



# **Do Dealers Help or Hurt EV Sales? Distribution Structure and Retail Performance in the U.S. Market for EVs**

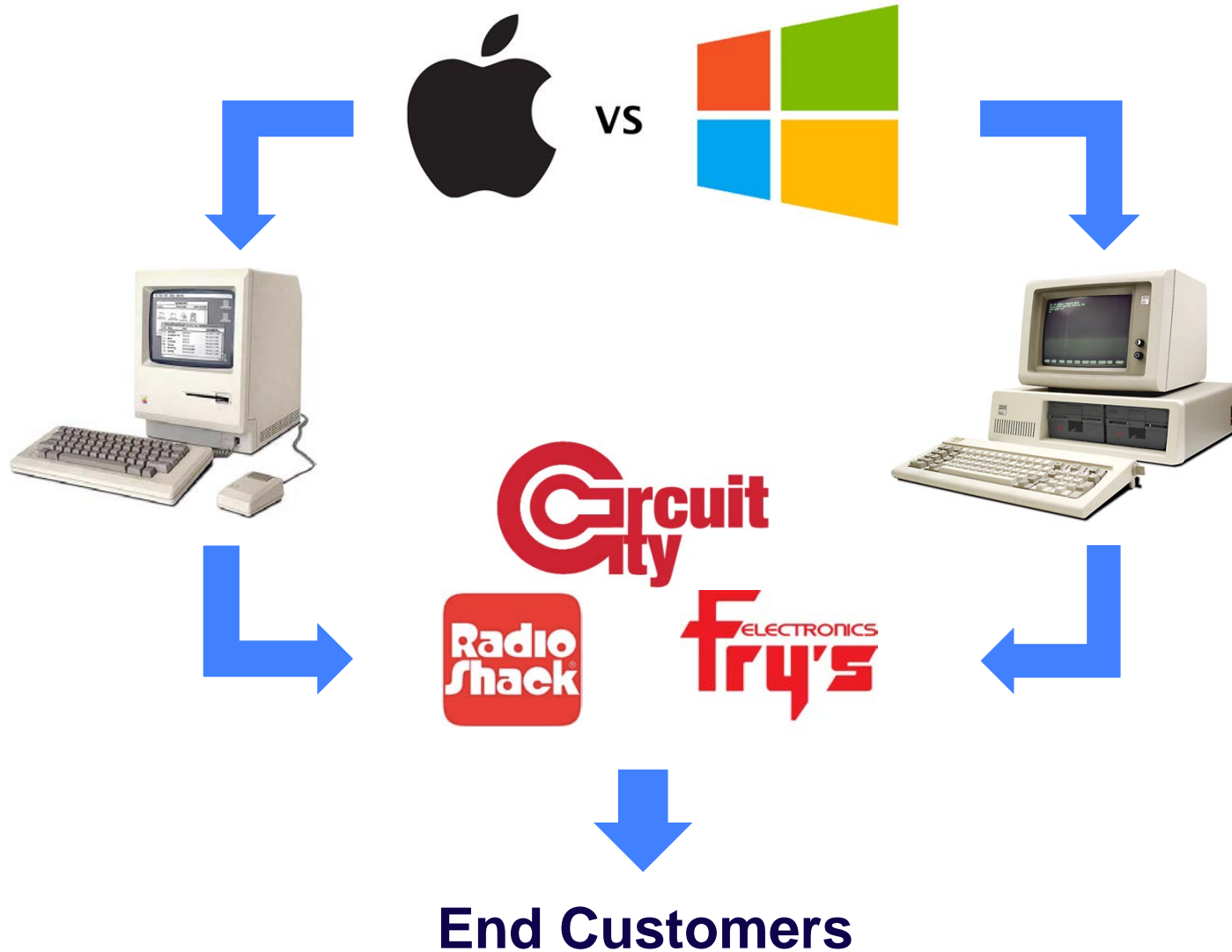
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**IEA Transport and Behavior Workshop**

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# Remember when...

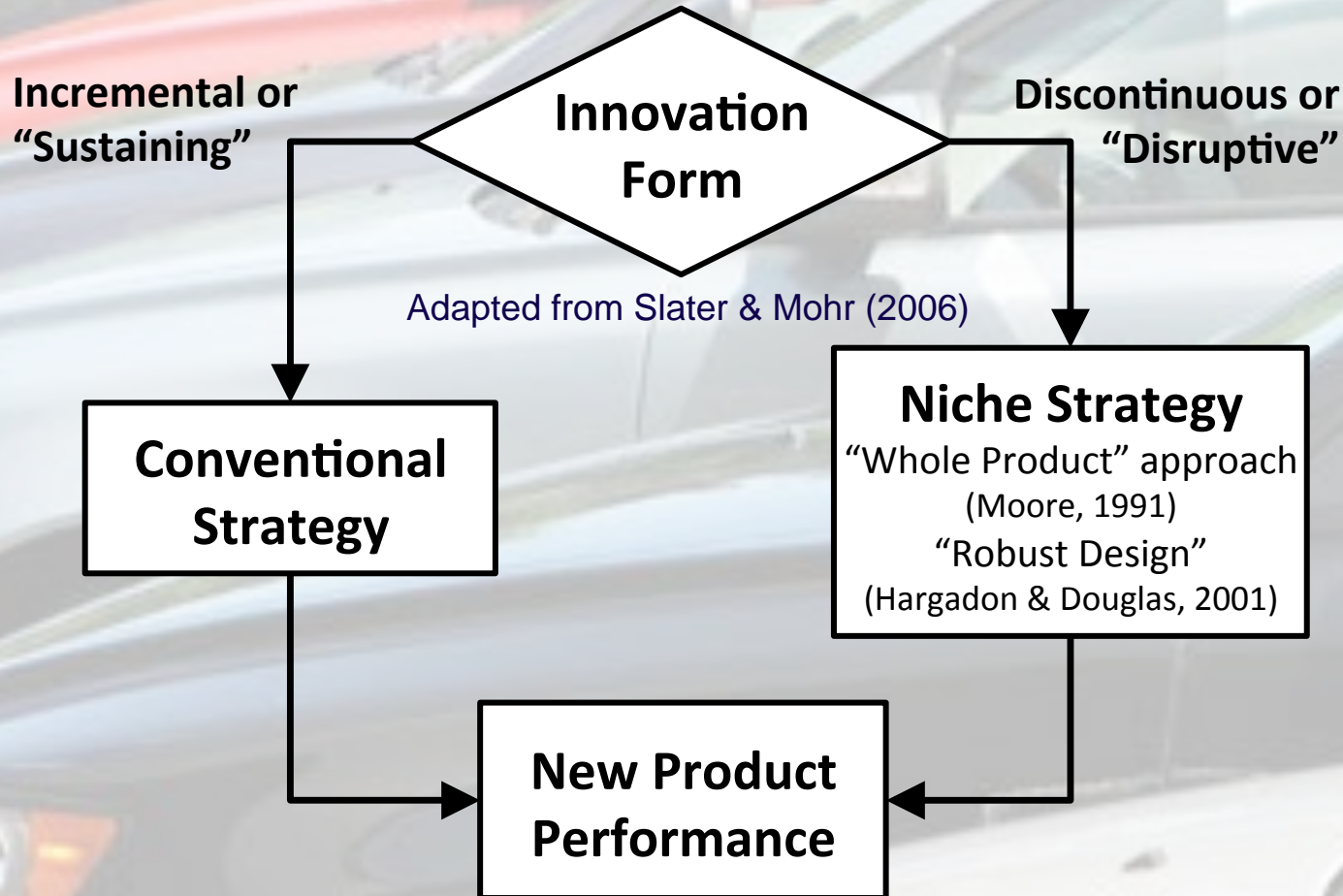




Apple now...



# New product success hinges on matching innovation form with distribution strategy



## Defining “discontinuity:”

- Involves new or unfamiliar technology
- New contexts of use
- New performance curves
- Dependence on new infrastructure

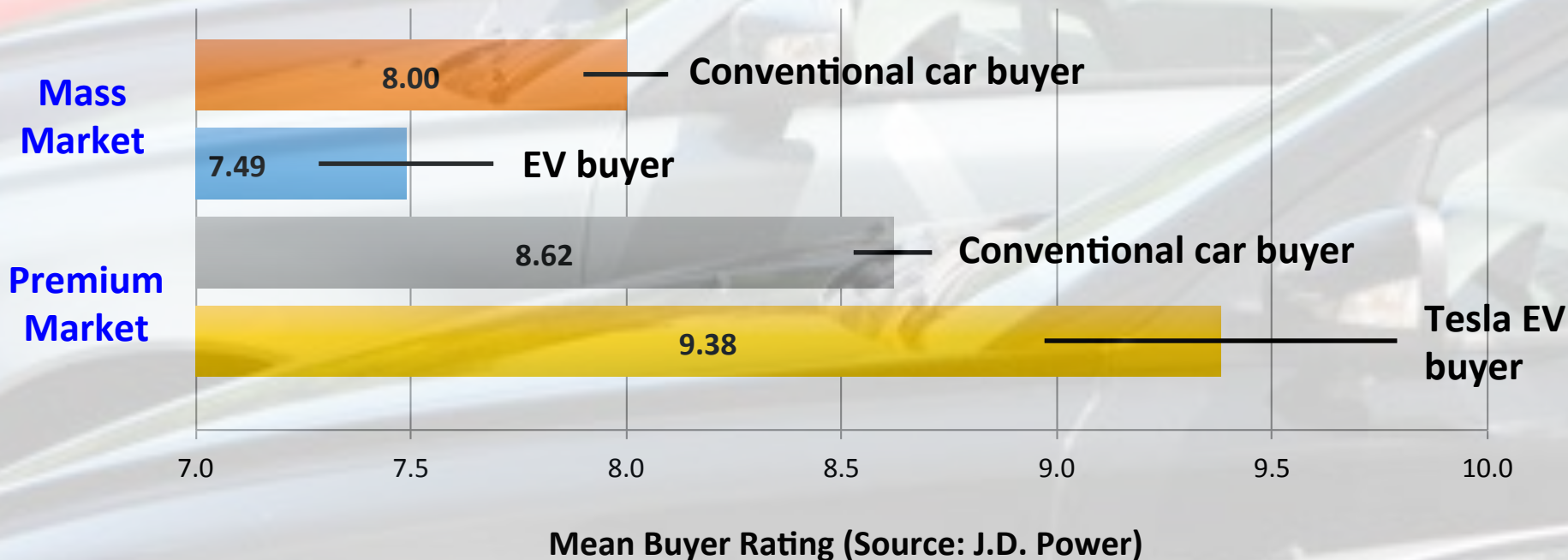


# Key Research Questions

1. How does the retail experience of EV buyers compare with buyers of conventional vehicles?
2. Do EVs need alternative distribution approaches?
3. To what extent are industry distribution structures positioned to provide these approaches?



# EV buyers reported lower satisfaction with the retail experience via dealers, higher satisfaction via direct sales



Source: 2013 Sales Satisfaction Index (SSI) Study, JD Power & Associates

Controls for demographic factors; Bars = 95% confidence interval

\* Does not include “rejecters” who shopped for an EV but bought a conventional car or shopped one dealer but bought from another.



# EVs pose distinct challenges for customers

Unfamiliar technology

+ underdeveloped infrastructure

= High Risk

→ Splits early and mainstream markets



# EVs pose challenges for dealers

**Dealers = familiar product + high demand**

**EVs = unfamiliar product + low (initial) demand**

**EVs also:**

- **Require up-front dealer investments**
- **Involve steep learning curves; added liability**
- **Offer fewer profit opportunities (loss leaders)**
- **Longer sales turns**
- **Are unavailable in larger vehicles**

***EVs present a classic problem of disproportionate returns for new vehicle distributors (dealers).***



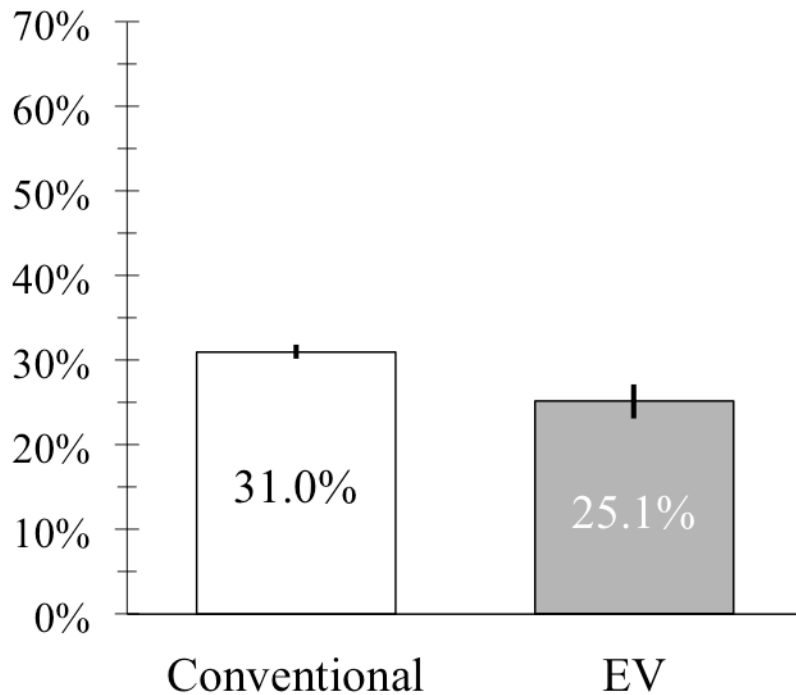
# Retail innovations from champion EV dealers include...



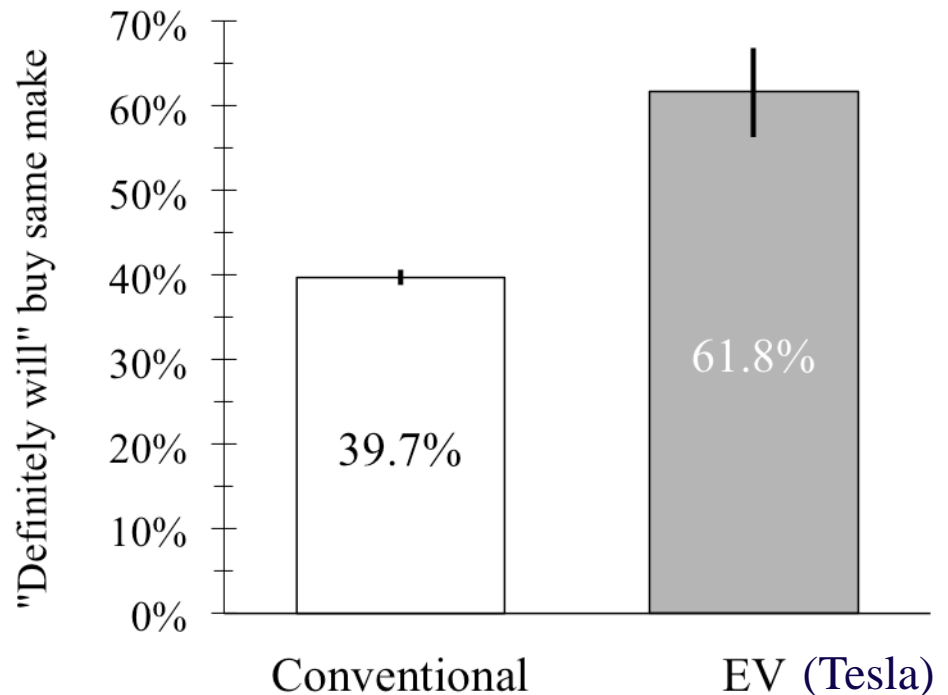
- Web-based reservations (discontinued)
- Targeted “ride and drive” events and special leases
- Pre-affixed HOV decals
- Co-locating of complementary products
- Extended test drives
- Access to loaner cars
- On-lot DC fast chargers
- Dealer and customer support hotlines

# For better or worse, purchase experience impacts customer loyalty

Intended Make Loyalty  
(Mass Market)

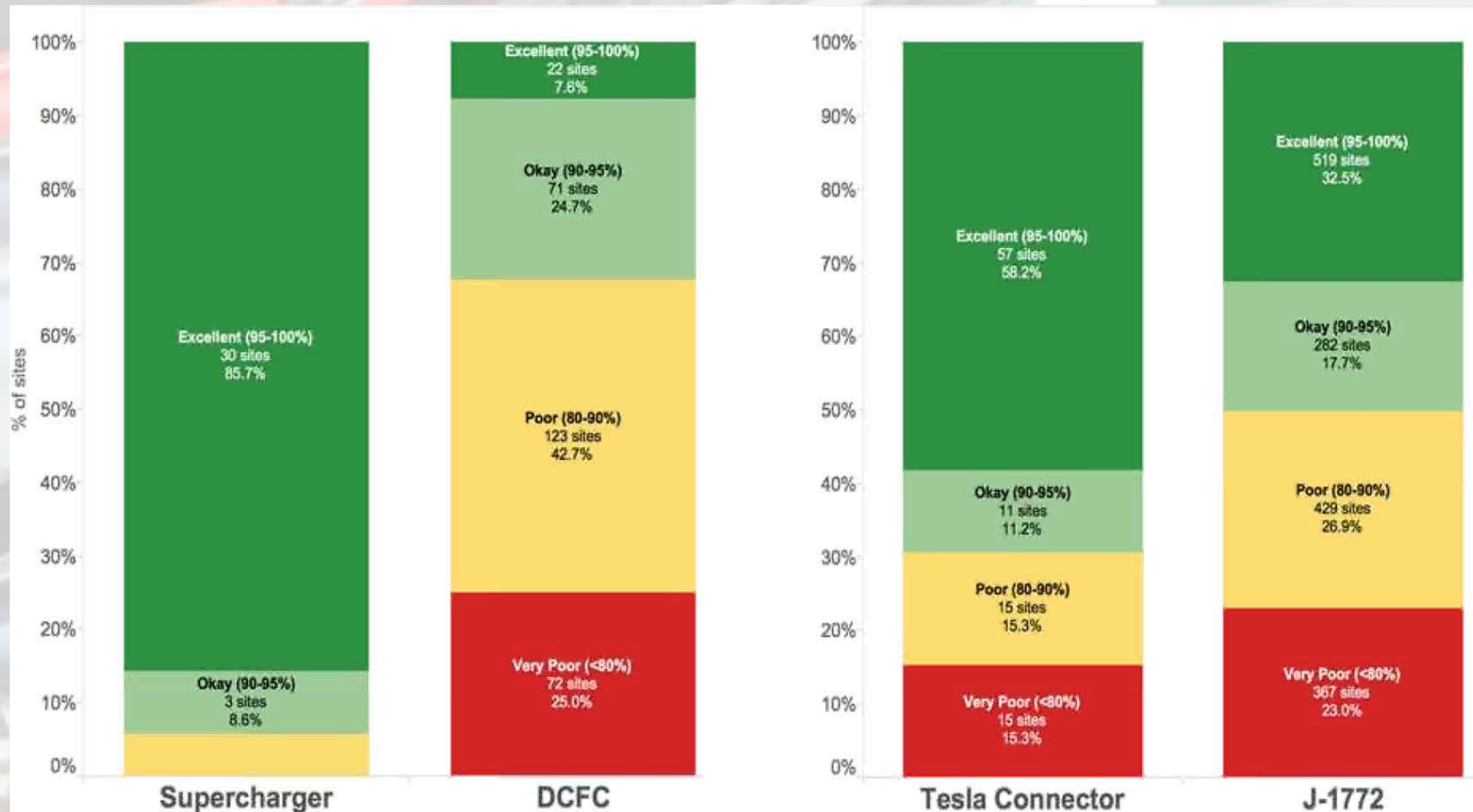


Intended Make Loyalty  
(Premium Market)





# Tesla charging infrastructure far ahead in customer satisfaction



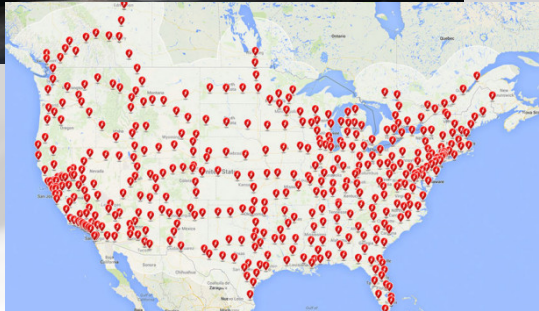
Source: PlugShare Data, 12/01/2015. Sites categorized by % of positive + neutral reviews over previous 12 months. Sites included in all connector categories they host. DCFC includes public and restricted access sites in CA.



# Retail Trailblazers: Tesla

Company ownership of all customer touch-points ensures single source accountability for:

- Retail quality
- End-to-end infrastructure



## Retail Innovations:

- Online sales transactions
- High-power fast charging
- Remote troubleshooting
- Autopilot
- Flash updates



# Retail Trailblazer: Tesla



**Features retail space designed for:**

- Consumer awareness
- Convenience
- Brand building
- Learning
- Simplicity (e.g., set price model)
- Consistency

Legend:

- Red: MI, IA, WV, TX, AZ
- Orange: OR, MN, MO, OH, NC, FL
- Yellow: WA, CA, NV, CO, NY, PA, VA, GA
- Grey: MT, ND, SD, NE, KS, OK, NM, UT, ID, WY, MT, WI, IL, IN, KY, TN, MS, AL, LA, AR, OK, NM, UT, ID, WY, MT, VT, NH, ME, MA, RI, CT, DE, MD, DC, HI, AK

# DMV warns Tesla its 'referral program' is unlawful

## HIGHLIGHTS

## DMV Investigations Division says Telsa offered 'bird dog fees' in September 29 letter

## Telsa told to correct multiple violations



# EVs pose distinct challenges for incumbent carmakers...

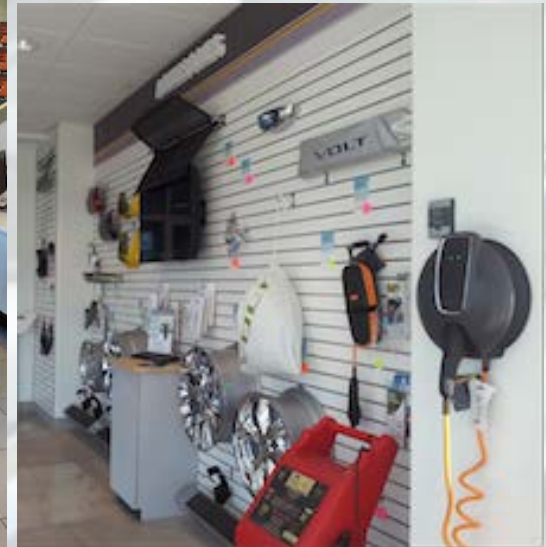
- **Low gas prices = EVs as loss leaders**
- **Limited control of the customer experience**
  - U.S. franchise laws limit the automaker's role
  - Unable to restrict EV sales to most-qualified dealers
  - De-burden dealers, but cannot offer services that could compete with dealers (e.g., pricing, sales, test drives, referrals, advertising, troubleshooting, etc.)
- **New marketing competencies and structures must be developed**
  - Early Market: Goal = Drive demand and discover the customer's end-to-end support needs
  - Main Market: Goal = Deliver end-to-end support at scale

# Thoughts and Conclusions

- The EV retail quality gap is real and may widen
- Legacy distribution structure and disproportionate returns to dealers appear to be contributing factors
- Poor retail experience may undermine EV adoption and loyalty
- EVs face barriers to market access that may entail new approaches to reach more customers
- ZEVs may need limited exemptions from franchise laws
- Expect a 10-15 year adjustment period
- Automakers will need to develop new marketing competencies



# Thank You



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## Citations:

Cahill, E.C. (2015). Distribution Strategy and Retail Performance in the U.S. Market for Plug-in Electric Vehicles: Implications for Product Innovation and Policy [Doctoral dissertation]. University of California, Davis, CA.

Cahill, E. (2016, May 11). Do Dealers Help or Hurt EV Sales? Distribution Structure and Retail Performance in the U.S. Market for EVs [Presentation]. Transport and Behaviour Workshop. International Energy Agency. Paris, France.

# **BACK-UP SLIDES**



# Other retail efforts: BMW



## Innovations include:

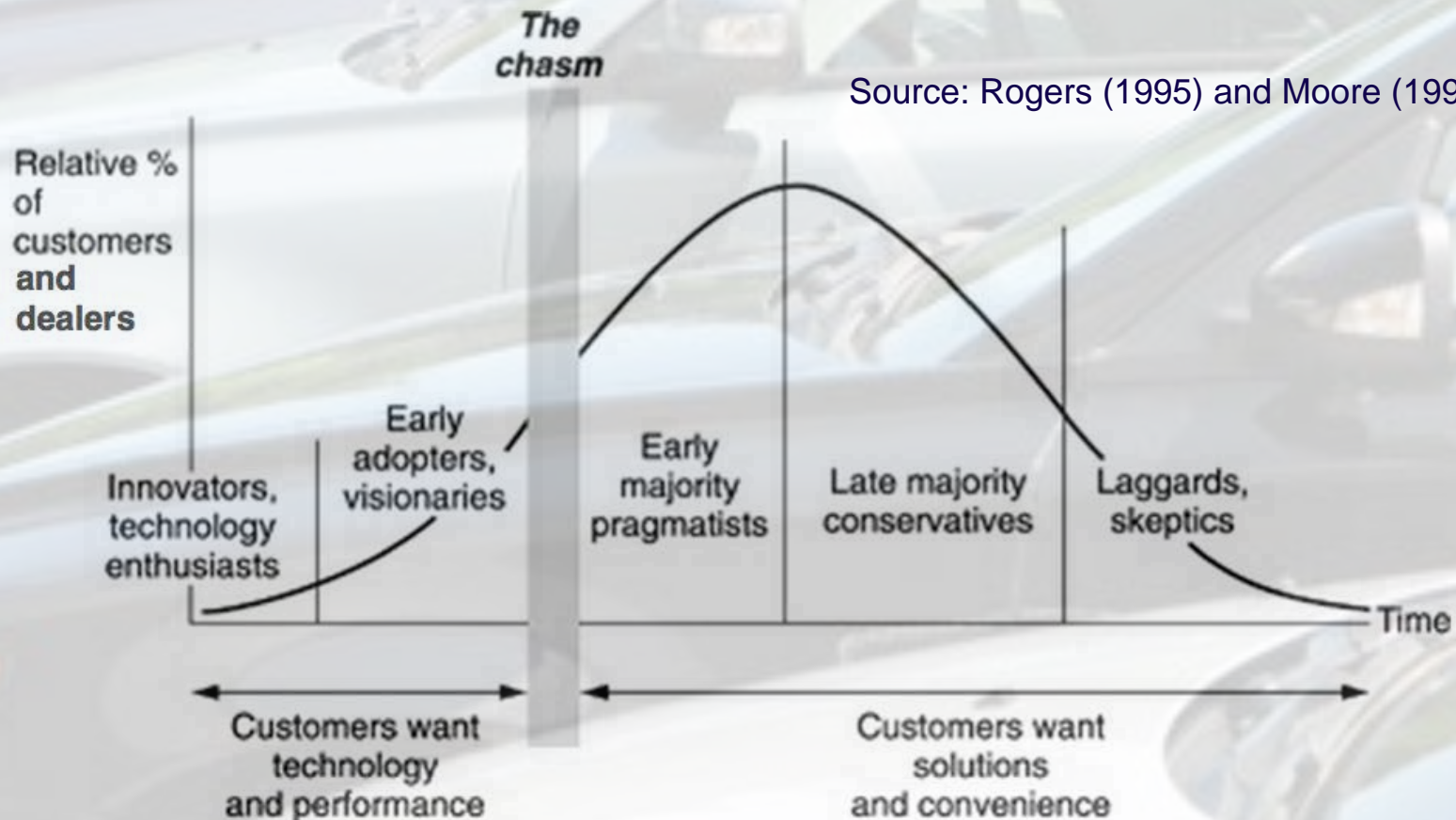
- Dedicated “i” sub-brand
- “Pop-up” retail stores featuring clean, simple, uniform learning-friendly experience



# Dealers are the first EV customers...

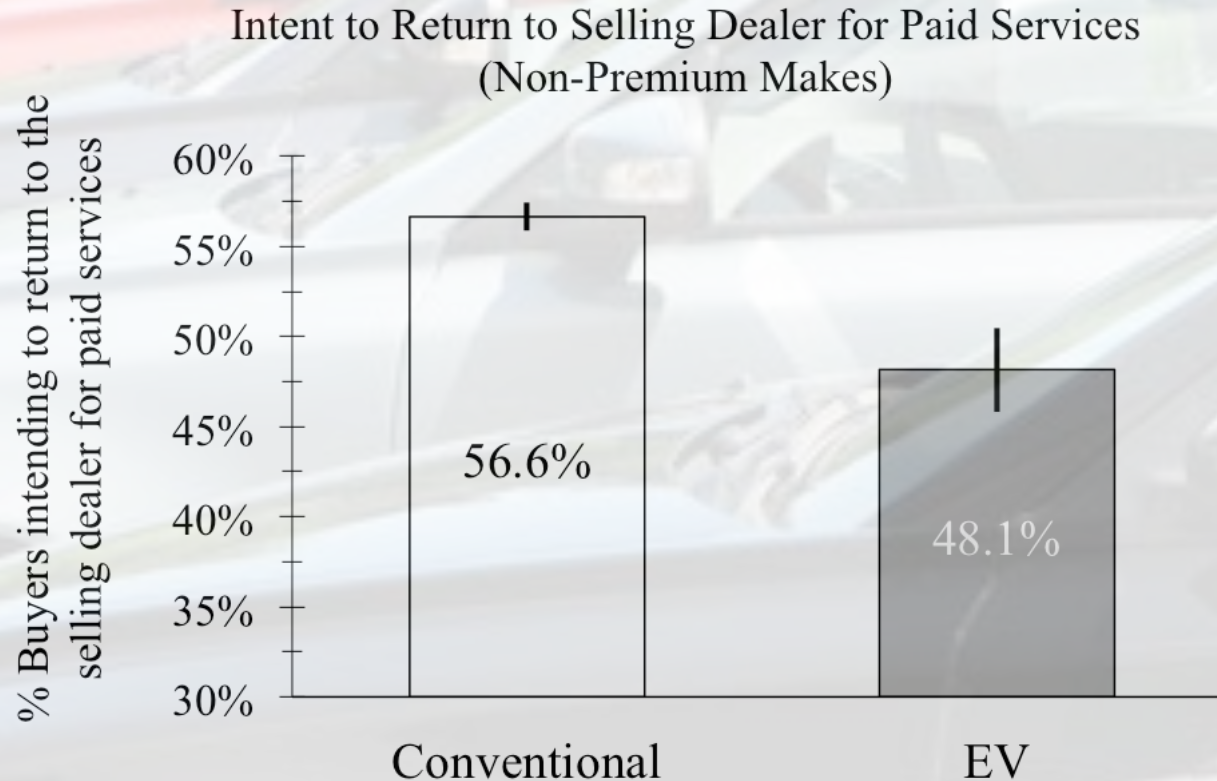
## Technology Adoption Lifecycle Model

Source: Rogers (1995) and Moore (1991)





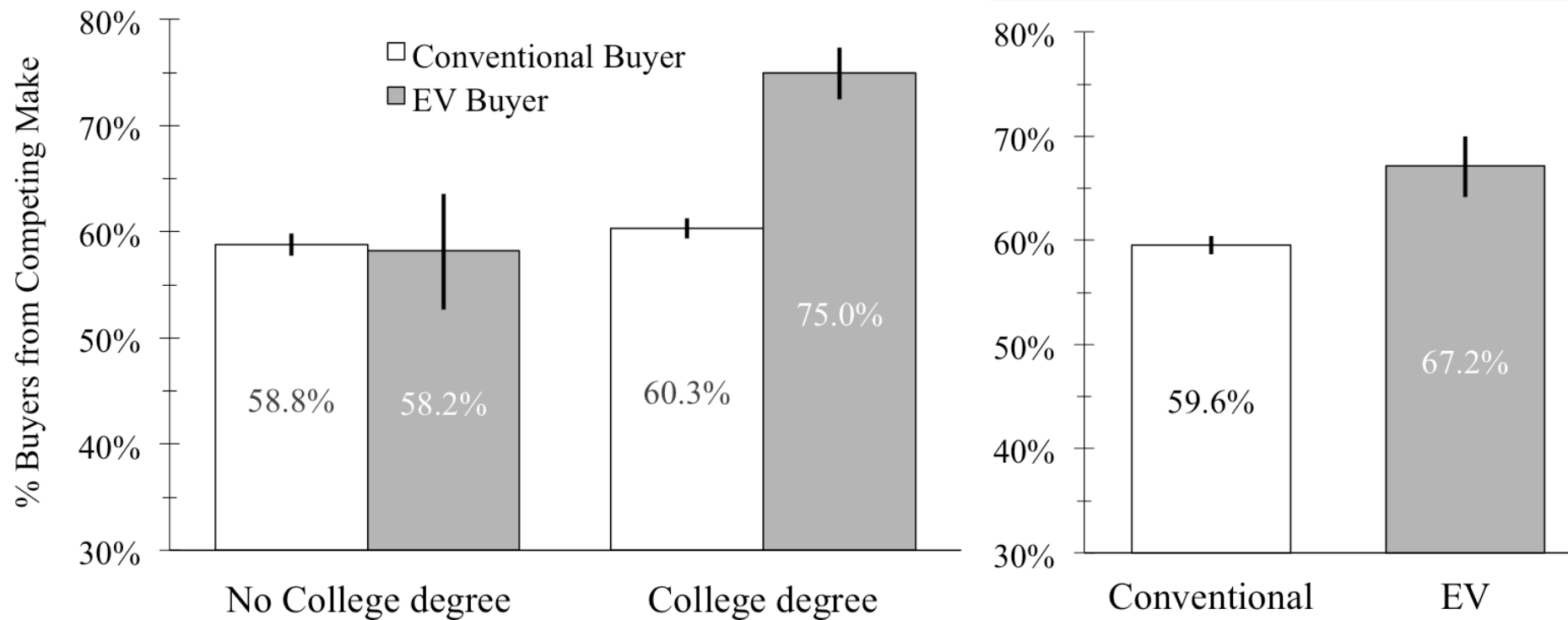
# Do EVs = fewer opportunities for dealer profit?



***For many dealers, the cost of selling EVs outweighs any near-term benefit***

Source: 2013 Sales Satisfaction Index (SSI) Study, JD Power & Associates  
Bars = 95% confidence interval

# EVs offer opportunity to win buyers from competing makes





# **Key findings from analysis of 2013 J.D. Power data**

- **Dealers are less likely to make money on EVs**
- **Dealers are more likely to earn lower ratings**
- **Dealers are more likely to steer customers away from EVs**
- **EV buyers are less likely to return next time**