

Redefining Mobility Summit



Lew Gaskell Jr.

IBM Transportation Leader





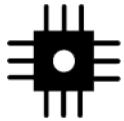
Cities are now the center of urban activity

In 2007, for the first time in history, the majority of the world's population lived in cities – 3.3 billion. By 2050, city dwellers are expected to make up 70 percent of the Earth's total population – 6.4 billion



Smart Cities Transportation is the lynchpin for economic viability and competitiveness

Cities can infuse intelligence into their entire transportation system, improving drivers' commutes, giving better information to city planners, increasing public transportation use and business productivity, and raising citizens' quality of life.



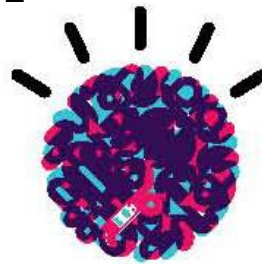
INSTRUMENTED

Smarter transportation ecosystems are able to track traffic from source to destination, monitor conditions in real time and instantly identify faults and inefficiencies across assets and infrastructure



INTERCONNECTED

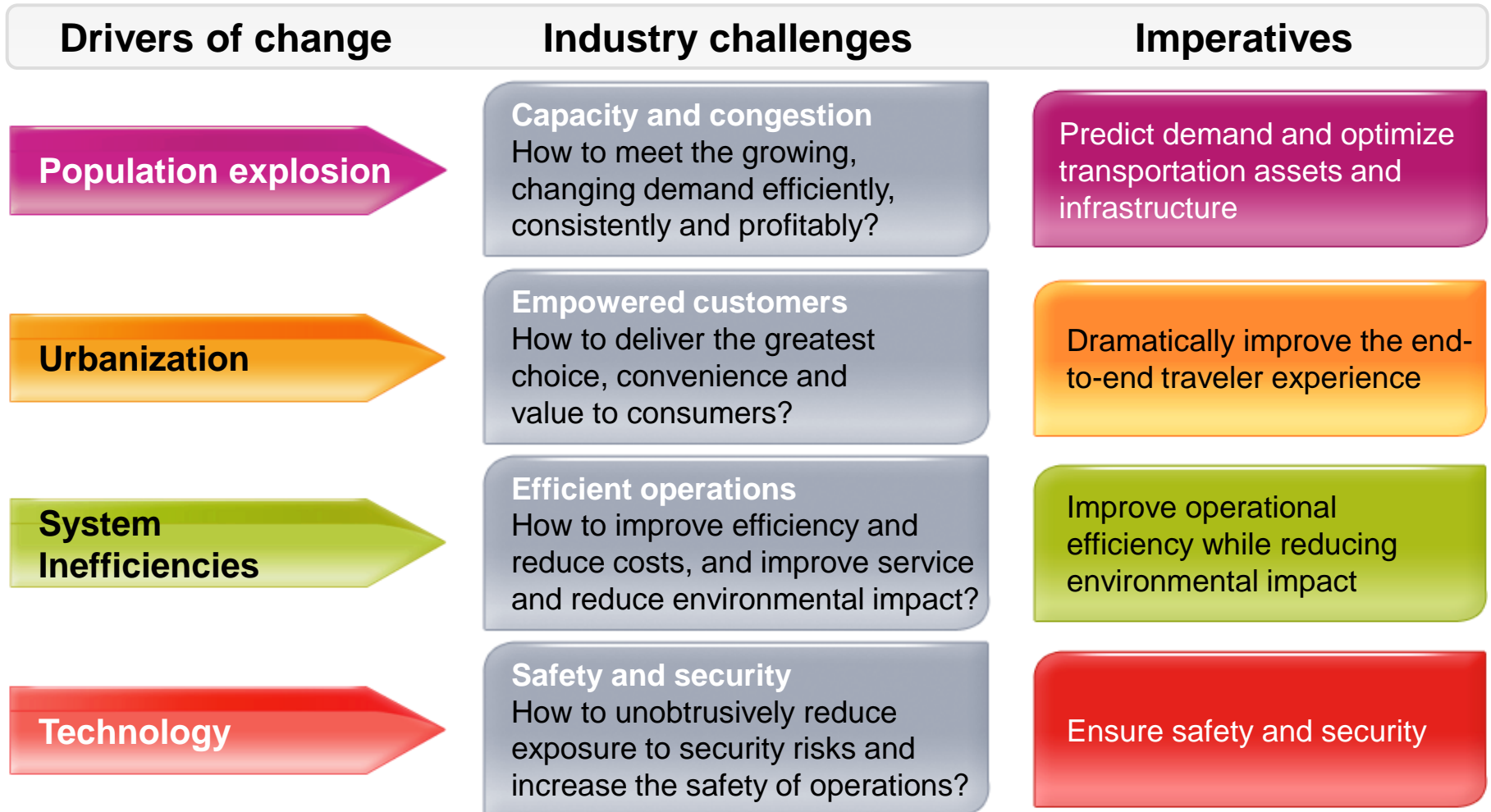
Smarter connections provide customers access to continuously updated information as well as travel choices, with instant notification of any irregularities in the transport system.



INTELLIGENT

Advanced analytics from real-time to predictive and cognitive data, enables decisions to be made in optimizing the operations of a transportation system.

The transport ecosystem is confronting four critical global issues, which are creating a specific set of challenges for transport agencies.



Summary: Top Trends To Watch In 2016

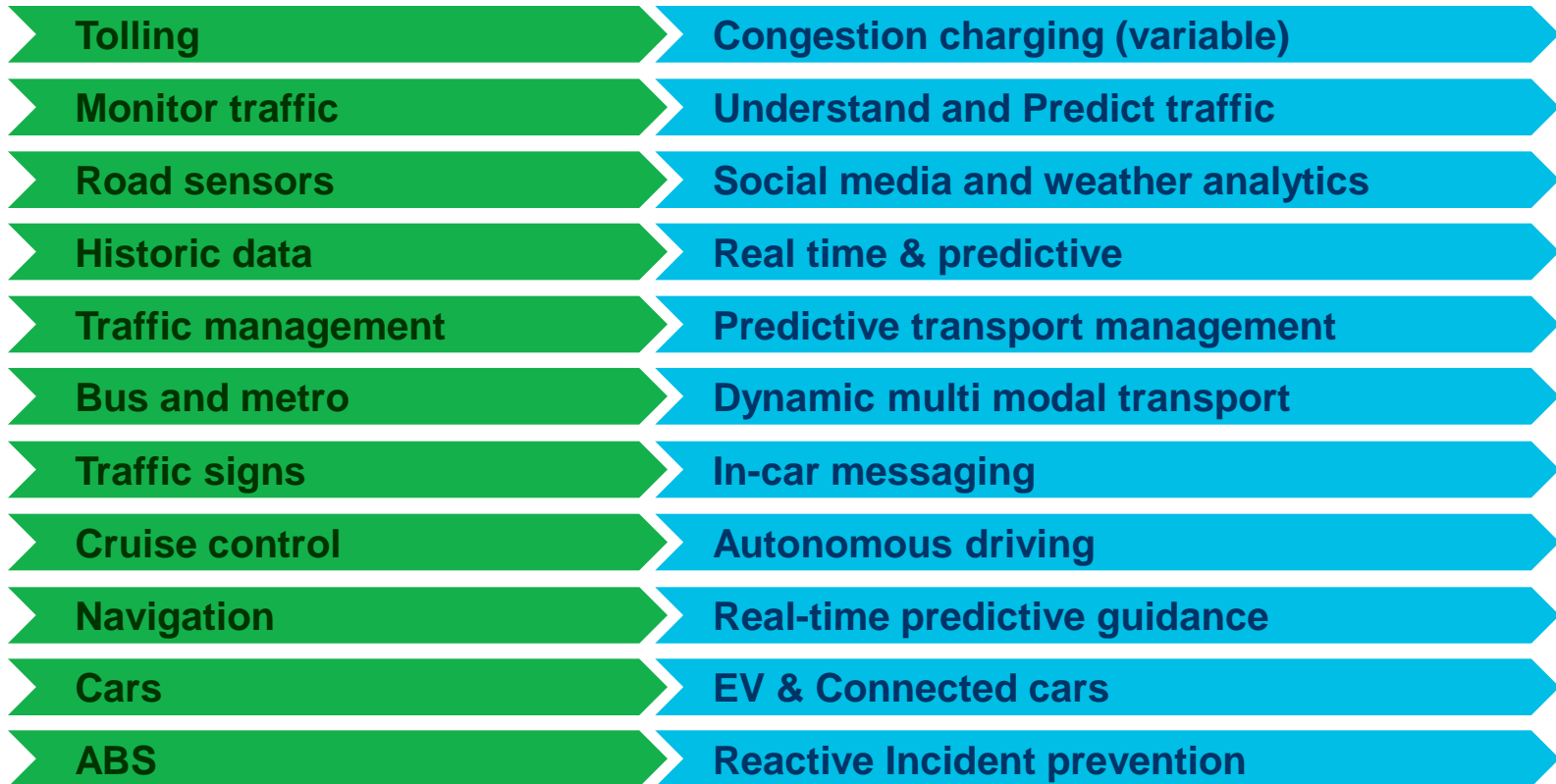
1	Security	<i>External threats increase. Impact of big data, mobile, social, and cloud. Now a business operations issue .</i>
2	Cloud Computing	<i>All types grow, but buzz in 2016 will be about Hybrids. Public clouds will experience price wars. Cloud increasingly becomes distribution channel for software apps. Intersection with mobile.</i>
3	Mobile Computing	<i>More devices, apps, clouds, analytics. Mobile security becomes a larger concern. HTML use increases. BYOD programs necessary.</i>
4	Internet of Things	<i>Sensors, M2M and wearables. Analysts talk of Billions of sensors and impact on economy. Execs and IT Leaders need to understand how to leverage it all.</i>
5	Big Data	<i>Explosion of data. How to collect, store, manage the data securely so it can be analyzed? Hadoop matures & goes realtime. Chief Data Officer role. Data Scientists. Training required</i>
6	Analytics	<i>The on ramp to the Smarter Planet. Embedded, predictive, unstructured, mobile. Applications for all processes. Self Service tools needed. Need changes in culture, skills, business processes.</i>
7	Cognitive Computing	<i>Smart Machines that learn, adapt, and think like humans are on their way. Watson, Google Now, Siri, Cortana. Robots. Will be highly disruptive. Leaders scenario planning.</i>
8	Social Business	<i>It is about connecting people before, during and after every task, every business transaction. Front office and back office apps. For the entire value chain. CEOs own up to changing culture.</i>
9	Digital Marketing	<i>Marketing is going through a huge transformation. Must significantly improve digital experience across all channels. All types of analytics required. Need help from IT.</i>
10	Software Development	<i>Developers, Developers, Developers!! This is a critical age of software development with many trends happening. DevOps, APM, Open 'Everything', SDN, Hackdays, Agile methods</i>

Source: Bill Chamberlin

New technologies can help transform transportation

From

To



Congestion



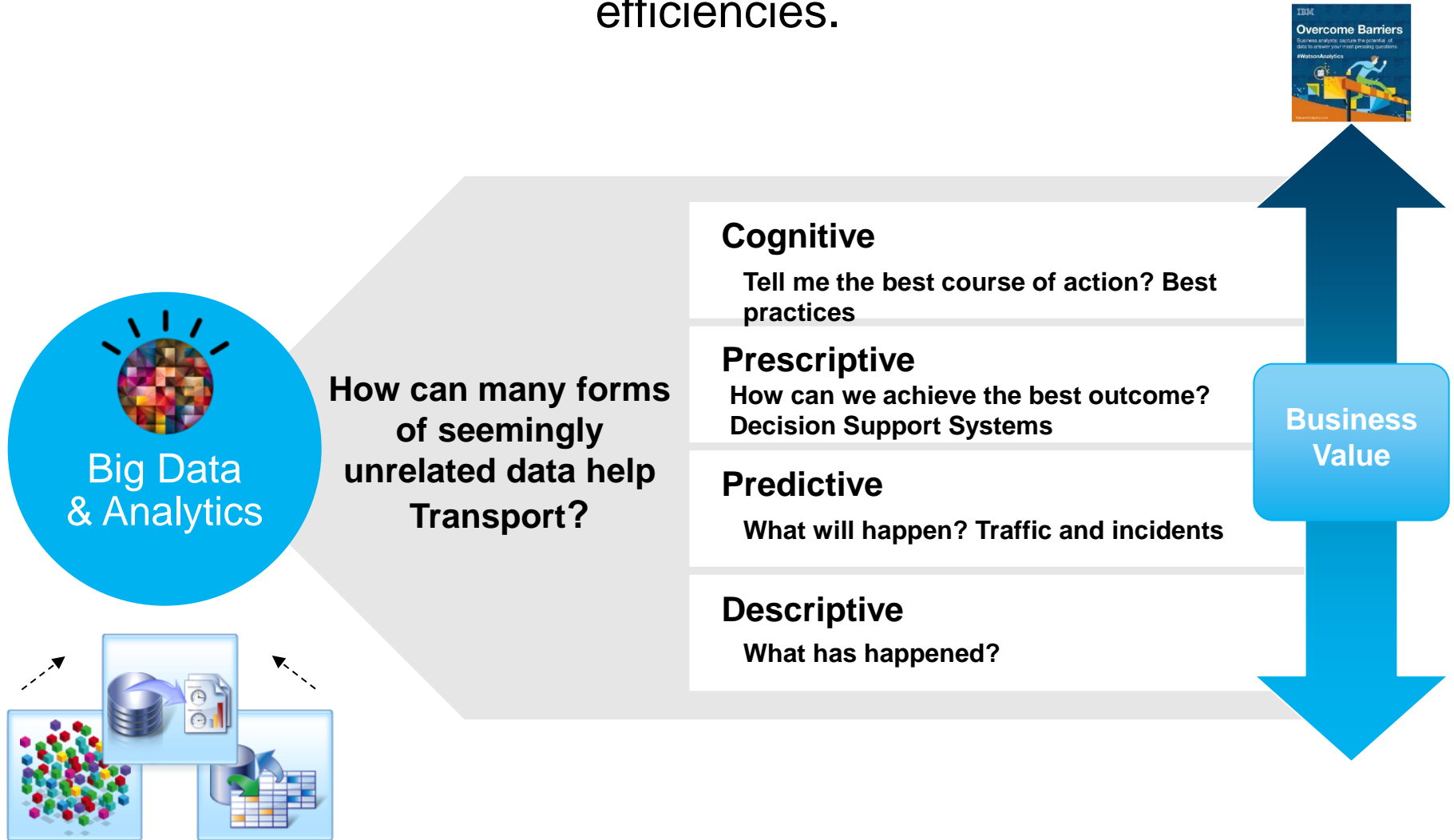
Optimized traffic flow

Economic constraint



Economic growth

The right mix of Big Data & Analytics capabilities enables better decisions, automation and increases transport operational efficiencies.



SMARTER TRANSPORTATION

IBM is working with cities like Miami Dade, London, Zhenjiang, Singapore, Da Nang, Dublin, Lyon and Stockholm to deploy smarter transportation systems.

Lyon: real-time decision support on steps that traffic engineers can use to reduce traffic congestion and enable faster incident response time when an unexpected event occurs.

Zhenjiang: makes public transportation system faster and more efficient by improving transit flow on 2,000 city buses and 100 bus routes

Da Nang: real-time information on traffic control center and 100 city buses to assist in monitoring traffic and controlling traffic lights

Zurich: providing apps that tie in dynamic multi modal trip planning with seamless open fare payment

Singapore FASTer program is the most innovative, using the latest predictive and prescriptive as well as people as sensors for O-D patterns, incidents and actions.

Thank you!

