

An aerial, high-angle view of a multi-lane highway bridge spanning a body of water. Numerous cars are driving on the bridge, moving away from the viewer. Several cars in the foreground have concentric circles around them, representing sensor or communication ranges. The sky is overcast, and the water is calm.

The Connected Car – Privacy & Access 20/20 Conference

November 12-13, 2015
Vancouver, BC



Global Automakers
of Canada

David C. Adams
President

Global Automakers of Canada (GAC)



HONDA
The Power of Dreams



PORSCHE



TOYOTA



Associates



ISUZU



DENSO

Members' economic contribution to Canada

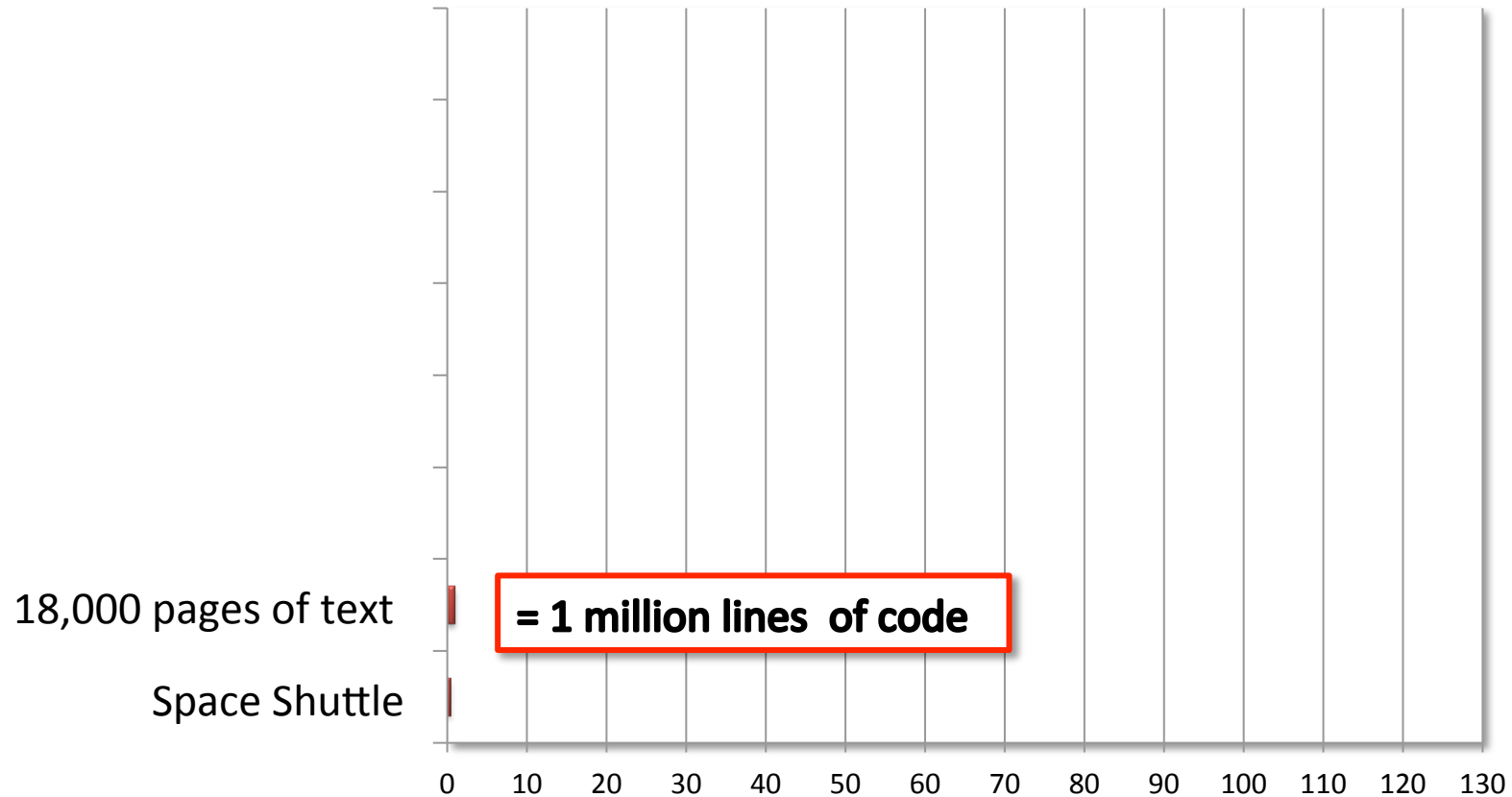


- **2014:** Sold over **1,019,000** vehicles = **55.1%** market share
- **54%** of sales = **NAFTA region**
- **77,000** Canadians employed directly and indirectly
- **40%** of Canada's vehicle production at 5 Honda and Toyota manufacturing facilities
- Mercedes-Benz fuel cell stack production – Burnaby
- Won majority of Natural Resources Canada's ecoENERGY awards for fuel-efficient vehicles
- **60% of Canada's 3,300+** new car and light truck dealers

Complexity of the Modern Automobile



Millions of Lines of Code

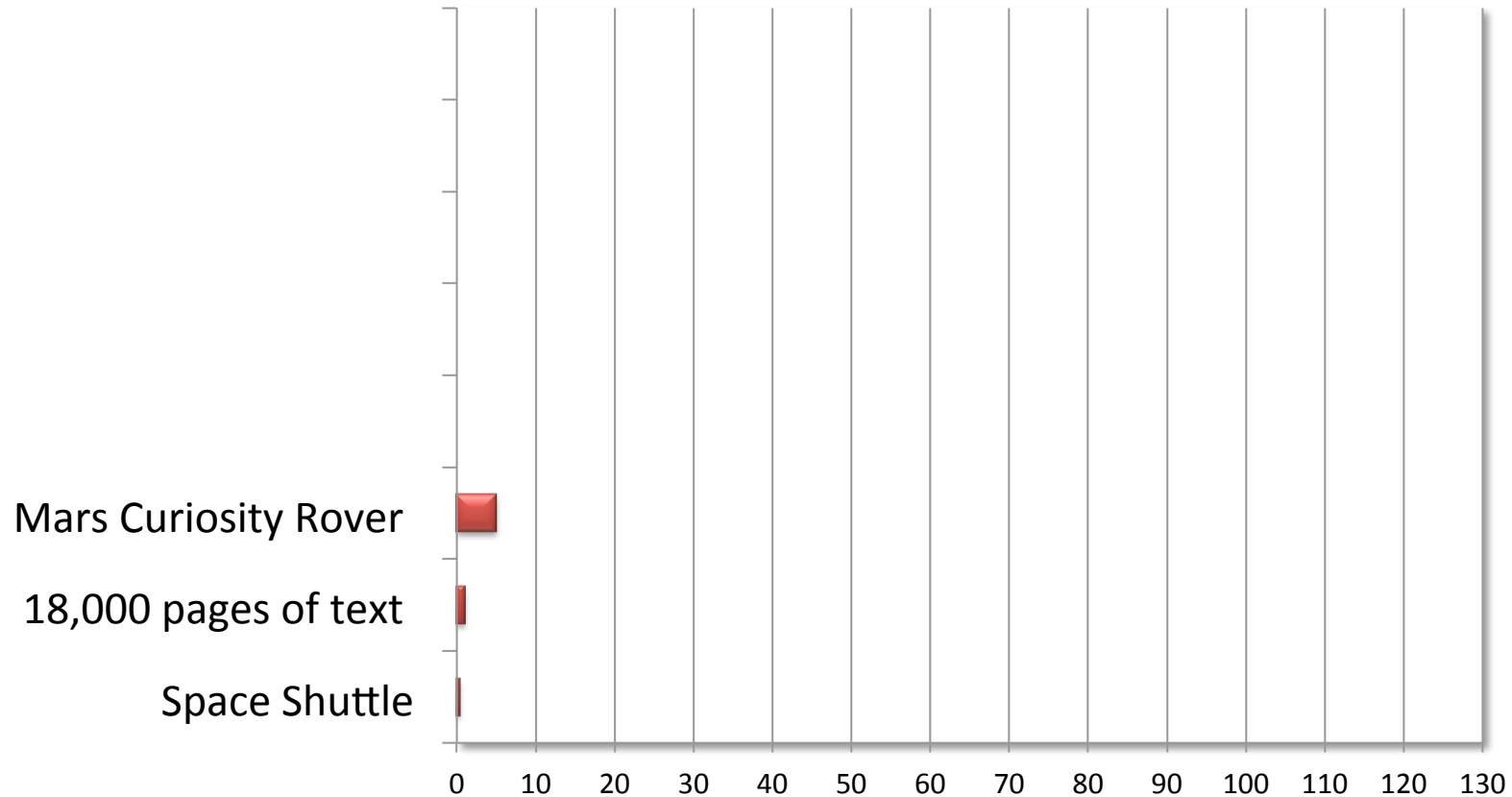


Informationisbeautiful.net, 2015, Codebases v 0.9, Sept 24, 2015

Complexity of the Modern Automobile



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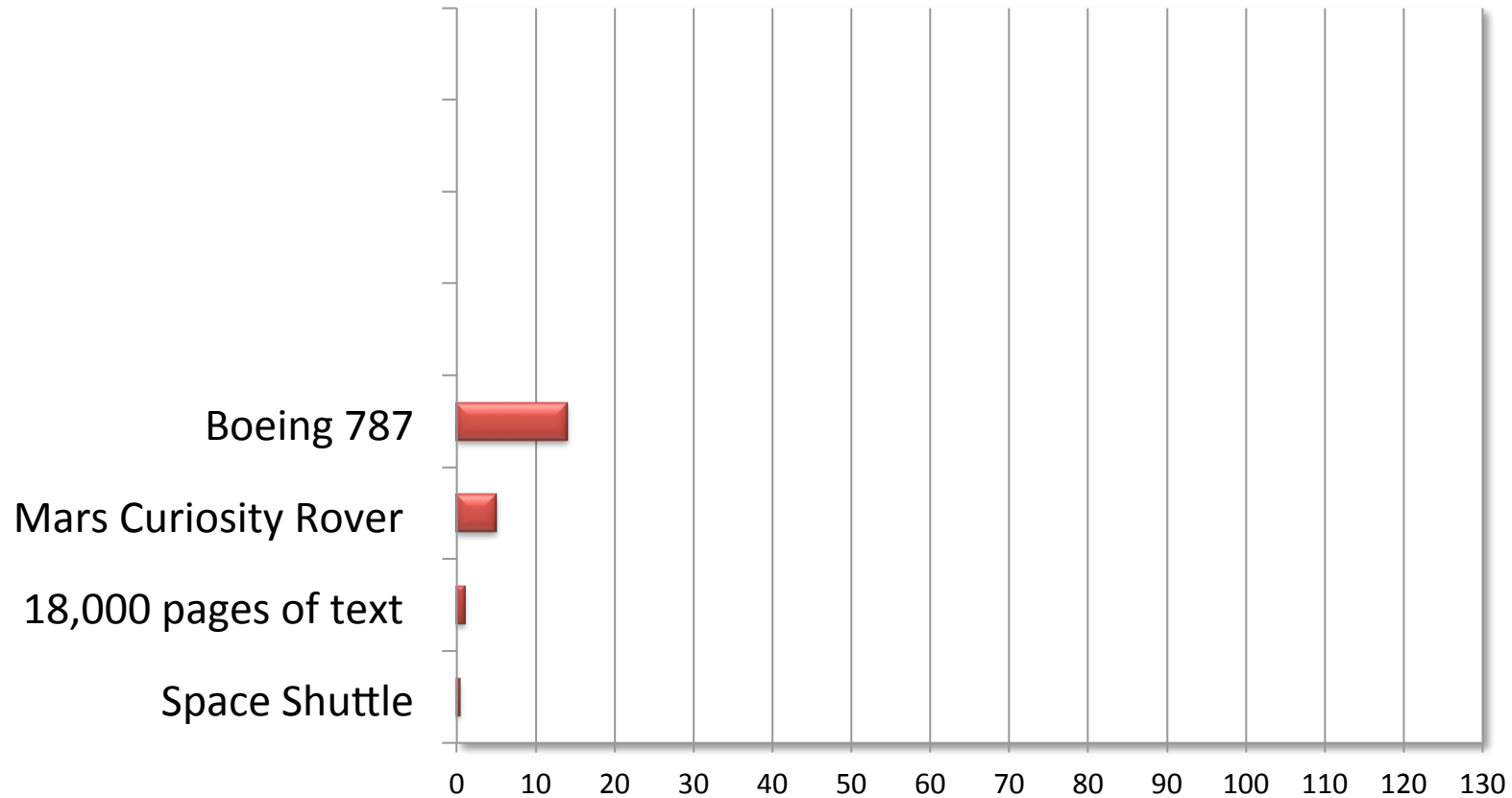


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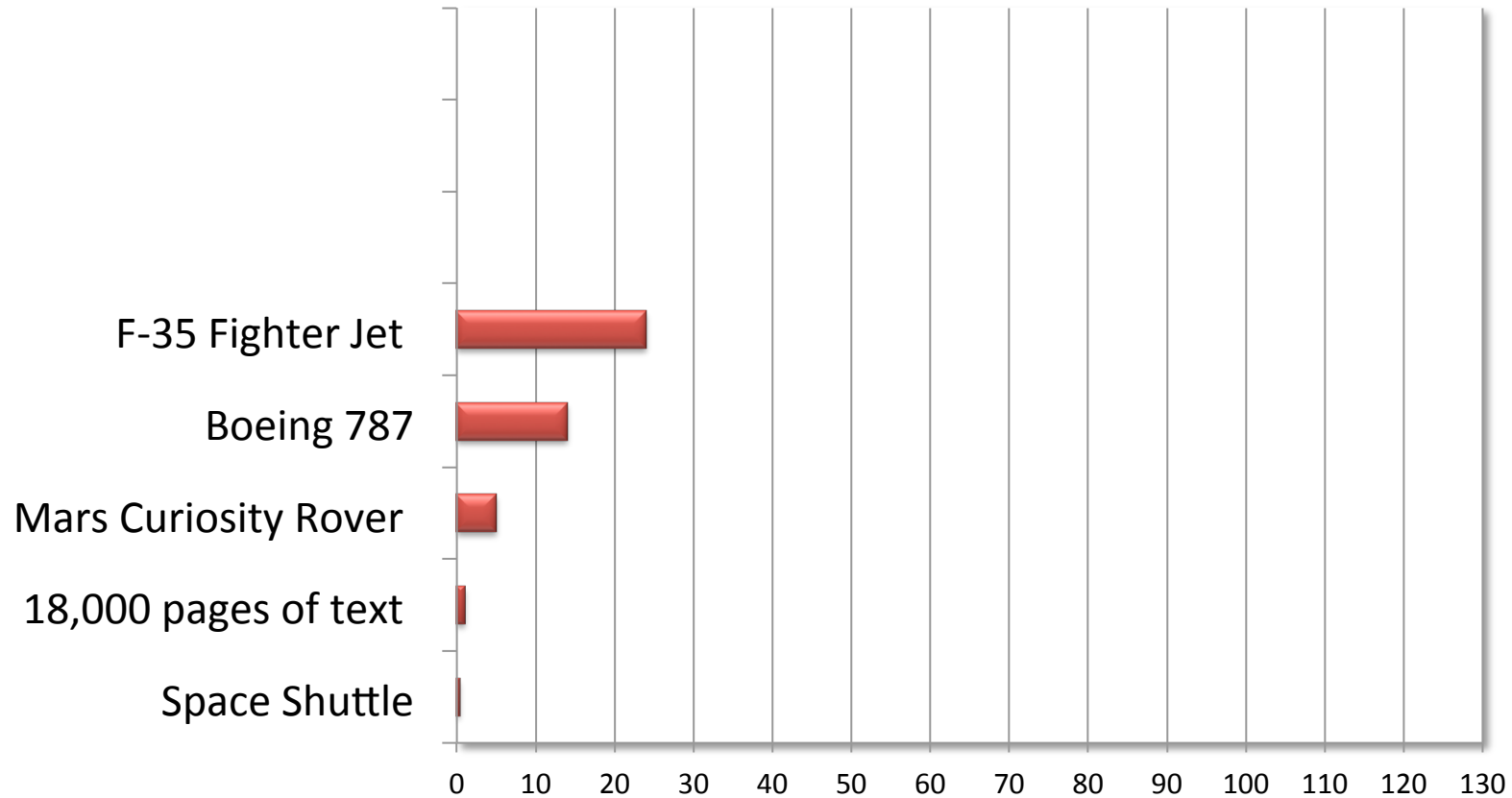


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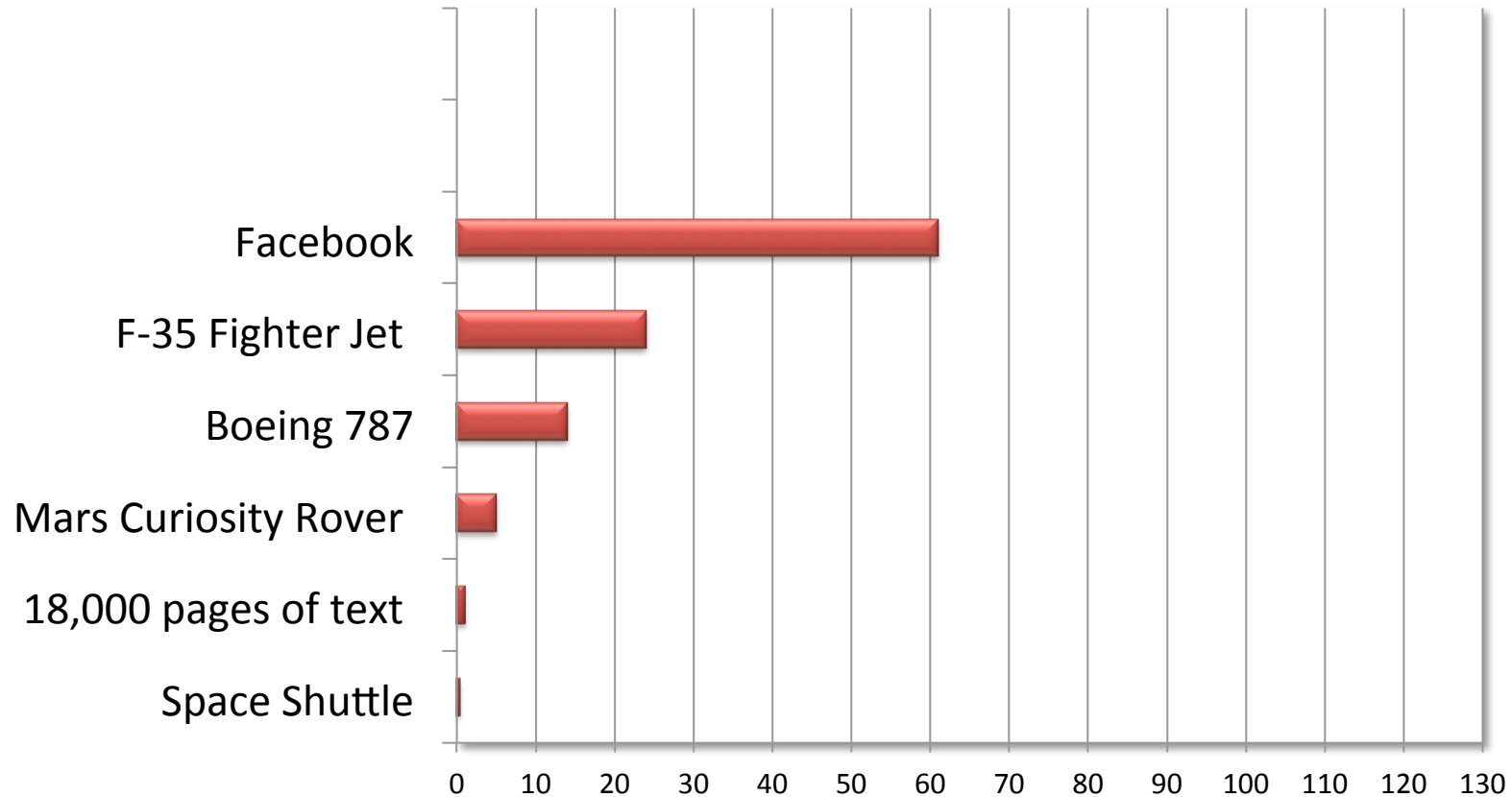


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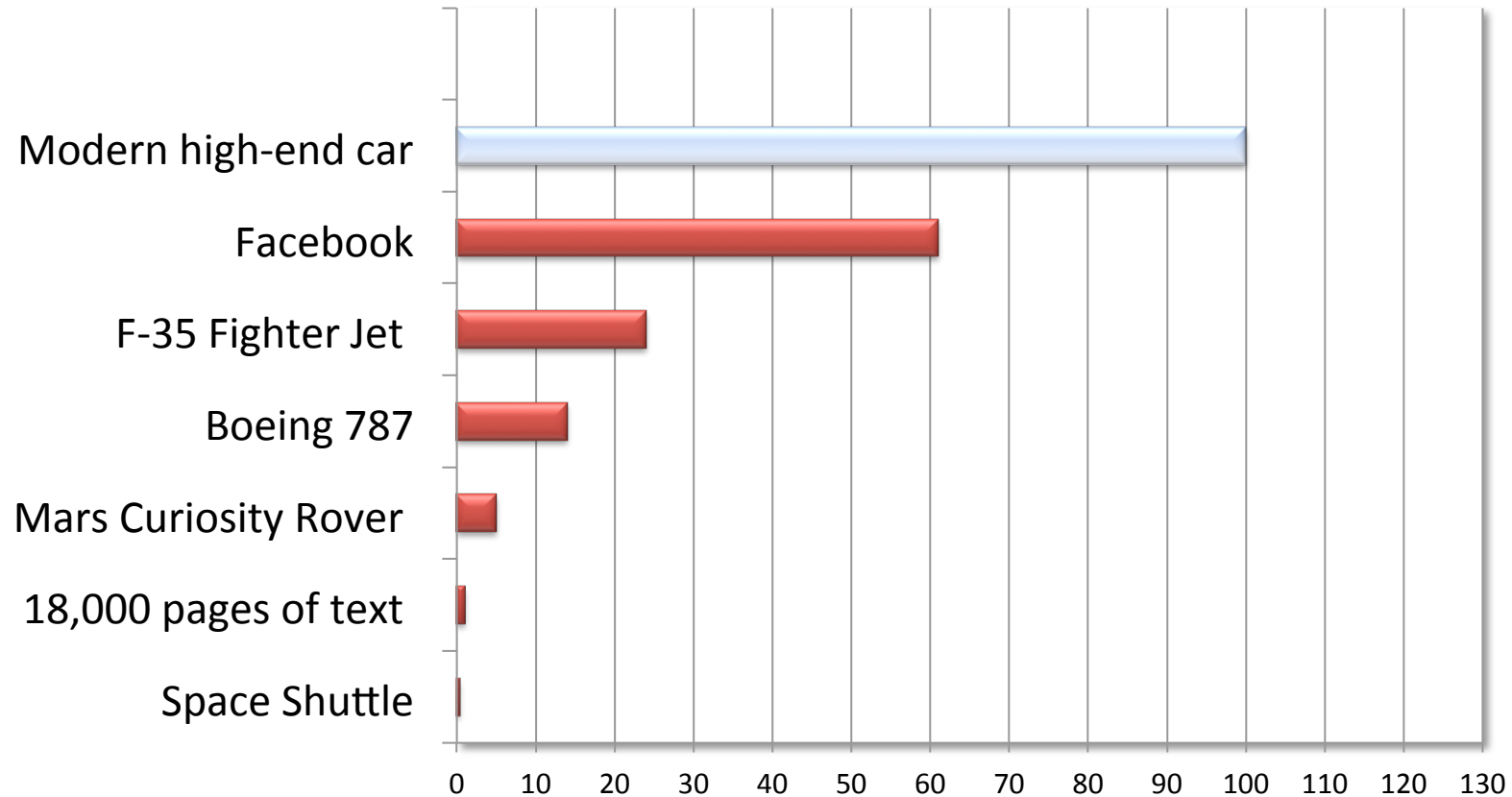


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Complexity of the Modern Automobile



Millions of Lines of Code

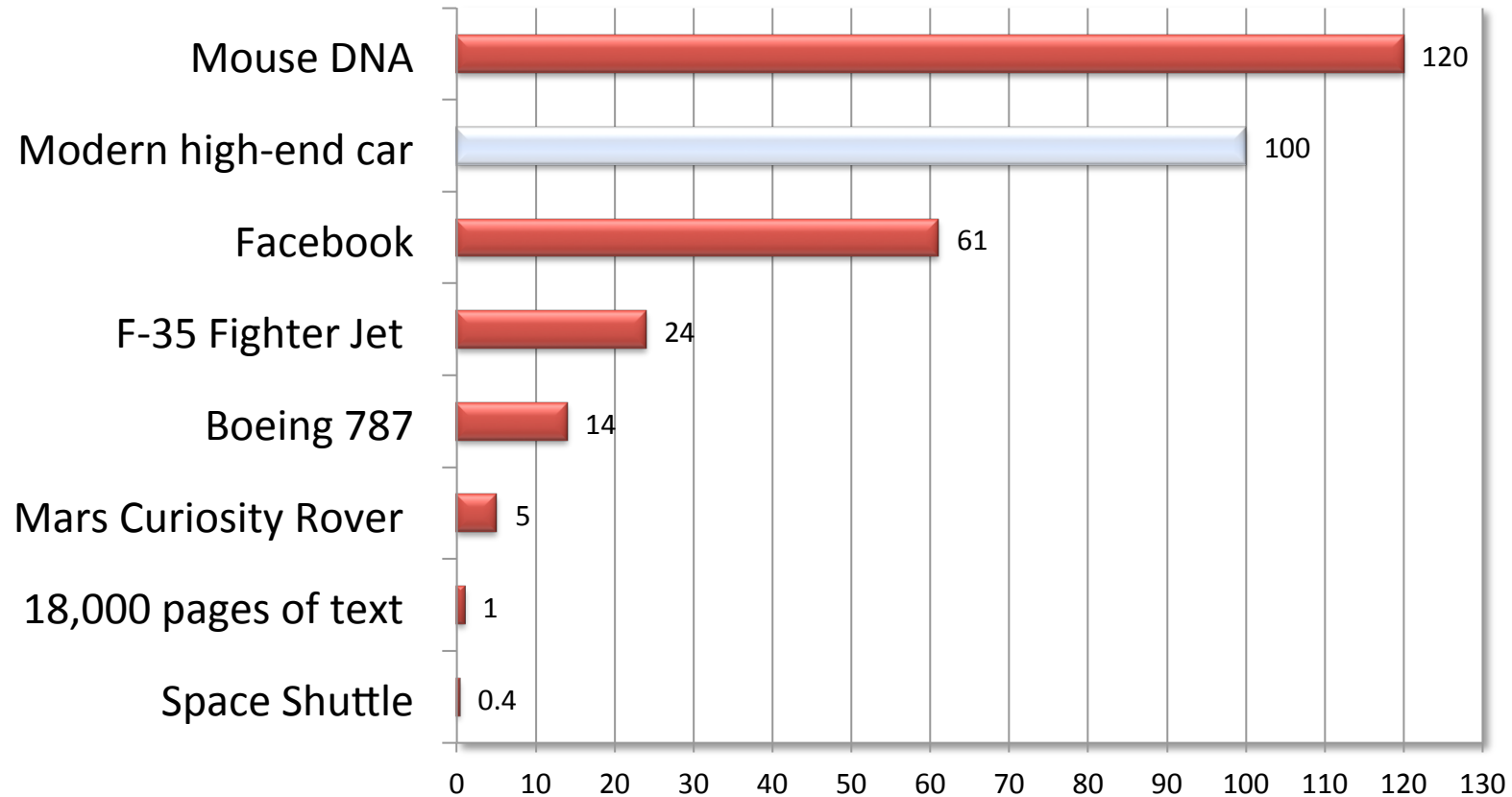


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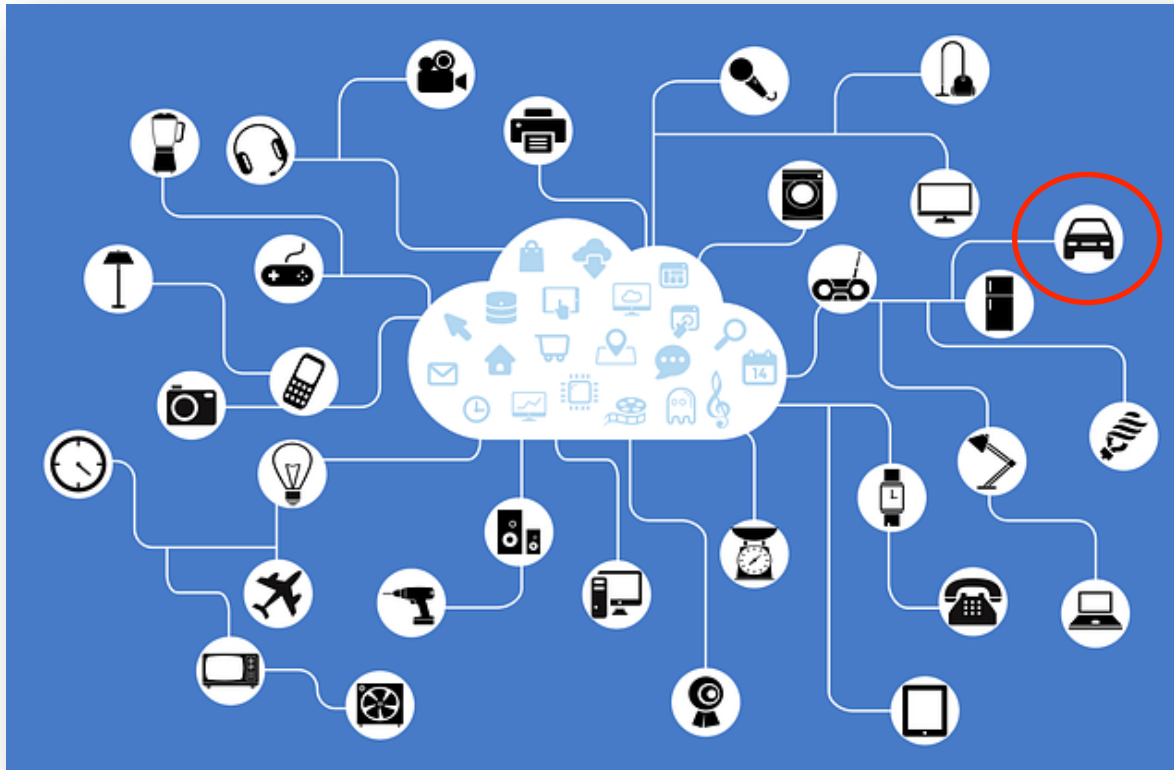
Complexity of the Modern Automobile



Millions of Lines of Code

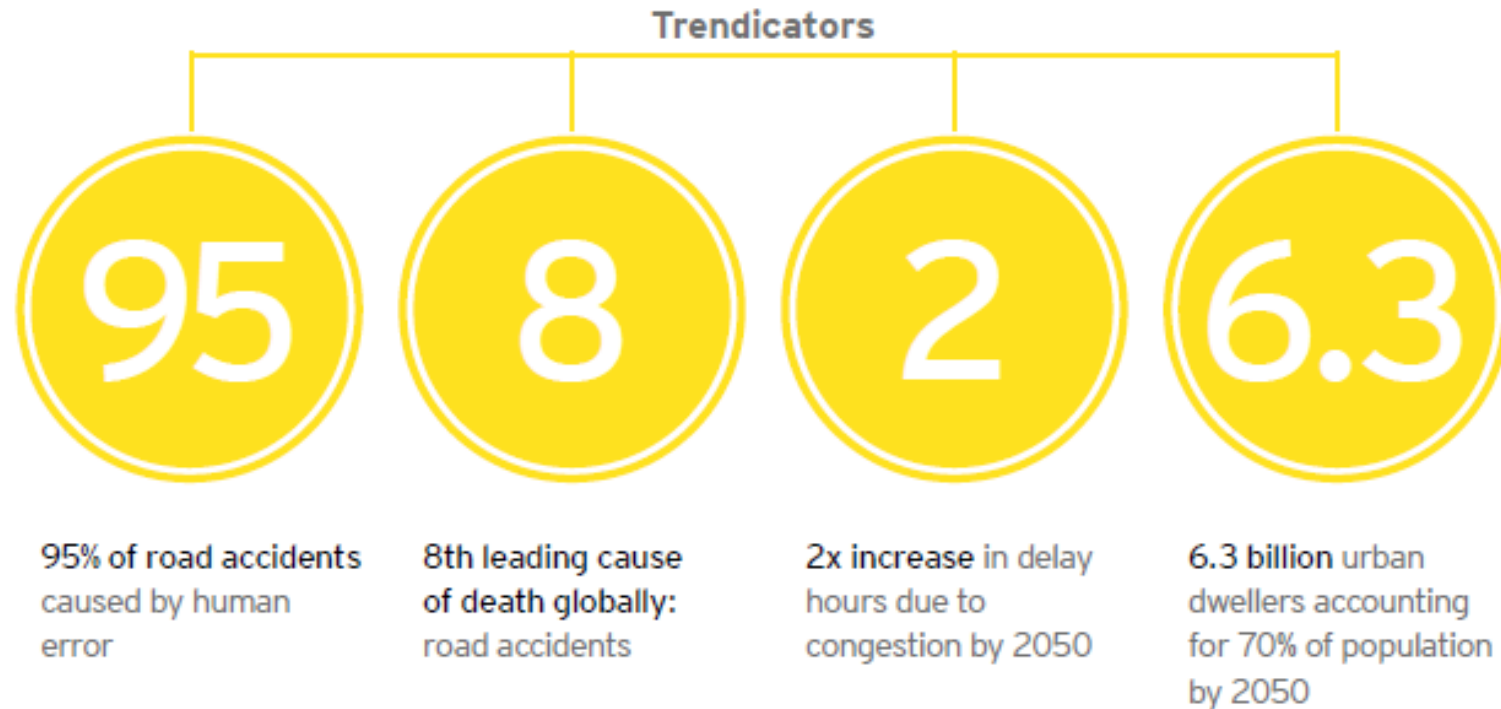


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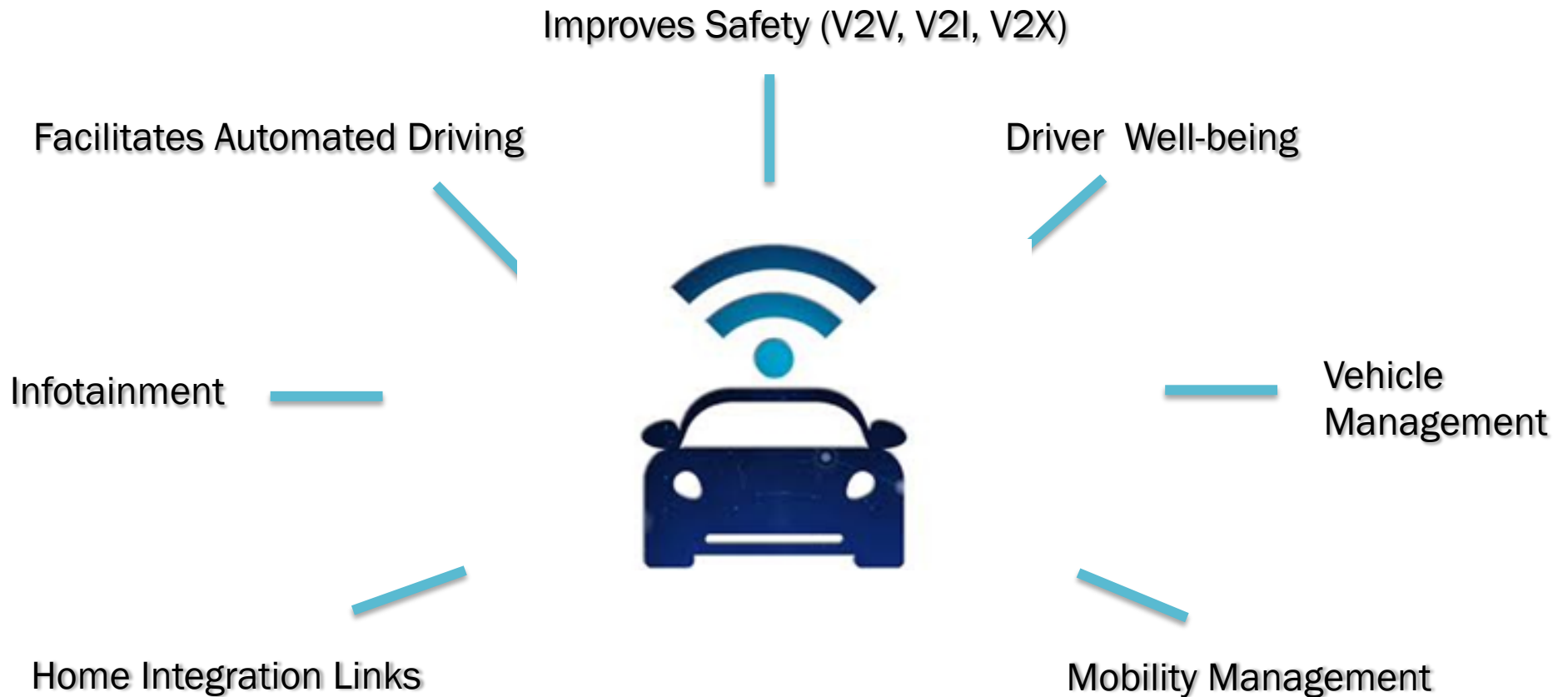
pwc 2015, *Connected Car Study: Racing ahead with autonomous cars and digital innovation*

What are the “drivers” behind CVs & AVs



Source: UN World Urbanization Prospects, World Business Council for Sustainable Development, Factiva, Navigant Research, EY analysis European Commission, Directorate General Information Society and Media, Informal document No.: ITS-13-07

The benefits of a “connected car”?



Benefits of CVs

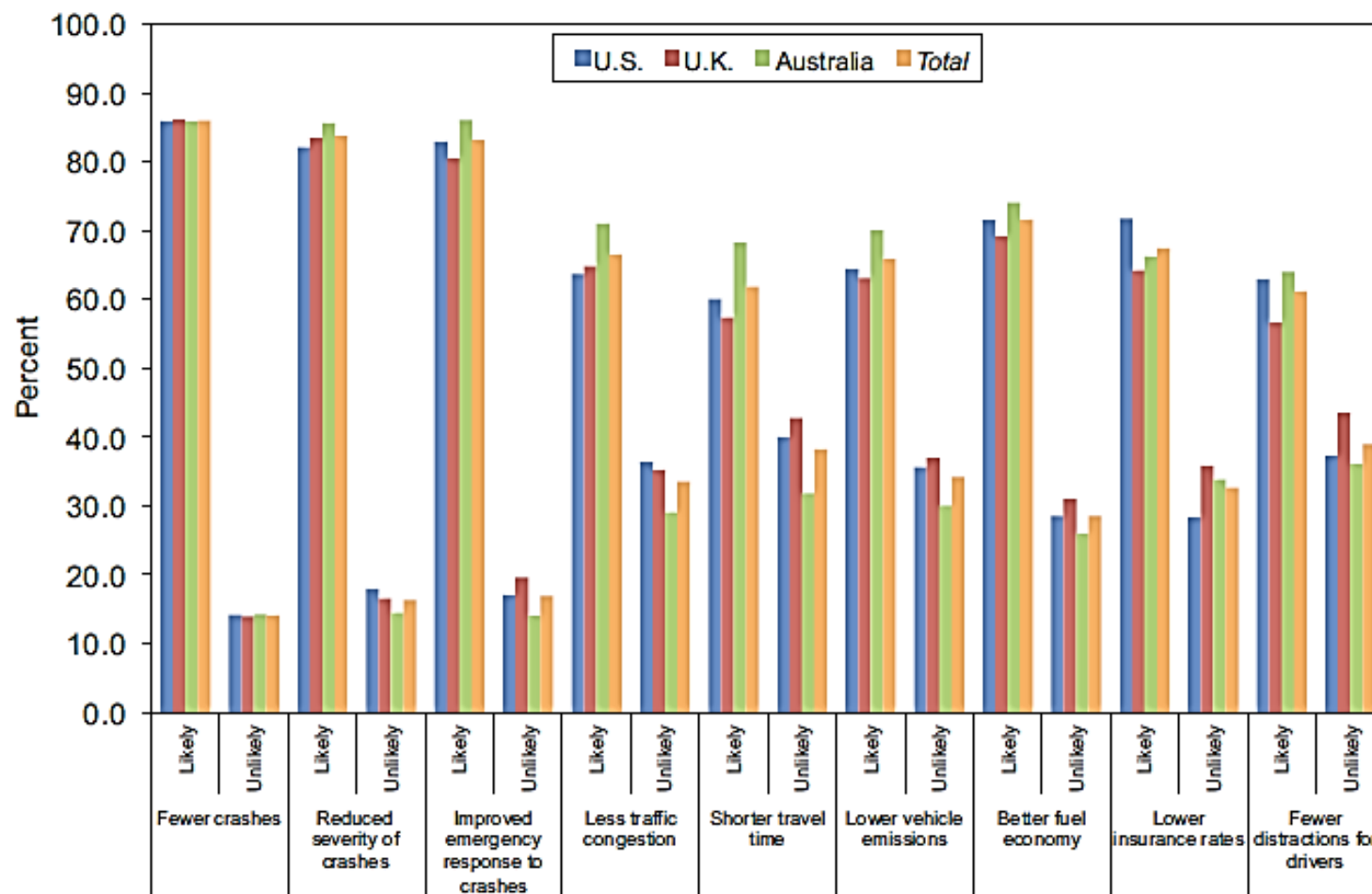


Figure 3. Summary of responses (collapsed), by country, to Q3: “How likely do you think it is that the following benefits will occur when using connected vehicles?”

UMTRI, 2014, A Survey of Public Opinion about Connected Vehicles in the U.S., the U.K., and Australia

Consumer Acceptance of CVs

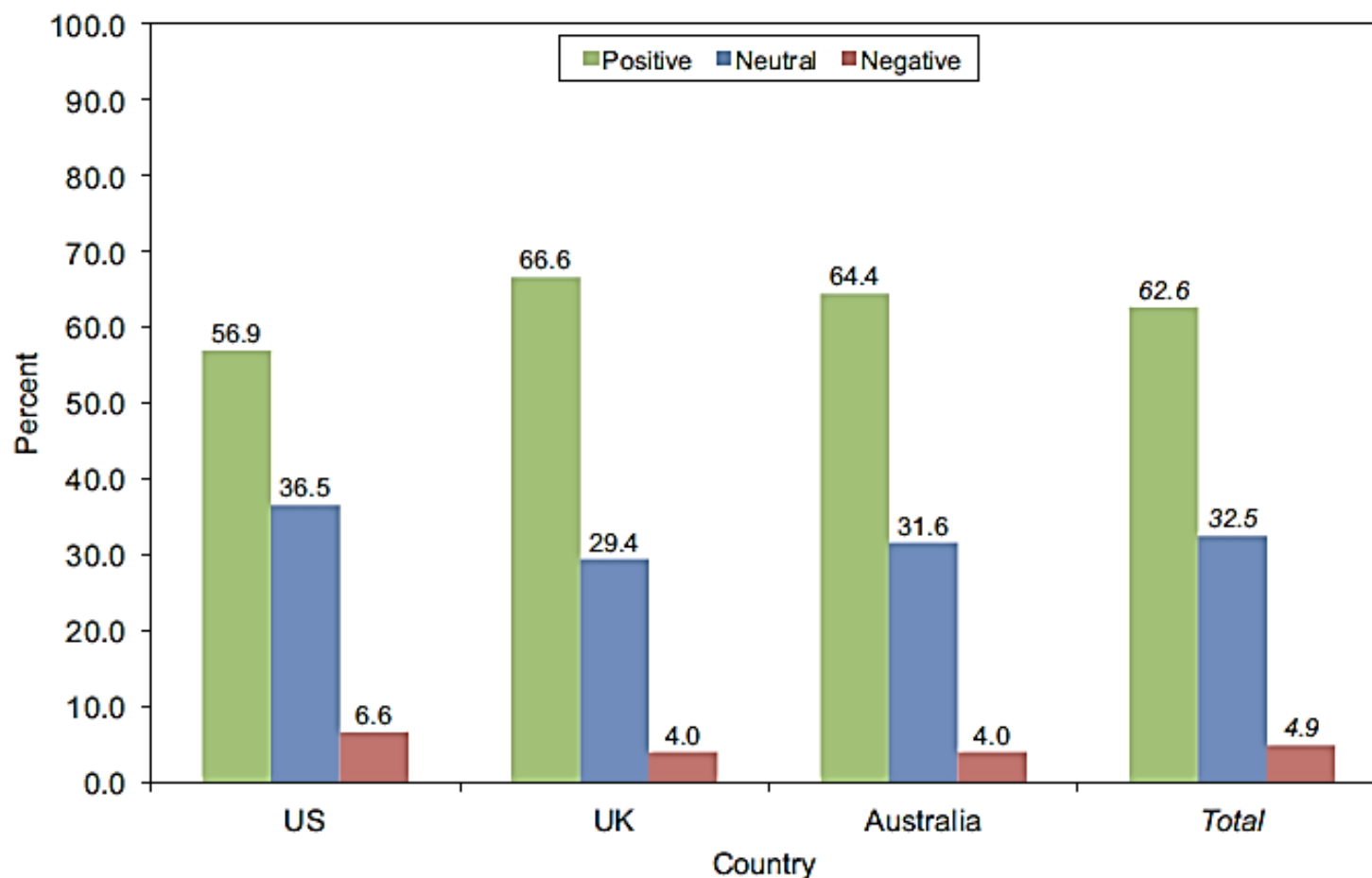


Figure 2. Summary of responses (collapsed), by country, to Q2: “What is your general opinion regarding connected vehicles?”

UMTRI, 2014, A Survey of Public Opinion about Connected Vehicles in the U.S., the U.K., and Australia

Importance of Internet Connectivity

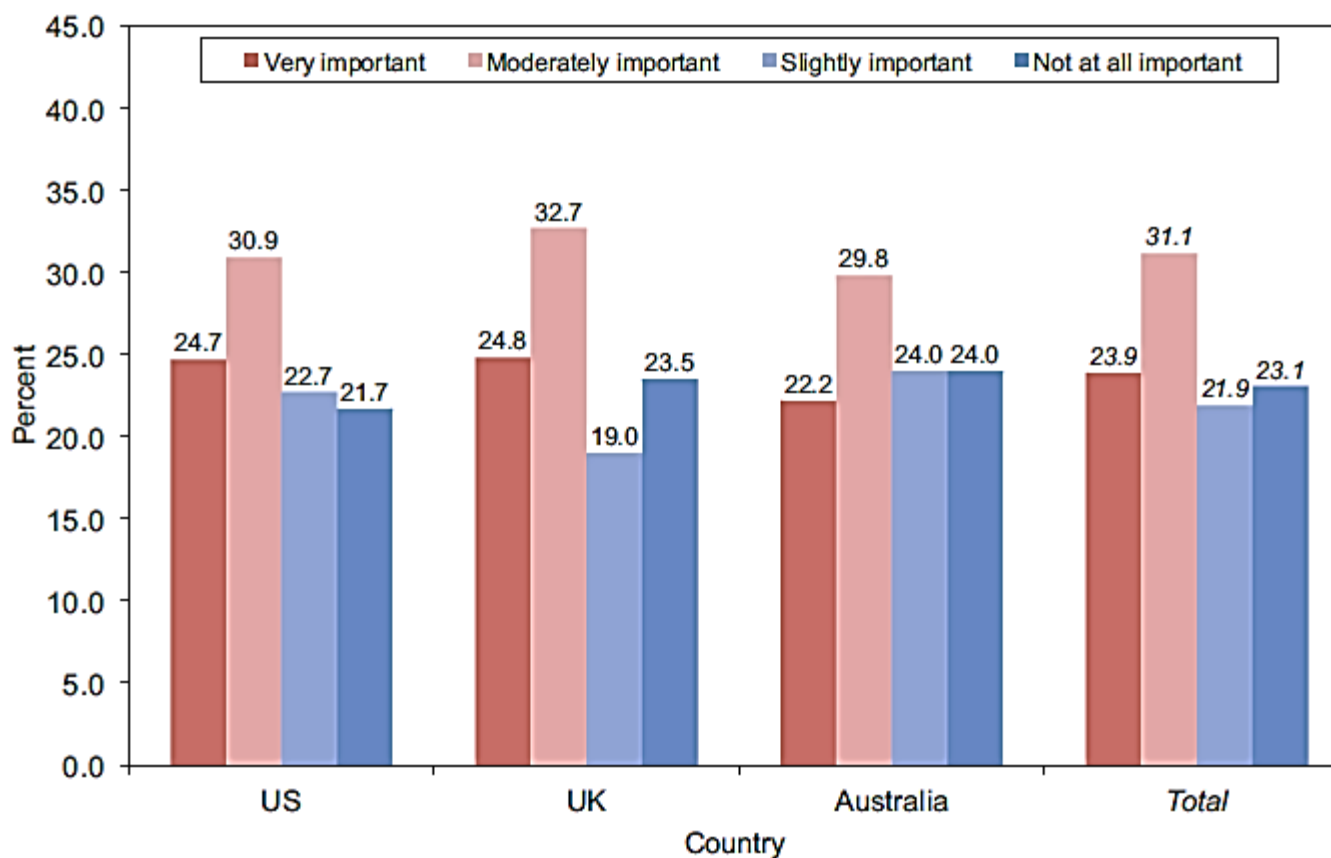


Figure 6. Summary of responses, by country, to Q9: “How important is it to you that connected-vehicle technologies include Internet connectivity?”

UMTRI, 2014, A Survey of Public Opinion about Connected Vehicles in the U.S., the U.K., and Australia

Importance of Integrating Nomadic Devices

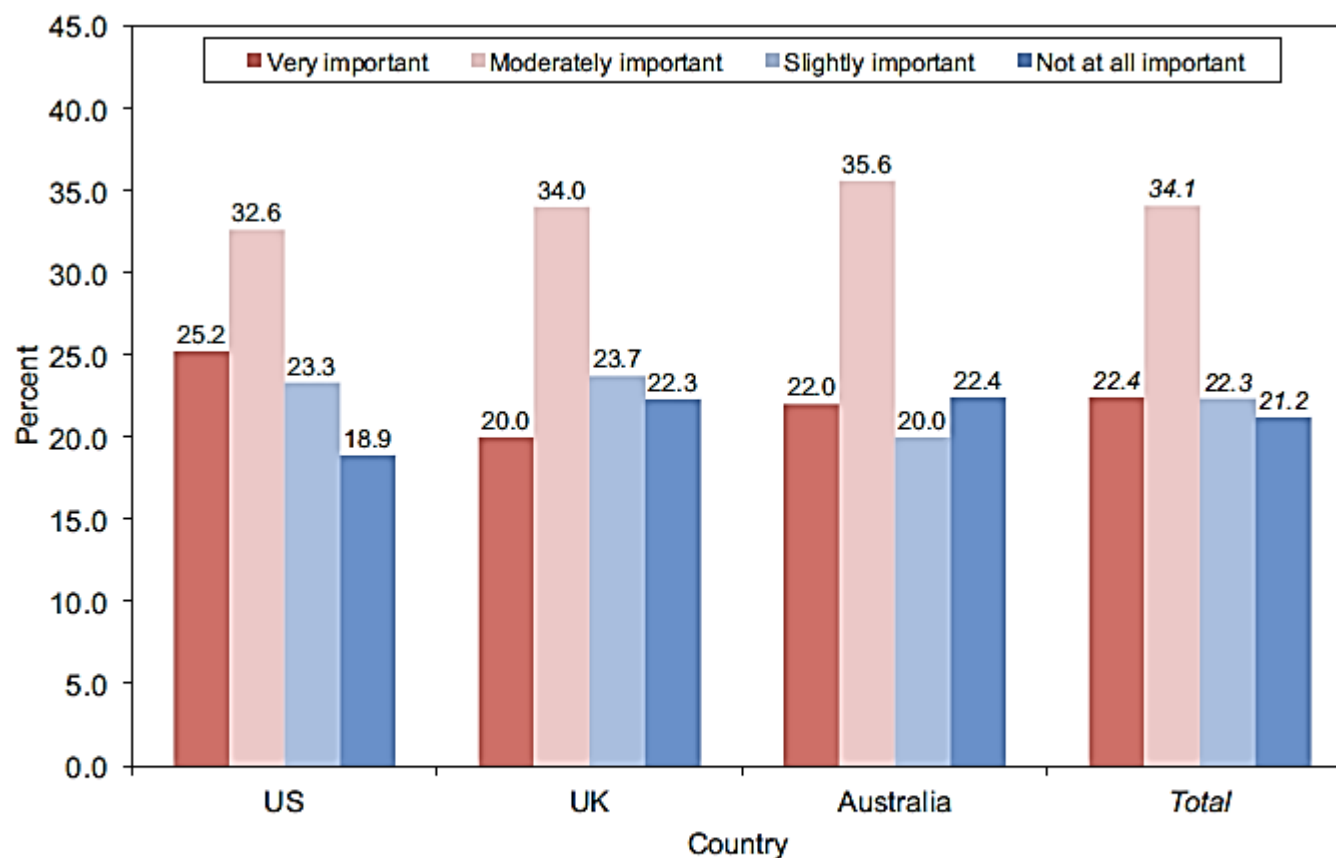


Figure 5. Summary of responses, by country, to Q8: “How important is it to you that connected-vehicle technologies are able to integrate with your personal communication device(s)?”

UMTRI, 2014, A Survey of Public Opinion about Connected Vehicles in the U.S., the U.K., and Australia



Interpretations of Future AV/CV



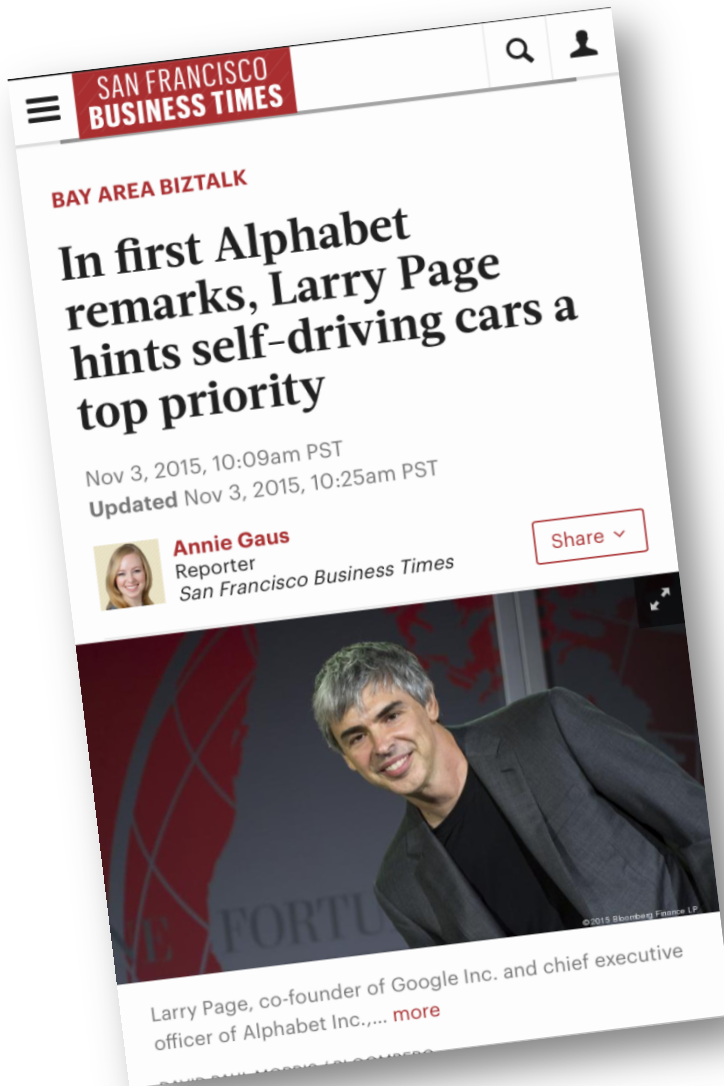
Nissan Intelligent Driving System (IDS) Concept



Honda Wander Stand concept



Make no mistake: CV/AV technology is an industry disruptor

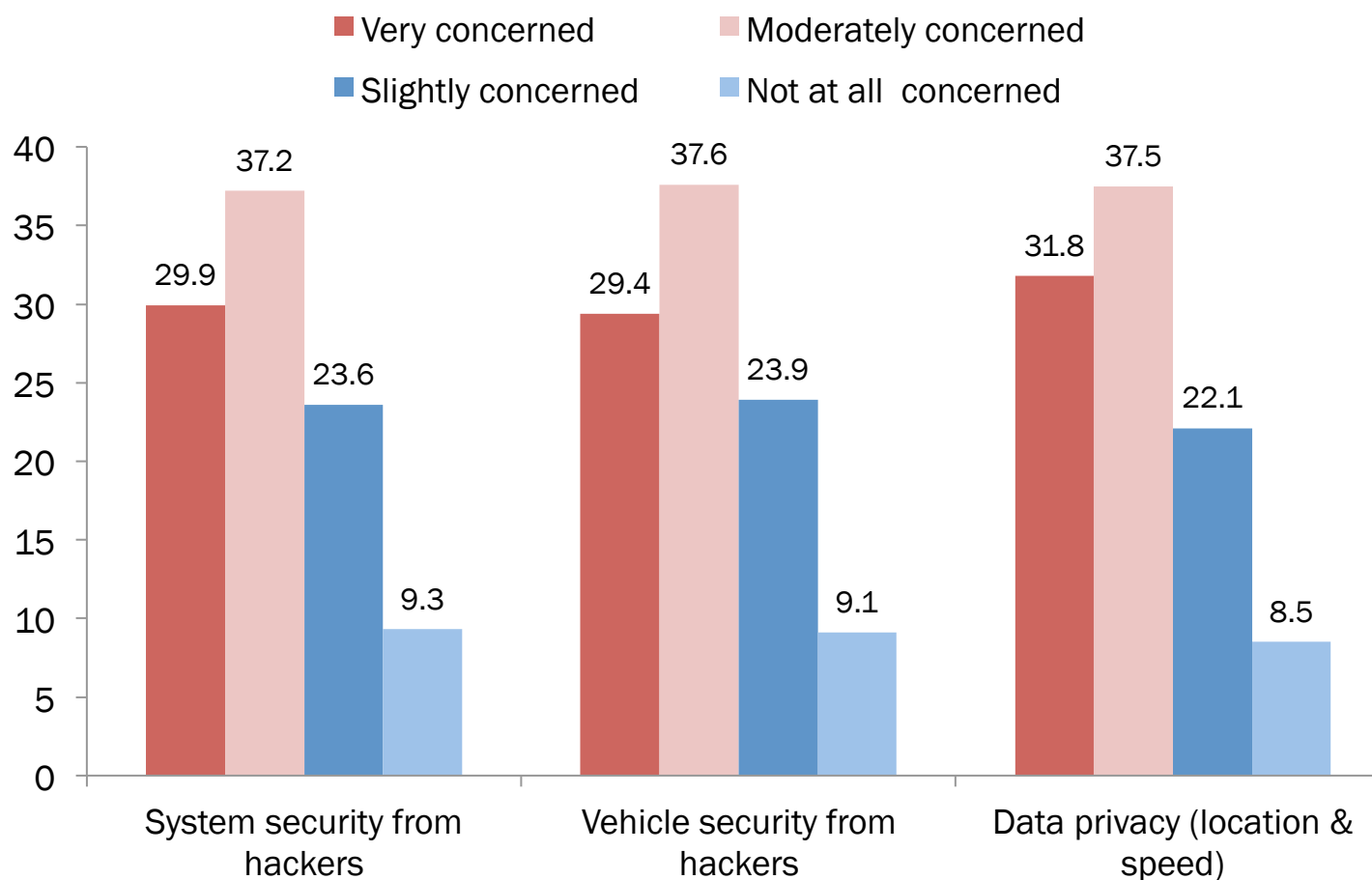


“The tech companies will take as much space as we are ready to abandon.”

- Carlos Ghosn, CEO
Nissan Motor Co.



Concerns Raised by the Connected Car



UMTRI, 2014, *A Survey of Public Opinion about Connected Vehicles in the U.S., the U.K., and Australia*

Concerns Raised by the Connected Car



Cybersecurity & Privacy Concerns

“These threats undermine customer trust, a key success factor for automakers in the digital era. Consumers will steer clear of connected cars if they believe the new technologies put their personal information and safety at risk.

Thus, to realize the vast potential of digital automotive technology, automakers must convince consumers that they will be safe and secure in vehicles hitched to open electronic networks.”

PwC 2015, *Connected Car Study: Racing ahead with autonomous cars and digital innovation*



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Concrete Privacy & Security Enhancement Measures from Automakers



In the U.S.

- Adoption a year ago of the **Consumer Privacy Protection Principles**



Concrete Privacy & Security Enhancement Measures from Automakers



- Followed by establishment of an **Auto – Information Sharing and Analysis Center (ISAC)** this July to centralize intelligence on cyber threats and potential weaknesses in vehicle electronics .

Auto-ISAC announces Board of Directors

For Immediate Release
October 21, 2015

Contacts:

Wade Newton, Auto Alliance
202 326 5571

Annemarie Pender,
Association of Global Automakers
202 650 5548

Washington, DC - Automakers continue moving forward on collaborative efforts to advance cybersecurity protections with today's announcement of the sector's Information Sharing and Analysis Center (ISAC) board of directors.

Concrete Privacy & Security Enhancement Measures from Automakers



In Canada,

- **PIPEDA and other privacy laws** have always applied to the automakers
 - **S-4 - Digital Privacy Act** requirements
 - Provisions of **CASL**
- **Updating of privacy policies** to reflect the increasing digitization of the automobile
- **On-going analysis of R&D on cybersecurity** - to make the automobile more secure

Taken together, these current protections and prospective measures make auto specific privacy regulation unnecessary

We are all in this digital revolution together and we all have to work together to make computing better, safer and more secure and the auto sector is certainly doing its part

Contact us



Global Automakers
of Canada

2 Bloor St W
Suite 1804, PO Box 5
Toronto, ON M4W 3E2

Tel 416.595.8251 | globalautomakers.ca

David C. Adams
President
dadams@globalautomakers.ca