



Retail Innovation in the U.S. Plug-in Electric Vehicle (EV) Market

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Apple then...



Apple vs. Microsoft



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EVs pose distinct challenges for customers...

- Involve new modes of behavior
- Dependence on new infrastructure
- Unfamiliar & confusing = High Risk
- Split between early and mainstream markets



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New product success hinges on a proper match between technology type and distribution strategy

Type of Innovation

- Incremental
- Disruptive (EVs)

Distribution Strategy

- Traditional
- Niche; "whole product" design

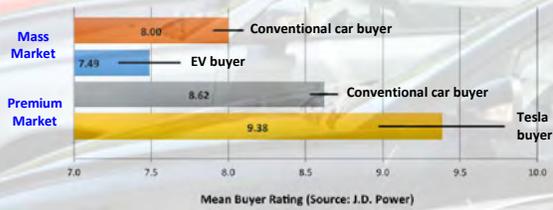
Adapted from Slater & Mohr (2006)

New Product Performance

- Survey data (JD Power 2013 Sales Satisfaction Index Study)
- Interviews

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Where automakers rely on dealers to sell EVs, customers report lower retail satisfaction



Market	Buyer Type	Mean Buyer Rating
Mass Market	Conventional car buyer	8.00
	EV buyer	7.49
Premium Market	Conventional car buyer	8.62
	Tesla buyer	9.38

Mean Buyer Rating (Source: J.D. Power)

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* Does not include "rejecters" who shopped for an EV but bought a conventional car
Source: 2013 Sales Satisfaction Index (SSI) Study, JD Power & Associates
Controls for demographic factors, Bars = 95% confidence interval

Key Questions

1. How does the retail experience of EV buyers compare with buyers of conventional vehicles?
2. Do EVs need alternative retail approaches?

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EVs pose challenges for dealers

- **Dealers = familiar products + high-demand**

EVs are:

- **Unfamiliar + low initial demand**
- **Involve a steep learning curve**

EVs also:

- **Require up-front investments**
- **Expose dealers to added liability**
- **Offer fewer profit opportunities**

For many dealers, the cost of selling EVs outweighs any potential benefit

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Dealers are the first customers of EV technologies...

Technology Adoption Lifecycle Model

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EVs pose distinct challenges for car makers...

- **Entail developing new marketing competencies**
 - *Early Market:* To stoke demand and identify end-to-end support needs
 - *Main Market:* To deliver end-to-end support at scale
- **EVs are loss leaders**
- **Dealers control the customer experience**
- **Franchise laws limit the carmaker's role**
 - Carmakers cannot limit EV sales to most-qualified dealers
 - Carmakers cannot offer support services that might compete with dealers (e.g., sales, test drives, referrals, advertising, troubleshooting, pricing, etc.)

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Some retail innovations include...

- Targeted "ride and drive" events and special pricing
- Web-based reservations
- Co-locating of complementary technologies on dealer lots
- Dealer/customer support hotlines

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Retail Trailblazers: Tesla

Company ownership of all customer touch-points ensures one entity is responsible for:

- **Retail Quality Control**
- **Provision of end-to-end support infrastructure**

Innovations:

- **High-power fast charging**
- **Remote troubleshooting**
- **Flash firmware updates**

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Retail Trailblazer: Tesla



Features retail space designed for:

- Convenience
- Mass exposure
- Simplicity (e.g. "no haggle" pricing)
- Learning

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Other retail efforts: BMW



Innovations include:

- Dedicated "i" sub-brand
- "Pop-up" retail stores
- Clean, simple, uniform learning-friendly experience




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TESLA'S STATE OF THE NATION



THE SACRAMENTO BEE

DMV warns Tesla its 'referral program' is unlawful

October 15, 2015

HIGHLIGHTS

- Tesla offered \$1,000 discount to Model S buyers using referral link of a current owner
- DMV Investigations Division says Tesla offered 'bird dog fees' in September 29 letter
- Tesla told to correct multiple violations

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Conclusions

- A sizeable retail quality gap exists between EV and conventional car buyers in the mass market
- EVs need new approaches and greater market access to reach more customers
- Easing franchise law restrictions for EVs could avoid choking off much-needed innovation by carmakers

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Thank You





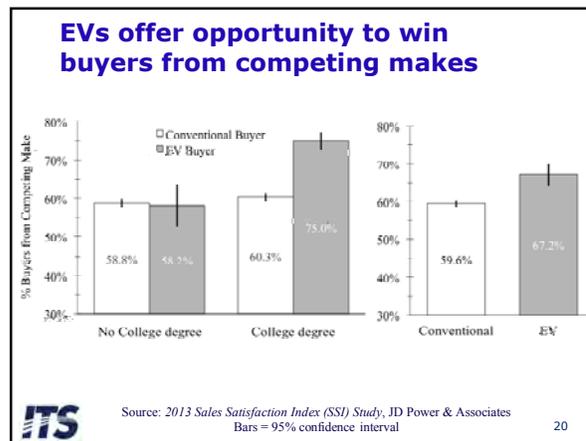
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BACK-UP SLIDES

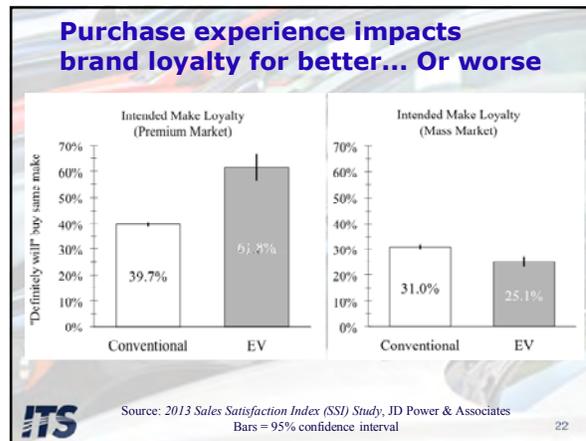
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Key findings from analysis of 2013 J.D. Power data

- 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

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State franchise laws limit options for automakers

- Originally protected dealers, now much more
- Automakers cannot:
 - Sell cars directly
 - Require dealers to sell certain models or vehicle types
 - Favor one dealer over another
 - Terminate dealers (in practice)
 - Many other restrictions
- Dealers control the retail experience
- Arms-length relations
- Relegated to financial 'carrots'

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We need to be thinking about how to get EVs the market access they need

- Ease franchise restrictions for EVs
- Grant OEMs access to alternative distribution pathways



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What policies, incentives & programs appear to be working?

Industry:

- Entry at the luxury end
- Exposing customers to EVs away from dealers
- Leveraging of "champion" dealers
- Targeted marketing by OEMs
- Dealer incentives

Government:

- Targeted incentives
- Reducing uncertainty



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What can governments do?

- Relax franchise restrictions
- Role for government:
 - > Help OEMs help dealers
 - > Help dealers help themselves
 - > Do for automakers what automakers cannot do for themselves



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