

Airneth, Den Haag, 8 December 2016

UAV Industry Development: Prospects for the Future

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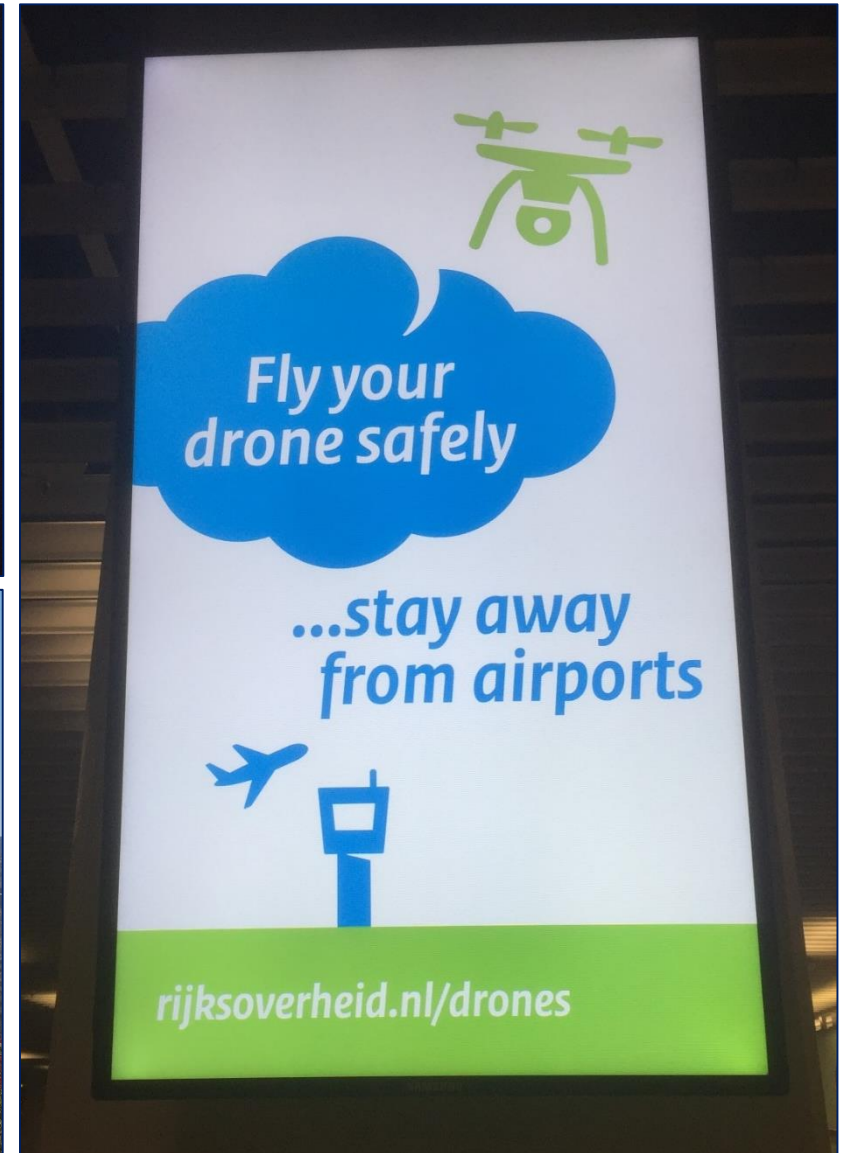
The business school that thinks
and lives in the future



CHRISTMAS 2026?



UAV EVERYWHERE





WHAT ARE WE GOING TO TALK ABOUT?

 Current Situation

 Dominant Design

 Process of Industry Emergence

 Importance for Mobility and Infrastructure

 Future Challenges

THE CURRENT SITUATION IN US AND EUROPE IS CHALLENGING

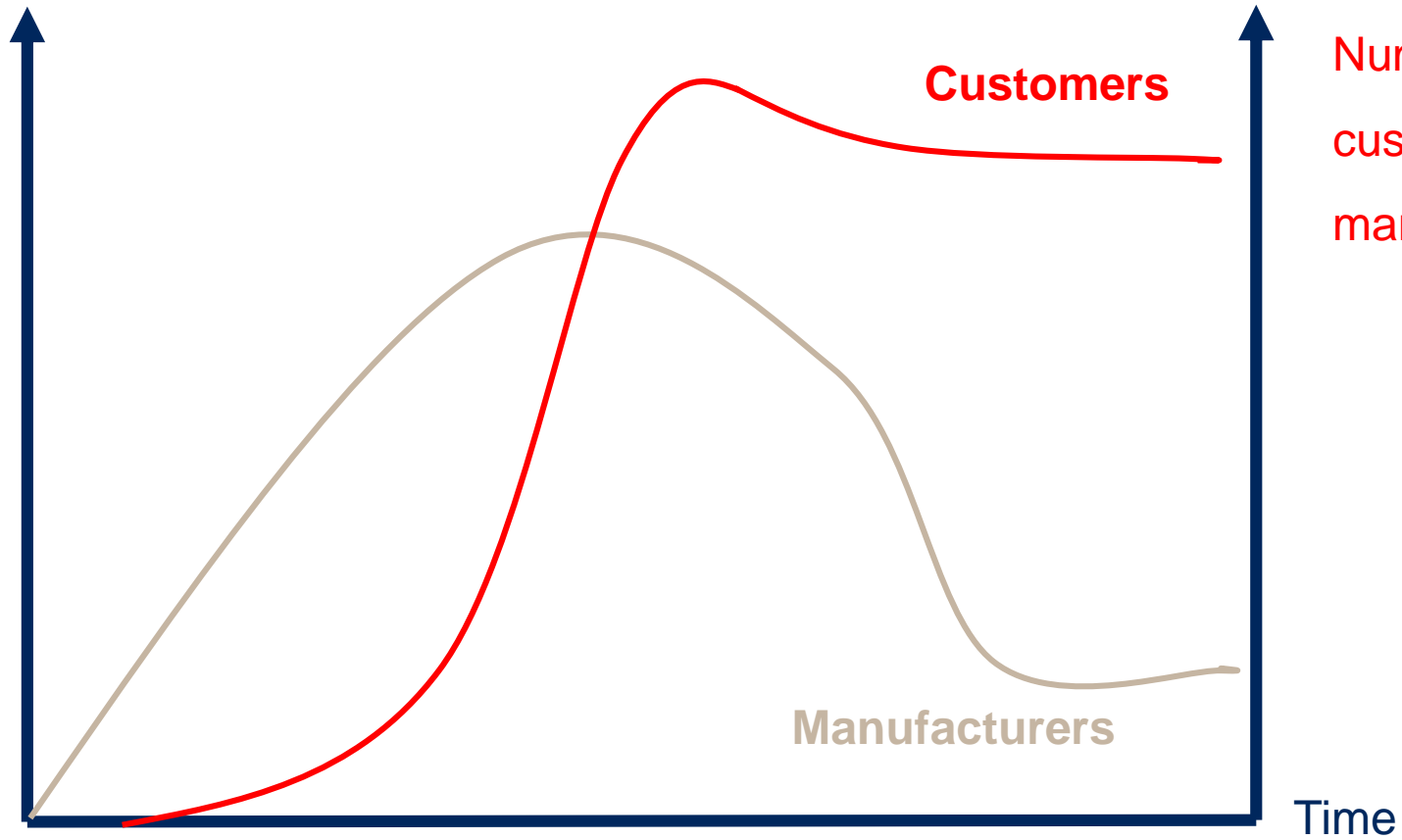
- ⌚ Restrictions due to legislation, safety, privacy issues.
- ⌚ Proof-of-concept and demo flights.
- ⌚ Technical challenges.
- ⌚ Entrepreneurial challenges!



WHEN WILL CONSOLIDATION COME?



Number of
manufacturers in
the marketplace



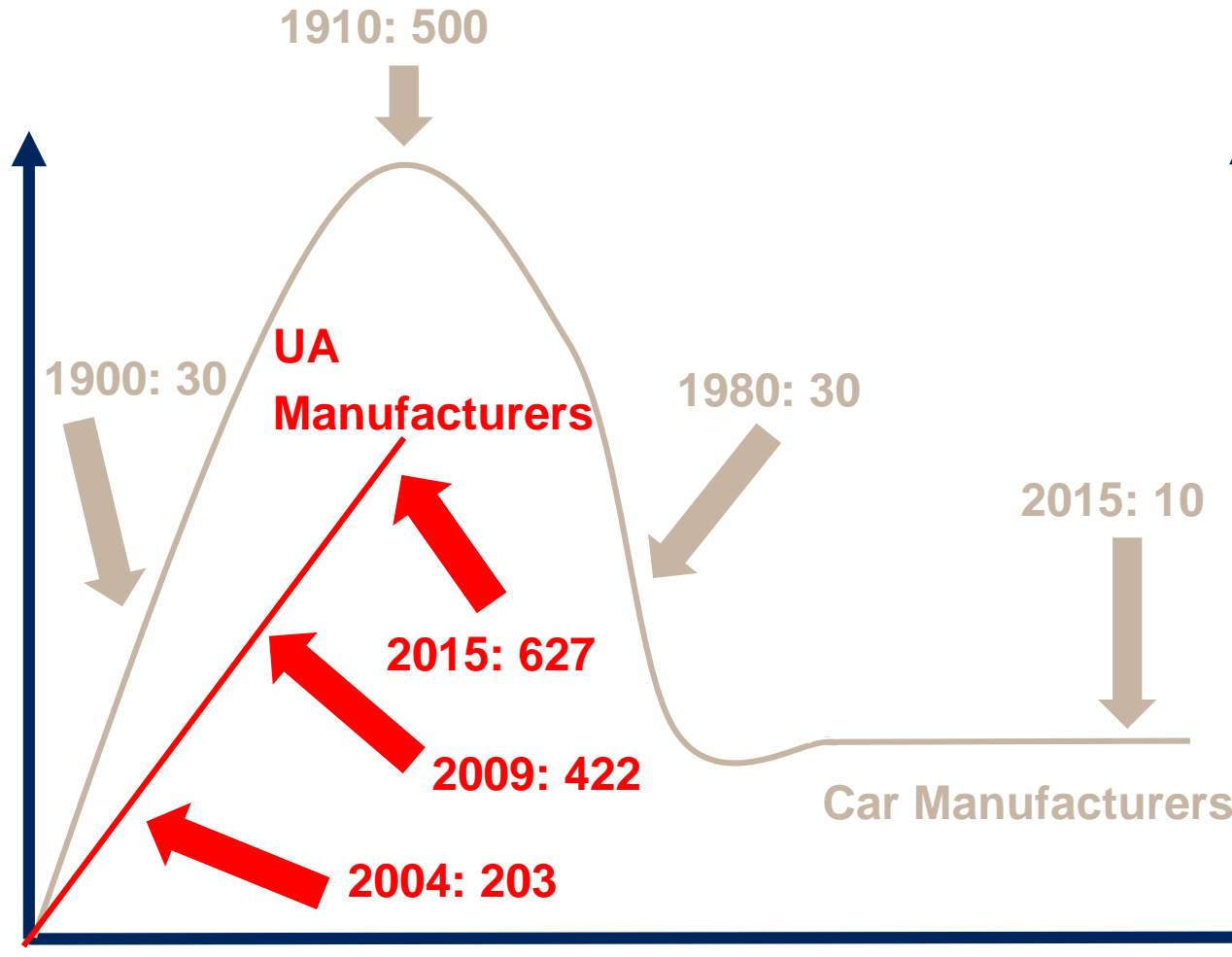
Number of
customers in the
marketplace

Source: Inspired by the work of Steven Klepper; own illustration

CARS AND UAV, SIMILAR IN THEIR DEVELOPMENT?



Number of global **CAR** manufacturers in the marketplace



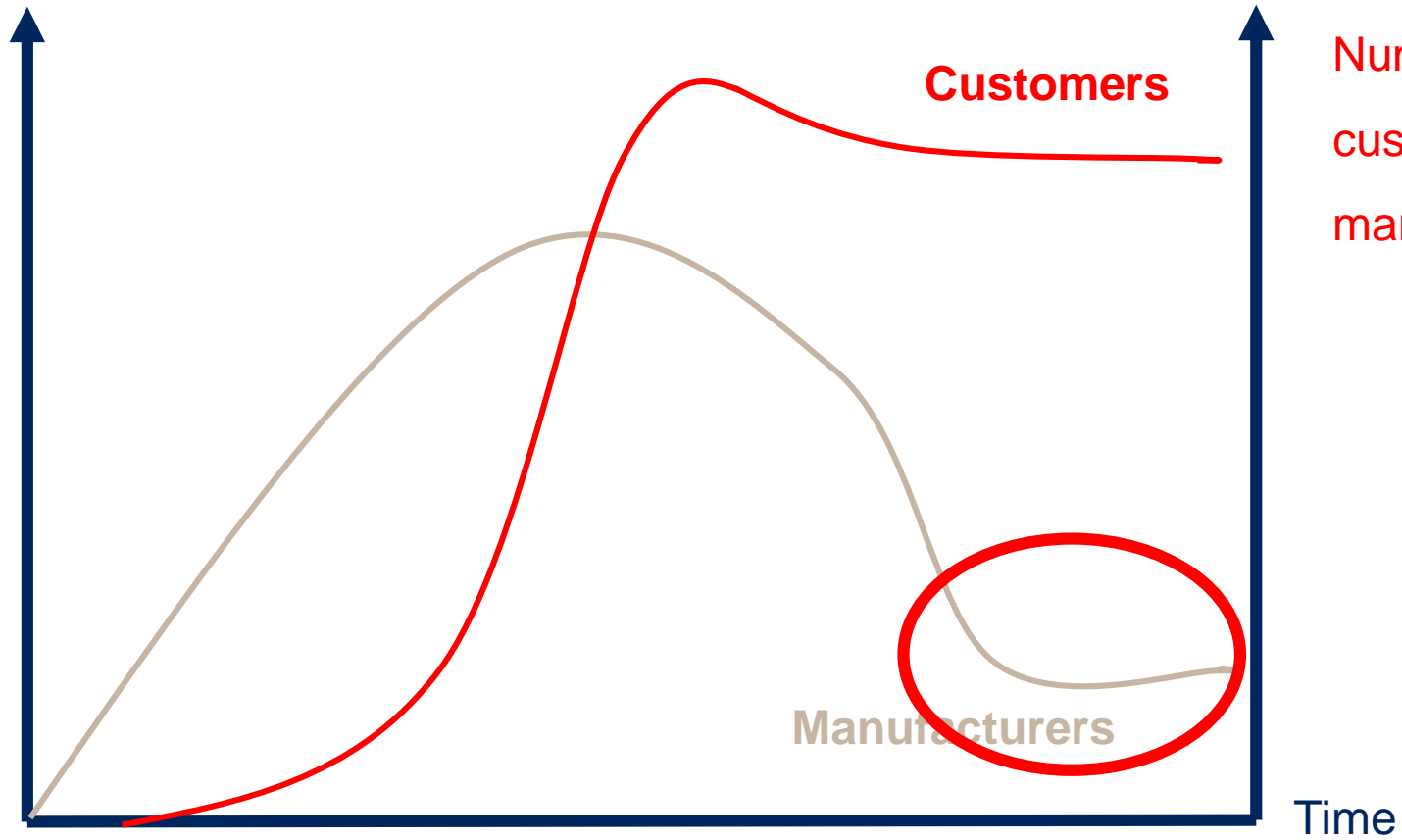
Number of **UA** manufacturers in the marketplace

Time

WHEN A DOMINANT MODEL EMERGES

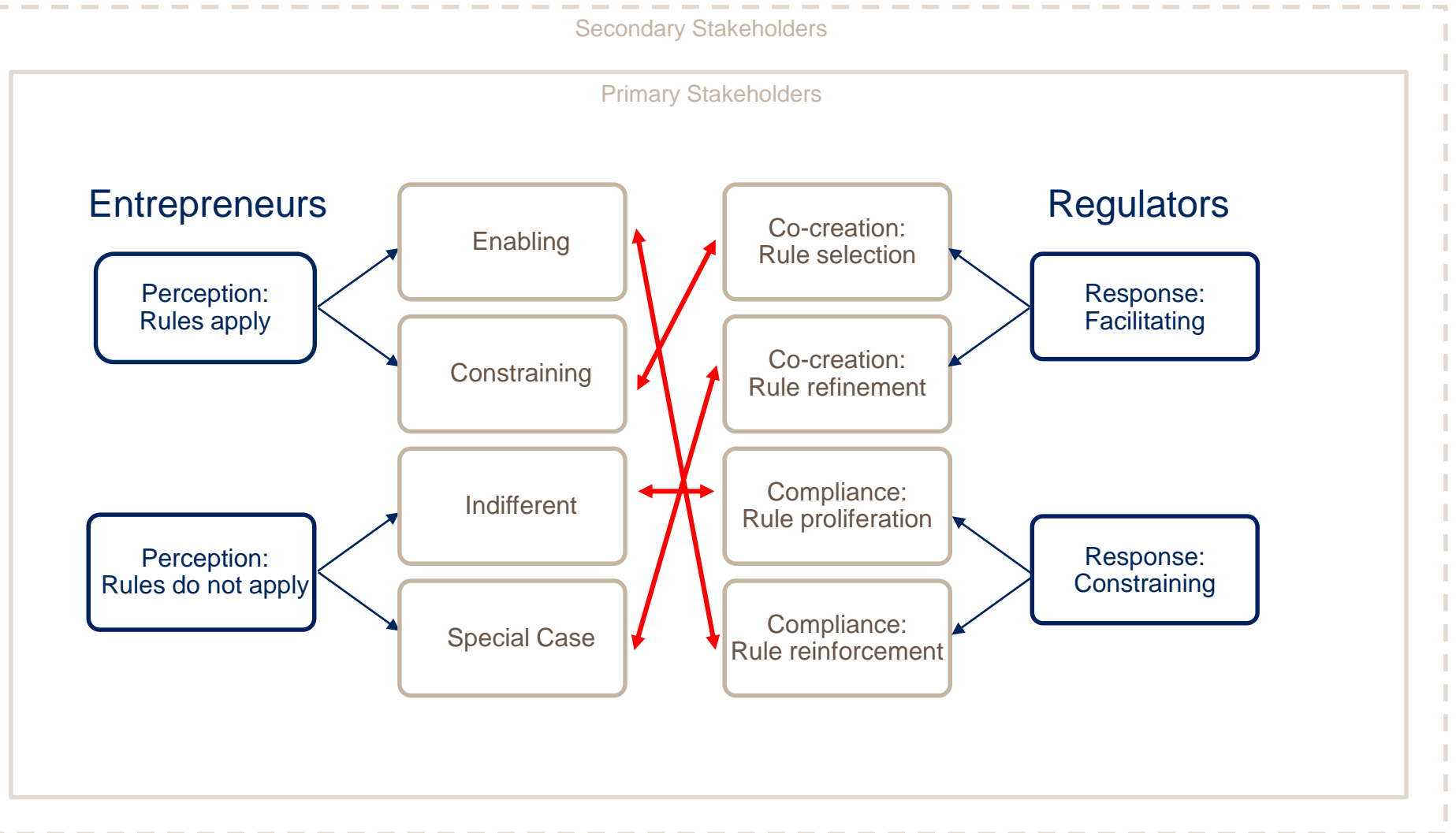


Number of
manufacturers in
the marketplace



Number of
customers in the
marketplace

THE PROCESS OF SHAPING THE CONTEXT



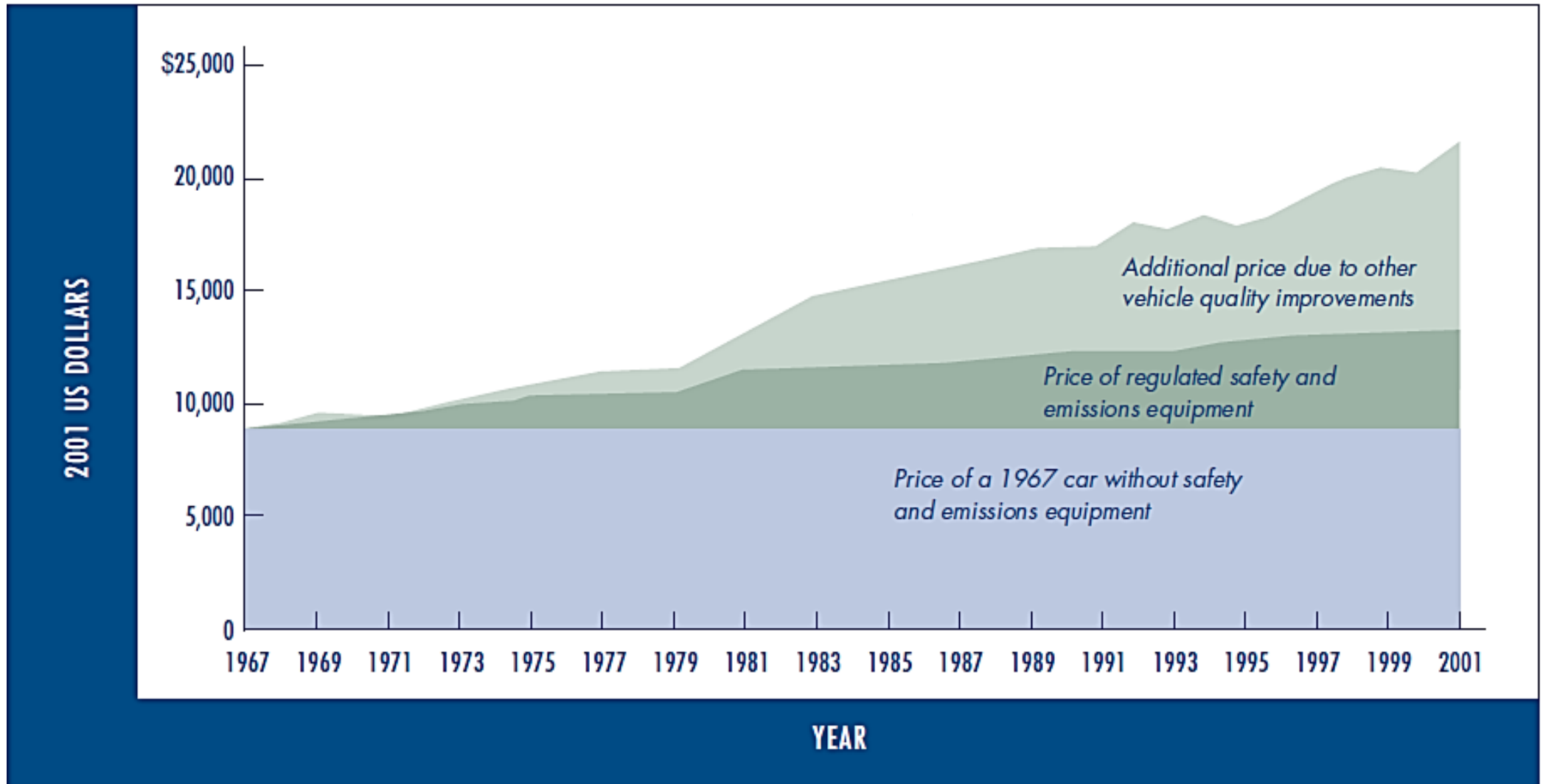


IMPLICATIONS FOR MOBILITY AND INFRASTRUCTURE

- 🚁 In comparison to other industries: development process a lot quicker!
- 🚁 Not only technology, but also regulatory framework.
- 🚁 Emergence of dominant design in car industry: based on market demand.
- 🚁 Emergence of dominant design in UAV industry: based on restrictions?



FUTURE CHALLENGE: INCREASING PRICES?



Regulatory-induced costs in the price of cars, 1967–2001



THANK YOU FOR YOUR ATTENTION!




Your input is highly valued!

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SOURCES (TEXT)

TEXT

-  Sperling, D., et al. (2004). The Price of Regulation. ACCESS Magazine, 1(25), 9-18. UC Berkeley: University of California Transportation Center.
-  UVS International (2015). RPAS Yearbook, The Global Perspective 2015/1016, 13th Annual Edition.
-  Vollmer, T., & Cirulies, N. (2009). Globalität und Interkulturalität als integrale Bestandteile beruflicher Bildung für eine nachhaltige Entwicklung–Band B2–Industrielle Produktion–Automobilindustrie (Sektoranalyse).

PHOTOS

Slide 1 (and header):

-  https://news.transport.gov.mt/wp-content/uploads/2015/02/fotolia_63026982_xl-768x576.jpg

Slide 2:

-  <http://media.cmgdigital.com/shared/img/photos/2013/12/11/2f/80/cb120213dAPR.jpg>

Slide 3:

-  Own photographs (K. Smolka)

Slide 5:

-  https://cdn.static-economist.com/sites/default/files/images/2016/04/blogs/gulliver/20160423_blp501.jpg
-  http://www.howtogeek.com/wp-content/uploads/2015/03/ximg_5515b2f82cb7e.jpg.pagespeed.gp+jp+jw+pj+js+rj+rp+rw+ri+cp+md.ic.J8R7QgP6-U.jpg
-  <https://assets.bwbx.io/images/users/iqjWHBFdfxIU/i872hNADtB4s/v2/-1x-1.jpg>

Slide 17:

-  https://www.occupycorporatism.com/wp-content/uploads/2014/02/Orig.src_.Susanne.Posel_.Daily_.News-drone.car_.kwid_.renault_occupycorporatism-600x337.jpg