



**CHRYSLER**

# Quality

**Doug Betts**

Chrysler Group LLC 2010-14 Business Plan

November 4, 2009

**DODGE**

**Jeep**

**CHRYSLER**





**1. Overall quality structure & strategy**



*Old Chrysler not organized to work effectively*

**2. Quality for current production**



*Rate of improvement not adequate*

**3. Quality at new model launch**



*New models launched with below average quality*



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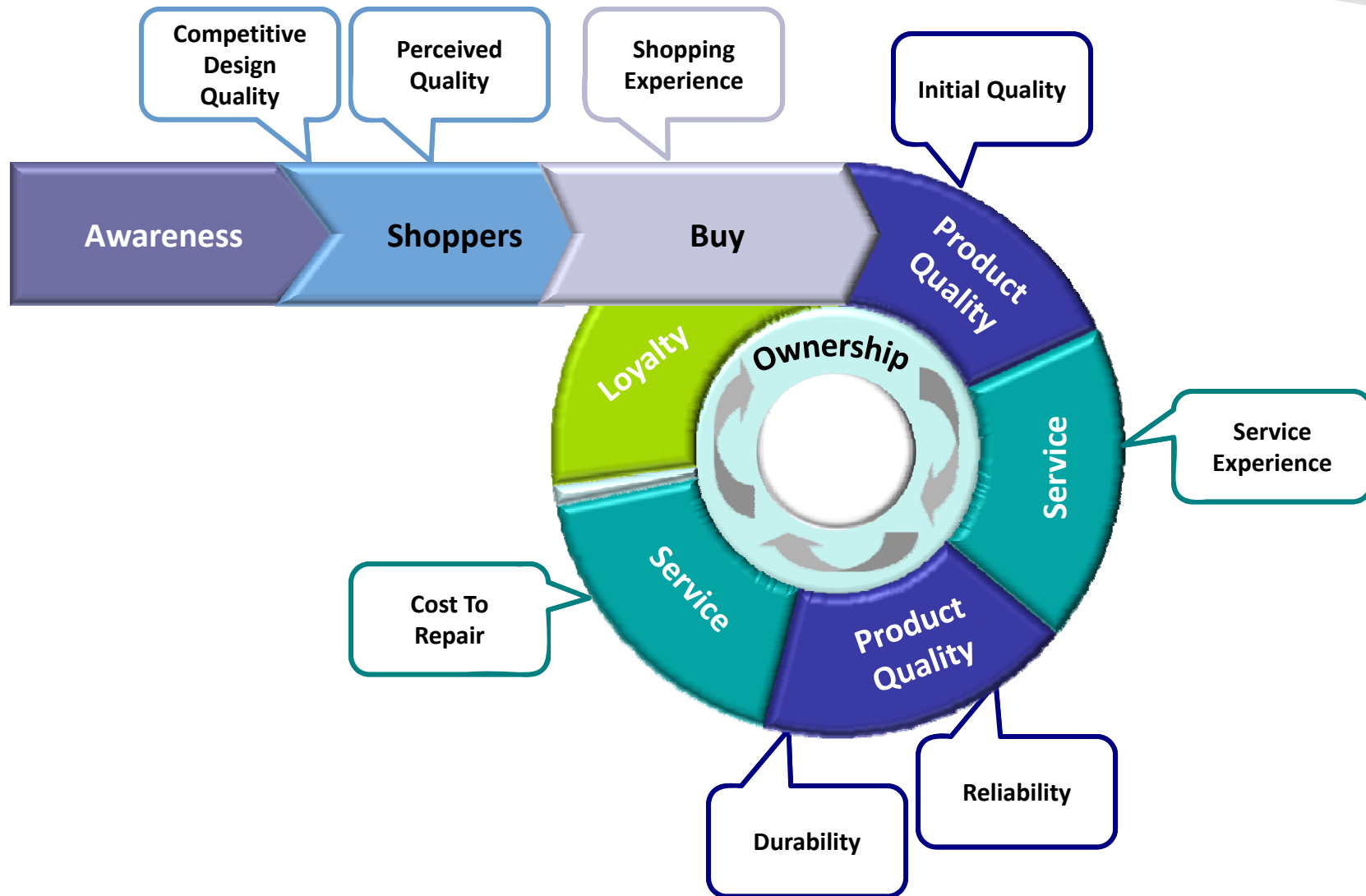


## 1. Original Quality Situation



ACTION	RESULT	WHEN
<ul style="list-style-type: none"> <li>• <b><u>Define quality</u></b> standardize “language” of quality, metrics, targets, responsibility</li> </ul>	<ul style="list-style-type: none"> <li>• Provide clarity and begin process of engagement with whole company</li> </ul>	<ul style="list-style-type: none"> <li>• Started – November 2007, substantially complete</li> </ul>

# Definition of Quality





## 1. Overall Quality Structure & Strategy



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<ul style="list-style-type: none"> <li>• Changed corporate quality monthly meetings from “Board Room” style to hands on, “Go &amp; See” meetings</li> </ul>	<ul style="list-style-type: none"> <li>• Leadership team can understand situation</li> </ul>	<ul style="list-style-type: none"> <li>• Complete – March, 2008</li> </ul>



# 1. Overall Quality Structure & Strategy

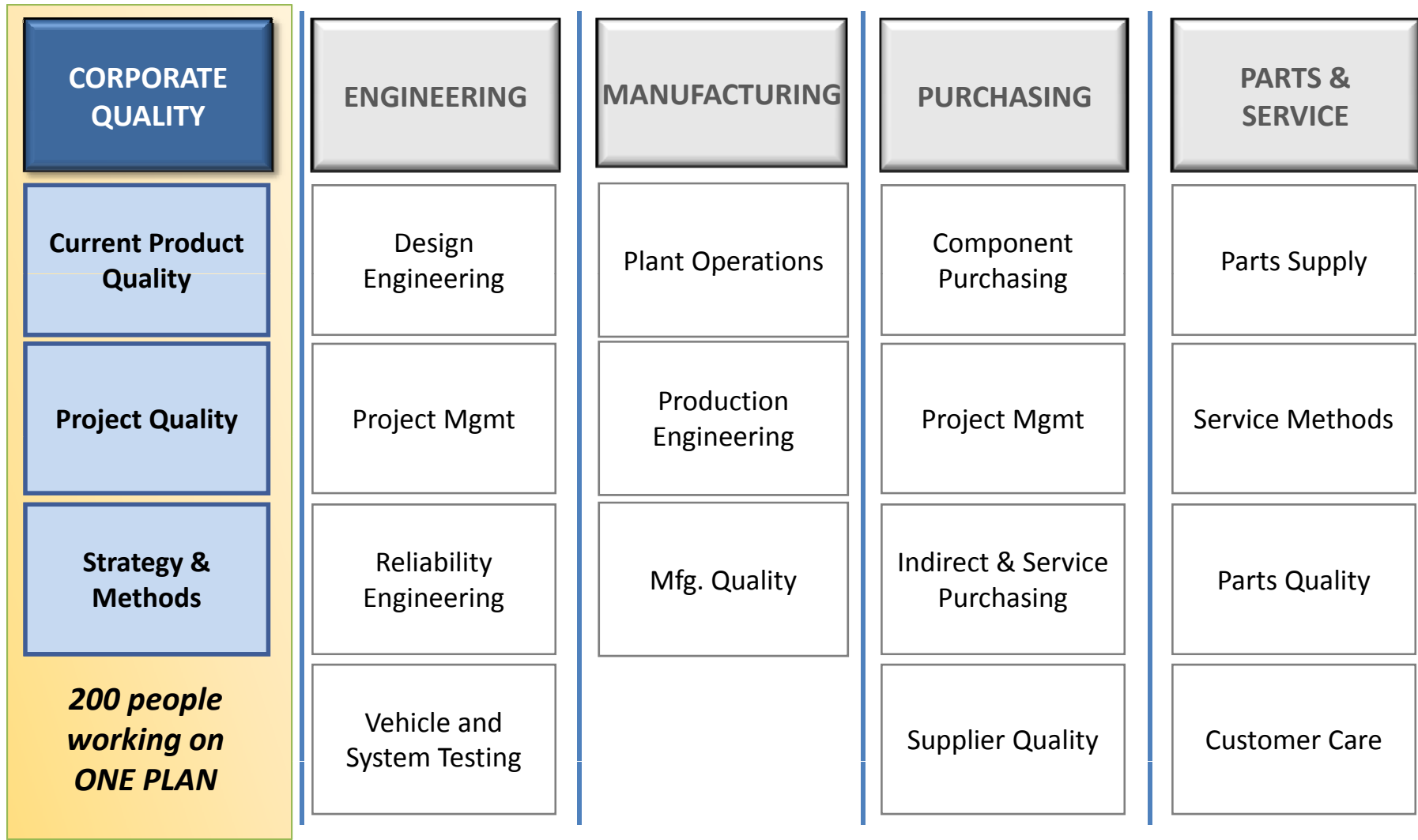


ACTION	RESULT	WHEN
<ul style="list-style-type: none"> <li>• <u>Define Quality</u> standardize “language” of quality, metrics, targets, responsibility</li> </ul>	<ul style="list-style-type: none"> <li>• Provide clarity and begin process of engagement with whole company</li> </ul>	<ul style="list-style-type: none"> <li>• Started – November, 2007 substantially complete</li> </ul>
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<ul style="list-style-type: none"> <li>• Merged all quality functions into one organization</li> </ul>	<ul style="list-style-type: none"> <li>• Effective coordination of Master Plan</li> </ul>	<ul style="list-style-type: none"> <li>• Complete – January, 2009</li> </ul>

## Overall Quality Structure & Strategy



**Before : Quality functions were split and difficult to work on ONE PLAN**

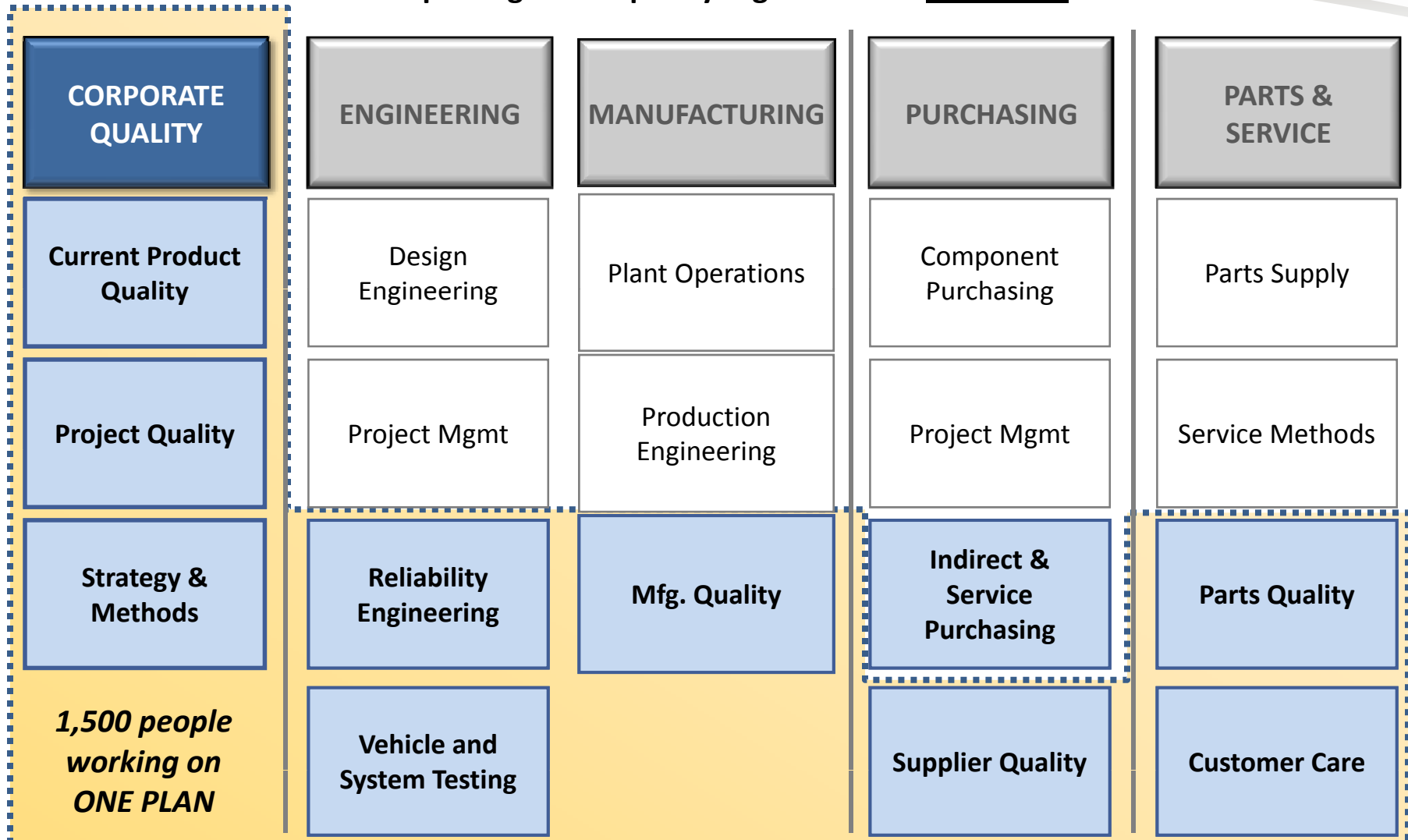




## Overall Quality Structure & Strategy



After: Solid or dotted line reporting – One quality organization – ONE PLAN



## Original Quality Situation



1. Overall quality structure & strategy

*Chrysler not organized to work effectively*

2. **Quality for current production**



*Rate of improvement not adequate*

3. Quality at new model launch

*New models launched with below average quality*



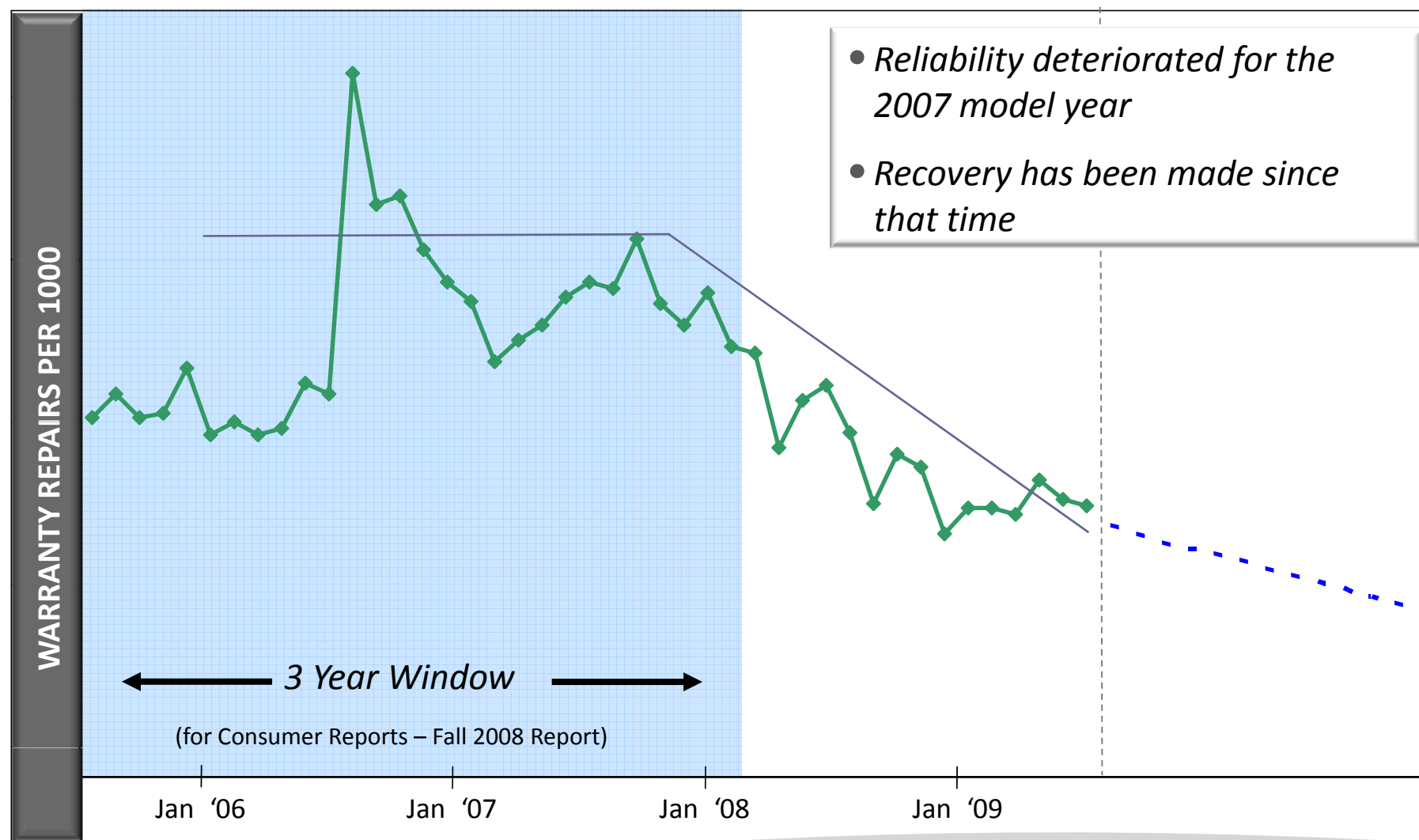
## 2. Quality For Current Production



ACTION	RESULT	WHEN
<ul style="list-style-type: none"> <li>• Changed internal metrics and targets for reliability</li> </ul>	<ul style="list-style-type: none"> <li>• Metrics that are accurate, benchmarked, and can show trend judged monthly</li> </ul>	<ul style="list-style-type: none"> <li>• Complete – January, 2008</li> </ul>
<ul style="list-style-type: none"> <li>• Implemented cross-functional teams for warranty reduction</li> </ul>	<ul style="list-style-type: none"> <li>• 30% reduction in warranty claim rate during first 9 months after implementation</li> <li>• Market downturn and financial difficulties prevented further gains</li> </ul>	<ul style="list-style-type: none"> <li>• Complete – January, 2008</li> </ul>



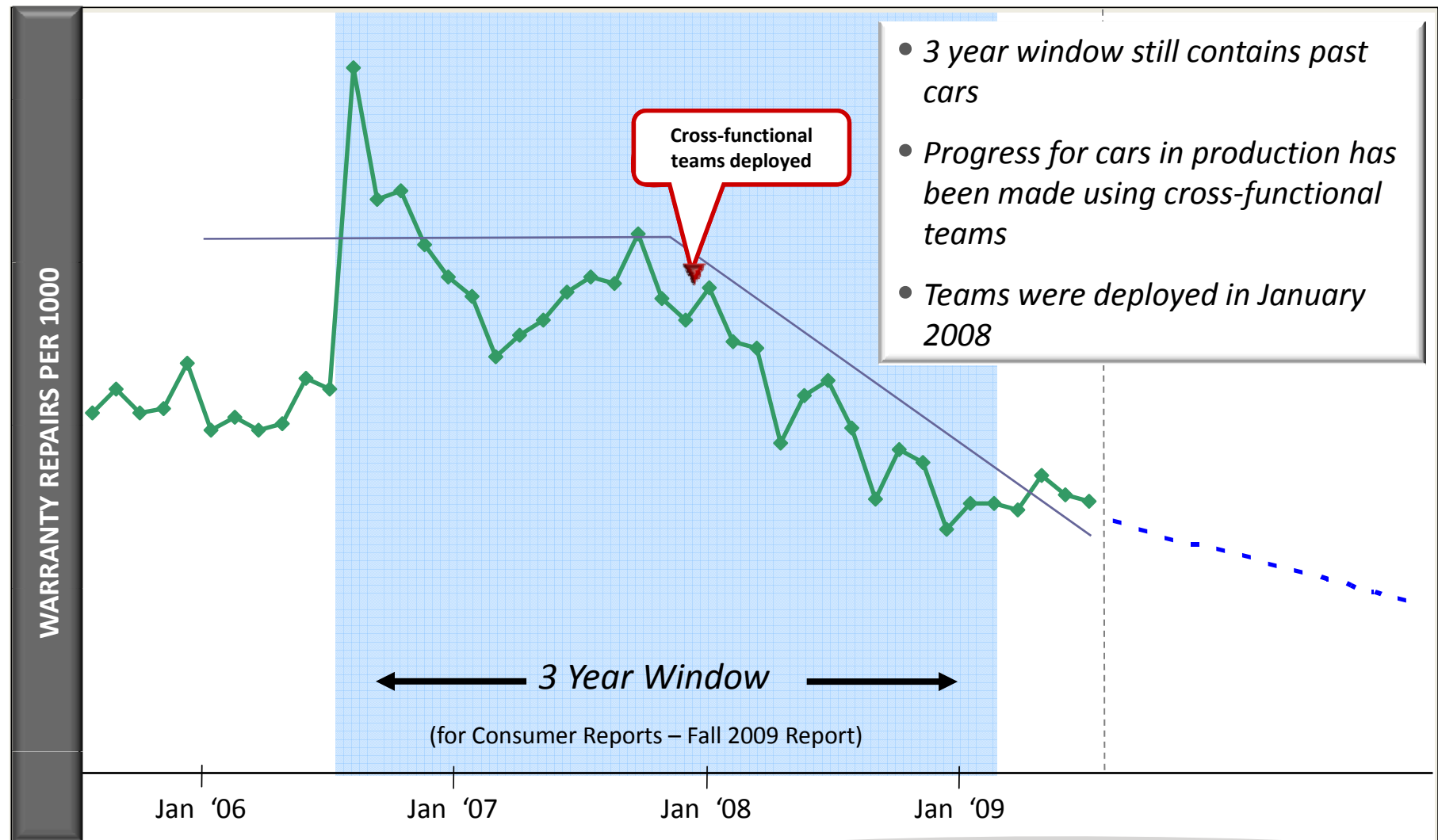
### Reliability – Situation in 2008 (typical vehicle shown)



## Cross-Functional Teams – Current Production



### Reliability – Situation in 2009 (typical vehicle shown)





## 2. Quality For Current Production



ACTION	PLANNED RESULT	WHEN
<ul style="list-style-type: none"> <li>• Changed internal metrics and targets for reliability</li> </ul>	<ul style="list-style-type: none"> <li>• Metrics that are accurate, benchmarked, and can show trend judged monthly</li> </ul>	<ul style="list-style-type: none"> <li>• Complete – January, 2008</li> </ul>
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<ul style="list-style-type: none"> <li>• Implementing new audit standards in manufacturing</li> </ul>	<ul style="list-style-type: none"> <li>• Better perceived quality</li> </ul>	<ul style="list-style-type: none"> <li>• Implement Oct – Dec, 2009</li> </ul>



### MANUFACTURING QUALITY EXECUTION

**Fiat Group audit standards...similar to Chrysler audit, but...tighter quality standards used for fit and finish**



**Changed Chrysler audit to match Fiat Group standards**





## 2. Quality For Current Production



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<ul style="list-style-type: none"> <li>• Increase headcount in manufacturing plants to support World Class Manufacturing (WCM) and dimensional control strategy (200+ engineers)</li> </ul>	<ul style="list-style-type: none"> <li>• Reduce variation in plant quality (Chrysler &amp; supplier manufacturing)</li> </ul>	<ul style="list-style-type: none"> <li>• Implement Nov – Dec, 2009</li> </ul>





## 2. Quality For Current Production



ACTION	RESULT	WHEN
<ul style="list-style-type: none"> <li>Changed internal metrics and targets for reliability</li> </ul>	<ul style="list-style-type: none"> <li>Metrics that are accurate, benchmarked, and can show trend judged monthly</li> </ul>	<ul style="list-style-type: none"> <li>Complete – January, 2008</li> </ul>
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<ul style="list-style-type: none"> <li>Replace J.D. Power SSI/CSI based survey with Customer Promoter Survey (CPS)</li> </ul>	<ul style="list-style-type: none"> <li>Understand customer opinion clearly</li> <li>Quick resolution</li> </ul>	<ul style="list-style-type: none"> <li>Complete – January, 2009</li> </ul>

## Increase # of Chrysler “Promoters” (3 yrs+ Ownership)



### 3 Areas For Initiatives

	SERVICE PARTS TECHNICAL IMPROVEMENTS	Service Operational Excellence	Human Interaction
<b>Goals:</b>	<ul style="list-style-type: none"> <li>• Improve quality of service parts</li> <li>• Redesign service parts to fix original technical issues</li> </ul>	<ul style="list-style-type: none"> <li>• Can repair every car, every time                             <ul style="list-style-type: none"> <li>• Parts available on the shelf</li> <li>• Tools at the dealership</li> <li>• Techniques for every problem</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Customer Promoter Score system to allow dealer feedback and self correction</li> <li>• Customer Care standards</li> <li>• Customer outreach programs to recover customer relationships</li> </ul>
<b>Metrics:</b>	<hr/> <ul style="list-style-type: none"> <li>• Warranty rate for repeat repairs</li> </ul>	<ul style="list-style-type: none"> <li>• Capable repair technicians</li> <li>• Vehicles off-road &amp; backorders</li> <li>• Effective repair rate</li> </ul>	<ul style="list-style-type: none"> <li>• Service retention</li> <li>• Loyalty</li> <li>• Follow-up with customer problems</li> </ul>

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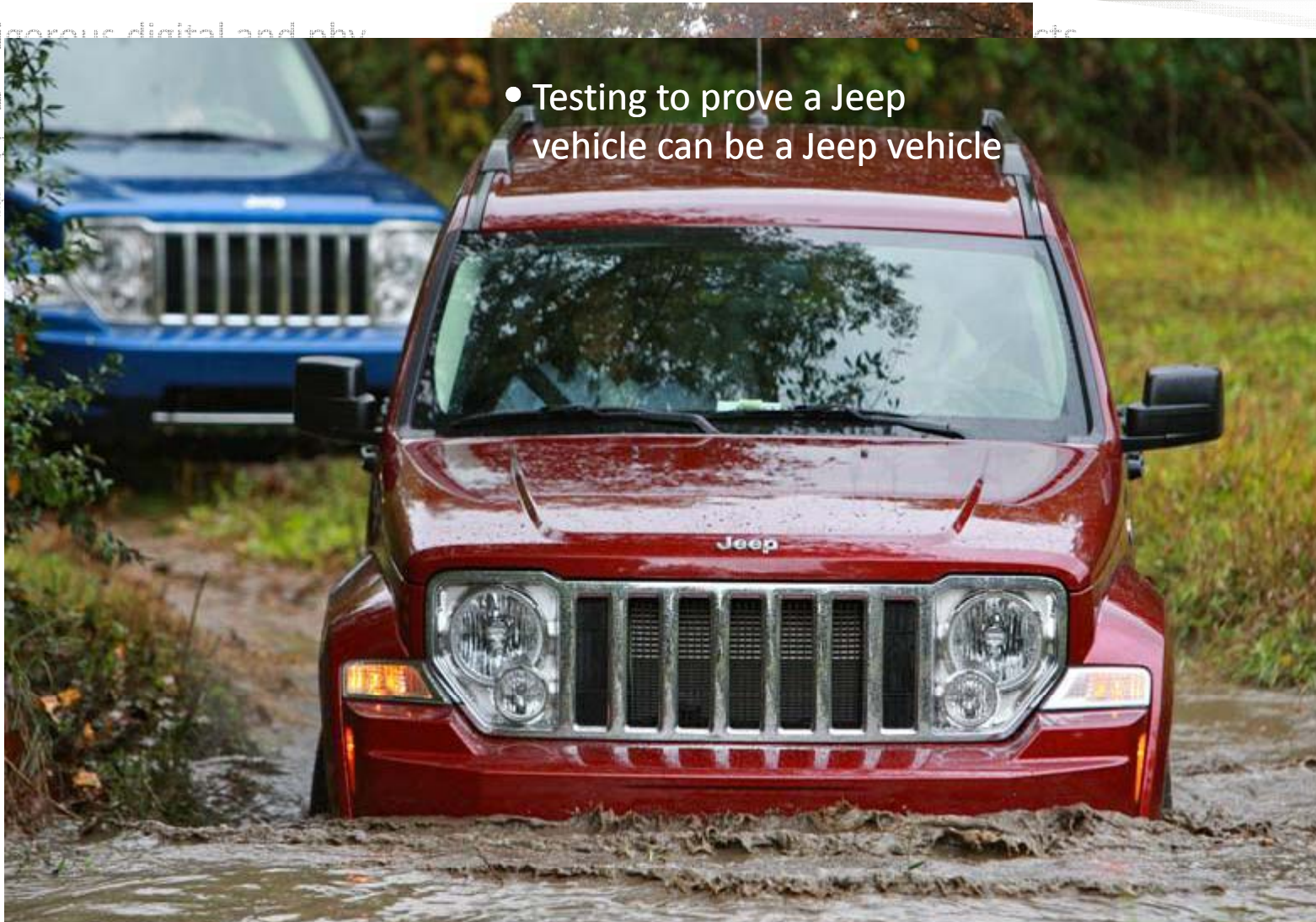


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<ul style="list-style-type: none"> <li>Changed reliability and durability test standards</li> </ul>	<ul style="list-style-type: none"> <li>More rigorous testing leading to more reliable/durable vehicles</li> </ul>	<ul style="list-style-type: none"> <li>Complete (effective 2009 Dodge Ram)</li> </ul>

## Improve Vehicle Reliability – New Models



- Rigorous digital and physical testing
- In-house testing facilities
- Comprehensive testing protocols
- Proven reliability



- Testing to prove a Jeep vehicle can be a Jeep vehicle

### 3. Quality At New Model Launch



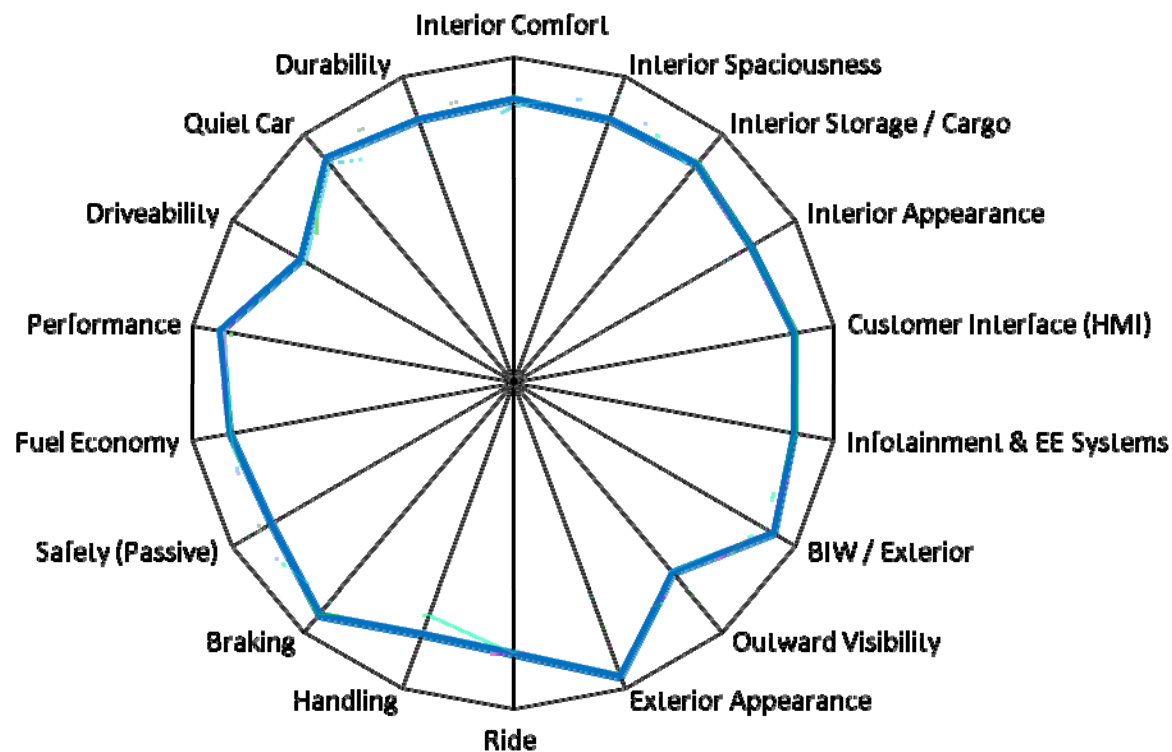
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<ul style="list-style-type: none"> <li>• Created standard process to benchmark and set targets for competitive design quality</li> </ul>	<ul style="list-style-type: none"> <li>• Competitive objectives leading to competitive vehicles</li> </ul>	<ul style="list-style-type: none"> <li>• Started with 2009 Dodge Ram Project</li> </ul>
<ul style="list-style-type: none"> <li>• Create internal 3<sup>rd</sup> Party to judge project quality status</li> </ul>	<ul style="list-style-type: none"> <li>• Eliminate self-assessment of work by functions</li> </ul>	<ul style="list-style-type: none"> <li>• November, 2009</li> </ul>



## Improve Competitive Performance In 3rd Party Reviews



### 20XX Program Vehicle Strategy Based on HOQ



— 20XX Chrysler Target — 20XX Comp A — 20XX Comp B — 20XX Comp C

#### New Process:

- Established 320 functional measurements,
- Benchmark best competition
- Set targets – Confirm physical achievement as project progresses

#### Impartial Judgement:

- Result confirmed by new quality function representing the customer

### 3. Quality At New Model Launch



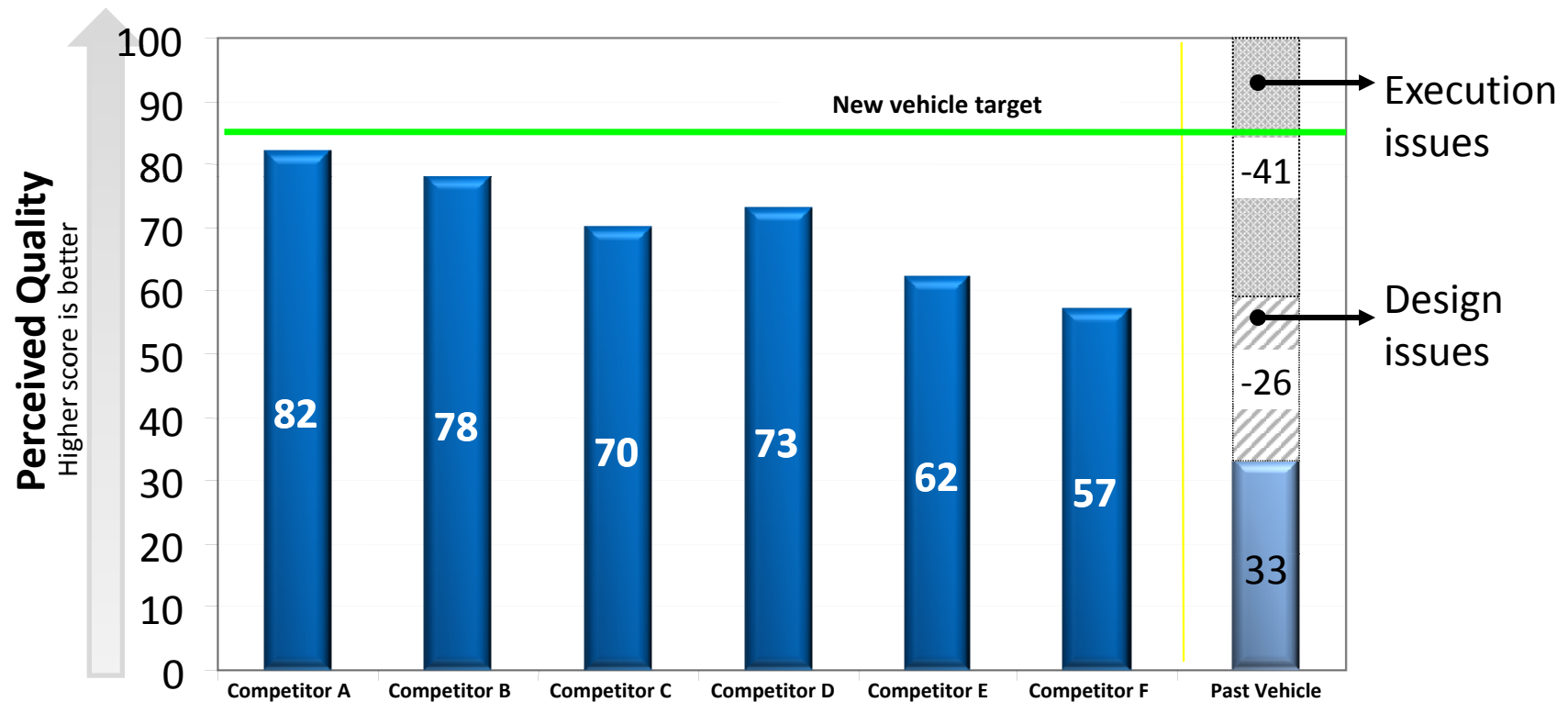
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<ul style="list-style-type: none"> <li>Created physical and digital perceived quality evaluation process</li> </ul>	<ul style="list-style-type: none"> <li>Design cars with better perceived quality</li> <li>Avoid cost of tooling mistakes</li> </ul>	<ul style="list-style-type: none"> <li>Complete – October, 2008</li> </ul>



## Improve Perceived Quality – Future Vehicles



Created development evaluation for perceived quality, benchmark best competitors and set targets for each new vehicle project



## Improve Perceived Quality – Future Vehicles

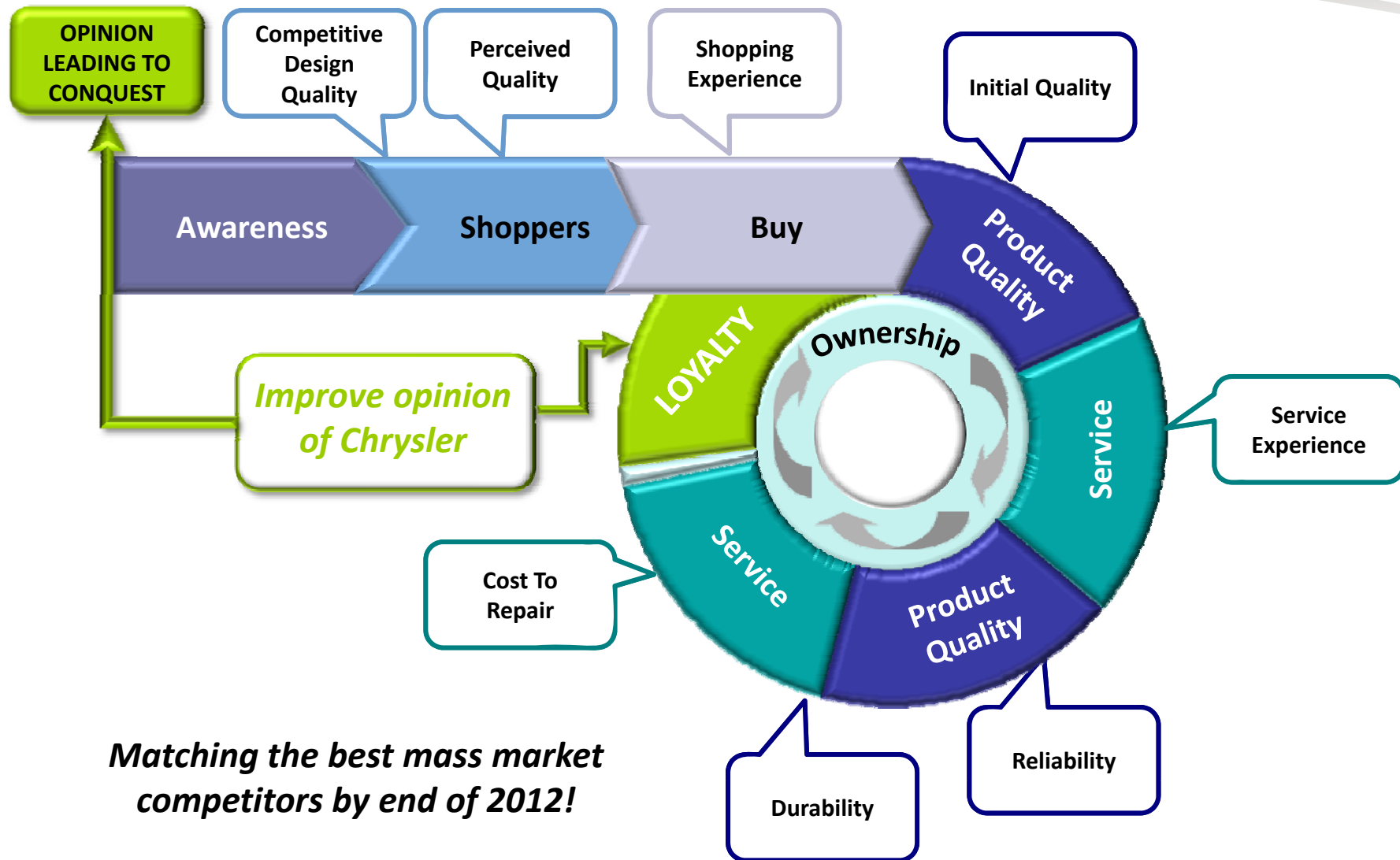


Use Dig

Exposed Hardware

- Ability to simulate real vehicle and lighting
- Identify problems without building a car

## Definition of Quality



***Matching the best mass market competitors by end of 2012!***