Overview of
J. D. Power and Associates
Today’s Agenda

• Background of JDPA

• Overview Some Key Syndicated Studies
  – Initial Quality Study (IQS)
  – APEAL
  – CQR
  – VDS

• Overview of Proprietary Studies

• Questions and Wrap Up
J.D. Power and Associates has Broad Industry Experience in Diverse Geographical Regions

- Operates in more than 20 industries
  - Core industries include: Automotive, Insurance, Home Builder, Travel, Mortgage, Telecom, Financial Services and Healthcare
- Proprietary research, consulting and forecasting in over 60 countries
- Nearly 800 associates in 12 offices worldwide
- Conducted Automotive Studies in major markets throughout Asia, Europe and North America with the ability to provide Research and Consulting services in any market worldwide
Industries Served

Our experience in “voice of the customer” measurement spans a variety of industries.

- Automotive (Light, Medium and Heavy Duty)
- Cable Broadcasting
- Consumer Electronics
- Credit Cards/Financial Services
- Durables/Appliances
- Health Care
- Home Builder Industry Services
- Marine
- Media/Advertising
- Office Equipment
- Packaged Goods
- Peripherals
- Powersports
- Specialty Vehicles (RVs, Construction, Agricultural)
- Sporting Events
- Telecommunications
- Travel (Hotel, Airline, Rental Car)
- Transportation
- Utilities
J.D. Power and Associates Strategic Intent

“To enable decisions and better results for business and consumers through credible, meaningful and easily accessible customer-based information.”

Basic Data

Integrated “Decision Support” Process

Product Solution

Research and Analysis

Forecasts/Market Intelligence

B2B Consulting

Performance Improvement

- Global Syndicated Research
- Proprietary/Custom Research
- Global Vehicle Sales Forecasts
- Global Vehicle Production Forecasts
- Powertrain Production Forecasts
- Forward Product Planning Information
- Supplier - OEM Relationships/Positioning
- OEM Customer Satisfaction
- Strategic Market Assessments
- Product Portfolio Strategy Development
- Corporate Product Strategy Alignment
- Quality Consulting
- Dealer Sales Process Improvement Training
- Product Knowledge Training/Education
- Dealer Certification Programs
Data from Vehicle Quality Survey is used by manufacturers and suppliers in a number of areas:

- Current Program Product Improvement (manufacturing)
- Product Development
- Contenting Decisions
- Marketing and Sales
- Procurement
- Service
- Awards (advertising)
- Residual Value (re-marketing)
Importance of Customer Satisfaction

• How satisfied are you with your overall ownership experience?
  – Product Quality
  – Features and Layout
  – Styling
  – Dealership
  – Service
  – Warranty
  – Image
  – Etc.
Relationship Between Owner Satisfaction and Manufacturer Sales

<table>
<thead>
<tr>
<th>Low Satisfaction</th>
<th>Mid Satisfaction</th>
<th>High Satisfaction</th>
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<tbody>
<tr>
<td>Daewoo</td>
<td>Chevrolet</td>
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<td>Dodge</td>
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<td>Pontiac</td>
<td>Saturn</td>
<td>Subaru</td>
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<tr>
<td>Suzuki</td>
<td>Volvo</td>
<td>Toyota</td>
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Change in Sales from 98 – 03*

-4% +24% +44%

*Satisfaction groupings based on J.D. Power and Associates 2003 Vehicle Dependability Study. SM
The Bottom Line

• Loyalty
  – Satisfied customers are repeat customers

• Advocacy
  – Satisfied customers tell others about their purchase and persuade others

• Price Premiums
  – Customers will pay for quality

• Reduced Operating Costs
  – High quality lowers warranty and production costs

• Close Rates
  – High satisfaction in the sales process closes more deals
Vehicle Quality Survey

Terminology

Things Gone Wrong (TGW)
- Consumer perceptions of product quality (problems experienced)
- Measured in Problems Per 100 Vehicles (PP100)
- A lower score is better (less reported problems)

Things Gone Right (TGR)
- Consumer perceptions of likes and dislikes (regardless of any problems experienced/reported)
- Each TGR question is measured on a ten-point rating scale ranging from unacceptable to outstanding
- A higher score is better (greater appeal)
VQS Methodology

- Retail purchases and lessees of new 2006 model-year vehicles
- Purchase and registered in November/December 2005 and January 2006
- Surveyed after 90-days of ownership
- Randomly drawn national sample obtained from R.L. Polk and Company
- Personal-use vehicles only
VQS Methodology

• Return target of 225 per model in 2006 and 450 per model in 2007
  – Representative mix of purchase and lease, by model
  – Where feasible, secondary target of 100 returns per plant

• All returns are weighted to reflect retail sales during the sample period

• Study includes
  – Approximately 160 car models
  – Approximately 120 truck models
  – Over 65,000 respondents
VQS Methodology

- 8-page questionnaire and cover letter
- The IQS survey is being redesigned for the first time since 1998
- $1 bill as an incentive plus business reply envelope
- Reminder post cards and Telephone calls one week after the survey was sent
- Response rate of 20%-25%
### Vehicle Quality Survey

- Things Gone Wrong (TGW)
- Things Gone Right (TGR)

### Initial Quality Study (IQS)
- Total vehicle
- Quality Focus
- Publish date: June 2006

### Automotive Performance Execution and Layout Study (APEAL)
- Total vehicle
- Satisfaction Focus
- Publish date: June 2006

### Feature Contenting Report (FCR)
- Total vehicle
- Focus on feature penetration, desirability and pricing
- Publish date: August 2006

### Component Quality Reports (CQRs)
- Component based
- Focus on quality and satisfaction
  - Noise / NVH
  - Interior
  - Multimedia
  - Seat
  - Ride/Handling
  - HVAC
  - Engine/Transmission
IQS Industry Highlights and Award Winners
For 2005, the Industry improves by 1 PP100


PP100

Year

IQS

IQS2

1998 IQS Bridge Study.
Overview of Initial Quality Trend

Leveling of playing field (initial quality is the price of entry; OEMs and consumers alike are placing more emphasis on long-term quality and durability).

Problems Per 100

Source: J.D. Power and Associates Initial Quality Study
The Luxury Car Super Segment sets the benchmark for quality while the Fullsize Car Super Segment shows the greatest decline.
### 2005 Award Winners – Cars PP100

**Compact Car**¹
- Toyota Prius: 100
- Kia Spectra: 104
- Honda Civic (Total): 104
- Toyota Corolla: 100

**Entry Midsize Car**
- Chevrolet Malibu/Malibu Maxx: 111
- Hyundai Sonata: 131
- Volkswagen Jetta: 131

**Premium Midsize Car**
- Buick Century: 75
- Chevrolet Impala: 86
- Pontiac Grand Prix: 86

**Fullsize Car**
- Buick LeSabre: 80
- Mercury Grand Marquis: 103
- Ford Five Hundred: 119

**Entry Luxury Car**
- Lexus IS 300/IS 300 SportCross: 65
- Jaguar X-Type: 70
- Cadillac CTS: 84

**Mid Luxury Car**
- Lexus GS 300/GS 430: 75
- BMW 5 Series Sdn: 89
- Cadillac DeVille: 93

**Premium Luxury Car**²
- Lexus SC 430: 54
- Lexus LS 430: 56
- Mercedes-Benz SL-Class: 86

**Sporty Car**
- Scion tC: 131
- Acura RSX: 133
- Ford Mustang: 144

**Premium Sports Car**
- Nissan 350Z: 59
- Honda S2000: 69
- Porsche 911: 85

¹The Entry Compact Car and Premium Compact Car segments comprise the Compact Car Award.
²The Premium Luxury Car and Luxury Sport Car segments comprise the Premium Luxury Car Award.
2005 Award Winners – Plants PP100

Asia Pacific Plant Awards

- **Platinum Award:** Toyota PP100
  - Tahara, Japan (Car)
  - Lexus: GS 300/GS 430, LS 430

Europe Plant Awards

- **Gold Award:** Ford PP100
  - Halewood, U.K.
  - Jaguar X-Type

- **Gold Award:** BMW PP100
  - Regensburg, Germany (BMW)
  - BMW 3 Series

North/South America Plant Awards

- **Gold Award:** General Motors Corporation PP100
  - Oshawa #2, Ontario (Car)
  - Buick Century, Buick LaCrosse, Pontiac Grand Prix

- **Gold Award:** General Motors Corporation PP100
  - Oshawa #1, Ontario
  - Chevrolet Impala, Chevrolet Monte Carlo

- **Silver Award:** BMW, Porsche PP100
  - Munich, Germany
  - BMW 3 Series

- **Silver Award:** BMW, Porsche PP100
  - Stuttgart, Germany
  - Porsche 911

- **Bronze Award:** Nissan PP100
  - Tochigi, Japan (N)
  - Infiniti G35, Infiniti Q45, Nissan 350Z

- **Bronze Award:** Toyota PP100
  - Higashi-Fuji, Japan
  - Lexus SC 430, Toyota Celica

- **Bronze Award:** Toyota PP100
  - Tochigi, Japan (N)
  - Infiniti G35, Infiniti Q45, Nissan 350Z

- **Bronze Award:** Toyota PP100
  - Higashi-Fuji, Japan
  - Lexus GS 300/GS 430, LS 430

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Why the focus on longer-term quality?

• **Consumer Perspective**
  – Drives new vehicle buyer behavior as well as used car purchase decisions

• **Automotive Industry Interest**
  – Drives customer retention
  – Drives residual value & warranty cost
  – Drives re-furbishing and re-marketing costs for Certified Pre-Owned Vehicles
2006 Vehicle Dependability Study (VDS)

VDS Methodology

• Sample
  – Original Purchasers and Lessees of 2003 model-year vehicles
    ▪ Originally purchased/leased between November 2002 and April 2003
    ▪ Personal-use vehicles only
    ▪ Return target of 225 per model
    ▪ Vehicles disposed of more than 12 months ago were removed from sample
  – Randomly drawn national sample obtained from R. L. Polk
    ▪ Weighted to registration availability during sample period
    ▪ Proportionate coverage of retail and lease, non-fleet

• Survey
  – 8-page questionnaire and cover letter
  – Letter and $1 bill as an incentive plus business reply envelope
  – Alert and Reminder postcards mailed one week before and after mailout
  – Response rate in 2005 was 23%.
VDS Content: Quality at 3 Years in Service

- Problems experienced in the past 12 months
- Similar diagnostic detail as IQS

  - 9 systems analyzed:
    - Vehicle Exterior
    - Vehicle Interior
    - Seats
    - Sound System
    - Features and Controls
    - HVAC
    - Ride, Handling, and Braking
    - Engine
    - Transmission

  - In-depth probing of potential problems:
    - 135 Problem Symptoms on IQS survey
    - 147 Problem Symptoms on VDS survey
      115 common problem symptoms

- Identification of the two most bothersome problems
  - Includes verbatims for each problem

- Results for average and high-mileage vehicles
  - Quality deterioration for high-mileage 3-year old vehicles closely matches that of the average 5-year old vehicle.
  - Earlier consumer feedback provides the industry with timely input for vehicle redesign considerations.

Note: There are specific questions on convertible components in the “Things Gone Wrong” section under “Features and Controls” and “Vehicle Exterior”
VDS Content: Satisfaction and Advocacy

Satisfaction --- overall and at the system level

• Overall
  – Overall quality
  – Vehicle
  – Interior
  – Cost of Ownership
  – Overall Ownership Experience
  – Dealer

• System-Level
  – Exterior Styling
  – Cockpit / IP
  – Seats
  – Sound System
  – Comfort / Convenience
  – HVAC
  – Ride, Handling, and Braking
  – Engine
  – Transmission

• Advocacy Levels:
  – Repurchase Intentions, including timing
  – Recommendations
Scope of Proprietary Methodologies

While client objectives are always needed before suggesting an approach/methodology for helping to meet the objectives, we have many tools available to us in order to gather data for analysis:

- Attitudinal, pricing, functionality, interest, branding, etc types of research can be conducted via (static or dynamic):
  - 1. Mail
  - 2. Phone
  - 3. Internet - can also handle more advanced type of studies such as conjoint studies useful in packaging/pricing configurations

- Depending on the scope of the project, the three primary quantitative methodologies above can provide analytics at many different levels:
  - geo, socio-economic, vehicle type, vehicle make, demographic, ethnicity, etc. In addition, advanced analytics can often be used with the output of these studies, regression, factor, cluster, correspondence, etc.

- On more qualitative nature, we can conduct:
  - 4. Focus Groups - qualitative but can often offer insight into more complicated issues/scenarios - also often used to fine tune quantitative methodology (refine questions for surveys, etc.)
  - 5. Clinics - nice balance of qualitative and quantitative where product accompanies the research environment.
# Examples of Research Conducted

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<thead>
<tr>
<th>Product Clinic</th>
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<tbody>
<tr>
<td><strong>(Leather Manufacturer)</strong></td>
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<tr>
<td><strong>Objectives</strong></td>
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<tr>
<td>- Understand relative value of leather in relation to other features</td>
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<tr>
<td>- Understand relative value of seat attributes</td>
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<tr>
<td>- Identify new products</td>
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<tr>
<td>- Maximize leather usage/penetration</td>
</tr>
<tr>
<td><strong>Impact:</strong> Sales Leverage</td>
</tr>
<tr>
<td>- How OEM/Supplier can achieve optimal value</td>
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<tr>
<td>- Invited clients to clinic to create their own brand image with customers</td>
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<th>Mail Survey</th>
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<tr>
<td><strong>(Fabric Protection Company)</strong></td>
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<tr>
<td><strong>Objectives</strong></td>
</tr>
<tr>
<td>- Brand awareness</td>
</tr>
<tr>
<td>- Brand value</td>
</tr>
<tr>
<td>- Quality/Satisfaction</td>
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<tr>
<td>- Usage</td>
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<tr>
<td><strong>Impact:</strong> Quantify Awareness and Value</td>
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<tr>
<td>- Understand satisfaction gaps</td>
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<tr>
<td>- Communicate relationship to repurchase intent</td>
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<tr>
<td>- Isolate potential new products</td>
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<th>B2B Executive Interviews</th>
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<tr>
<td><strong>(Tier One Systems Supplier)</strong></td>
</tr>
<tr>
<td><strong>Objectives</strong></td>
</tr>
<tr>
<td>- Understand the OEM’s expectations with regards to customer satisfaction</td>
</tr>
<tr>
<td>- Identify the criteria used to evaluate their suppliers</td>
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<tr>
<td>- Determine the key drivers of satisfaction</td>
</tr>
<tr>
<td>- Measure supplier’s ratings on 24 customer satisfaction attributes</td>
</tr>
<tr>
<td><strong>Impact:</strong> OEM Customer Alignment</td>
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<tr>
<td>- Developed strategies to improve relationship and communicate improvement plan.</td>
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<th>Focus Groups, Internet Survey, QFD Study</th>
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<tr>
<td><strong>(Tier One Systems Supplier)</strong></td>
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<tr>
<td><strong>Objectives</strong></td>
</tr>
<tr>
<td>- Understand importance of climate control attributes</td>
</tr>
<tr>
<td>- Measure customer satisfaction with current systems</td>
</tr>
<tr>
<td>- Assist in new product development</td>
</tr>
<tr>
<td><strong>Impact:</strong> Product Planning</td>
</tr>
<tr>
<td>- Developed simulation model that predicts overall climate control satisfaction</td>
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Data from Vehicle Quality Survey is used by manufacturers and suppliers in a number of areas:

- Current Program Product Improvement (manufacturing)
- Product Development
- Contenting Decisions
- Marketing and Sales
- Procurement
- Awards (advertising)
- Service
- Residual Value (re-marketing)

Note: VOC stands for Voice of the Customer
Questions
Wrap Up