Information is the New Frontier

Get the best route, every day, with real-time help from other drivers.

Waze is the world's largest community-based traffic and navigation app. Join other drivers in your area who share real-time traffic and road info, saving everyone time and gas money on their daily commute.
A growing segment of consumers with quite different attitudes and behaviors.

• Rethinking the relationship they want to have with a car

“Mobility is a service that I consume whenever, wherever, and however I want it.”

One of the Honda vehicles in Zipcar's shared fleet available for one-way trips.
A prime example of the opportunity for incumbents to be the proactive disruptor, rather than respond to others.

**WHY IS IT IMPORTANT?**

• The confluence of social change, innovative business models, and new technologies is disrupting the mobility sector

With your Smartphone...

Daimler’s car2go

...you get in and drive off
WHY IS IT IMPORTANT?

• Far-reaching implications for the automotive industry, insurance, infrastructure, public transport, city planning, and new technologies

• Analogous developments are creating new opportunities and threats in retailing, banking, travel, communications, and energy

“Society and the automotive industry are undergoing radical change.” [Peter Schwartzenbauer, BMW Board of Management]
Developments in mobility have implications that reach far beyond individual passengers and drivers.

**WHAT ARE THE THREATS?**

- **Significant impact on vehicle sales – higher utilization, smaller fleet, faster replacement**
- Reduced demand for personal auto insurance
- Decline in use of traditional public transport
- Shift in mix of vehicle owners – more fleets, fewer individuals
WHAT ARE THE THREATS?

• Greater standardization and commoditization of vehicles
• Increased market transparency and competition
• Disruption of the traditional value chain
• Value captured by new players – Uber, Google, Apple
Research at UC Berkeley shows that each shared vehicle in North America reduces the need for 9-13 personal cars.

**IMPACT ON VEHICLE SALES**

- More than 1.5 million people are already using these services in the Americas
- Another study estimated that 5% pa growth in car sharing could halve US auto sales by 2020

“...you buy this asset, it depreciates fairly rapidly, you use it 3% of the time and pay a vast amount of money to park it for the other 97%.” [Dan Ammann, President, General Motors]
IMPACT ON VEHICLE SALES

These estimates may be exaggerated but they nonetheless indicate the magnitude of potential impacts.

- Reduced vehicle production – growth in excess capacity
- More intense competition
- Increased cooperation in R&D, development projects, and production
- Consolidation of manufacturers, suppliers, and dealers
IMPACT ON VEHICLE SALES

• Greater reliance on innovation ecosystems
• Difficult to differentiate products – expansion in services
• Competitive advantage from intangibles
Much at stake – the US industry collected $175 billion in passenger car insurance premiums in 2013.

- Fewer drivers and vehicles to insure
- Increased competition among insurers
- Automation of underwriting and claims
- Commoditization of basic auto insurance
- New insurance opportunities from innovative business models and technologies
These developments offer the possibility of being the disruptor, either as an established player or an entrepreneur.

AND WHAT ARE THE OPPORTUNITIES?

- Monetize underutilized capacity
- Redefine the relationship with a car
- Change the product into a service
- Reinvent the customer experience
- Introduce new technologies
- Innovate with business models
As a market matures and commoditizes the sources of competitive advantage become increasingly intangible.

- Customer insights
- Skills and capabilities
- Brands, reputation
- Use of information
- Relationships
- Trust
Trust is central in this new ecology. It determines what you can do with information.

- Customer information has become the most valuable asset
- Trust is prerequisite for customers to disclose sensitive information and authorize its use
- Customer information management drives the dynamics of relationship value
- The dynamics can be either virtuous or vicious
The relationship can *build value* for both the customer and provider.

**Customer**
- trust = greater openness + empowerment of provider

**Provider**
- personalization + push = greater value added for customer

How can we demonstrate trustworthiness to customers?

What’s the payoff for us?

© Henry Birdseye Weil and Elisabeth Endicott Weil 2001
Three streams of vehicle technology are converging to affect the design and operation of passenger cars.

- **The connected vehicle**
- The autonomous vehicle
- The sustainable vehicle
The connected car *already is a reality.*

- Vehicles are becoming connected to one another, a wide range of information providers, the emergency services, and insurers

- *The immediate bottleneck is the proliferation of proprietary standards and vehicle-centric walled garden platforms*
• Google and Apple are driving the move to widely accepted, open standard smartphone apps for the connected vehicle

“As more technology is incorporated in the car, the industry wants to avoid the fate of the PC companies and handset makers....” [FT 19/20 September 2015]

“What is important to us is (that) the brain of the car is not (an) operating system like iOS or Android...but is our brain.” [Dieter Zetsche, Chairman, Daimler Board of Management]
Most business model innovations are platform plays.

- **Very powerful network effects**
  - attractiveness to developers
  - use of customer information
  - value to customers

- Communities generate valuable meta-data

- Tipping dynamics produce dominant platforms
  - Google, Apple, Facebook, Alibaba, Uber
PLATFORM DYNAMICS

value

apps on the platform

# of users and volume

attractiveness to developers

selection

supply

attractiveness to customers

P2P

customer information

communities

meta-data
INNOVATION WITH BUSINESS MODELS

Uber is an excellent example of the *key attributes* of a successful innovation.

- *Solve a problem for customers*
- Redefine quality
- Keep it simple
- Build in flexibility, allow experimentation
- Create powerful network effects
- *Forget about your “industry”*
Uber has more than 200,000 drivers, operates in more than 300 cities, and is valued at $50 billion.
Google bought Waze for $1.1 billion. Waze is piloting a car sharing service.
BMW’s DriveNow has 360,000 customers in Germany. Plans to launch in 25 more cities.
car2go in being rolled out in US cities.
BlaBlaCar is raising $160 million, valuing ride-sharing startup at $1.2 billion.
INNOVATE WITH BUSINESS MODELS

• Uber is experimenting with many complementary services
  - package delivery
  - food delivery
  - ride sharing

• So far, mixed results
• Uber may dominate the taxi hailing segment in some markets, but other parts of the mobility economy are in the “fluid phase”
  - many competitor
  - no dominant player or business model
  - no technical standards

• Key pieces of a complete solution are missing, e.g., insurance, linking to customers’ IT systems
WHAT NEXT?

• Lots of experimentation
• Emergence of dominant designs and standards
• Open platforms
• Industry consolidation
• Winners and losers
• *Business models will be more important than vehicle technologies*