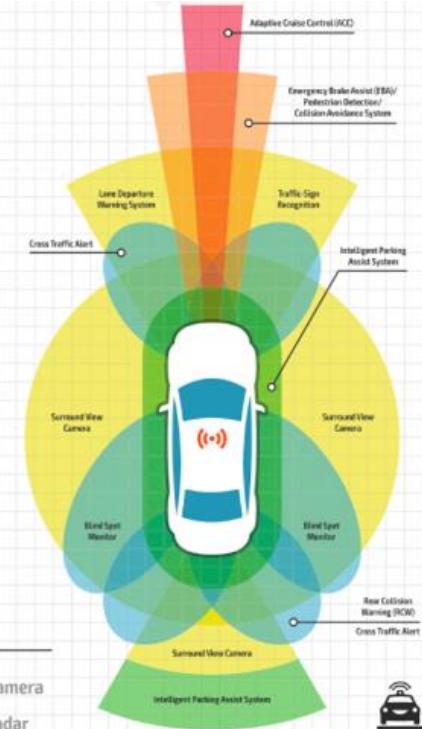
● Long-Range Radar

● LIDAR

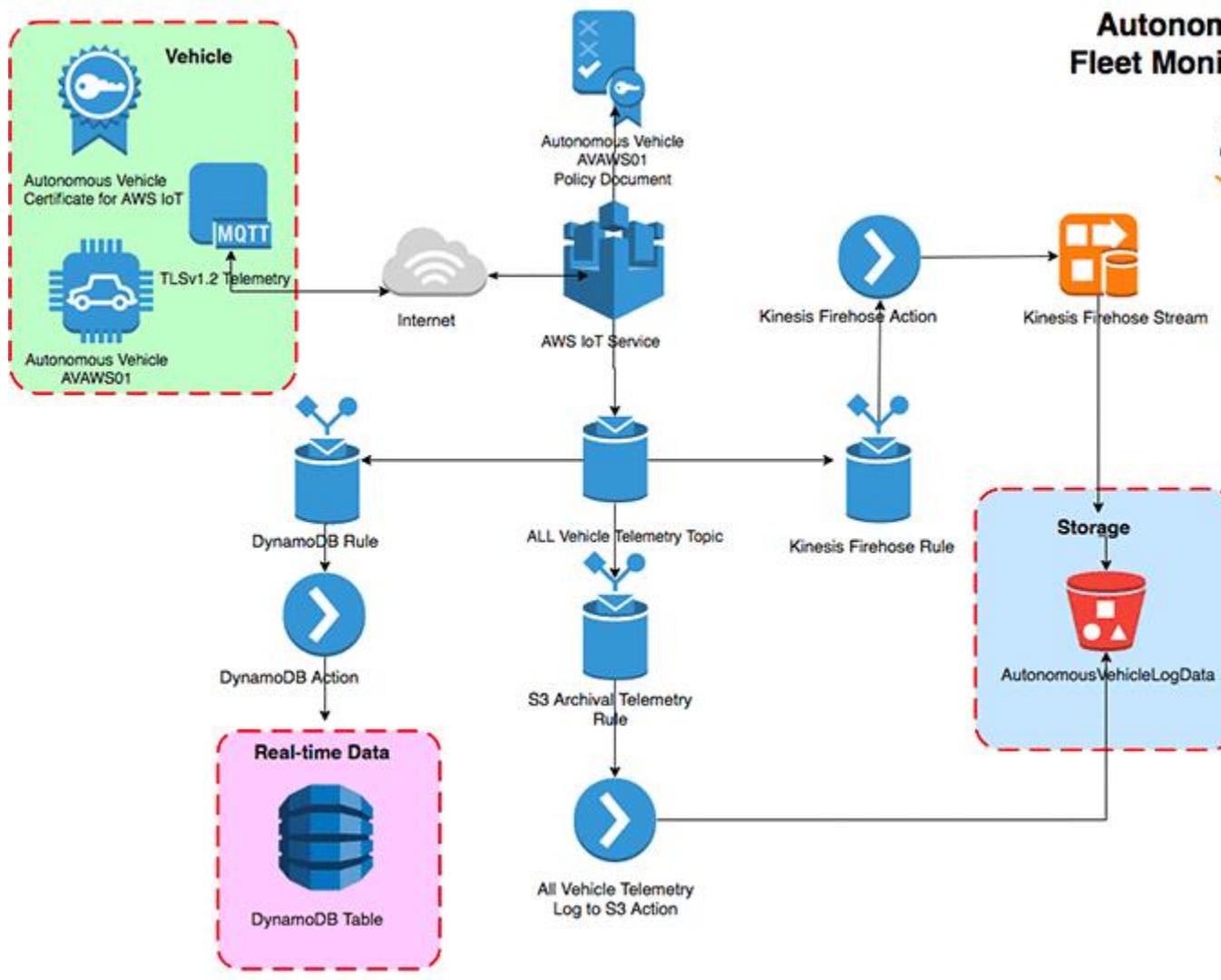
● Camera

● Medium-Range Radar

● Ultrasonic Radar

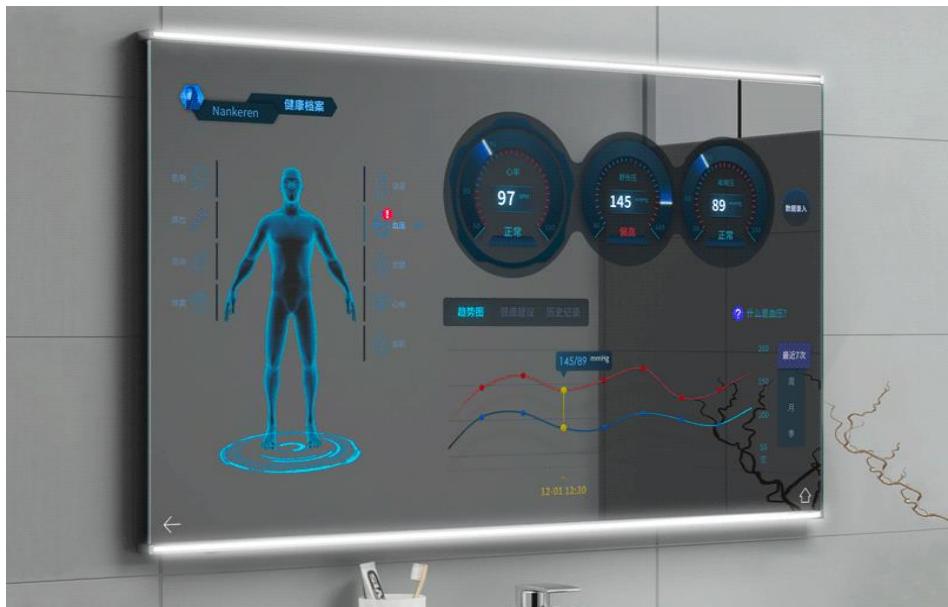


# Autonomous Vehicle Fleet Monitoring Service



# Health Care

- Binah.AI to provide us smart mirror which will track health of the passenger from heart beat, skin health ,temperature and much more.
- In case of any heart related or other emergencies the car will drive the passenger to the nearest hospital that would be in tie-up with Rivian.
- Here hospitals and insurances will tie up with Rivian and Rivian gets profits out of these two bodies.



# AFTER SALES SERVICE

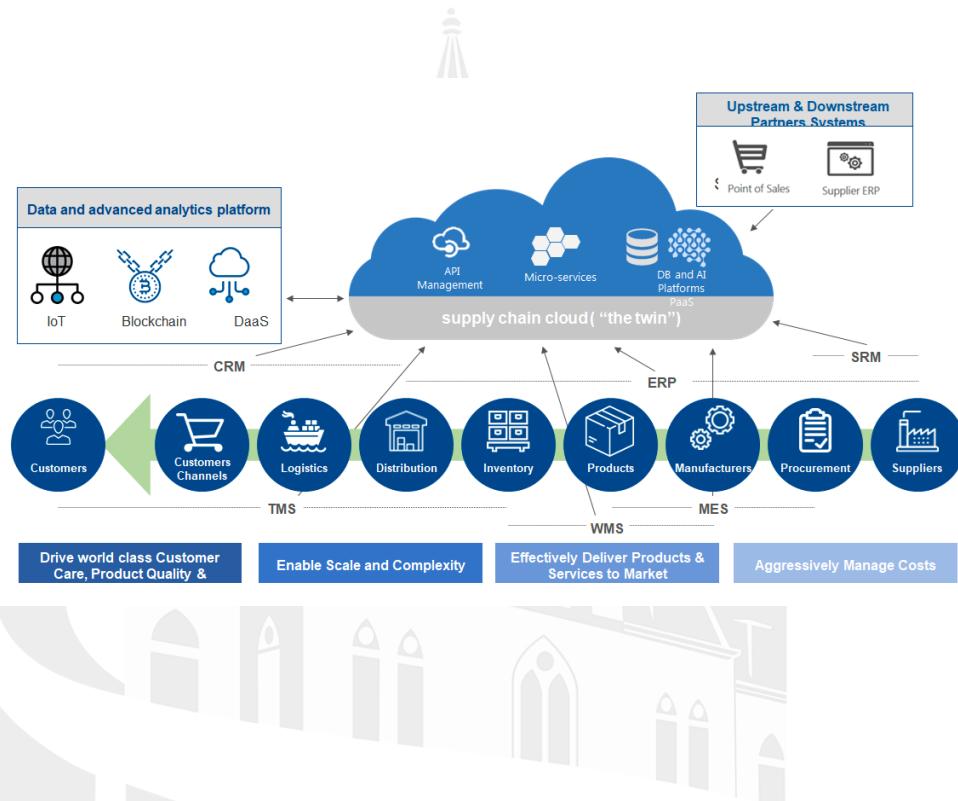
- That means Rivian is aiming to build a platform -
  - a mountain of invisible network technology and data analytics -- that creates a sustained and dynamic relationship with the customer of every one of its vehicles.
- That platform, by the way, would theoretically cut out dealerships, gas stations, insurance brokers, independent auto repair shops, banks and other lenders, and fleet management firms. And there are probably more.





# SUPPLY CHAIN

- 1. Add IoT and tracking functionality.**
- 2. Record transaction data.**
- 3. Standardize and align data from different sources.**
- 4. Develop predictive and prescriptive analytics.**



# Delivering Value

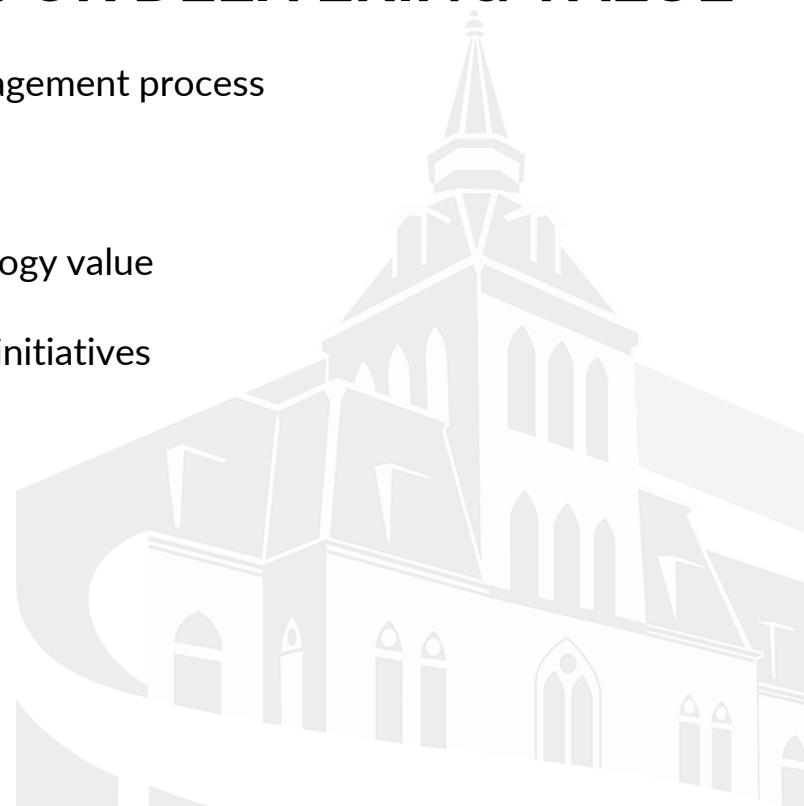
- WHAT      Excellent car, delivery, healthcare experience with in house repairing.
- WHEN     Phased implementation :- Start manufacturing & in-house repairs first, then launch software platforms for delivery ,supply chain management and provide healthcare facility in emergency.
- WHO      Customers;build partnerships with hospitals,insurances,Binah.AI for smart mirror,cheaper partners for vehicle parts, marketing & social media partners.
- WHERE    Manufacturing locations, software platforms and hospitals.
- HOW      By manufacturing sedans,hatchbacks, bringing in smart mirrors for health and making software platforms to improve the supply chain problem,delivery and outsourcing battery research.



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# FIVE PRINCIPLES FOR DELIVERING VALUE

- Having a clearly defined portfolio management process
- Aim for chunks of value
- Adopt a holistic orientation for technology value
- Aim for joint ownership of technology initiatives
- Experiment more often





# DIGITAL STRATEGY

**Analytics for real-time data with machine learning and big data for driverless car**

**Manufacture of sedans and hatchback**

**Predictive analysis for supply chain management**

**Manufacturing of in-house motors, batteries and research oriented approach**

**Collaborate with Binah.AI for smart mirrors and emergency healthcare service**

**In-house servicing and software platforms for delivery partners**



# CLOUD STRATEGY

No Capital expenditure.

Multi-cloud infrastructure.

Expand existing data work by collaborating with Amazon.

Edge computing in driverless cars.

Simple and fast environment.

# BUSINESS IMPROVEMENT AND COMPETITIVE ADVANTAGE



Business improvement :-

- AI and machine learning will optimize the supply chain saving at least 200 million dollars per year
- With the new sedans and hatchback our estimated increase in profits will be upto 30%
- Collaboration with Binah.AI for smart mirrors and hospitals is a sureshot way to gain popularity of middle aged and old aged people who need these services in case of any emergency.
- Outsourcing the battery research again leads to business advantage as we have experts on our team and we promise the researchers a small percentage of our profits on manufacturing of new batteries.



Competitive advantage:-

- Signing future contracts with companies to stabilize our profits and get support as required.
- Strong relationships with partners, customers, vendors and researchers.



# Business Alignment and Partnership



- Expertise in Trucks and delivery type vehicles.
- Partnerships and relations with delivery assisted companies like amazon.
- 12% stake of Toyota bringing in expertise to our company.

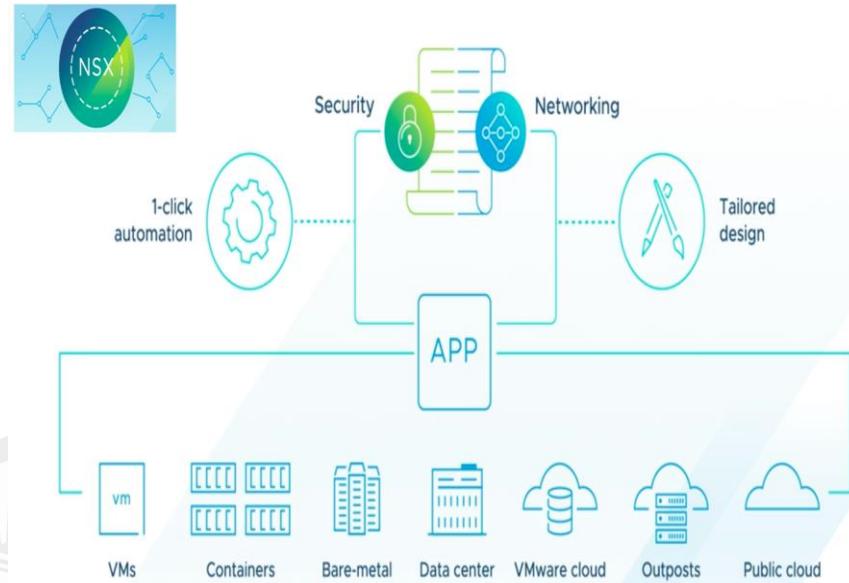
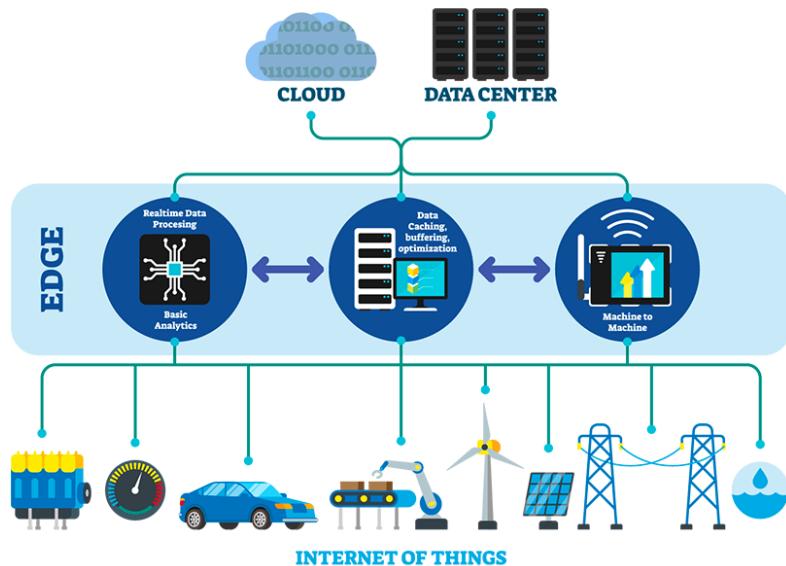
- Credibility with customers.
- Credibility with partners.
- Credibility with vendors.

- Customer trust.
- Market middleman trust.
- Investor trust.
- Partner trust.



# INFORMATION MANAGEMENT

## Edge Computing

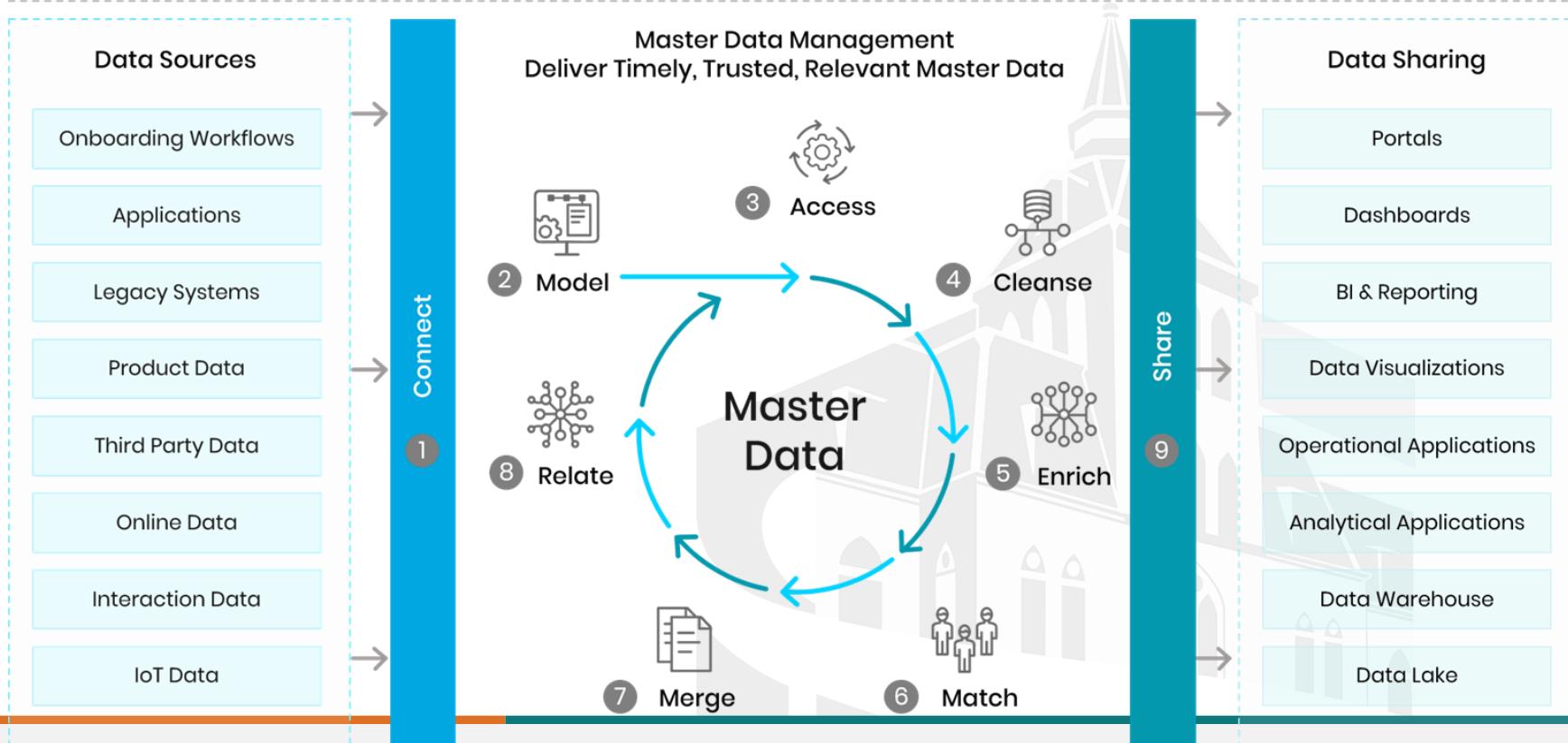




# MASTER DATA MANAGEMENT

10

Govern & Secure



# **IT-Enabled Innovation(Customer experience & Business Intelligence)**

Storage system ,shortage of inventory will give alert to suppliers and vendors.

Applied AI and analytics to improve driverless car experience.

Edge computing in supply chain to give details of every inventory as well as in cars for tracking objects.

Smart mirrors and data management systems with edge computing for emergency healthcare for customers.

Business intelligence for knowing the delivery of certain products through delivery partners.

Warehouse management systems for storing data , data analysis and doing visualisation.

# Compliance Impacts & Needs for Rivian

- Compliance officer and security team is designated and publicized between IT & Business department
- Training employees at the beginning about compliance
- Periodic assessment and updating standards
- Written internal policies and procedures are implemented
- Security team conducts monthly review of customers and partners activities
- Secure user IDs, passwords, and appropriate role-based access are used
- Anti-hacking and anti-malware software is installed



# Suppliers and Alliances

The logo for POSCO, consisting of the word "posco" in a bold, blue, sans-serif font.

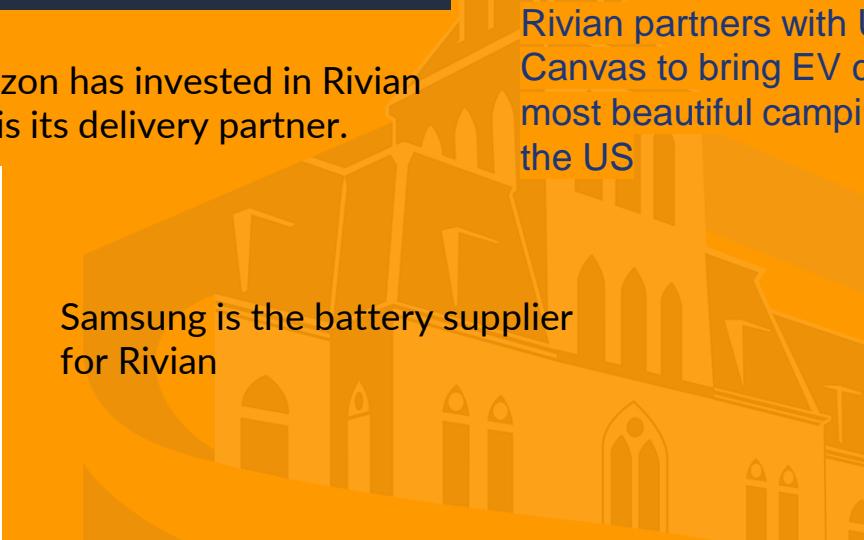
POSCO supplies parts to Rivian



Amazon has invested in Rivian  
and is its delivery partner.



Rivian partners with Under  
Canvas to bring EV charging to  
most beautiful camping sites in  
the US

The logo for Samsung, consisting of the word "SAMSUNG" in a white, bold, sans-serif font inside a blue, rounded rectangular oval.A faint, large watermark-like illustration of a building with multiple arched windows and a tiled roof, rendered in a light orange color.

Samsung is the battery supplier  
for Rivian



# IT GOVERNANCE

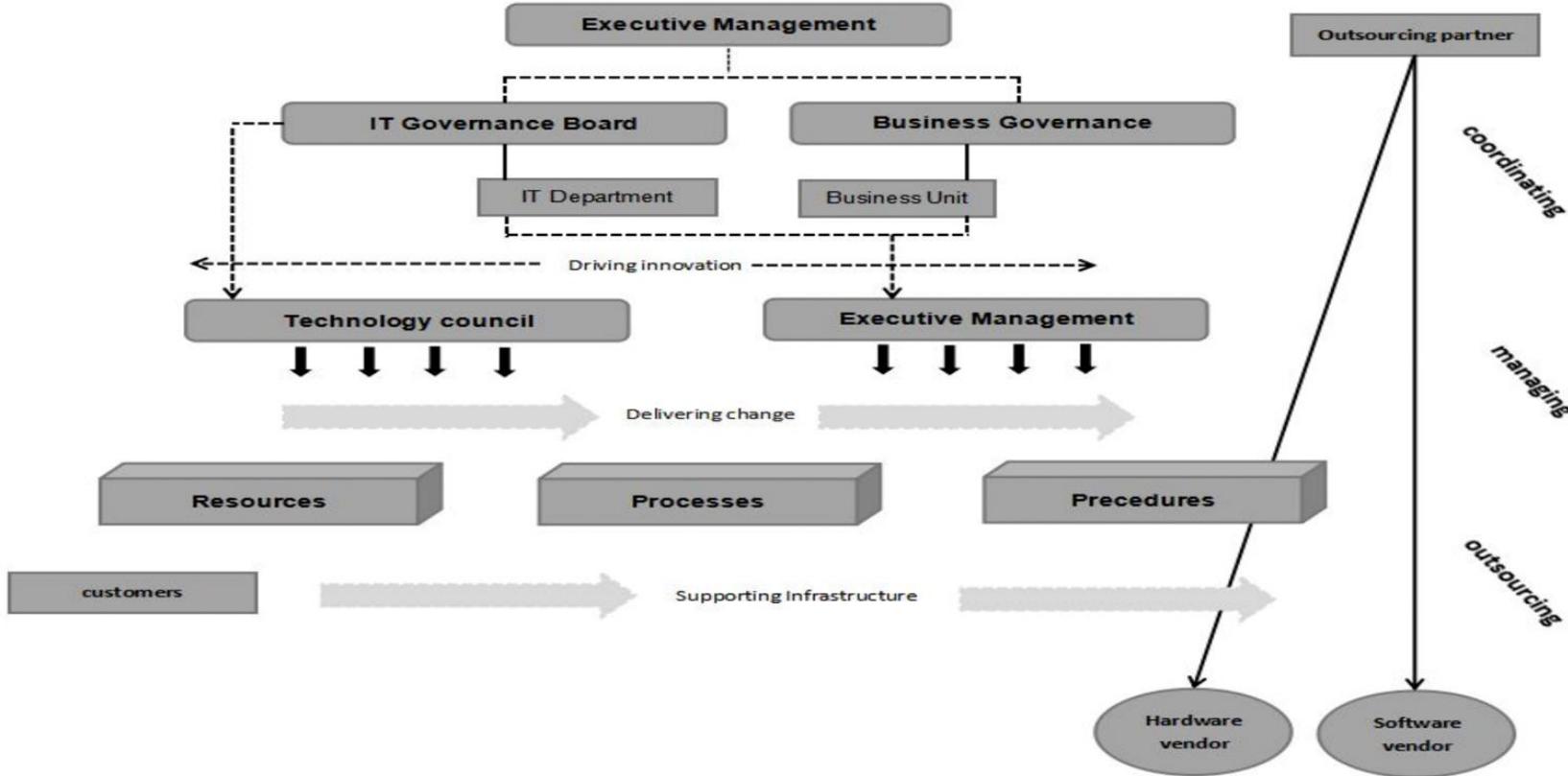
IT governance provides a framework for aligning IT and business strategies. Organizations can produce measurable results toward achieving their strategies and goals by adhering to a formal framework. A formal program also considers the interests of stakeholders, as well as the needs of staff and the processes they follow. In the grand scheme of things, IT governance is an essential component of overall enterprise governance.

Changes in business strategy should be communicated to and updated by IT at the same time.





# STRUCTURE OF IT GOVERNANCE



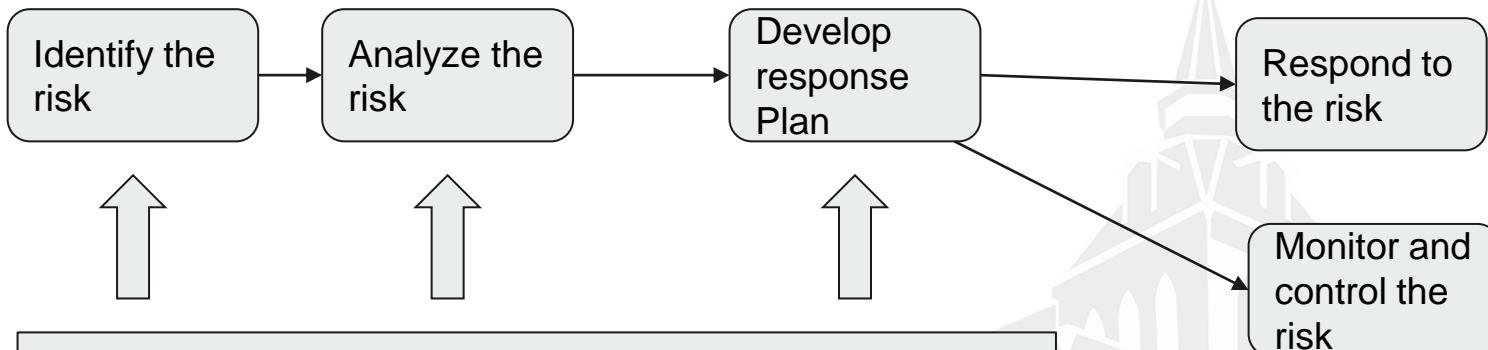


# COMPONENTS OF GOVERNANCE

Resource Management	Risk Management	Measurement of results	Strategic fitting	Value-building factors
<ul style="list-style-type: none"><li>- Organizational structure</li><li>- Process map</li><li>- Framework for continuous improvement of enterprise architecture</li></ul>	<ul style="list-style-type: none"><li>- Inventory of ICT assets</li><li>- Risk estimation</li></ul>	<ul style="list-style-type: none"><li>- Critical success factors</li><li>- Key performance indicators</li></ul>	<ul style="list-style-type: none"><li>- Corporate strategic goals</li><li>- Corporate improvement activities</li><li>- Programs</li></ul> <ul style="list-style-type: none"><li>- IT strategic Goals</li><li>- IT improvement activities</li><li>- Projects</li></ul>	<ul style="list-style-type: none"><li>- Management of IT services portfolio</li><li>- Management of relationships with business</li></ul>
<b>Effective communication</b>				



# Risk Management Strategy



## Risk Database

- factors: political and economic environment, competition, personnel, capital etc.
- risk checklist
- assessment & standards
- risk control system



# Communication Plan

Target audience

Internal: BUs and IT departments;  
External: clients, suppliers, local government officials, medical and media representatives etc.

Objectives

To provide a highly-efficient environment where IT and Business can cooperate with each other by maintaining open channels of communication for a flexible environment that makes products and services accessible to customers and transparency of data.

Channels

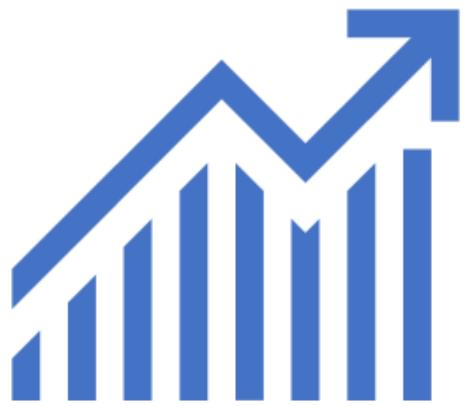
Internal: group meeting, online conference, emails, IM  
External: Social media(e.g Instagram & Facebook), magazine, TV ads, website

Frequency

Internal: Monthly, weekly, daily dependent on channel  
External: As needed for major announcements, weekly on social media

Evaluate the results

Internal: monthly report, progress report, employee feedback  
External: online survey



## Professional Assessment

# Super SWOT Analysis

**OPPO RTUNITIES**

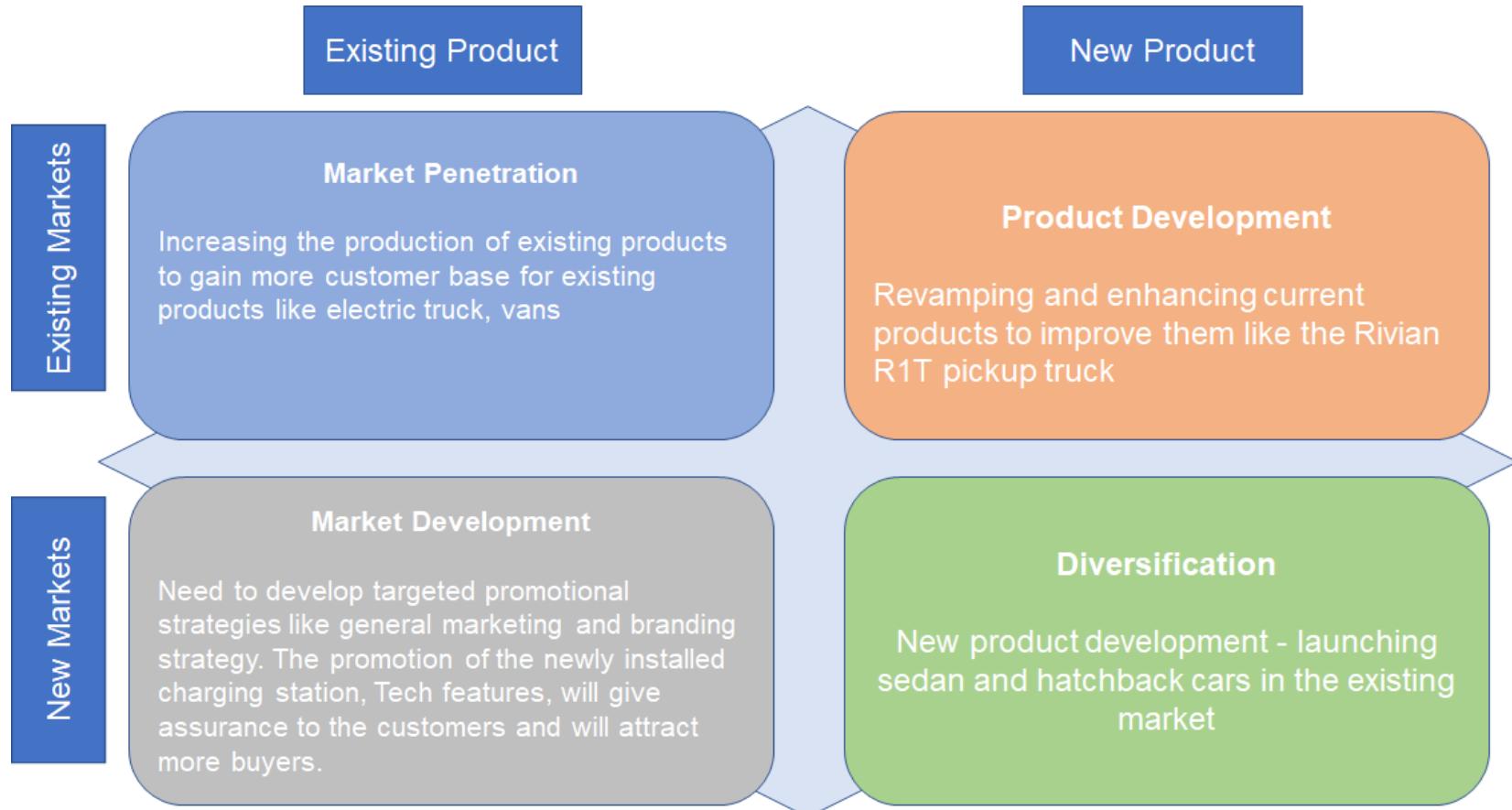
- 1.Innovative use of technology
- 2.Targeting the passenger car market
- 3.Use of LFP batteries will be environment friendly and also cut the dependency on cobalt supply market which is very weak.

**THREATS**

- 1.Slow production of batteries lead to poor supply.
- 2.Demographic issues in crisis situation like pandemic.
- 3.Strong competitive market of commercial cars - sedan, hatchback.
- 4.Reliance on Technology for emergency situations like - using ambulance.

	<b>STRENGTH</b>	<b>WEAKNESSES</b>
	1.Strong investor base 2.Reliable product quality 3.In-house production of parts will make cost effective products 4.Expansion car -charging network 5.Use of promising technology -AI and data analytics 6.Lower price production	1.Production is slow 2.Big competition ( 80 new car to be launched in market ) 3.Demographic issues of supplier 4. Weak supply chain 5.Past poor decision making on mitigating the expenses on production line - price hike for pre-booked cars too.
<b>S – O</b>	<b>W – O</b>	
	<ul style="list-style-type: none"> <li>• Technological innovation to provide better services to the customer.</li> <li>• Manufacturing cost effective products to target wider customer base.</li> </ul>	Focus on in-house manufacturing to tackle supply chain issue.
<b>S – T</b>	<b>W – T</b>	
	<ul style="list-style-type: none"> <li>• Identifying customer needs while developing new product.</li> <li>• Installation of technologies by following code of conduct for security and extensive testing including corner cases.</li> </ul>	Analyzing how to best secure continued supply to build their products with several strategies such as producing parts through vertical integration: development/ production partnerships, joint ventures, and/or buying directly through suppliers

# Ansoff Matrix



# Porter's 5 force analysis

## Rivalry in the industry - High

Intense competition in the industry with start-ups, traditional automakers, and big automotive brands switching to electric Long battery power ,lower cost prices, changing government policies and weak supply chain in overall automobile industry are playing vital roles in the industry competition.

## Threat of new entrants - Low

- 1.Strong supply chain power
- 2.Technological expertise
- 3.Cost Effective Services

## Power of suppliers - High

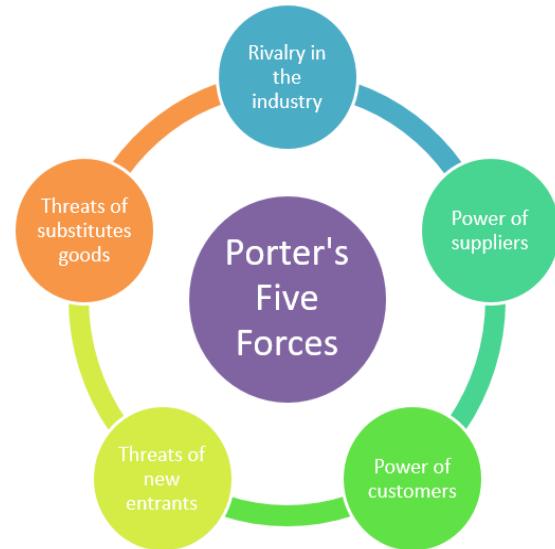
- 1.Diversify suppliers to avoid shortages and production delays.
- 2.Leverage technology to lower the bargaining power of suppliers.
- 3.Develop vertical integration to enhance cost leadership and manufacturing capabilities.

## Power of customers - Low

- 1.Diversify products in the popular segment, such as sedan and hatchback cars
- 2.Implementing single platform for addressing customer needs and providing services.

## Threat of substitute goods- HIGH

- 1.Expand stores /showrooms into an interactive technology hub, so customers can experience the latest technology.
- 2.Clever marketing and branding with focus on product sustainability to the environmental regulations
- 3.Expansion of charging stations networks.



# As-Is / To-Be Analysis - Business

		Business Strategy	
Business Scope		AS-IS	TO-BE
	Products and Services	Traditional EV's like Trucks,pickup vans etc	New product in the stack Sedan and hatchback cars
	Customer/ Clients	Mostly targeted affluent customer base	Targeting the wide range of customers who's interested in personal electric vehicles
	Competitors	Tesla,GM,Lucid Motors,BYTON,Zoox,Ford	Tesla,GM,Toyota and 800 other manufactures

# As-Is / To-Be Analysis - Business

Business Strategy			
Business Governance		AS-IS	TO-BE
	Internal Decisions	Reviewing company policies, procedures ,market trends and demands	No change anticipated to the internal decision making process
	Regulatory	Privacy policies and environmental policies are followed	<ul style="list-style-type: none"><li>• Data protection and privacy policies will be improved.</li><li>• Electric waste management polices will be prioritized</li></ul>
	Partners	Amazon is the biggest investor in Rivian who committed to buying 100,000 delivery vehicles from Rivian	No change in the partners as of now though open for it

# As-Is / To-Be Analysis - Business

Business Infrastructure		
Key Processes	AS-IS	TO-BE
	<ul style="list-style-type: none"><li>• Supply Chain</li><li>• Outsourcing the parts</li></ul>	<ul style="list-style-type: none"><li>• Systematizing supply chain and maintaining sustainable relationship with suppliers.</li><li>• Collaborating with new suppliers in the manufacturing demographic</li><li>• In-house motor manufacturing</li><li>• In-house battery cell manufacturing with LFP chemistries to eliminate dependency on cobalt aka li-ion batteries</li></ul>

# As-Is / To-Be Analysis - IT

IT Strategy			
Technology Scope		AS-IS	TO-BE
	Key Applications	Cloud based application	Digital data streams and artificial intelligence
	Key Technologies	Cloud based technologies	Use of AI and Data analytics to build health tracking activity and self driven truck system
Systemic Competencies	Competencies	All technological capabilities on single platform to pinpoint control e.g : Software Control	A new dedicated platform hosting a mountain of invisible network technology and data analytics
Governance	Governance and Compliance	<ul style="list-style-type: none"> <li>Cybersecurity compliance for data protection</li> <li>Compliance with environment ,safety and security</li> </ul>	Improvising the existing security and safety compliances.

# As-Is / To-Be Analysis - IT

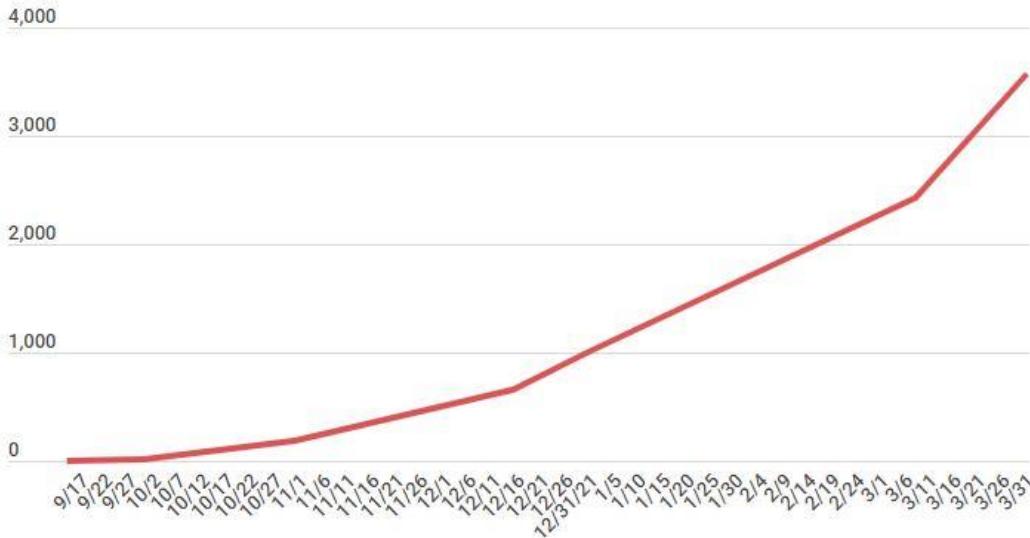
	IT Infrastructure	
Architecture	AS-IS	TO-BE
	Leveraging existing infrastructure	Focus on automating the most of the task including supply chain assessment with the support of blockchain technology and AI
Key Processes	Cloud based systems for tracking after sales activity of customers	Integrating AI and data analytics for gathering information and building predictive models
Human Resources	Software experts and hardware technicians	Software experts and hardware technicians

# Market Analysis & Demand

- The R1T (SUV model) exceeded its set reservations of 55,400 and has now eclipsed over 71,000 orders.
- Rivian company has started deliveries of its R1S SUV model from December 2021, for which the company had around 71000 pre-orders.
- It has 83,000 preorders for its SUV and pickup truck, along with the initial order of 100,000 delivery vans from Amazon.
- Collaborating with Amazon to set up an exclusive charging network in USA and Canada by 2023.
- **Rivian aims to grab 10% of the EV market by 2030 with its electric trucks and SUVs.**

## Rivian vehicles produced

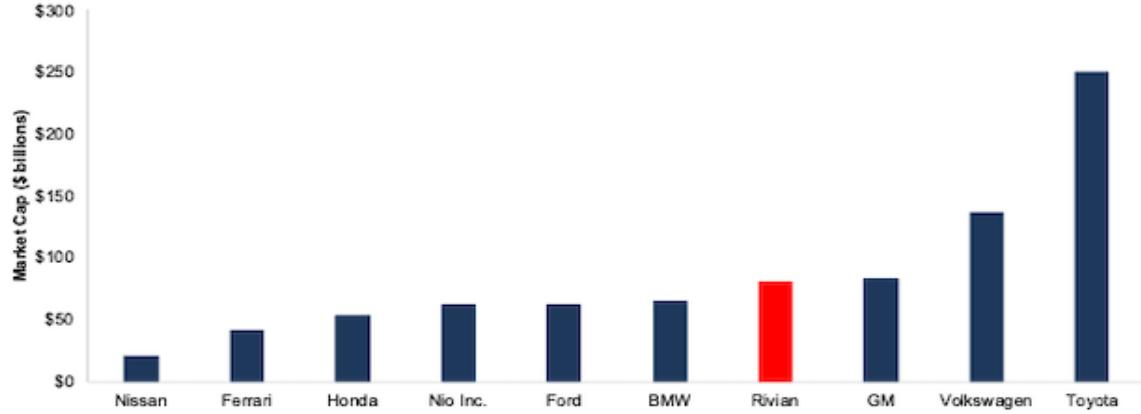
A look at how Rivian's production ramp-up is progressing at its Normal manufacturing plant.



SOURCE: Rivian, WGLT reporting

# Market Analysis & Demand

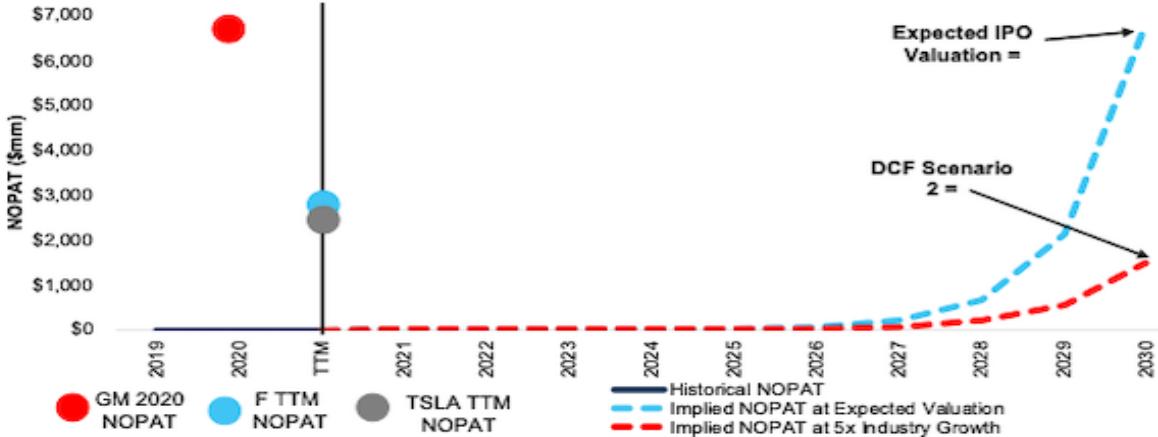
## Rivian's Valuation Higher Than Ford, Honda, Nissan, and More



As of March 2022, the company's market cap is around \$40.94 Billion, volume 12.8M, P.E ratio - 11.20, stock price near \$48.70 and this company comes in class A trading.

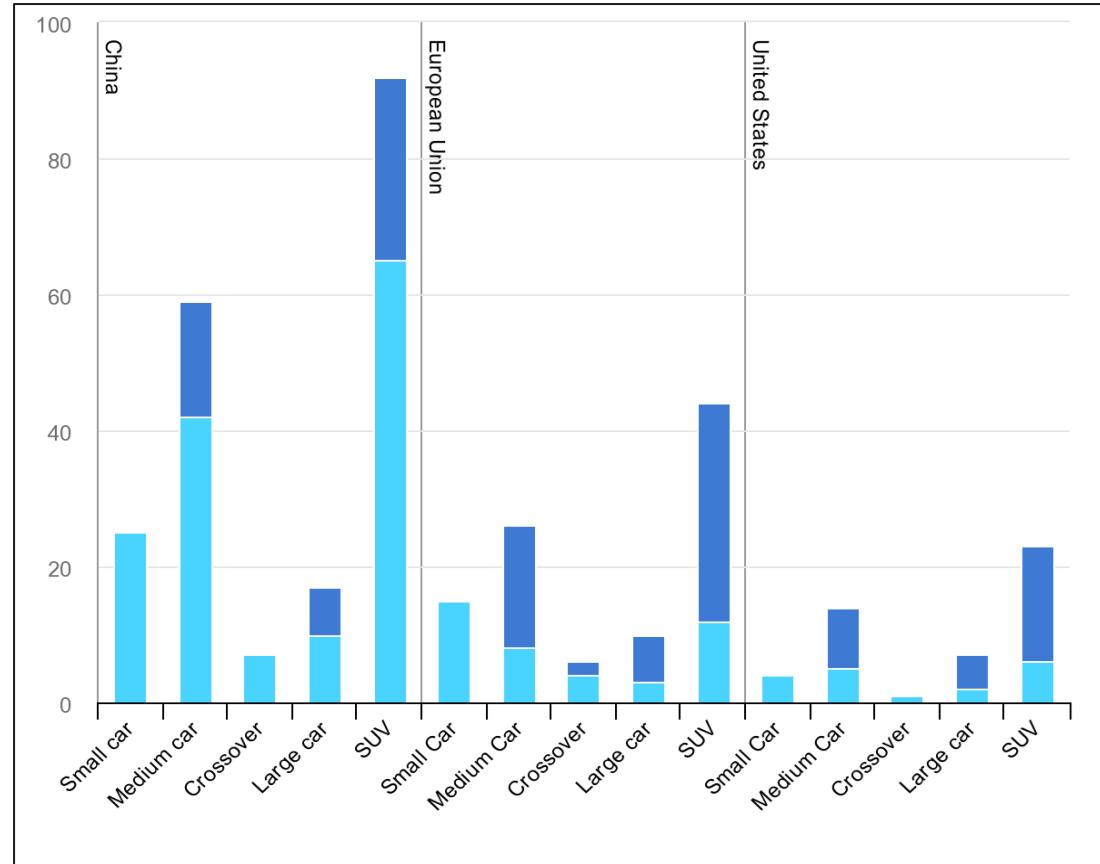
The company is sitting on \$18 billion in cash as of the end of last quarter and pre-orders remain strong at 83,000 despite the price debacle earlier this month

## Rivian's Valuation Implies Exponential Growth

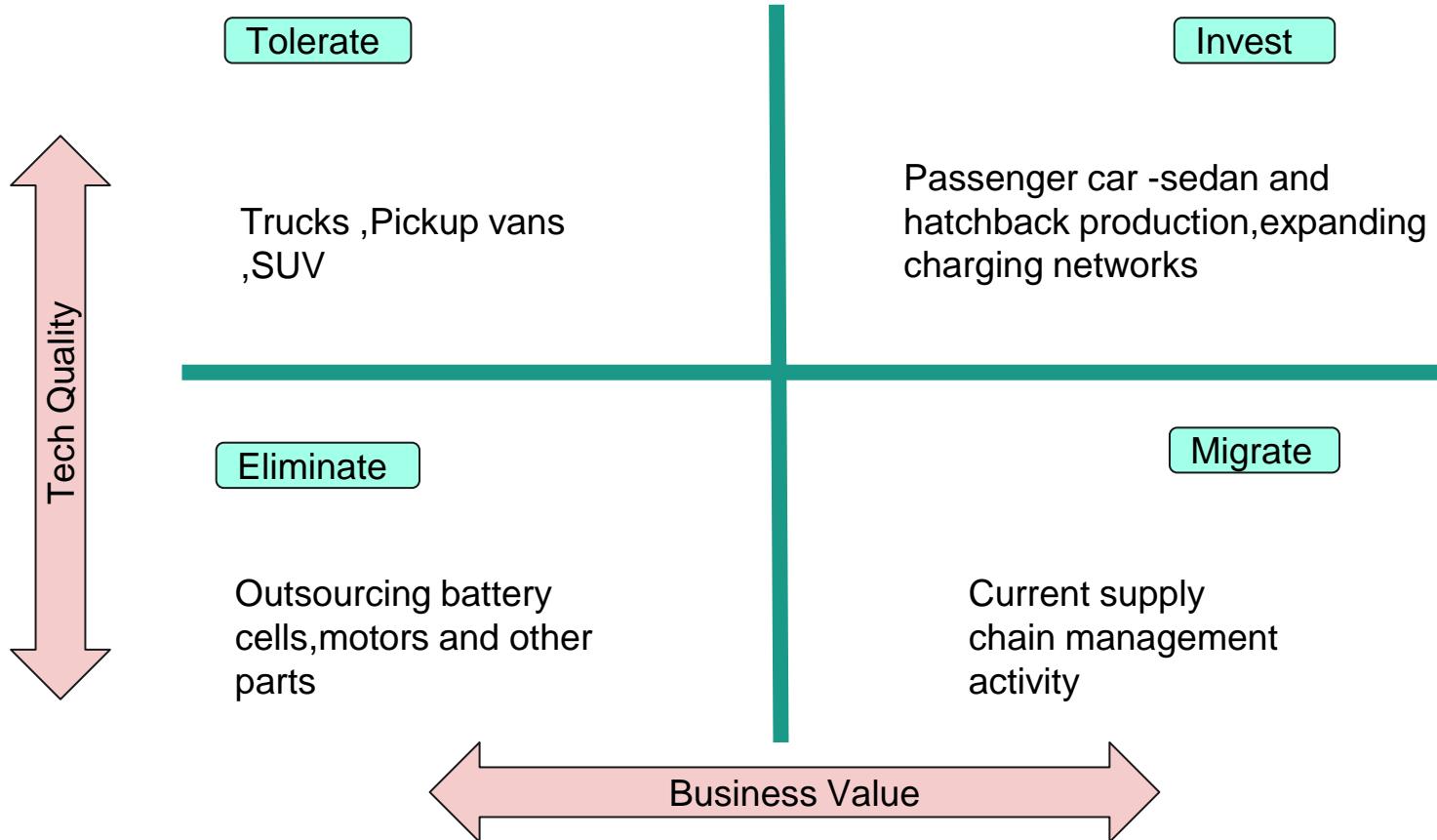


# Target Market

- The EV passenger vehicle segment will likely be the largest during the 2021 and 2030 forecast periods.
- Passenger EVs with rear-wheel drive capabilities will lead the market. Their demand and popularity have been on the rise across all markets. That's mainly because of the ease of vehicle control.
- With the production of Sedan and Hatchback cars Rivian wants to get into the passenger market which is in high demand and cost effective.



# Application Portfolio Analysis



# BCG Matrix



Off road Vehicle like SUV ,passenger cars,Fleet business -amazon pickup vans



supercharges ,charging grid

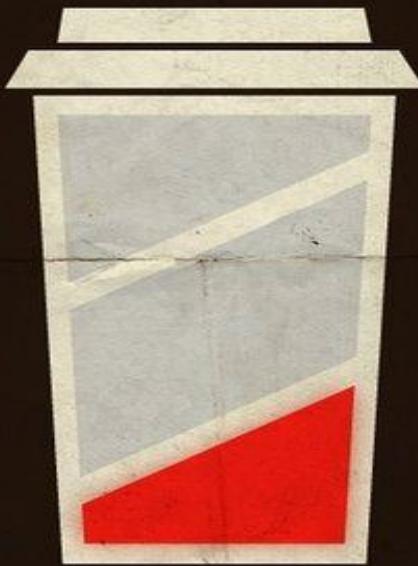


Miscellaneous accessories



Manufacturing complications with some models

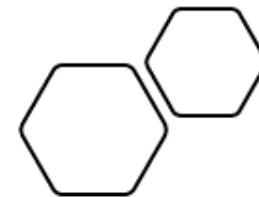
low batt



need caffeine

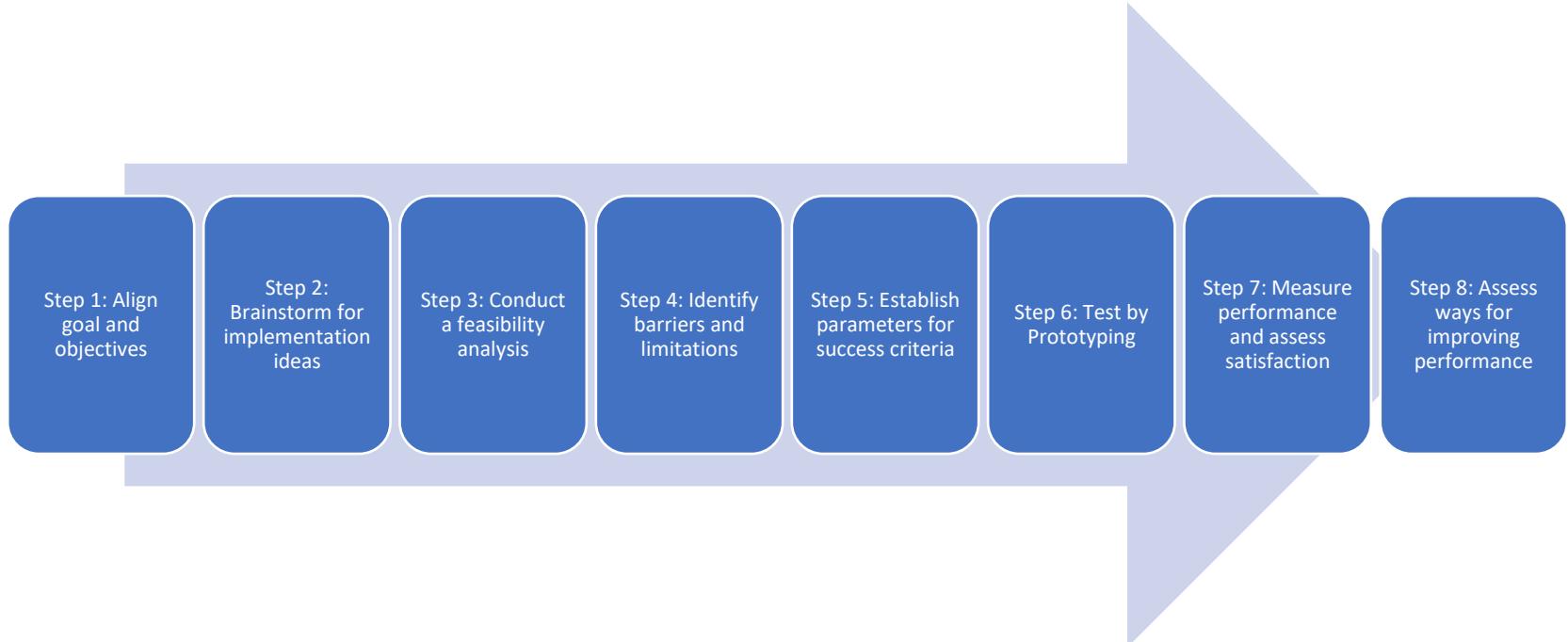


# IT Service Design



**make, move, monitor and maintain**

# Stages of Service Design



# Productivity and Innovation

- In-house manufacturing of motors, battery cells and other accessories.
- Rivian is designing vehicles tough enough to go off-road. It promises far more range per battery charge than existing electric cars.
- For off-road capabilities, Rivian vehicles are far superior to Tesla cars. Both the Rivian R1T and R1S have a quad-motor system, which doles out 800 hp and 900 lb-ft of torque.
- EV batteries can provide longer range, charge faster, and cost less.  
`

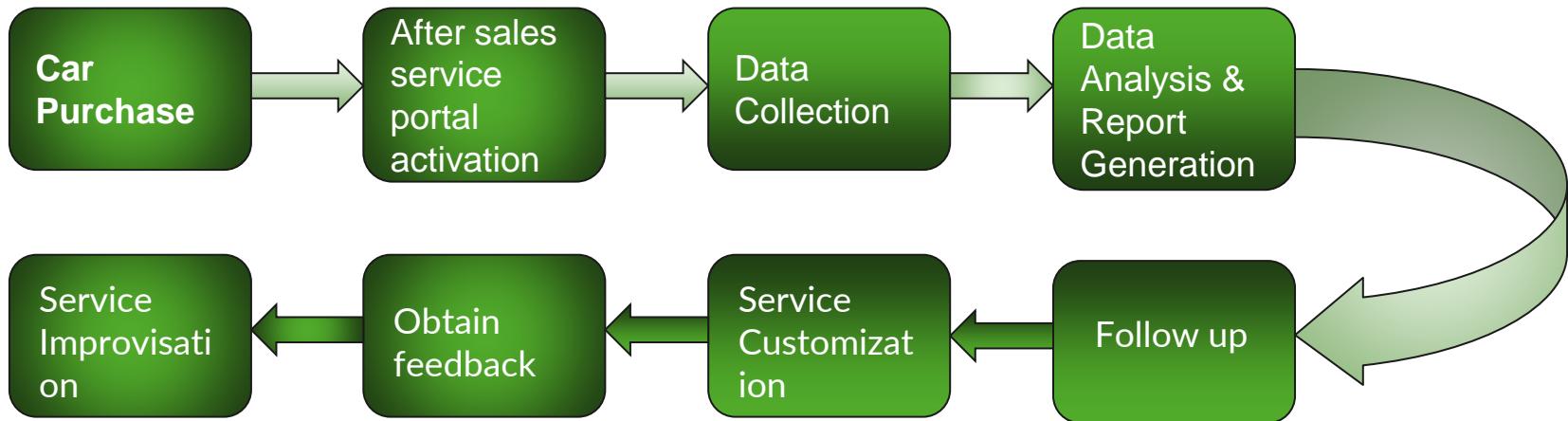


# Productivity and Innovation

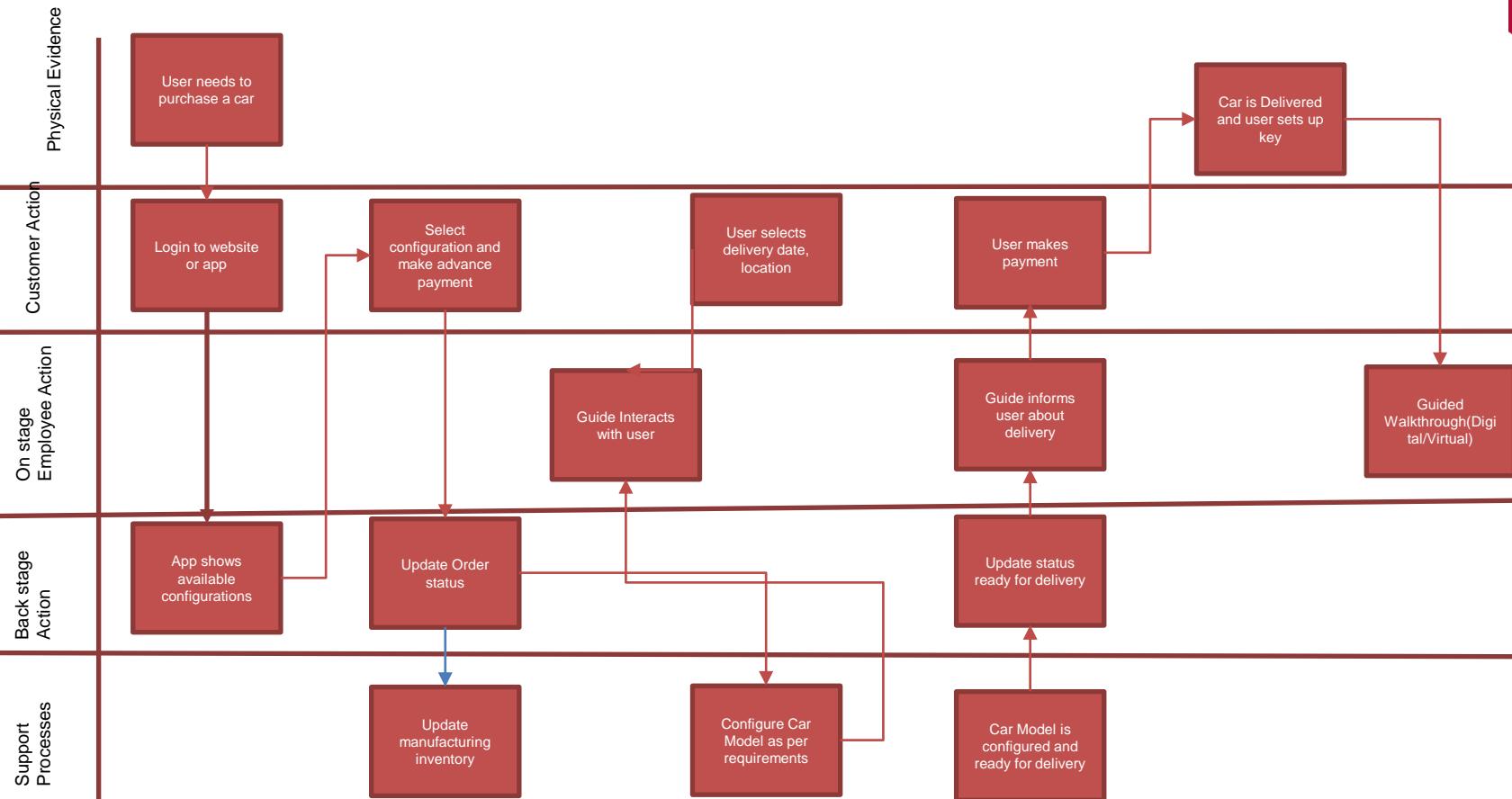
- Constantly making effort to blend technology with business and adapting new technologies like AI, Data analytics
- To tackle the supply chain market Rivian has come up with the Blockchain solution.
- The emergency ambulance technology with AI, Data analytics



# Service process for after sales activity



# Service Visualization through blueprinting



# Technology Roadmap

## Present Technology

- Li-ion battery
- All electric pickup trucks and vans
- Data analysis technology
- Full stack development of hardware and software design to move data around the vehicle and synchronize it with cloud platform for data control mechanism

## Future Technology

- LFP batteries
- Data analytics and Machine learning for predictive analysis of customer data
- Blockchain technology to tackle supply chain issue
- Electric grid for smart charging
- Smart Mirror, Emergency ambulance - AI technology
- Digital data streams and artificial intelligence - monitor and maintain



# IT Business Model

Key Partners	Key Activities	Value Propositions	Customer Relationships	Customer Segments
<ul style="list-style-type: none"><li>• Basecamp Outdoor</li><li>• The Bridge Project</li><li>• Amazon</li><li>• Ford Motor Company</li></ul>	<ul style="list-style-type: none"><li>• Manufacturing electric vehicle</li><li>• Marketing the vehicles</li><li>• Continually enhance the software platform</li></ul>	<ul style="list-style-type: none"><li>• Adventure Ready Electric Vehicles</li><li>• Green Energy</li><li>• Autonomous vehicles</li></ul>	<ul style="list-style-type: none"><li>• Customer engagements through personal interactions</li><li>• Voice mails and emails</li></ul>	<ul style="list-style-type: none"><li>• Recreational Truck users</li><li>• SUV enthusiasts</li><li>• Healthcare</li></ul>
	<p>Key Resources</p> <ul style="list-style-type: none"><li>• Network of offices</li><li>• Test labs</li><li>• Experience centers</li><li>• Service centers</li><li>• Supercharging stations</li><li>• Manufacturing plants</li><li>• Sales agents</li></ul>		<p>Channels</p> <ul style="list-style-type: none"><li>• Website</li><li>• Physical stores</li></ul>	
Cost Structure		Revenue Streams		
Materials, Salaries/Commission, Equipment., Facilities, Advertisement		Electronic Vehicle sales		



# Business Model Alignment

## IT innovation

Artificial Intelligence

Biometric data collection

“Skateboard” architecture

Car Design

## Corporate goals

Provides competitive edge

Customer Focussed

Differentiator in the segment

Customer satisfaction



# Marketing Strategy

- Rivian Pre-Order events
- Pop-up stores
- Major and renowned investors
- Reviews from high profile publications such as Motortrend



# 8 P's of Service Marketing

- Product: AI, Fully electric vehicle, Skateboard battery pack, Green Energy, Stylish Adventurous personality
- Price: Premium price, Different segments
- Place: Official Company website, pop up stores, Charging stations
- Promotion: Social Media, Pre order events, Reviews
- People: Customers, IT innovation team, Business development team, Partners, Competitors
- Process: Customer centric approach, IT innovation
- Physical evidence: Skateboard architecture, prototypes
- Productivity and Quality: Green Energy, Efficiency, Higher range



# Value Proposition

- Sustainable transportation
- Adventure Ready vehicles
- Efficiency
- Autonomous vehicles
- Innovative experience



# Marketing Segmentation

## By Types of Users

- General Users
- Premium Users
- Celebrity and Influencers

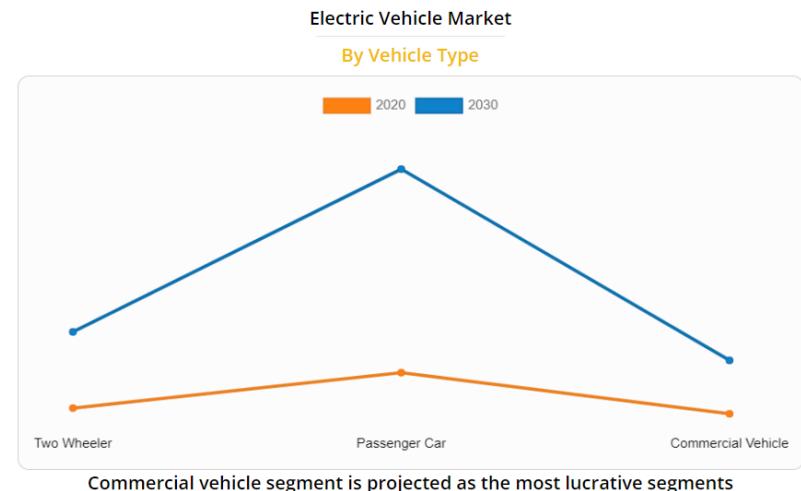
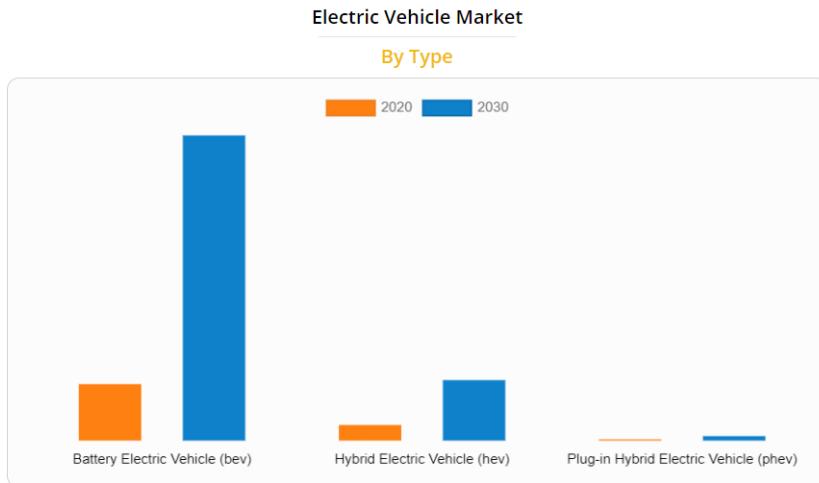
## By Demographics

- Age
- Geographic location
- Gender

Worldwide, 38.5% of Twitter users are of age 25-34, making it the largest age group using the app.



# Marketing Segmentation





# Customer satisfaction and loyalty

“Meaningful change happens when people come together. That's how we've built Rivian and that's how we want to build our community.” -R.J. Scaringe

- Exceed expectations
  - 180kwh Skateboard battery provides better range
  - Adventure ready electric vehicles
- Keep customers engaged
  - Rivian gatherings and events
- Gather customer feedback and act
  - Rivian cancelled the price hikes on its pre-order vehicles after receiving backlash
- Customer loyalty
  - Rivian membership program



# Profit/Loss Analysis and Revenue

## 2019

- Revenue: \$0
- Gross Profit: -\$0
- Operating expenses: \$409 million
- Operating loss: \$409 million
- Net loss: \$426 million

## 2020

- Revenue: \$0
- Gross Profit: N\$0
- Operating expenses: \$1021 million
- Operating loss: \$1021 million
- Net loss: \$1018 million

## 2021

- Revenue: \$55 million
- Gross Profit: -\$465 million
- Operating expenses: \$2755 million
- Operating loss: \$4220 million
- Net loss: \$4688 million



# Expense forecast for 2022

- Vehicles produced: 25000
- Adjusted EBITDA: \$4750 million
- Capital expenditure: \$2600 million



Annual Data   Millions of US \$ except per share data		2021-12-31	2020-12-31	2019-12-31
<b>Revenue</b>		<b>\$55</b>	-	-
Cost Of Goods Sold		\$520	-	-
<b>Gross Profit</b>		<b>\$-465</b>	-	-
Research And Development Expenses		\$1,850	\$766	\$301
SG&A Expenses		\$1,242	\$255	\$108
Other Operating Income Or Expenses		\$-663	-	-
Operating Expenses		\$4,275	\$1,021	\$409
<b>Operating Income</b>		<b>\$-4,220</b>	<b>\$-1,021</b>	<b>\$-409</b>
Total Non-Operating Income/Expense		\$-468	\$3	\$-17
<b>Pre-Tax Income</b>		<b>\$-4,688</b>	<b>\$-1,018</b>	<b>\$-426</b>
Income Taxes		-	-	-
<b>Income After Taxes</b>		<b>\$-4,688</b>	<b>\$-1,018</b>	<b>\$-426</b>
Other Income		-	-	-
<b>Income From Continuous Operations</b>		<b>\$-4,688</b>	<b>\$-1,018</b>	<b>\$-426</b>
Income From Discontinued Operations		-	-	-
<b>Net Income</b>		<b>\$-4,688</b>	<b>\$-1,019</b>	<b>\$-426</b>
EBITDA		<b>\$-4,023</b>	<b>\$-992</b>	<b>\$-402</b>
EBIT		<b>\$-4,220</b>	<b>\$-1,021</b>	<b>\$-409</b>
Basic Shares Outstanding		204	101	98
Shares Outstanding		204	101	98
<b>Basic EPS</b>		<b>\$-22.98</b>	<b>\$-10.09</b>	<b>\$-4.35</b>
<b>EPS - Earnings Per Share</b>		<b>\$-22.98</b>	<b>\$-10.09</b>	<b>\$-4.35</b>

# IT budget: Functional and Capital



# Cash Flow analysis

Quarterly Data   Millions of US \$ except per share data	2021-12-31	2021-09-30	2020-12-31	2020-09-30	2019-12-31
Net Income/Loss	\$2,227	\$-1,209	\$-353	\$-239	\$-426
Total Depreciation And Amortization - Cash Flow	\$-89	\$57	\$13	\$-10	\$29
Other Non-Cash Items	\$-513	\$513	\$-1	\$1	-
Total Non-Cash Items	\$-602	\$570	\$12	\$-9	\$29
Change In Accounts Receivable	-	-	-	-	-
Change In Inventories	\$157	\$-157	-	-	-
Change In Accounts Payable	-	-	-	-	-
Change In Assets/Liabilities	\$11	\$-11	\$19	\$-19	-
Total Change In Assets/Liabilities	\$-89	\$-11	\$35	\$36	\$29
<b>Cash Flow From Operating Activities</b>	<b>\$1,536</b>	<b>\$-688</b>	<b>\$268</b>	<b>\$227</b>	<b>\$-353</b>
Net Change In Property, Plant, And Equipment	\$1,338	\$-424	\$-307	\$-410	\$-197
Net Change In Intangible Assets	-	-	-	-	-
Net Acquisitions/Divestitures	-	-	-	-	-
Net Change In Short-term Investments	-	-	-	-	-
Net Change In Long-Term Investments	-	-	-	-	-
Net Change In Investments - Total	-	-	-	-	-
Investing Activities - Other	-	-	\$-3	\$5	\$-2
<b>Cash Flow From Investing Activities</b>	<b>\$1,338</b>	<b>\$-424</b>	<b>\$310</b>	<b>\$405</b>	<b>\$-199</b>
Net Long-Term Debt	\$-2,420	\$2,420	-	-	-
Net Current Debt	-	-	-	-	-
Debt Issuance/Retirement Net - Total	\$-2,420	\$2,420	-	\$-61	\$61
Net Common Equity Issued/Repurchased	\$-2,654	\$2,654	\$-2,500	\$2,500	-
Net Total Equity Issued/Repurchased	\$-2,654	\$154	-	\$-250	\$2,750
Total Common And Preferred Stock Dividends Paid	-	-	-	-	-
Financial Activities - Other	\$6	\$-6	-	-	-
<b>Cash Flow From Financial Activities</b>	<b>\$-5,068</b>	<b>\$2,568</b>	<b>-</b>	<b>\$-311</b>	<b>\$2,811</b>
<b>Net Cash Flow</b>	<b>\$-2,194</b>	<b>\$1,456</b>	<b>\$-578</b>	<b>\$-943</b>	<b>\$2,259</b>
Stock-Based Compensation	-	-	-	-	-
Common Stock Dividends Paid	-	-	-	-	-



# Delivery/Operations



## Customer Service strategy:

Dedicated service guide for each customer  
Online support center  
Chatbots



## Distributing services through physical and electronic channels

Rivian guide in constant touch  
Payment, location and delivery date can be set by mobile app



## Delivery options

Direct delivery to the customer  
Walkthrough by a Rivian Field Specialist or guided digital orientation



# Technology

- Skateboard architecture delivers massive 180 kWh battery which yields range of more than 400 miles
- Upcoming proprietary 800V architecture to improve battery power
- Integration with smartphones and other fitness trackers
- Keys and access: Bluetooth and NHC

Key fob

Key card

Waterproof sports band

Smartphone app

- Safety: Driver+

Tightly integrated set of cameras and sensors to assist drivers

- Security: Gear Guard

Reports any suspicious activity through a 360 degree view of space around vehicle



# Sales

- Pre Orders of 83000 vehicles
- 2021
  - 920 vehicles delivered
  - \$55 million revenue generated
- 2022
  - Yearly target of 25000 vehicle deliveries
  - 1227 vehicles delivered till date



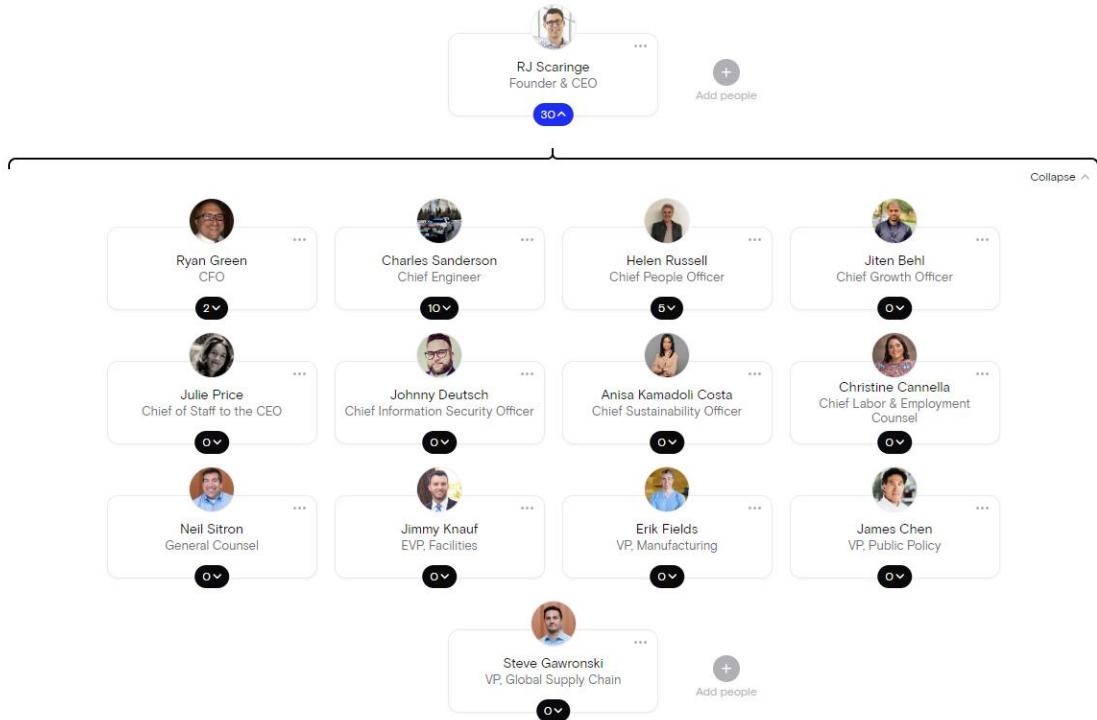
# Human resources

The strength of the organization we build, and the way that we work together, and the culture in which we operate, that's the only real long-term sustainable competitive advantage.- RJ, Founder and CEO

- Hiring strategy should consider the willingness to upskill oneself and the ability to contribute in a collaborative environment
- Compensation in the form of equity and various benefits
- Various development and training opportunities are provided



# Staffing Plan





# Outsourcing strategy

- Most EV startups opt for developing their electric powertrains in-house as opposed to traditional carmakers
- Rivian is the only startup fully outsources its electric drive units.
- In order to have a proper strategy and mitigate risks, Rivian has set up different Terms and Conditions agreement :
  - Production Purchases: Purchases of component parts incorporated into vehicles or products
  - Machinery and Equipment Purchases: Purchases of manufacturing equipments
  - Indirect Purchases: All other purchases



# Suppliers list

Audio - Meridian

Suspension - Tenneco

Could be almost anything - Magna

Tires - Pirelli

Seats - Hyundai Transys

Batteries - Samsung

Motors - Bosch

Braking System - Bosch

Front End - Plastic Omnium

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Multiple Components - Ningbo Tuopo Group

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Lighting - Varroq Group

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Manufacturing/Support

Suspension Testing - AB Dynamics

Robotics - Paslin



# Outsourcing success metrics

- Service Quality
- Cost Management
- Operational efficiency
- Growth
- Performance
- Communication
- Compliance
- Reviews



# Implementation Strategy

# Competitive Market Strategy – Phase I



New partnerships for supplying drive-train components

- Valuable expertise
- Enhances EV adoption
- Early-mover
- Distribution network

Enter mainstream automotive market

- New customers
- Motivation for EV adoption
- Limits partnerships

Enter renewable energy market

- Growing industry
- Valuable IP
- Green Energy
- New Market





# Roll Out Plan

## Amazon-Backed Rivian Set to Announce Plan for Georgia EV Factory

- Plant to include vehicle assembly, battery manufacturing
- Company also considered competing sites in Texas, Arizona



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Rivian announced Dec. 16, 2021, that it will open a vehicle assembly and battery plant near Atlanta. The \$5 billion project is slated to break ground in the coming months.

Rivian Automotive rolled out the first all-electric pickup truck, the R1T, on Sept. 14, 2021. On Nov. 9, 2021, the much-anticipated RIVN IPO priced strong. The EV startup had a monster IPO, however shares have fallen well below their IPO price recently, amid an overall market downturn

The Rivian IPO priced an upsized 153 million shares at \$78 a share Nov. 9, 2021, above the expected range. The RIVN IPO raised \$11.9 billion, giving Rivian an initial valuation of roughly \$77 billion. Shares soared to 179.47 on Nov.



# Measurement and Metrics



# Traditional Measures

## CPA – Cost Per Acquisition

This is also known as cost per conversion and is dependent on industry, location, ad type, season, etc.

## CR - Campaign Revenue

$$CR = \text{total conversions} * \text{life time value} * \text{closing ratio}$$

## ROAS – Return on Advertising Spend

Calculated as total campaign revenue per total campaign cost

## LTV - Lifetime Value

$$LTV = \text{Average Transaction} + \text{Annual Purchase} + \text{expected years of relationship}$$



# Traditional Measures

## Funding

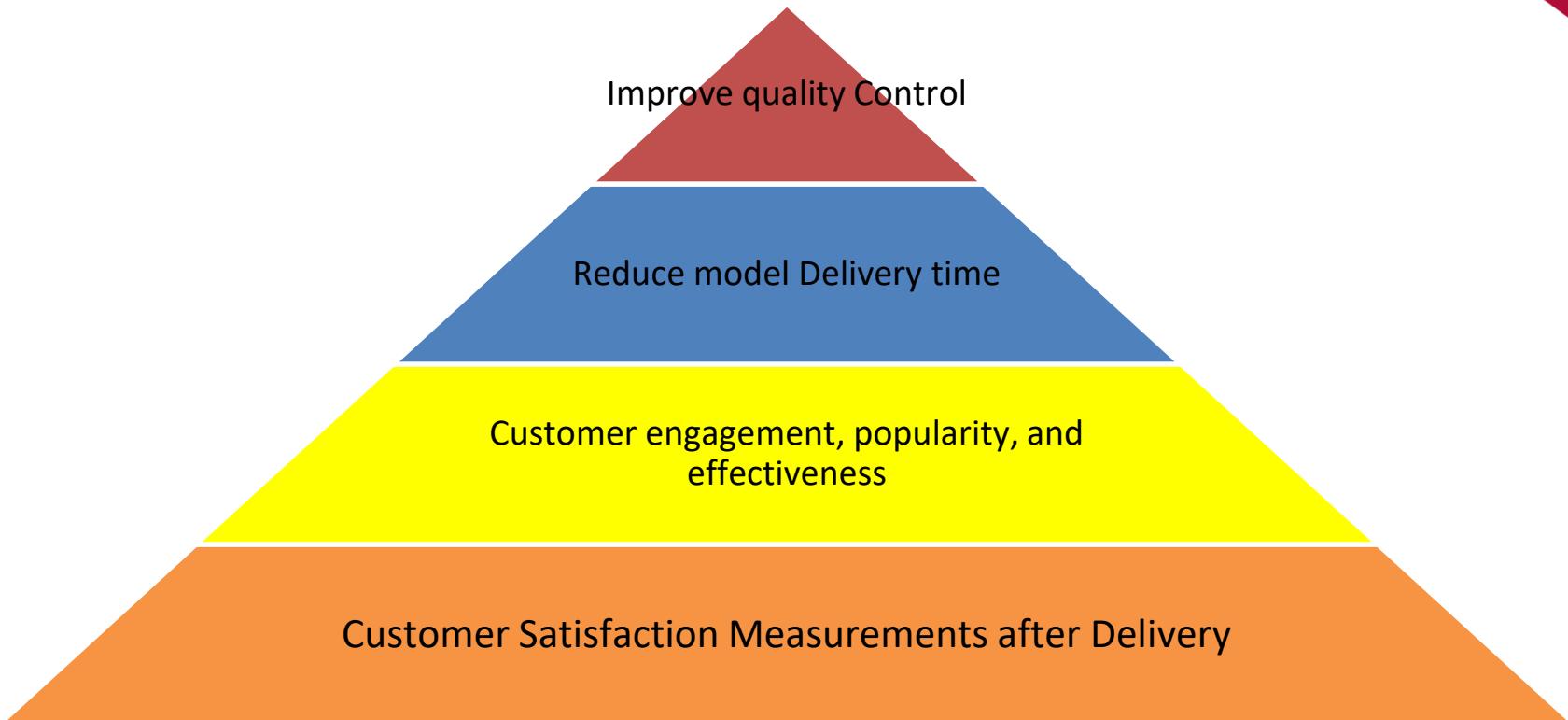
- Rivian has raised a total of \$10.7B in funding over 10 rounds. Their latest funding was raised on Jul 23,2021 from a Private Equity round.
- Rivian is registered under the ticker [NASDAQ:RIVN](https://www.nasdaq.com/symbol/RIVN)
- Their stock opened with \$78.00 in its Nov 10, 2021 IPO.
- Rivian is funded by 19 investors. Ford Motor and D1 Capital Partners are the most recent investors.
- Rivian has a post-money valuation in the range of [\\$10B+](#) as of Jan 6, 2021

Total funding for Rivian  
\$10.7B

Estimated worth of  
Rivian  
\$116 Billion



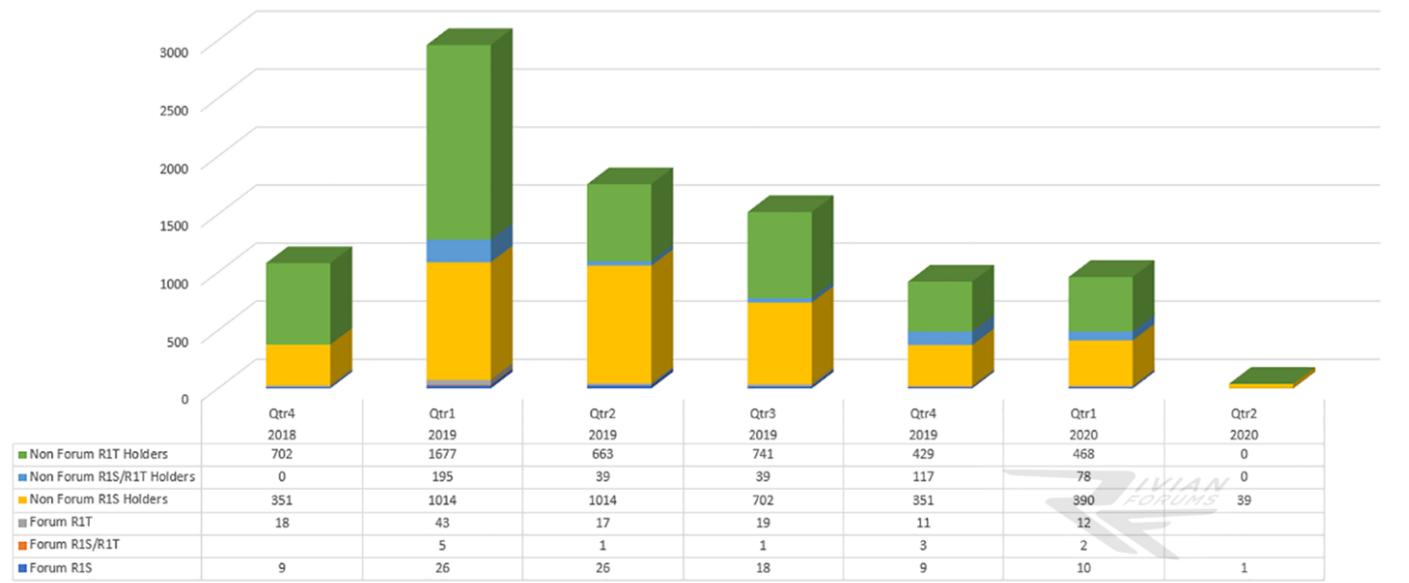
# New Metrics





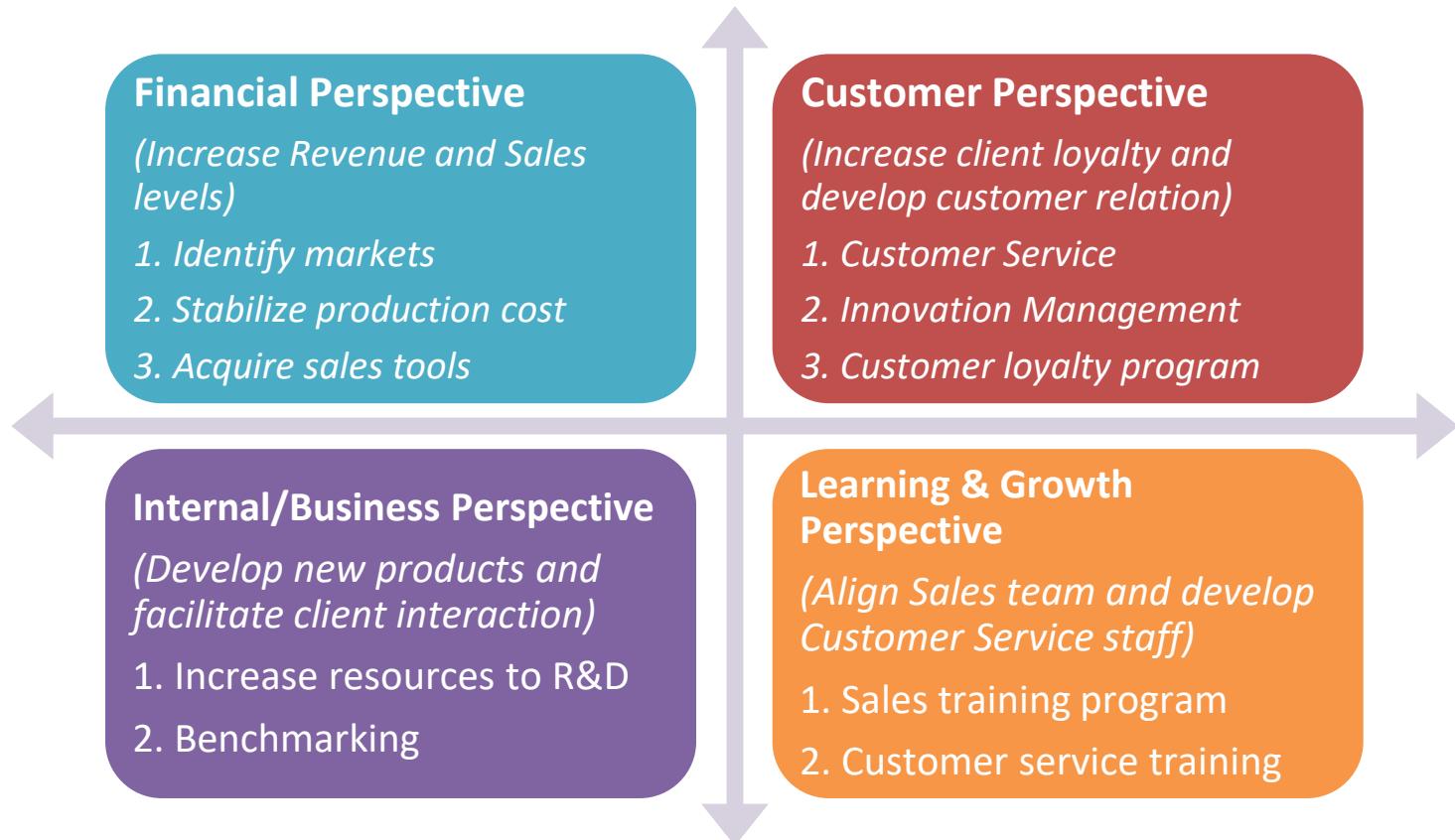
# New Metrics

Overlaying the other Non-Forum Reservations on top of the Forum Pattern for the vehicles





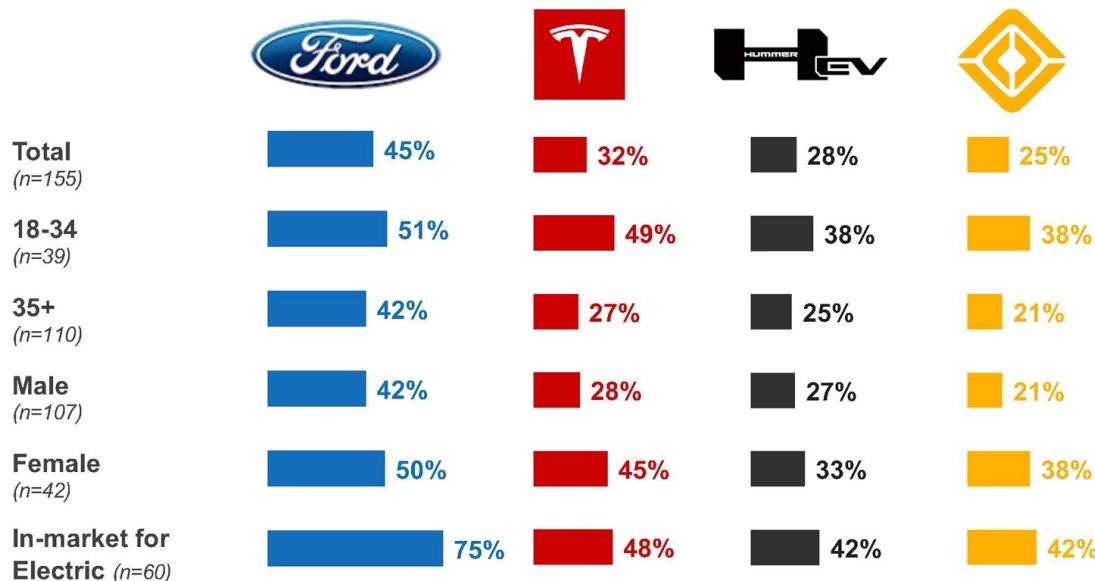
# Balance Scorecard





# Value Measurements

As Rivian is an emerging EV Company it has gained popularity in this industry.



Q. How likely are you to consider the following pickup truck for your next purchase?



# Link between IT metrics and Business

The key to linking IT to business performance creates an environment where everyone understands what measures are important to the business and are accountable for them.

## Enterprise Measures

- Ties the work of IT directly to the performance of the organization.
- Example: Customer Satisfaction, Corporate Financial Performance.

## Functional Measures

- Assess the internal work of the IT organization as a whole.
- Example: IT employee satisfaction, internal customer satisfaction, operational performance, development productivity.

## Project Measures

- Assess the performance of a project team in delivering specific value to the organization
- Example: Business case benefits, Delivery on time



# Dashboard (User Interface)





# Dashboard (Web Performance)





# Dashboard (Product and Subscription Sales)





# Issues

# **Government regulations and policies (Political and Legal environment)**



According to the latest government policies, there is threat to freeze national fuel-efficiency and CO2 standards which would undermine automakers investment in EV vehicles as well as to limit tax rebates for EV companies

# Technology environment

- Shortage of Chips: Over the past two years, the chip shortage has led companies to slash production and cut electronic features in vehicles like touch screens and seat heaters
- Supply Chain Issues: The entire automotive sector is facing supply-chain disruptions triggered by the Covid-19 pandemic. Indeed, beginning in 2020, the authorities' measures designed to limit Covid-19 infections particularly hamstrung suppliers of spare parts, forcing carmakers to slow production or close factories altogether.
- With other big competitors like Tesla , Rivian is bound to face issues, as they do not utilize the resources used in EV Industry.



# Macroeconomic environment

- One of the famous new emerging companies in the world of EV after Tesla is Rivian who not only builds all-electric vehicles but also infinitely scalable clean energy generation and storage products.
- There were separated graphs that showed that Model R1T owners' 71 percent are males and Model R1 S owners' 23 percent are females. As we calculated the average percentage, we found out that unfortunately, only 24 percent owners are females. Numbers are based on a universe of Rivian .
- The typical new Rivian customer is male, in their 50s, owns their own home and has a high household income. People who buy and drive Rivian 's cars are more eco-friendly than those who can afford these cars but prefer others.





# Social environment

- The environment at Rivian is considered positive by 75% of employees and regarded as having an “extremely fast” work pace by 10 employees.
- Rivian ranks in the Top 50% of 1554 similar sized companies (5,001-10,000 Employees) on Comparably.

## Rate Environment the Highest

Gender - Female	-3%
Experience - Over 10 Years	-10%

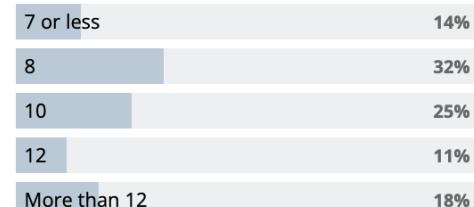
## Rate Environment the Lowest

Ethnicity - Asian or Pacific Islander	-18%
Gender - Male	-16%

## How Rivian's Environment Score is Calculated

FILTER RATINGS BY ▾

Results from 28 Employees in All Departments, All Genders, All Ethnicities and All Yrs. Experience  
Experience

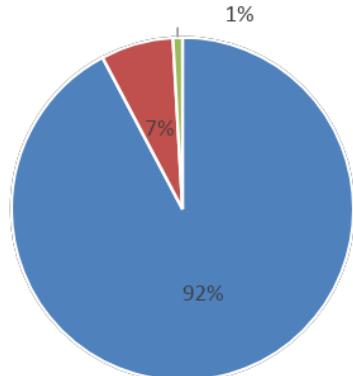


# Demographic environment

- The Overview at Rivian's website shows exactly the target market for their vehicles.
- It's two trims, the explore and adventure, show that Rivian is marketing the truck towards the sporty and outdoors-type while also offering sufficient utilitarian features for less traditionally outdoors people.

Gender Distribution

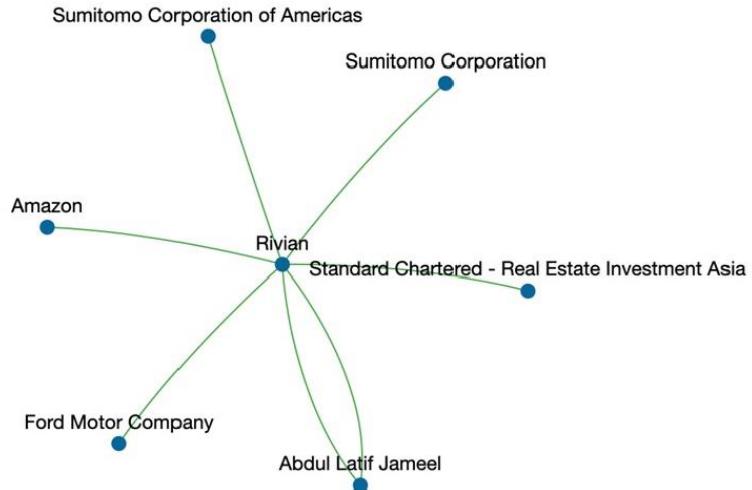
■ Male ■ Female ■ Others





## Rivian's investors

Disclosed investors with a stake in Rivian since 2017 – 2019 YTD (8/6/2019)



Source: cbinsights.com

CBINSIGHTS





# Conclusion

# Conclusion

- Strategically, Rivian has chosen to focus on range anxiety, or the fear that an electric vehicle will run out of power before the driver can reach a charging station. This is a key factor in car buyers' decision on whether to purchase an EV.
- Rivian's entry-level cars hope to offer more range than a top-spec Tesla, which has helped the company gain attention.
- The company plans to deliver a massive 180 kWh battery model, which it claims could yield more than 400 miles of range





# Recommendation

## Quality control measurements

- For quality control measurements, we recommend Rivian to perform a Reliability Quality measurement to address the current concerns with their battery's durability and vehicles' maintenance. Through this process, company will be able to understand whether their batteries and cars will work for a long time without failing or requiring maintenance.

## Time control measurements

- For time control measurements, they can implement delivery speed measurements, which will say how quickly the operations or supply chain can deliver a car or offer a service once the customer put in a request.

## Customer satisfaction measurements

- Rivian has a unique approach when it comes to car deliveries – cars are distributed directly to customers instead of using a dealership. With that, the company has a closer look on the customer relationship process.



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# Questions? Comments! & Concerns :(





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