

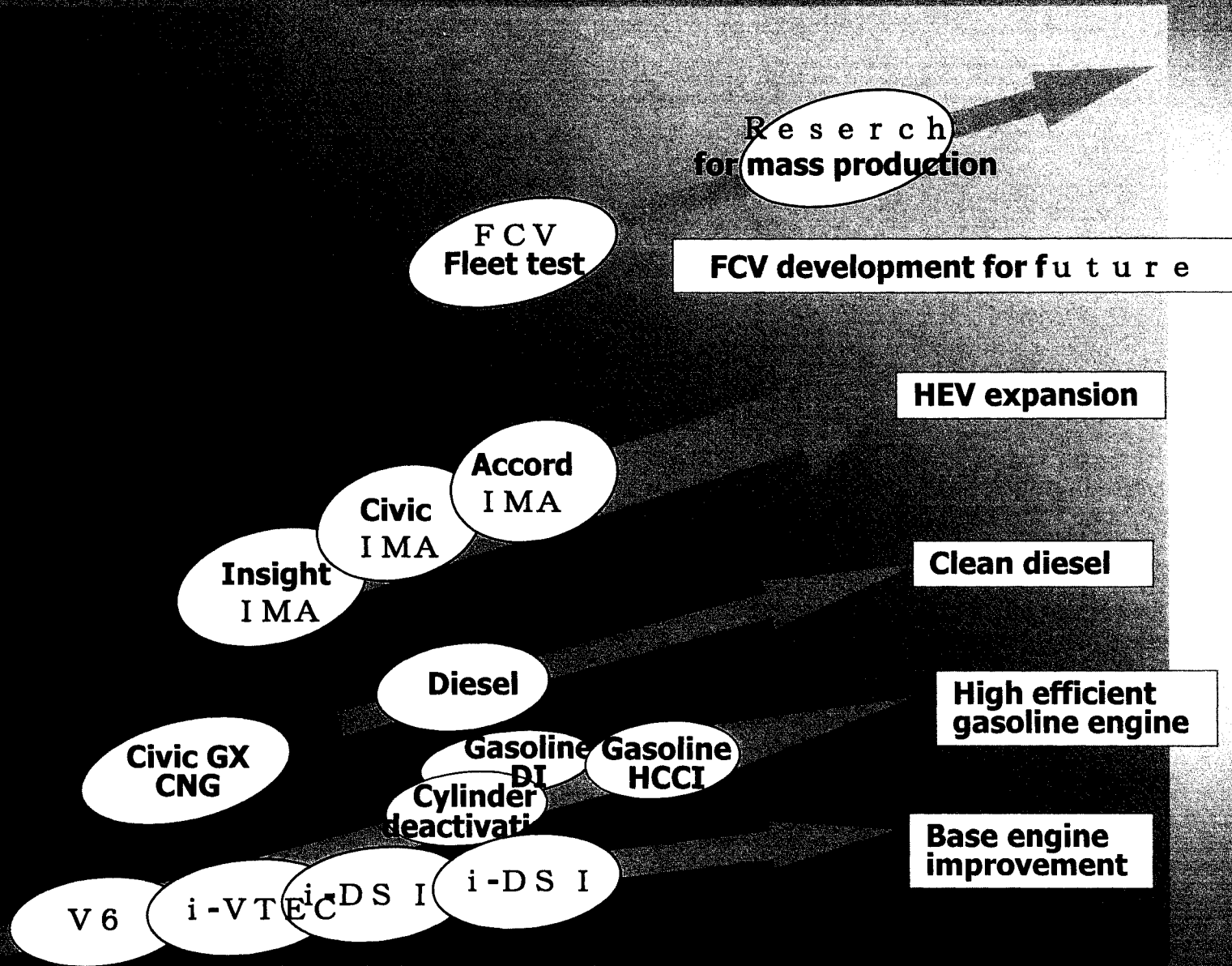
Rank	Purchase Reason	Top Box
1	Reliability	64.70%
2	A Well Made Vehicle	63.17%
3	Durability	55.90%
4	Good Running Engine	52.54%
5	Manufacturer's Reputation	51.99%
6	Safety Features	50.41%
7	Price Or Deal Offered	47.61%
8	Ease Of Handling	46.67%
9	Riding Comfort	45.86%
10	Value For The Money	44.80%
11	Fun To Drive	44.58%
12	Warranty Coverage	43.65%
13	Interior Roominess	42.68%
14	Handling in Inclement Weather	42.31%
15	Seating Comfort	42.11%
16	Fuel Economy	41.27%
17	Dealer's Service	40.19%
18	Previous Experience With Make	39.85%
19	Exterior Styling	38.32%
20	Exterior Color	37.22%

When considering new car purchase reasons, Fuel Economy ranks 16th, just above “Dealer’s Service”, and just below “Seating Comfort”.

Survey of 55,000 Buyers of 2007 New Cars from Strategic Vision's 2007 New Vehicle Experience Survey. For more information, visit www.strategicvision.com.

Development Progress for CO2 reduction

CO2 reduction



Multiple Technologies = Huge Risks

- Multitude of technology options, each with unknown future costs and technology synergies
- Market is very competitive
- Manufacturer at a competitive disadvantage if the selected technology ultimately proves to be more expensive
- Even worse is widespread adoption of a technology that does not meet the customer expectations for performance and reliability.
 - Hurts manufacturer's reputation
 - Sets back acceptance of the technology for everyone (GM diesel)

The Real Barrier - Leadtime

- **Must allow time to ensure quality and reliability**
 - Rigorous product development process – 2-3 years after feasibility has been demonstrated
 - Prove in production on a limited number of vehicles – 2-3 years
 - Assess impact of higher volume and further development on costs before committing to a single technology
 - Spread across fleet – 5-year minimum product cycles
- Longer leadtime is needed for new technologies or for implementation of multiple technologies
- **Costs increase dramatically if normal development cycles are not followed**
 - Greatly increases development costs, tooling costs, and the risk of mistakes

CO₂ Emissions in Japan and Europe

- Europe 1995-2008:
 - CO₂ reduced from 185 gCO₂/km in 1995 to 140 in 2008
 - Annual FE improvement rate: **2.2% per year**
- Europe 2009-2015 (draft):
 - Further reduce CO₂ emissions to 125 grams/km by 2015
 - Annual FE improvement rate: **1.6% per year**
- Japan 2005-2016:
 - Increase economy from 13.6 km/l in 2005 to 16.8 in 2016
 - Annual FE improvement rate: **1.9% per year**

Pushing beyond about 2% per year will cause an exponential increase in the potential for adverse effects on the environment and consumer backlash