

The Automotive Industry

Where next?



Politics **E**conomics **S**ocial Behaviour **T**echnology
in business planning

Denis Hicks

Commercial Director – Automotive, Huntsman Polyurethanes Asia Pacific
Shanghai, PRC

I will not cover the following

- Well known Business Analysis Concepts (Sources of Competitiveness, 4 P's of Marketing, Value Chain Analysis, Economies of scale, Formal Systems Paradigm) ... but I assume you are aware these explain....
 - Today's global nature of the industry
 - Intense Vertical integration of suppliers
 - Intense Horizontal integration of services
 - Massive consolidation of car producers (270 to 50 within 40 years)
 - Technological uncertainty driven by the carbon economy

I will cover 2 aspects of Good business : **Realism**, being **Well Planned**

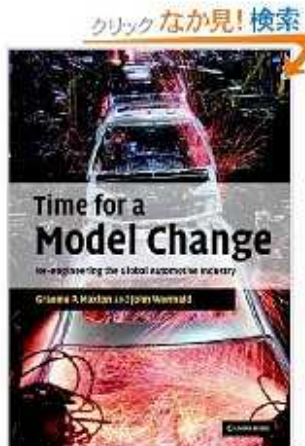
The first (and best) advice I received in Shanghai

Source : Graeme Maxton, Insight Bureau, 2007. Location Tea Lounge, Hilton Hotel, Shanghai

‘I don’t think I can give you much help

‘...In 2005 I asked my Editor at The Economist to publish a piece called ‘The Funeral for General Motors’. He said he thought it was too controversial....’

‘.....I have decided to move on. I wont cover the Automotive Industry anymore. The people running it in the US are so obsessed with their own power and sense of self interest, it is no longer worth speaking to them.....’



Further reading:

Time for a Model Change, Graeme P. Maxton, John Wormald

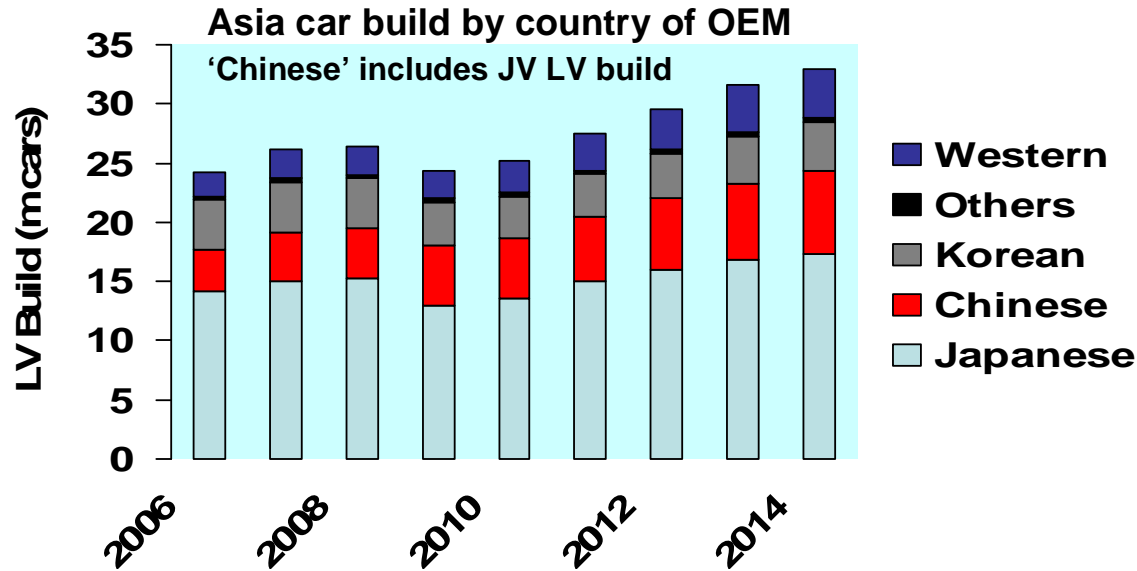
Hot, Thirsty and Crowded, John Wormald, Autopolis

The Toyota Way, Jeff Liker

Sloan Rules, David R Farber

The battle for Asia Developing Automotive Markets, John Bonnell, JD Powers

Beware : Market forecasts extrapolate the past and show business as usual after the current crisis

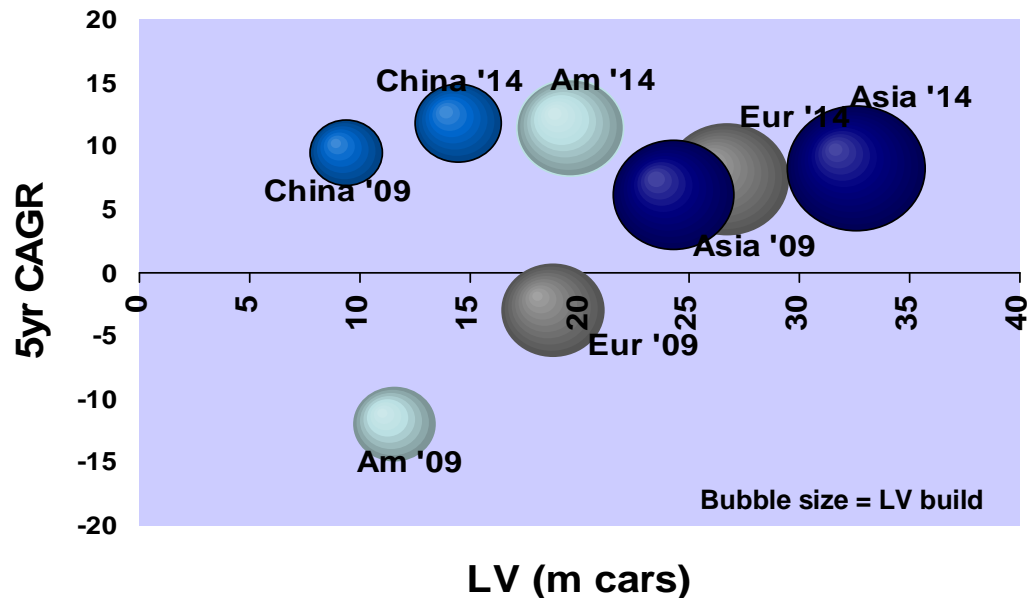


In Asia

After current crisis, demand recovers

Asian OEM' maintain majority share

China growth is evident



Globally

After current crisis, demand recovers rather well

Asian market is recession resistant with China explaining most of the Asia growth.

The Big Three bail out December 2008, the model was broken long before....

Near-desperation drives GM, Ford ads

After detecting strong loyalty to Japanese brands, U.S. carmakers are marketing more aggressively.

By TOM KRISHER
The Associated Press
DETROIT — When Ford Motor Co. did research to compare the Fusion mid-sized car with its Japanese competitors, it uncovered something scary.

Although many who drove the Fusion and other cars in hood-to-hood tests liked the Fusion's styling, performance and handling better, they still wouldn't buy one because they had such good experiences with their Honda Accords and Toyota Camrys.

General Motors Corp. found similar results in its research, showing both automakers that they have a long way to go in cracking the Japanese dominance of the all-important mid-sized car market. Both Ford and GM have responded with far more aggressive advertising and marketing campaigns in an almost desperate attempt to pull import buyers back into their showrooms.

"We've really got to fight hard," said Mark LaNeve, GM's vice president of North American sales, service and marketing. "If you see a more aggressive tone, we just want to shake people's consciousness a little bit."

Ford launched television, print and Internet ads comparing the Fusion directly with the Accord and Camry, and GM's Saturn brand started urging people to rethink their values as well as how they view Saturn and American cars. On Monday, Saturn will post Accords and Camrys at all 435 U.S. dealerships for shoppers to compare with its new Aura mid-sized sedan.

All of this is designed to change what U.S.-based automakers say is an incorrect perception that they make cars inferior to Honda's and Toyota's. "We need to earn people's confidence and trust, and we believe we've got the goods to back it up," said Barry Engle, general manager of Ford Division marketing.

Ford (NYSE: F, \$8.24) and GM (NYSE: GM, \$31) have

lost a huge portion of their car market share in the past 27 years. In 1980, GM dominated with 46 percent of the U.S. car market, but that has dwindled to 19.2 percent so far this year, according to Autodata Inc. Ford went from 17.3 percent in 1980 to 11.1 percent this year.

During the same time, Toyota (NYSE: TM, \$124.45) more than tripled its U.S. car market share and Honda's share more than doubled, largely by selling Camrys and Accords that have reputations of reliability and quality.

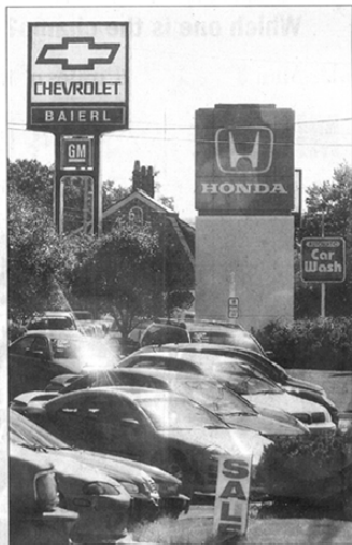
The results went straight to the bottom line. Toyota and Honda (NYSE: HMC, \$34.62) recently have made billions of dollars while GM and Ford struggle with losses, especially in North America.

Ford can tout its recent strong performance in the J.D. Power and Associates initial quality comparisons, said David Koehler, a clinical marketing professor at the University of Illinois. And GM is effectively showing its quality by trumpeting its five-year, 100,000-mile powertrain warranty, said Ken Bernhardt, a marketing professor at Georgia State University.

To go with the car-to-car comparisons, Saturn's "Rethink" television and Internet ads force people to see a different view of status, beauty, power, strength and essentially their value systems, said Jill Lajdziaik, Saturn Division general manager.

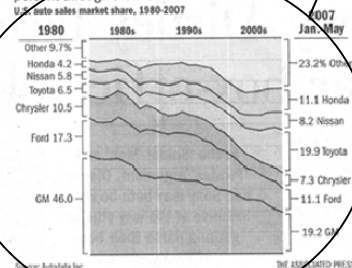
"Fewers then see that Saturn has five new models that aren't just small cars, including hybrid gasoline-electric powered vehicles. At the end, the ad challenges people to 'Rethink American.'"

"In my mind, our campaign goes squarely back to the roots of Saturn," said Lajdziaik, whose company was started in 1990 as GM's small-car answer to the Japanese automakers. "You want people to rethink many things in life. We want them to rethink what they think about Saturn."



GM and Ford want to win back import buyers. "We've really got to fight hard," said Mark LaNeve, a GM executive for North America.

Gradual deceleration of the Big Three
The combined U.S. market share of General Motors, Ford and Chrysler declined from 73.8 percent in 1980 to 37.6 percent through the first five months of 2007.



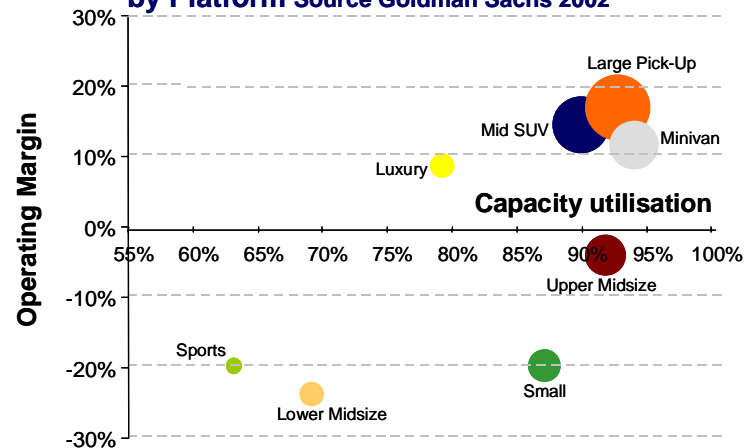
Tom Krisher Associated Press
9 June 2007

Gradual deceleration of the Big Three

The combined U.S. market share of General Motors, Ford and Chrysler declined from 73.8 percent in 1980 to 37.6 percent through the first five months of 2007.

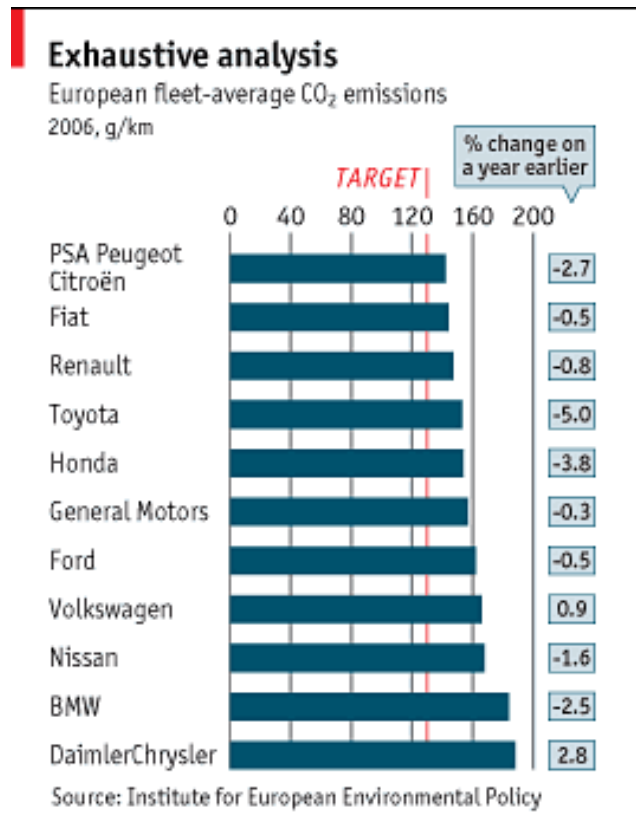


US Big Three's Earning Structure by Platform Source Goldman Sachs 2002

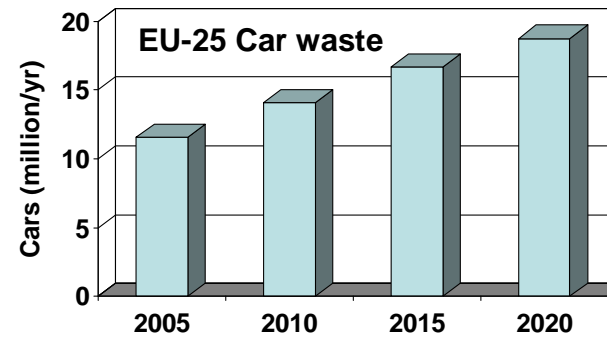


Automotive Industry : increasing damage to the environment and social well-being

Climate change and air pollution, EU sets emission targets

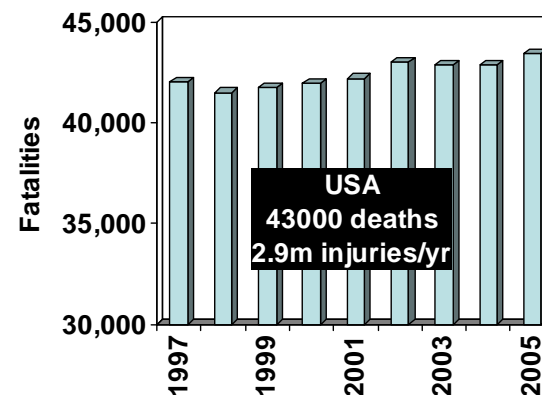


Hazardous Waste from cars will almost double



ETC/RWM working paper 2008/2 for the European Environment Agency

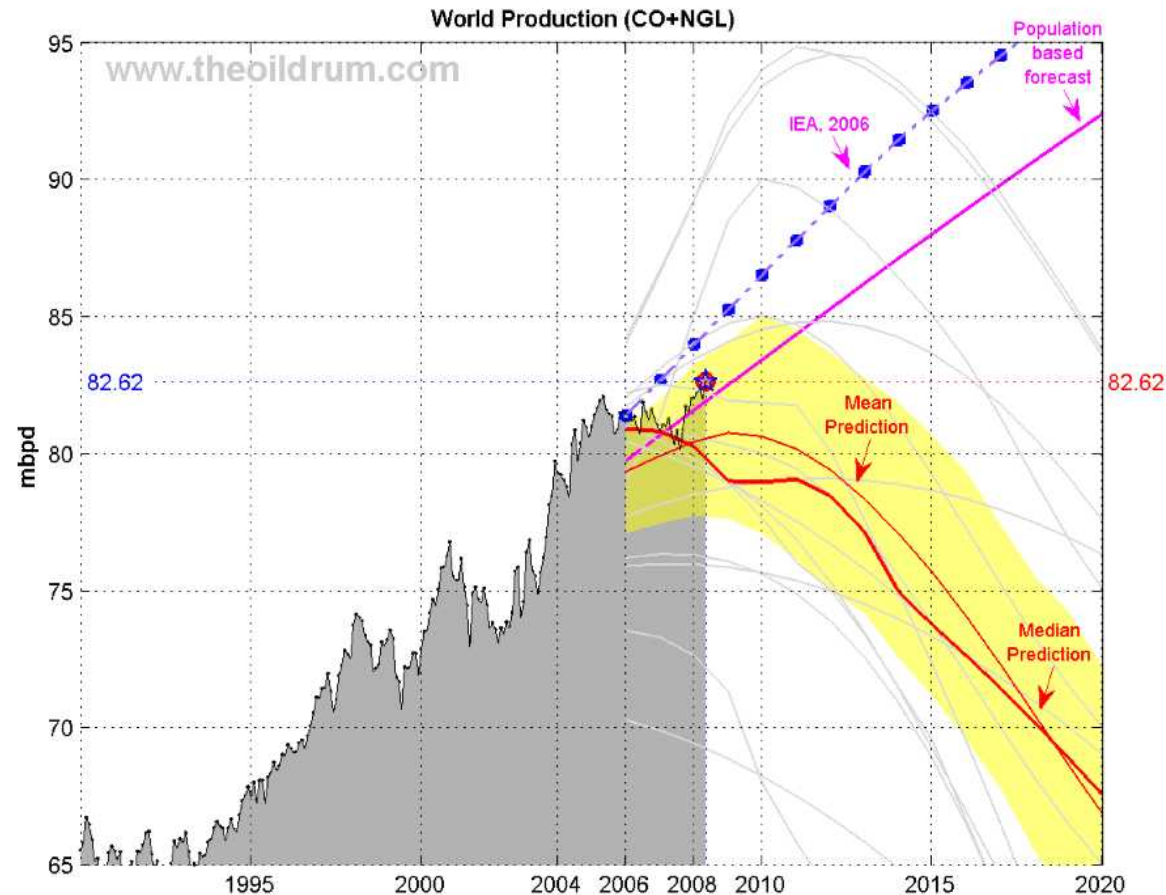
Significant cause of death and injury



US Road Traffic Accidents
National Highway Traffic Safety Admin

And honestly, it cant go on much longer

World Oil Production & Consumption – history and forecast

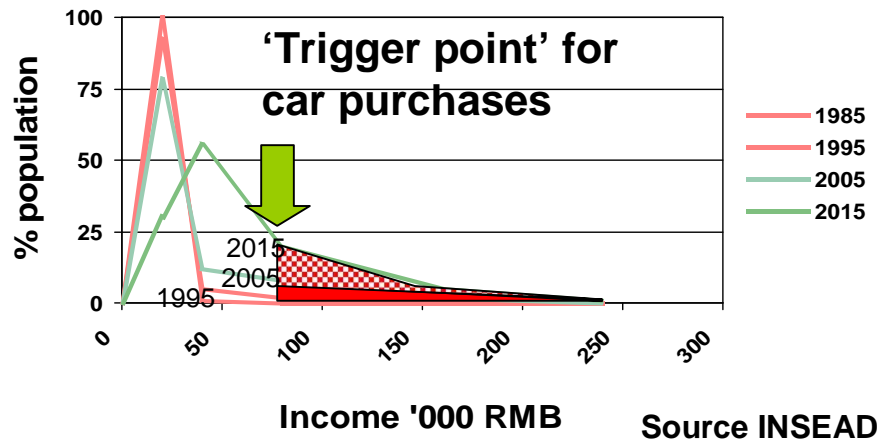


World oil production (EIA Monthly) for crude oil + NGL. The median forecast is calculated from 14 models that are predicting a peak before 2020 (Bakhtiari, Smith, Staniford, Loglets, Shock model, GBM, ASPO-[70,58,45], Robelius Low/High, HSM). 95% of the predictions sees a production peak between 2008 and 2010 at 77.5 - 85.0 mbpd (The 95% forecast variability area in yellow is computed using a bootstrap technique)

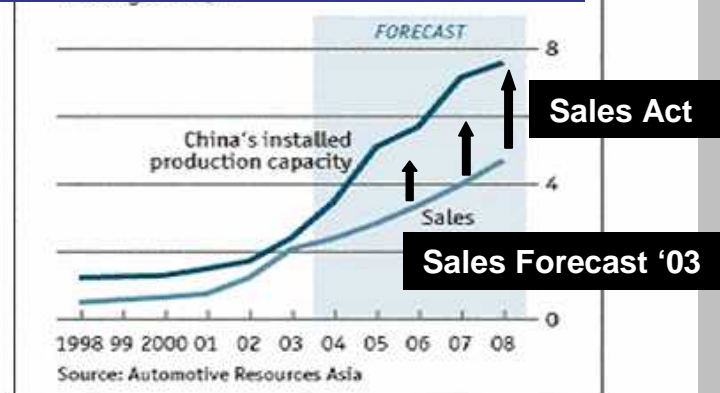
Not everyone thinks cars are bad

China thinks it can sustain its economy by building cars

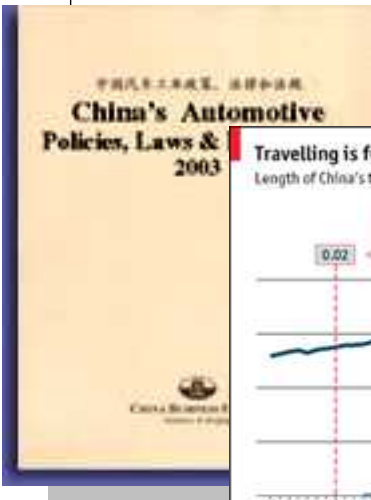
Purchasing power in China.....



.....building capacity well ahead of demand



Source : The Economist 2003



gov't policies



.. And now with a stimulus package

- #### 2009 China Stimulus package
- Tax reduction of 5% on small cars boosted sales in H1
 - \$0.7bn rebates for early retirement of old cars
 - \$1.4bn R&D grants for new engine technology
 - Consolidation of OEM's from 15 to 8
 - Alignment with other industrial sectors eg steel
- Automotive Industry equipments an economy with capability. Typically 11% GDP is Auto-related

People are changing. What the Automotive Industry think you want?

Social Behaviour seeking affordable Technology

Feature	Now	Future
Size	Large (All purpose)	Small (Specialised)
Weight	Heavier	Lighter
Safety	Passive	Active
Performance	Power	Fuel economy
Consumer Values	Status	Mobility

Source : Hot, Thirsty and Crowded
Autopolis

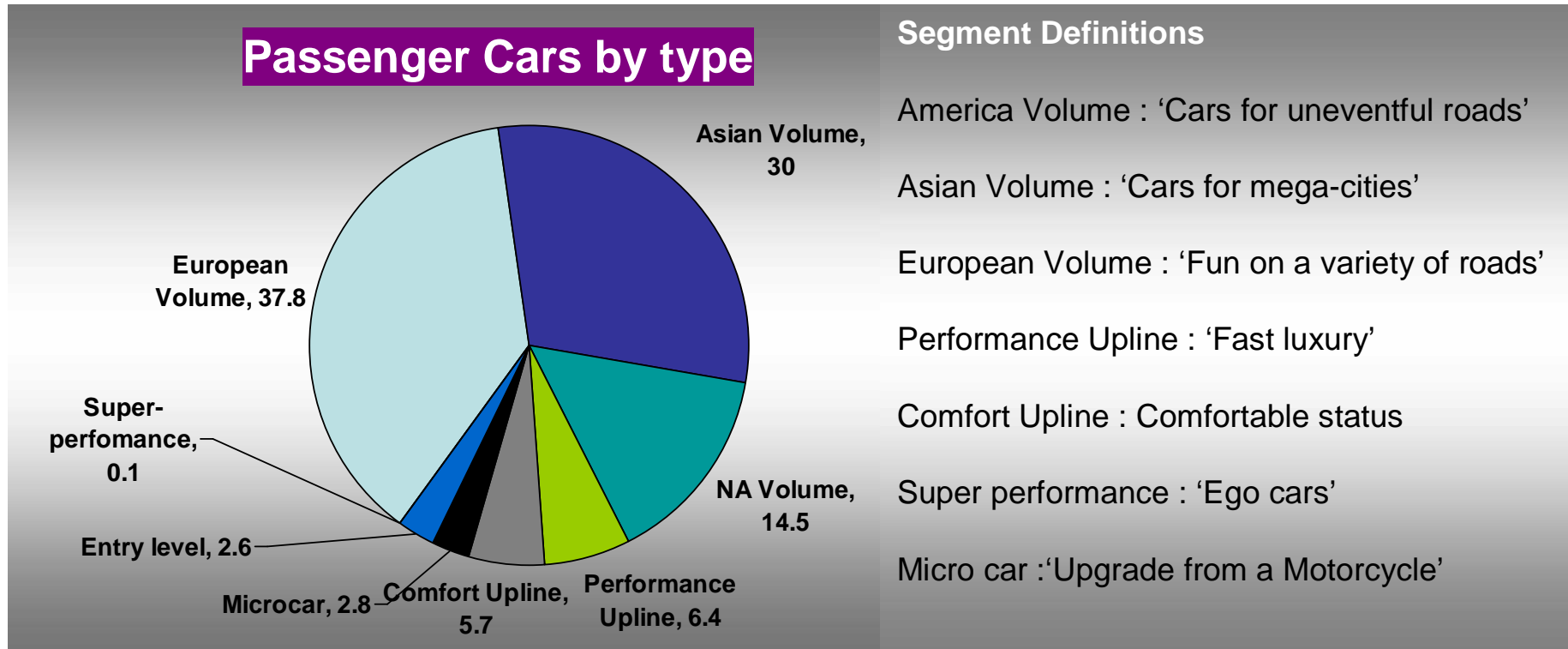
Technology changes

Mass Customisation	Mass variation
Metal	Polymer
Impact Engineering	Electronic crash prevention
Single engine	New & multiple drive trains
Comparable platforms	Diversified platforms

Conventional Automotive thinking assumes this needs significant free cash, justified by global economies of scale, sophisticated marketing and extensive Infrastructure investment

But every region is very different.

Alternative segmentation based on consumer needs and preferences



For the Global Auto Industry it is more useful to consider :

Regional Designs - Local designs based on local behaviours and services.

Upline (Global premium brands) – Global companies that depend on centrally specified products and a global supply capability

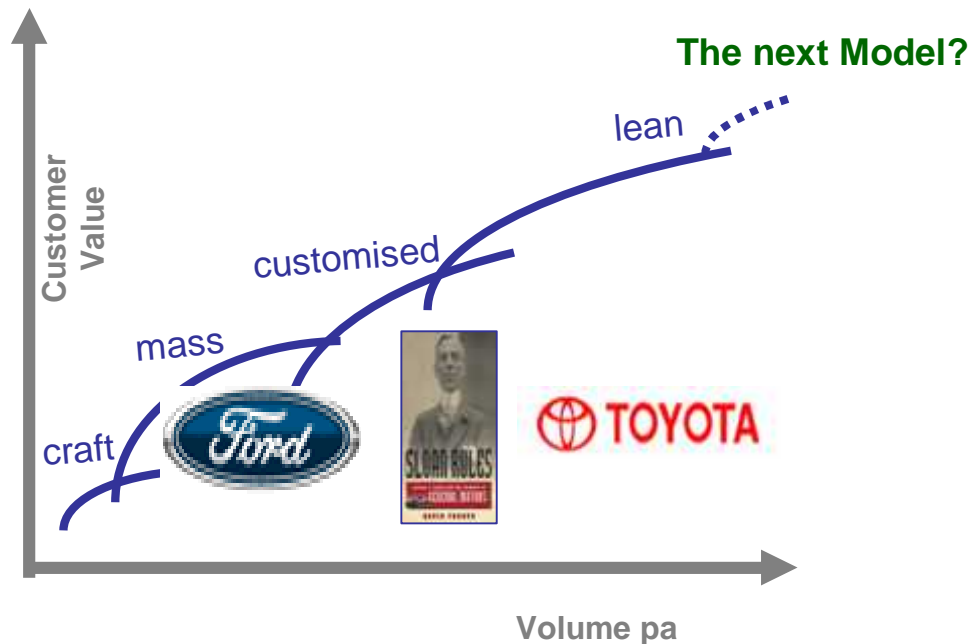
Regional markets imply an explosion in models and variants finely tuned to local needs and local regulation.

Economies of scale disappear

More competition from emerging markets - China, Korea, Russia – unburdened by legacy and more able to access technology

How to put all this into a simple framework?

Historical perspective indicates time for a change



1950's Lean : Toyota's Management System cut working capital and the cost of quality and maintained mass customisation at far lower cost. It crippled the Big Three when it was globalised

1930's Customised : Alfred P Sloan & GM's use of mass customisation. Birth of today's concepts of brands, segmentation, differentiation and business units. GM's US market share peaked at 51% in 1962 even as brands expanded on top of fat profits

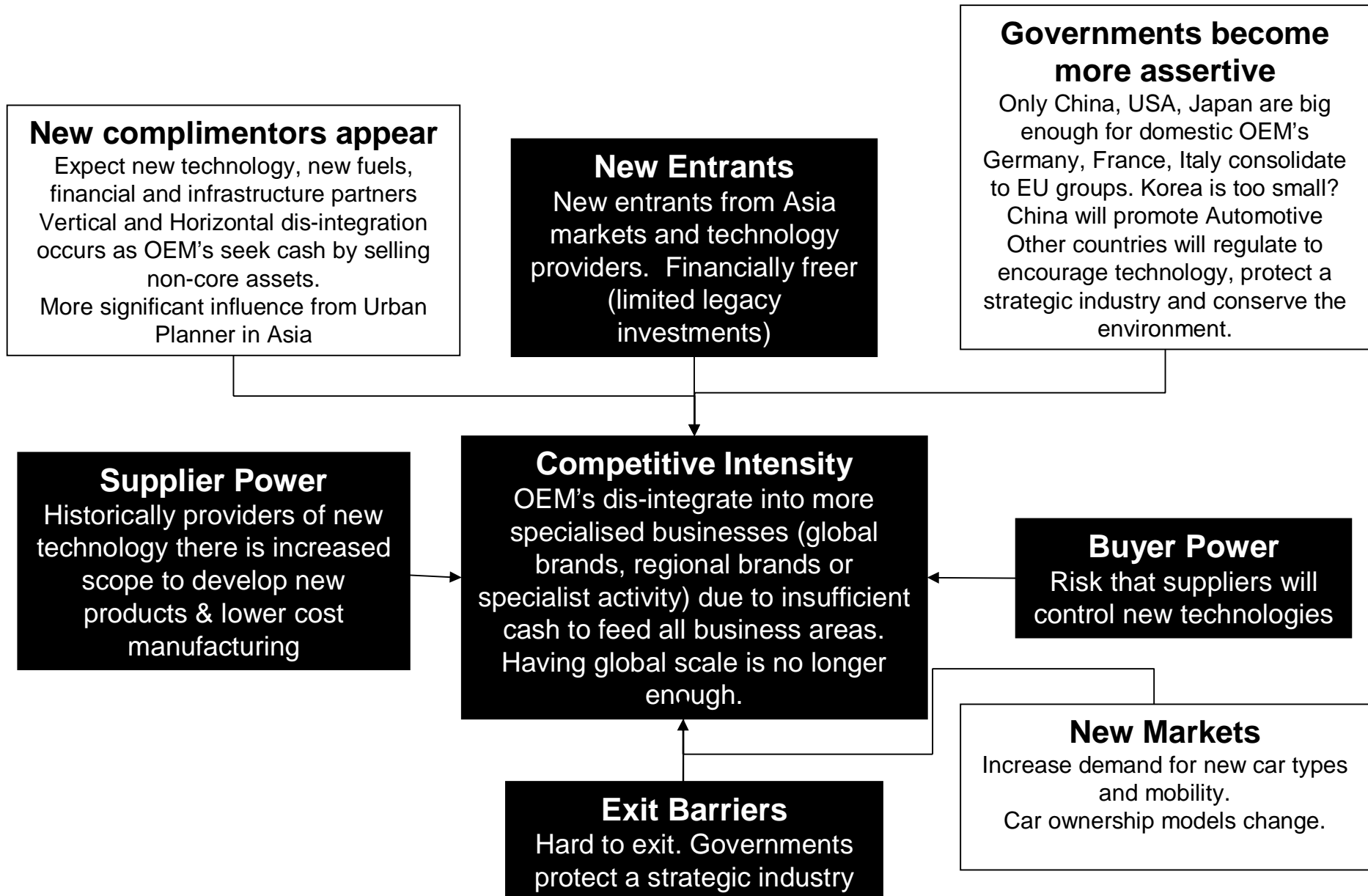
1909 Mass : Ford's production line methodology eliminates the need for skilled craftsmen. Makes cars available to everyone, if they are black cars...

Pre 20th Century Craft : Craftsman making cars available for the rich elite

Each period has its own distinct industry model lead by one company. With globalisation Toyota's Lean model is reaching the end of its life

Automotive Industry transformation

Porter Analysis



I hope ...

- Look at the Automotive Industry in a new way
- Appreciate the challenge that is now faces
- Explain to me what Toyota should do



Thank you
for your attention