



West Coast innovation hubs and AGL strategy

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Konsulko Group, Founder and Partner
Jaguar Land Rover, Infotainment Technologist

1

Who am I /私は誰？

2

Automotive Software Strategy and AGL

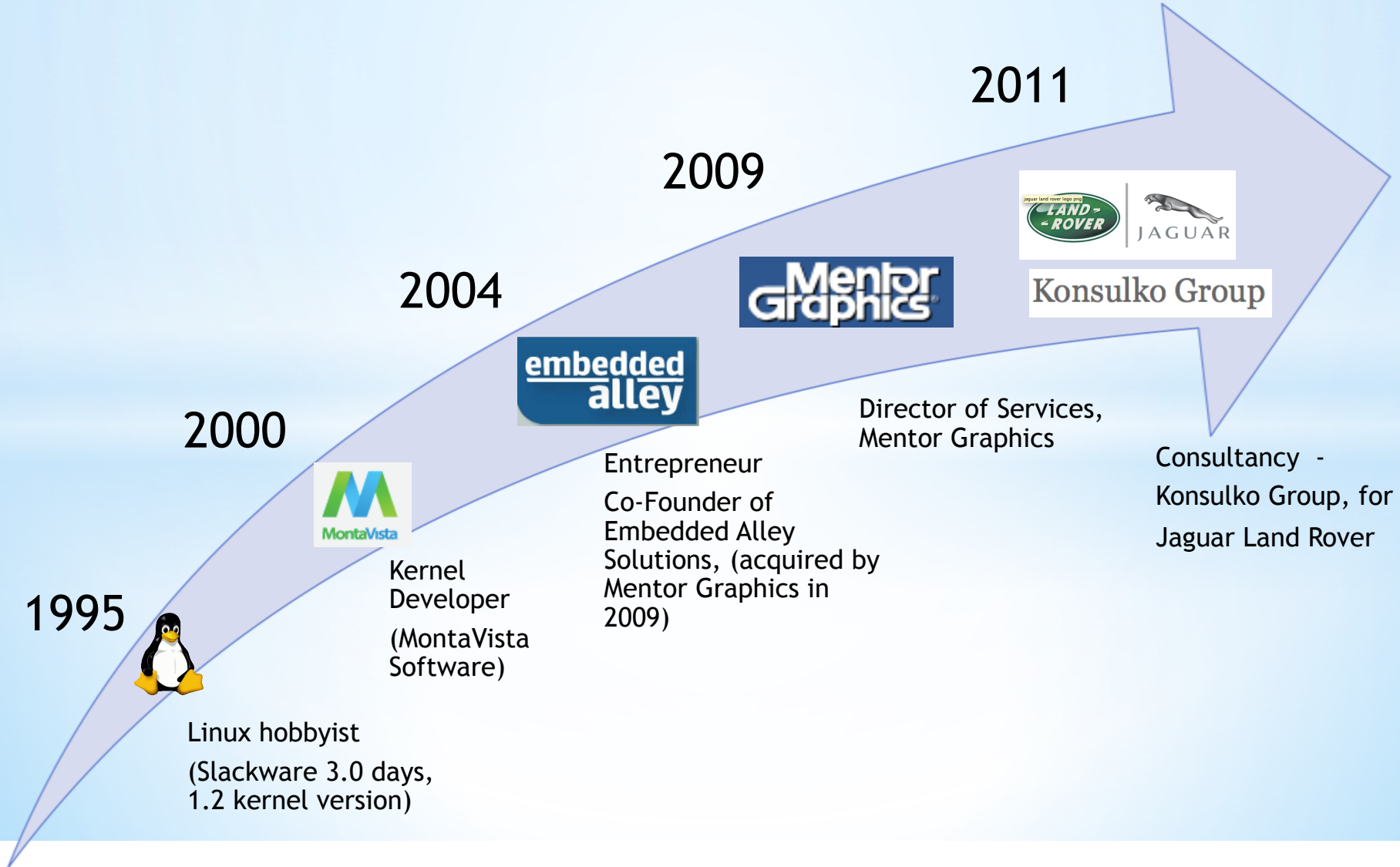
3

West Coast Software Technology Hubs

4

Conclusion





Paradigm Shift



“Today 90 percent of all innovations in vehicles have to do with electronics, either directly or indirectly.”

Rudi Hudi, Audi AG

AUTOMOBIL
ELEKTRONIK **KONGRESS**

Growing Software Complexity

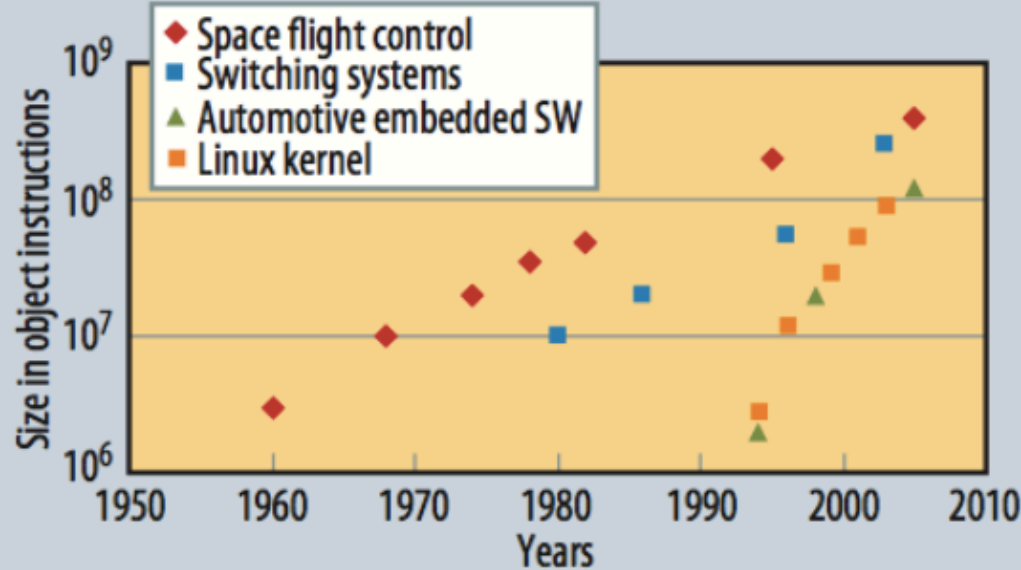


Figure 2. Complexity growth of embedded systems.

10x every ~7 years

Dr Jan Bosch
Professor of Software
Engineering, Chalmers
University of Technology,
Gothenburg, Sweden

What is your software strategy?



Open Source Software is not a
Strategy

Linux [OSS] is becoming the fabric of computing



- Collaboration
- Irc chat rooms
 - Mailing lists



Git: source control management

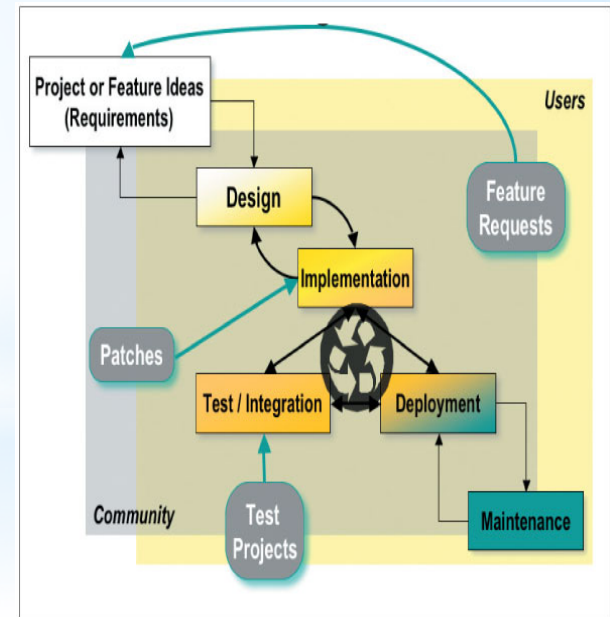
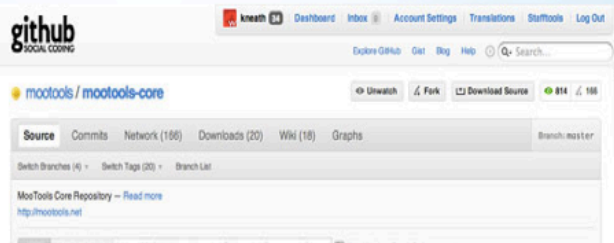
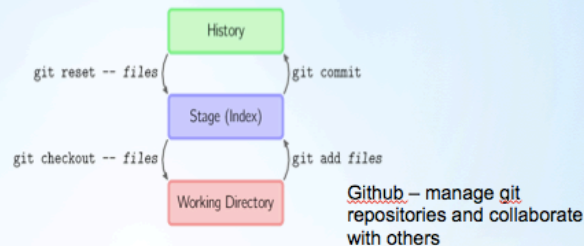


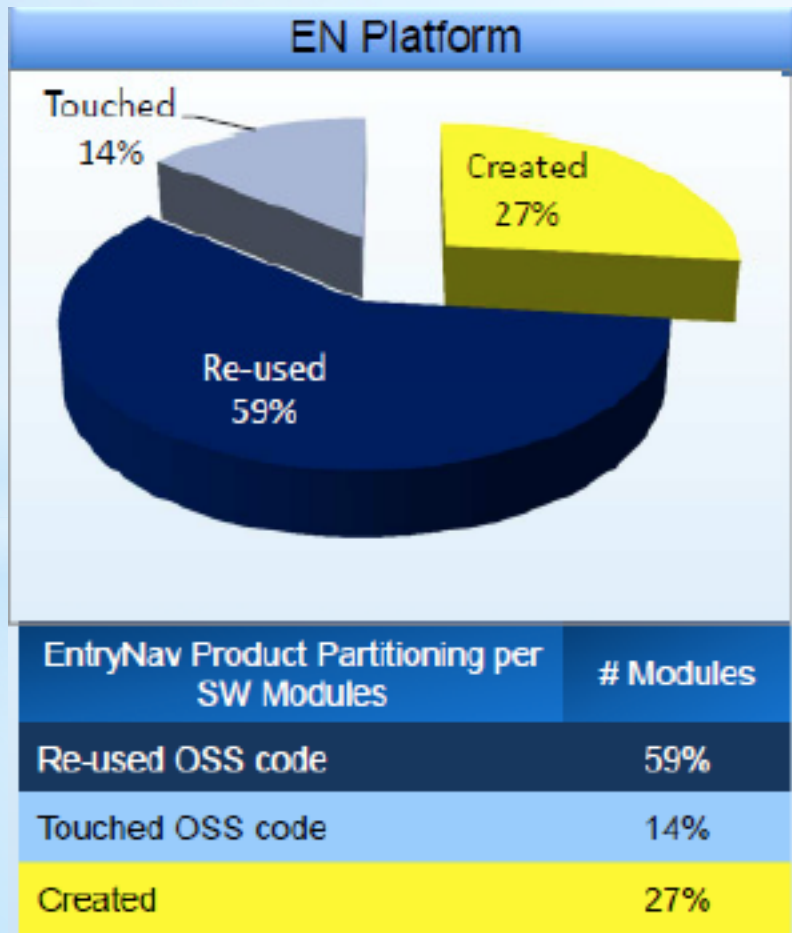
Figure 2: Open source development model

(SOURCE: BILL WEINBERG, OPEN SOURCE DEVELOPMENT LABS, 2006)





Software Reuse: BMW case study



Without an understanding of the OSS development and collaboration model, you will never achieve meaningful software reuse.

Source: BMW case study, presented by Graham Smethurst

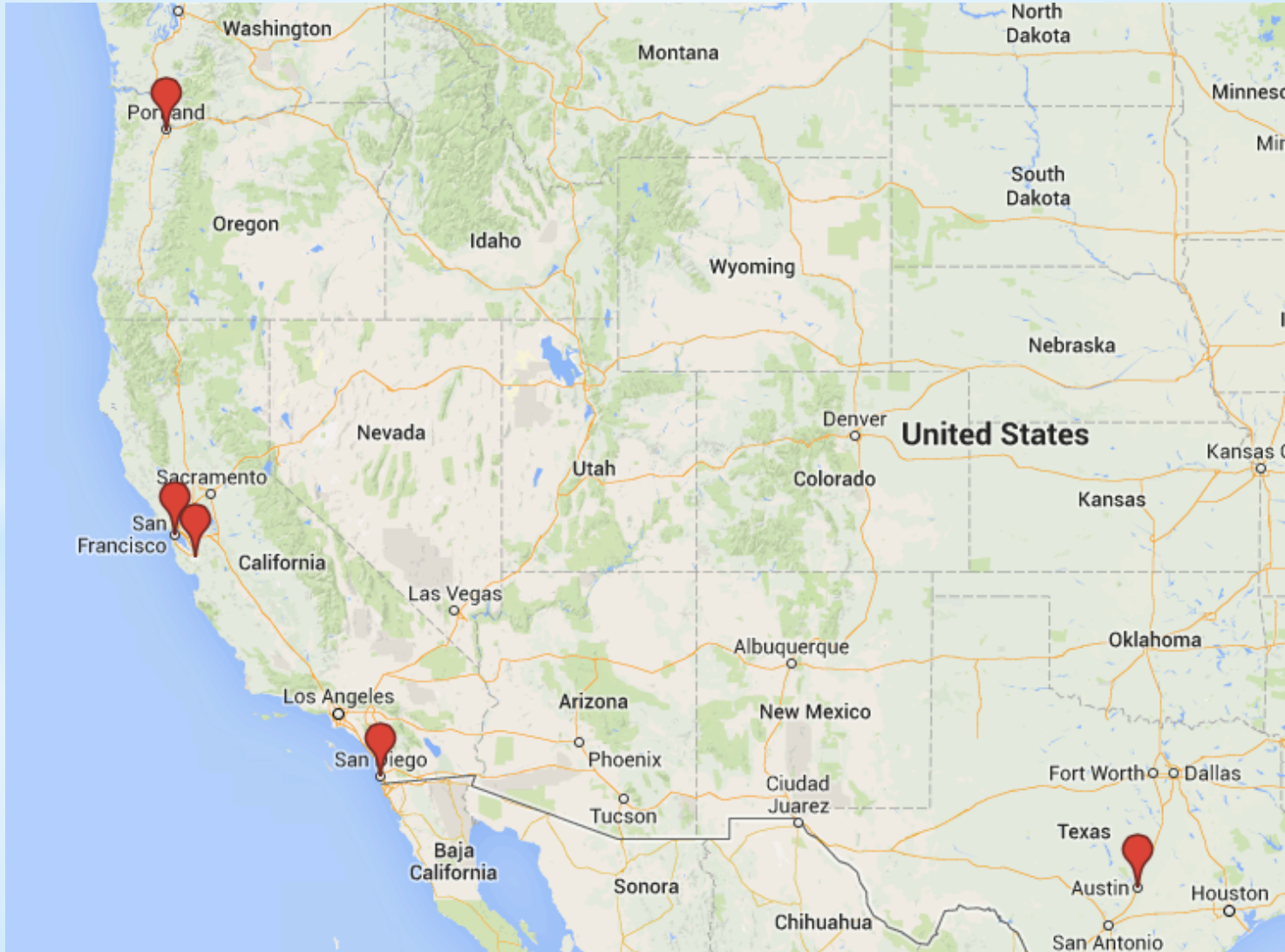


Open Source is Not a Differentiator

It's Acceleration to Differentiation

Source: Presentation by IBM Global Services

West Coast Innovation Hubs



Sample Startups Numbers



Silicon Valley Startups

11,433 companies, \$4.7M avg valuation

San Francisco Startups (included in SV)

6,333 companies, \$4.7M avg valuation

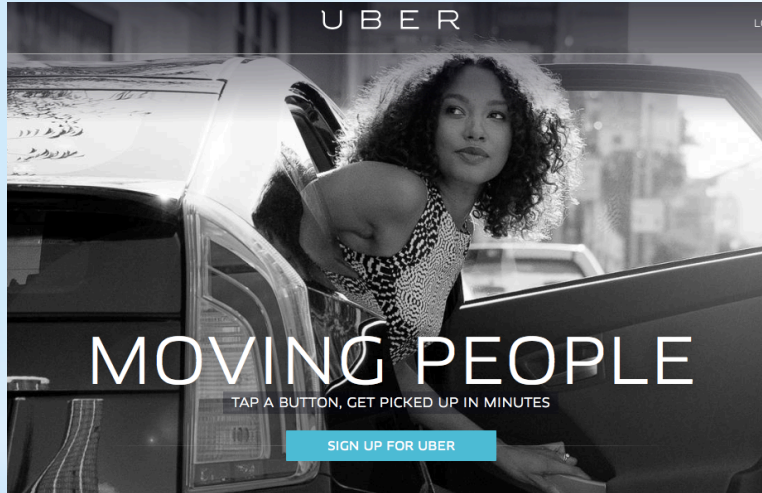
Austin Startups

1,139 companies, \$3.9M avg valuation

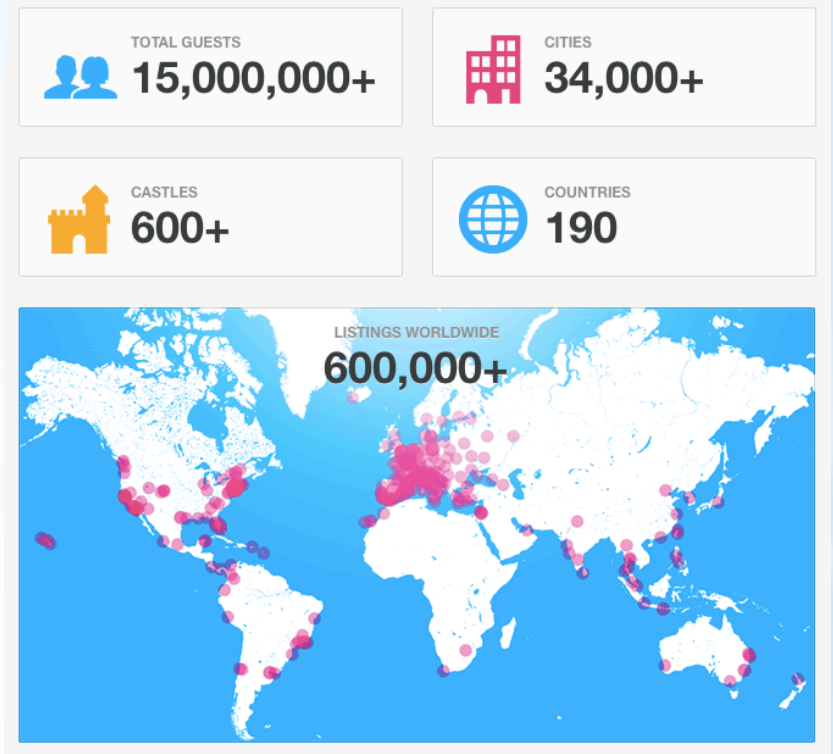
San Diego Startups

783 companies, \$4.1M avg valuation

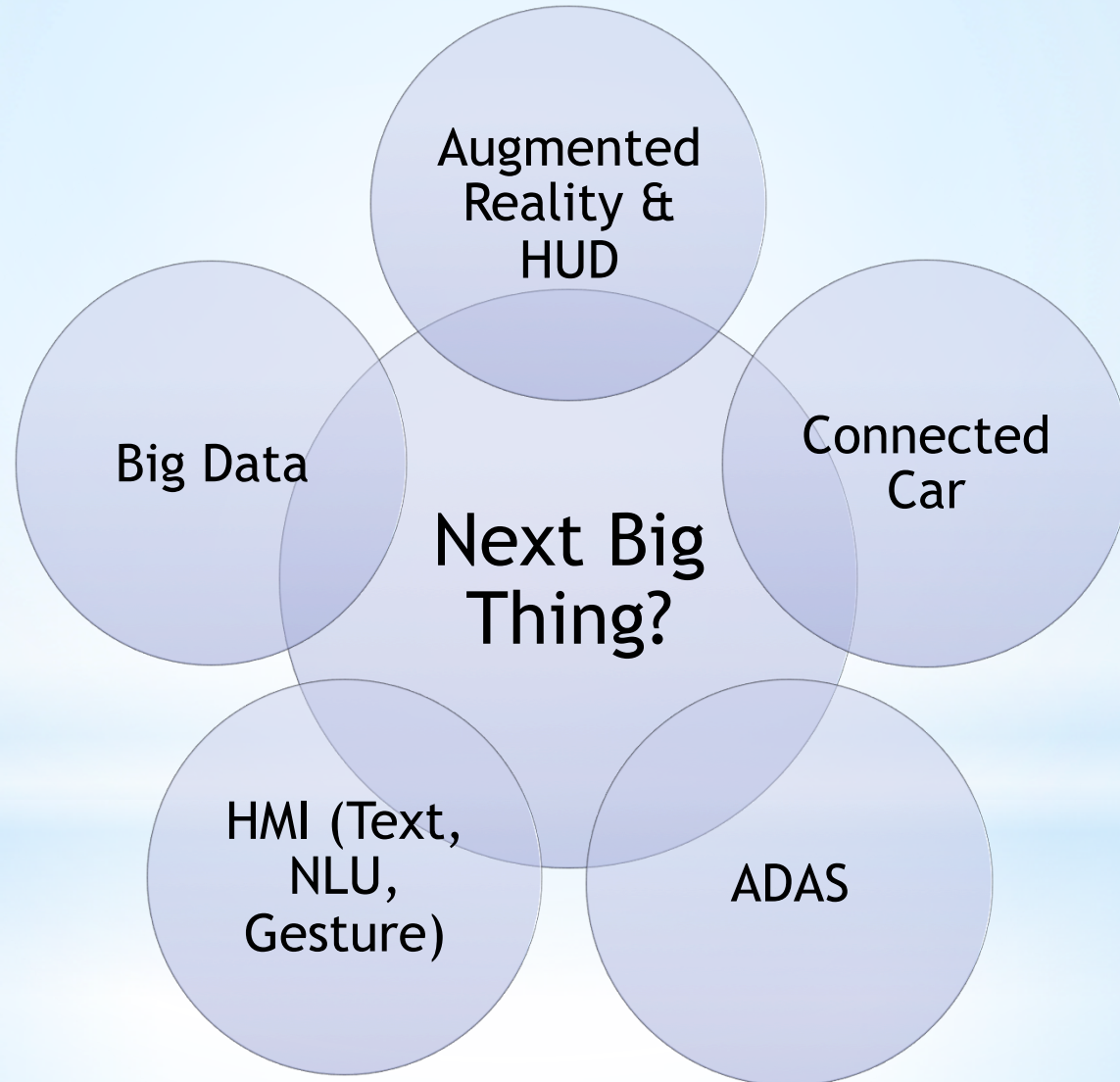
Disruptive Innovators



San Francisco based Uber.
Disruptive innovator in mobility.



San Francisco based Airbnb.com.
Hotel/rental industry disruption.

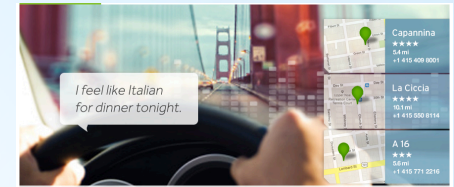


Multi-modal HMI



HMI (Text,
NLU,
Gesture)

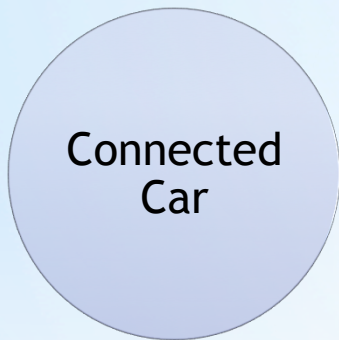
- Gesture recognition
- Text prediction / handwriting
- NLU
- Touch
- ... and more



The connected car experience



Home & Office convergence in the car



- Extension to the office
- Cloud streaming
- Connection to home automation

Cloud meetings

HD video conferencing



Home Automation



Connected
Car / Big
Data



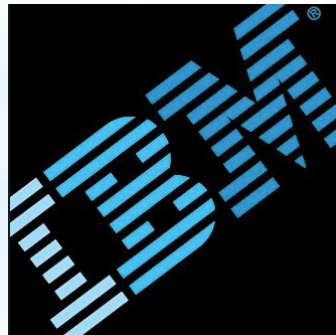
Platfora processes raw data in Hadoop and gives Business Analysts visual self-service Big Data Analytics to go from events, actions, behaviors to business facts



Java-based, integrated data and application framework that layers on top of Apache Hadoop, HBase, and other Hadoop ecosystem components. It surfaces capabilities of the infrastructure through simple Java and REST APIs.



Cloud-based analytics for Big Data



The company offers a 100% open source and enterprise-ready distribution of Apache Hadoop with Cloudera Manager.

Venture Capital Companies



- <http://500.co>
- <http://a16z.com>
- <http://www.accel.com>
- <http://www.artisventures.com>
- <http://www.augustcap.com>
- <http://www.austinventures.com>
- <http://www.azurecap.com>
- <http://www.battery.com>
- <http://www.bvp.com>
- <http://www.canaan.com>
- <http://www.crv.com>
- <http://www.crosslinkcapital.com>
- <https://www.dagventures.com>
- <http://www.dcm.com>
- <http://www.dfj.com>
- <http://www.drapervc.com>
- <http://firstround.com>
- <http://www.foundationcapital.com>
- <http://www.greylock.com>
- <http://www.hcp.com>
- <http://i5invest.com>
- <http://www.interwest.com>
- <http://www.ivp.com>
- <http://www.jafco.com>
- <http://www.kpcb.com>
- <http://lsvp.com>
- <http://www.matrixpartners.com>
- <http://www.mayfield.com>
- <http://www.mdv.com>
- <http://www.menloventures.com>
- <http://www.meritechcapital.com>
- <http://www.nvp.com>
- <http://www.pavp.com>
- <http://www.redpoint.com>
- <http://www.shv.com/portfolio>
- <https://www.sequoiacap.com>
- <http://www.tcv.com/portfolio/>
- <http://www.usvp.com>

Corporate VC Funds



- <http://www.appliedmaterials.com/about/ventures>
- <http://www.gv.com>
- <http://www.intelcapital.com>
- <http://www.digitalconceptscenter.com>

Incubators (Top 10 to Watch, Inc Manazine)



- <http://www.techstars.com>
- <http://ycombinator.com>
- <http://summer.hcp.com>
- <http://www.dreamitventures.com>
- <http://www.launchboxdigital.com>
- <http://flashpoint.gatech.edu>
- <http://capitalfactory.com>
- <http://nep.benfranklin.org/incubator-network/ben-franklin-techventures/>
- <http://www2.cleantechopen.org>
- <http://researchpark.illinois.edu/enterpriseworks>

You need a presence



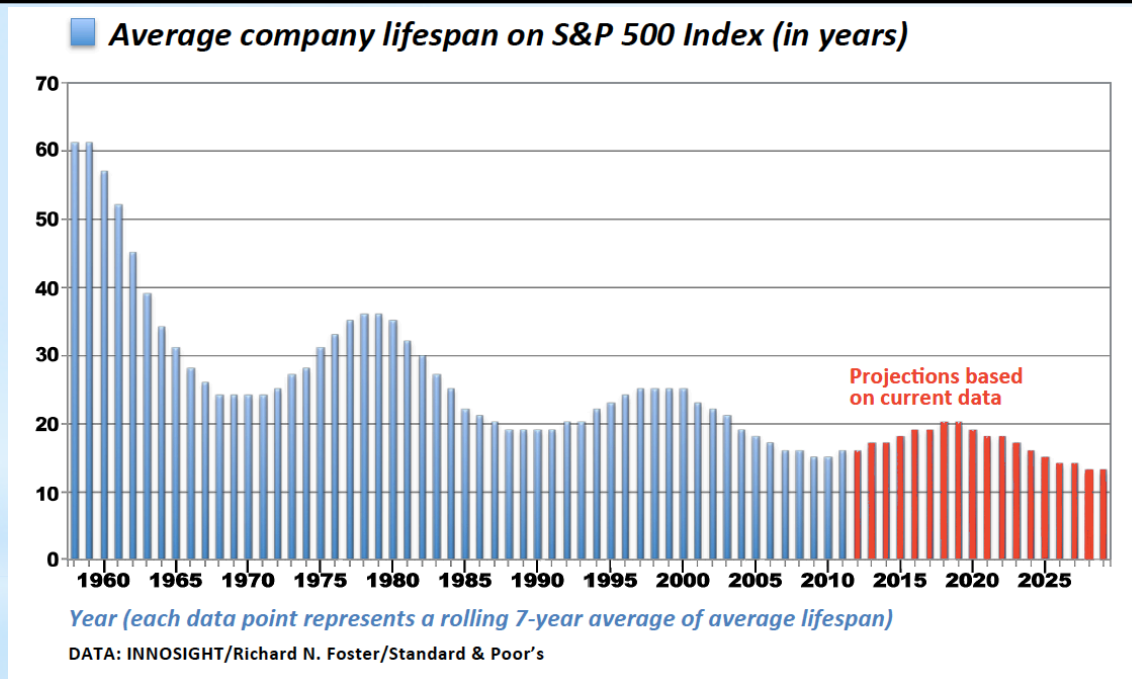
OEMs & Tier1s with innovation centers on the West Coast
(not a complete list)



NISSAN MOTOR CORPORATION



The argument for building capabilities



- ❑ Jim Collins (Built to last): Companies last, on average, 30 years on the Fortune 500 list. And that time period is decreasing.
- ❑ Nearly 2000 companies have appeared on the Fortune 500 list and most are gone from it.
- ❑ Main cause: **Companies fail to innovate and to build new core capabilities.**

Conclusion



- ❑ Building new core capabilities in software must be part of the strategy of an automotive company
- ❑ You need a presence where the innovation happens
 - ❑ Eighty percent of success is showing up
- ❑ You need to do something real at your new innovation center
- ❑ You need a platform for –
 - ❑ Collaboration with OSS community and 3rd party companies with proprietary technologies
 - ❑ Building software capabilities