

Tendencias da Tecnologia

Um mundo Digital

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Executive Partner – Latin America

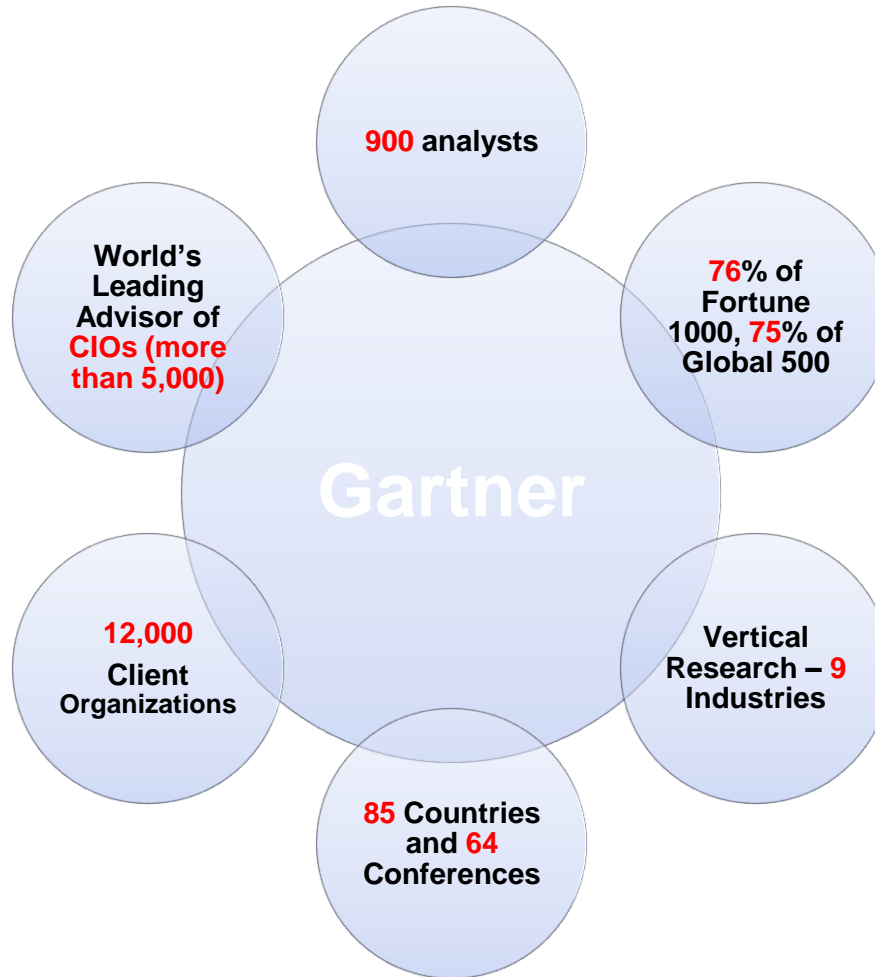
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@ablauth

ACI NH – Sep/2014

Gartner®

Gartner in one minute...



Did You Know

2

million
Google queries

47k

app apple
downloads

100k

new tweets

1.3

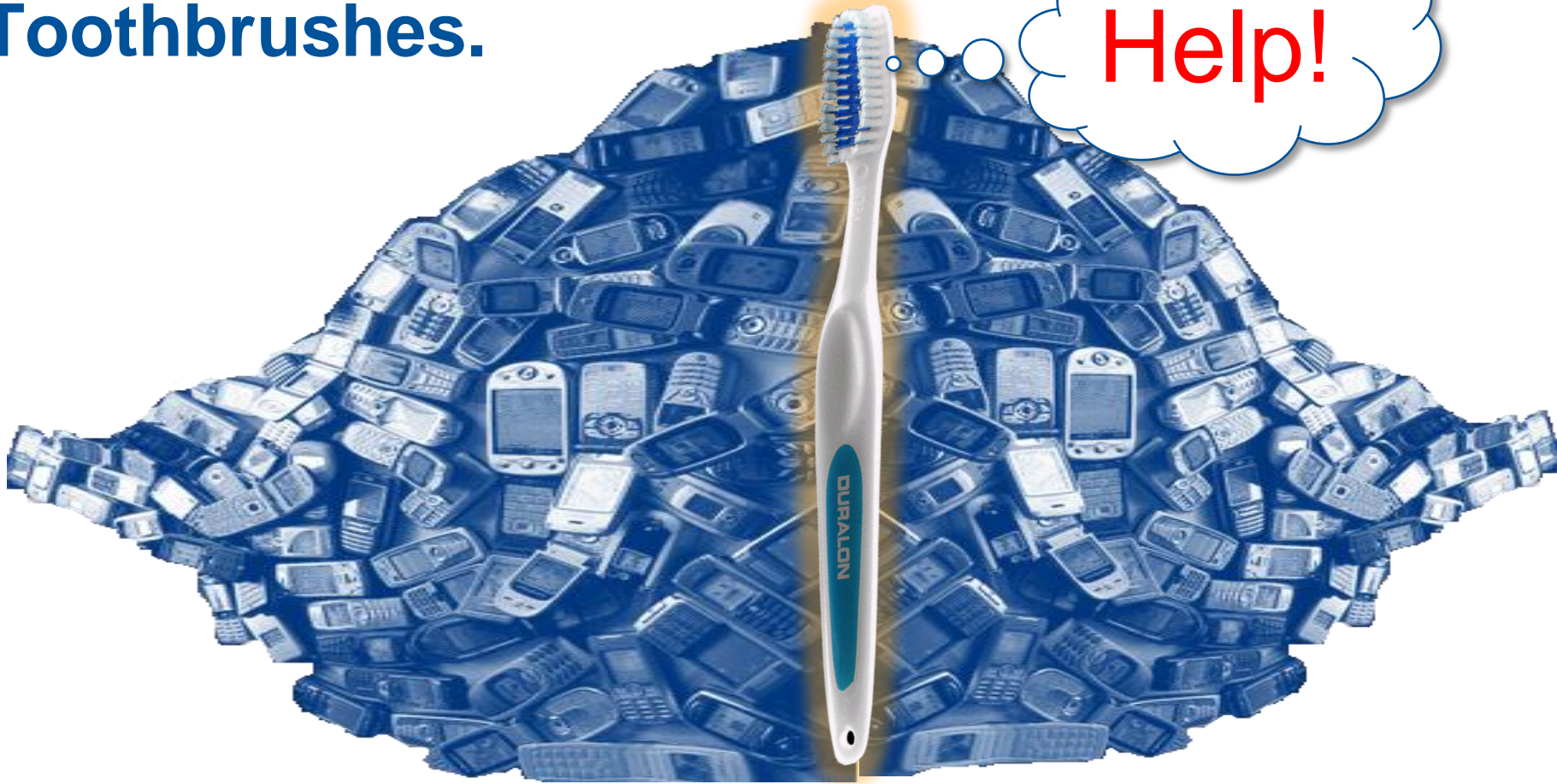
million
YouTube views

In last minute....

**Access to Everything, All the Time,
From Any Device, From Anywhere**

Today, There Are More Mobile Phones...

... and Than Toothbrushes.



The Market Is Forever in Transition

Historic Origin

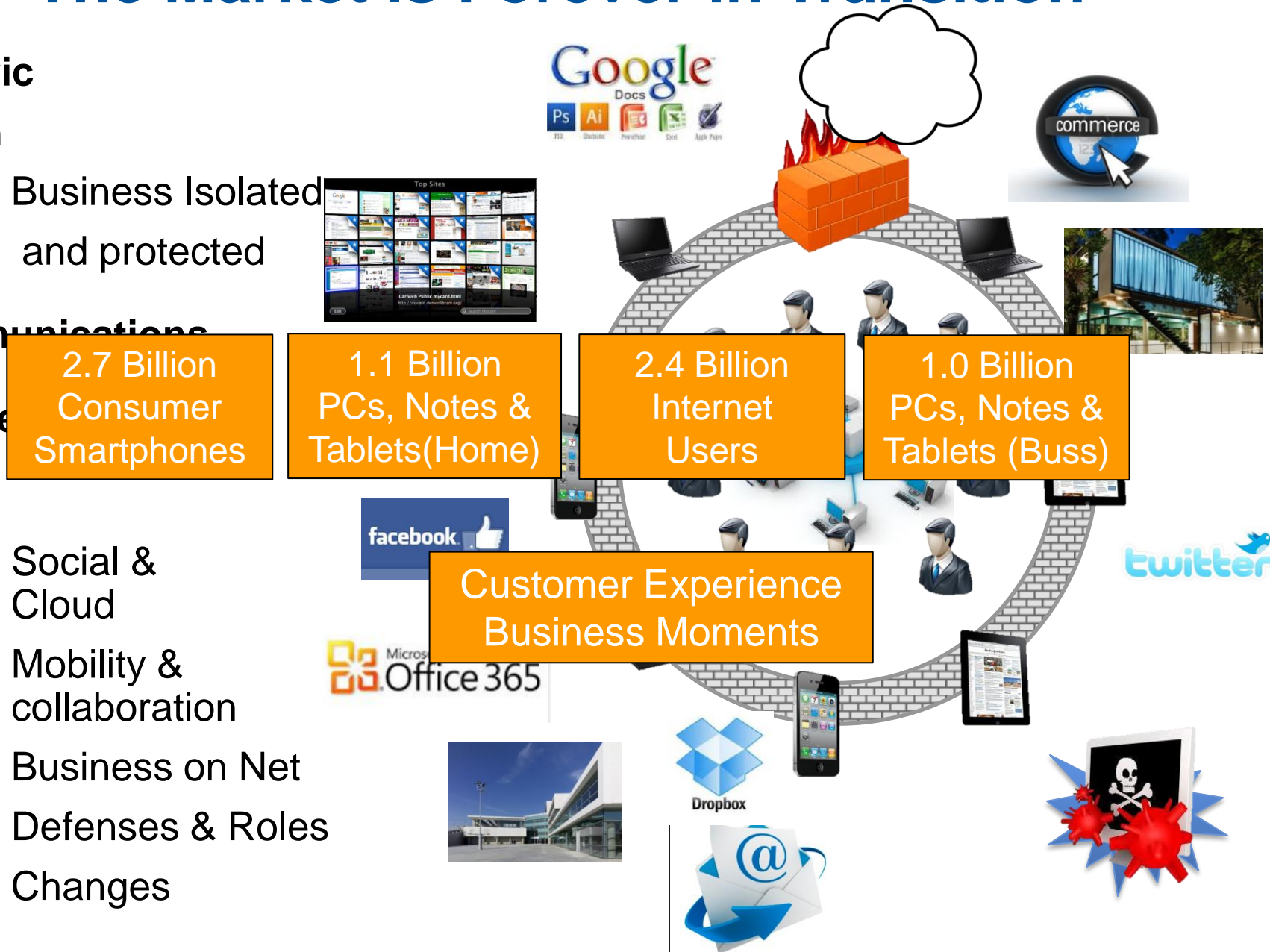
- Business Isolated and protected

Communications

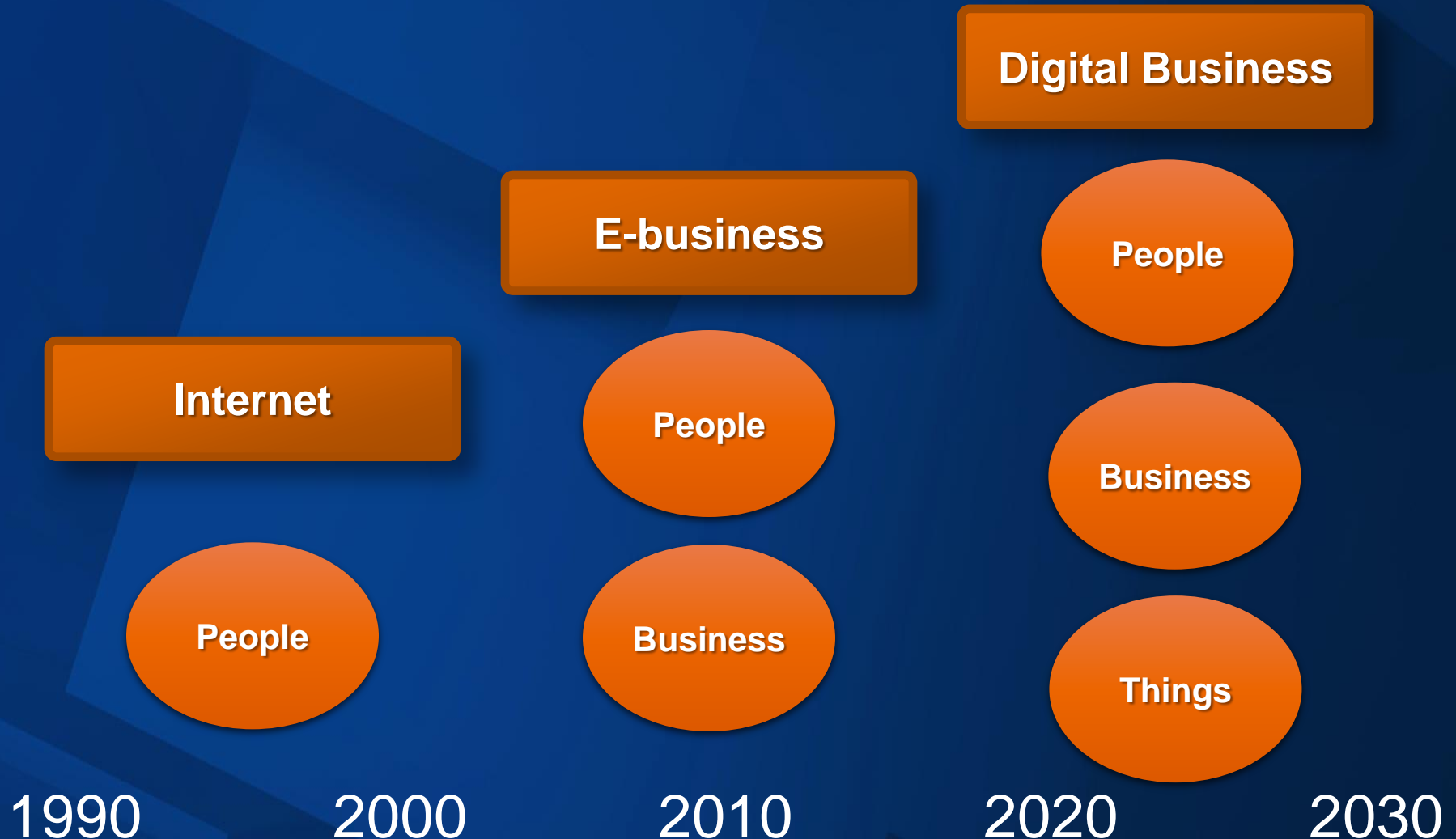
Internet

Today

- Social & Cloud
- Mobility & collaboration
- Business on Net
- Defenses & Roles Changes



Entering a New World

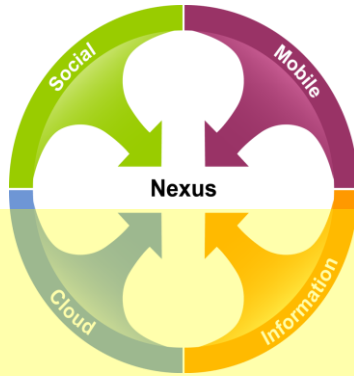


The Danger of Missing Trends ...



**The Nexus of Forces (and others) will accelerate digital disruption.
Enterprises MUST become more threat-aware.**

Strategic Technology Trends



Converging Forces

Derivative Impact

Future Disruption

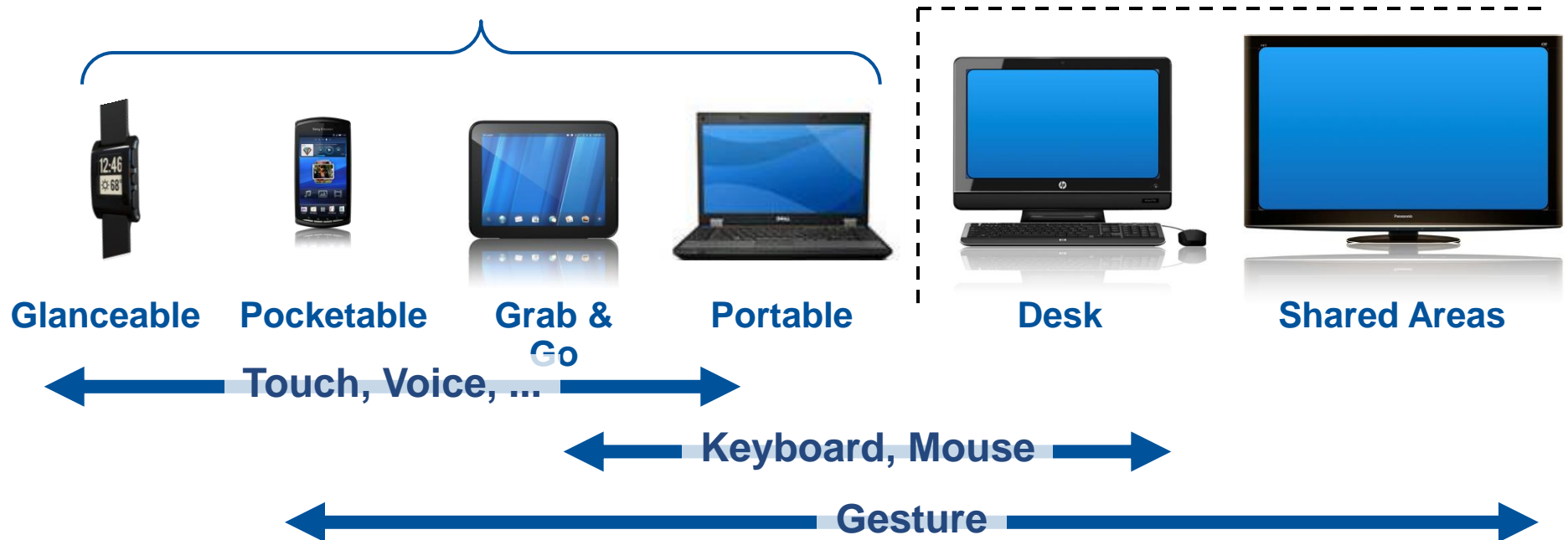
Top 10 Strategic Technology Trends for 2014:

- Mobile Device Diversity & Mgt.
- Mobile Apps & Applications
- The Internet of Everything
- Hybrid Cloud & IT as Service Broker
- Cloud/Client Architecture
- The Era of Personal Cloud
- Software Defined Anything
- Web Scale IT.
- Smart Machines
- 3-D Printing

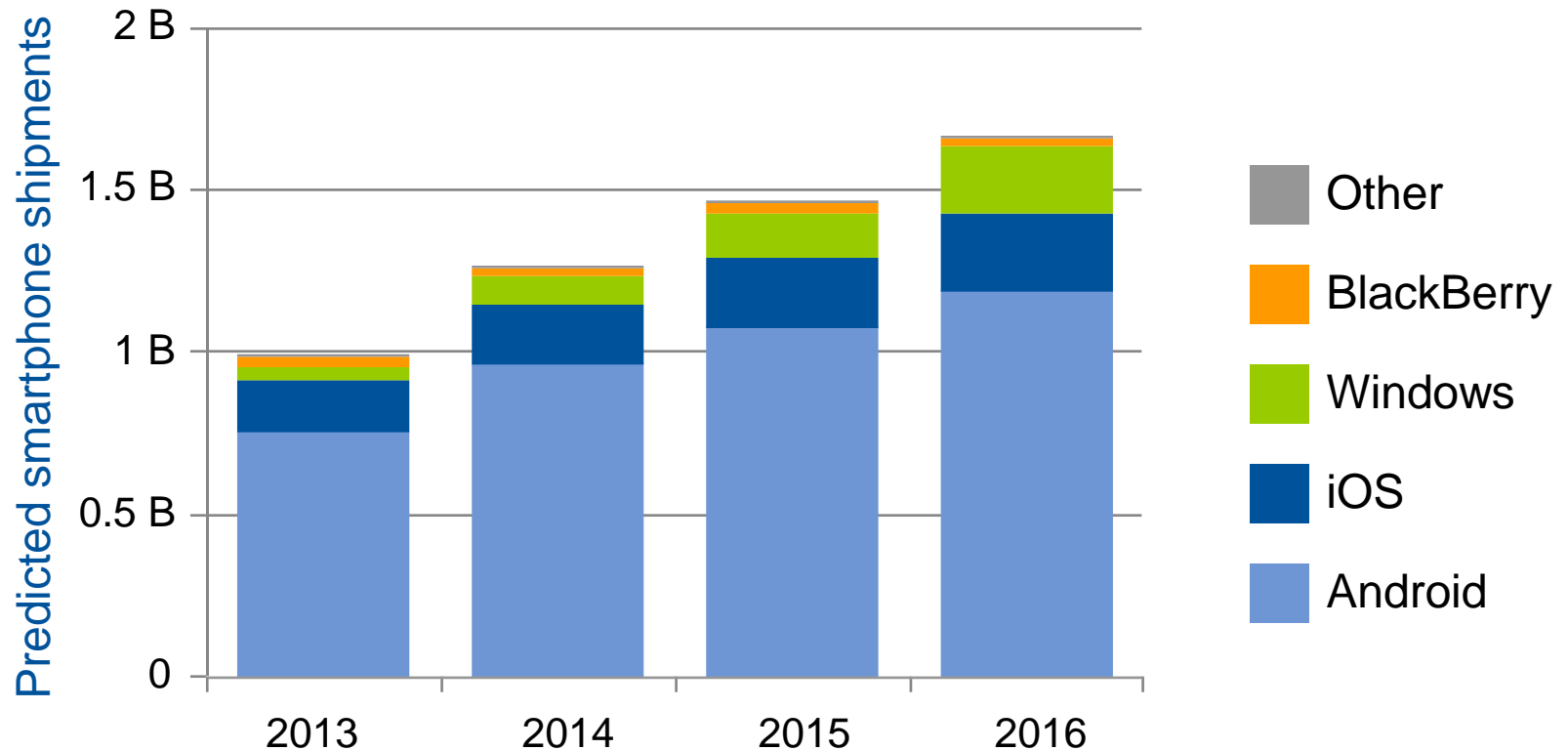
Mobile Device Diversity

1

- Many form factors, screen sizes, interaction styles, platforms, architectures
- > 100 mobile application development tools, > 60 MDM tools
- New working practices, opportunities, organizational structures, skills



Android Dominates the Handset Market



But iOS still dominates in enterprise mobility.

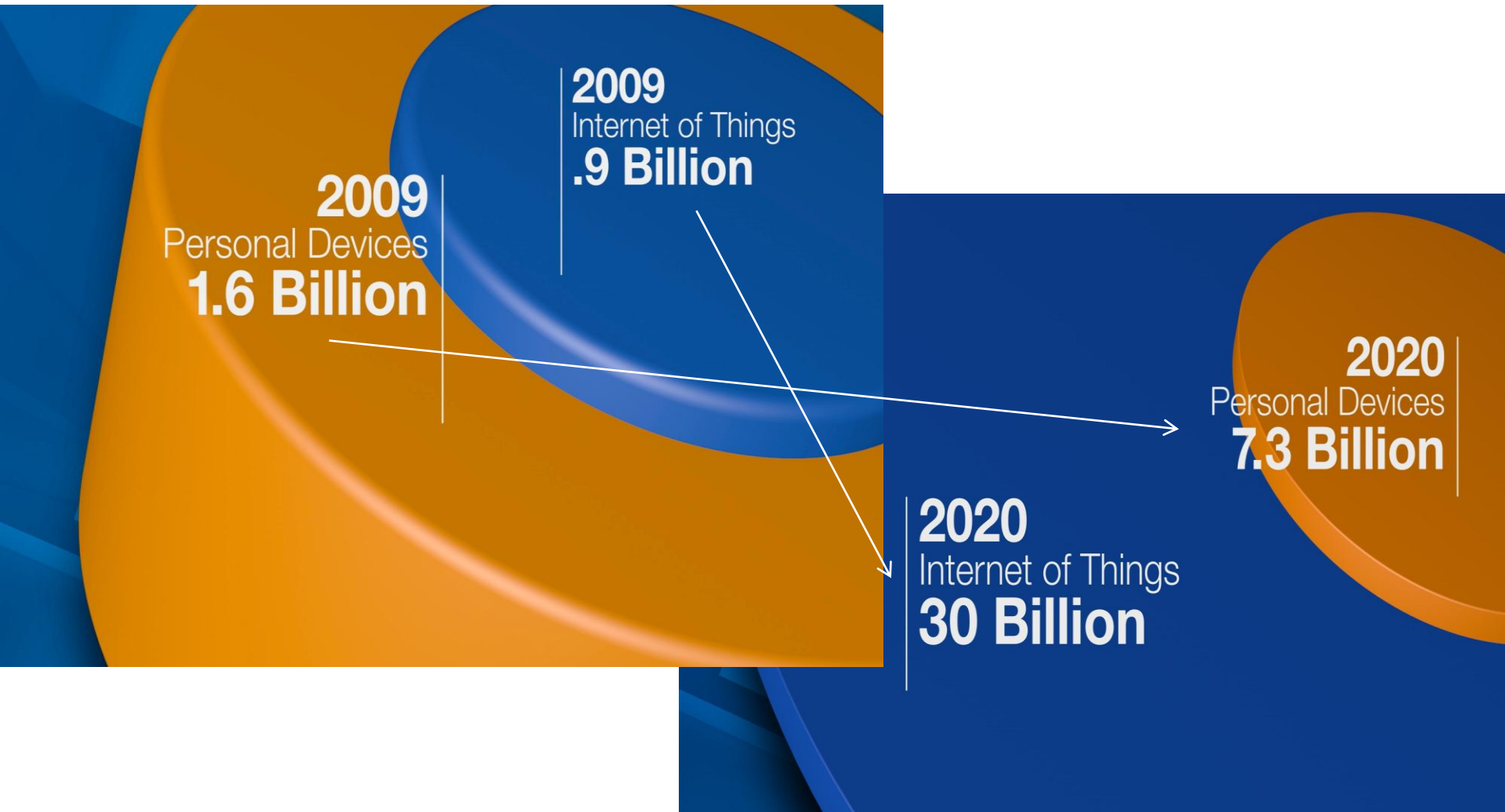
Mobile Apps and Applications

2



- Microsoft, Google and Apple will battle for leadership
- Multichannel application integration and interactions
- Richer UI models - Voice, Video & more

Internet of Things



Things - Real-time Services

3

Intelligent Trash Cans



Source: BigBelly Solar, Inc



Compactor increases capacity 6-8 times
Notifies operator when emptying needed
80% fewer collections

Driving Habits Sensor



Source: <http://www.progressive.com/auto/snapshot.aspx?vanity=true>

Pay-as-you-drive car insurance

Sensor-based Logistics



Source: FedEx Sensaware

GPS and cellular technology

Senses location, temperature, light intensity, humidity, pressure, shock

Tech-part Price of Things

	2010 Cost	2015 Cost
Radio, Wi-Fi	1.50	0.80
Radio, Bluetooth	1.00	0.50
Processor (basic 8-bit microcontroller with flash)	1.00	0.85
Sensor (temperature)	1.00	0.75
Sensor (vibration/accelerometer)	1.50	1.00
Camera (1.8 megapixel CMOS image sensor)	1.80	1.20
Microphone	1.20	1.00
GPS	1.25	0.70
Energy source (inductive loop wireless power, incremental cost per unit)	2.50	2.00

Things - Real-time Services

3

Pizza Delivery



Source: Domino's U.K. & AUS.



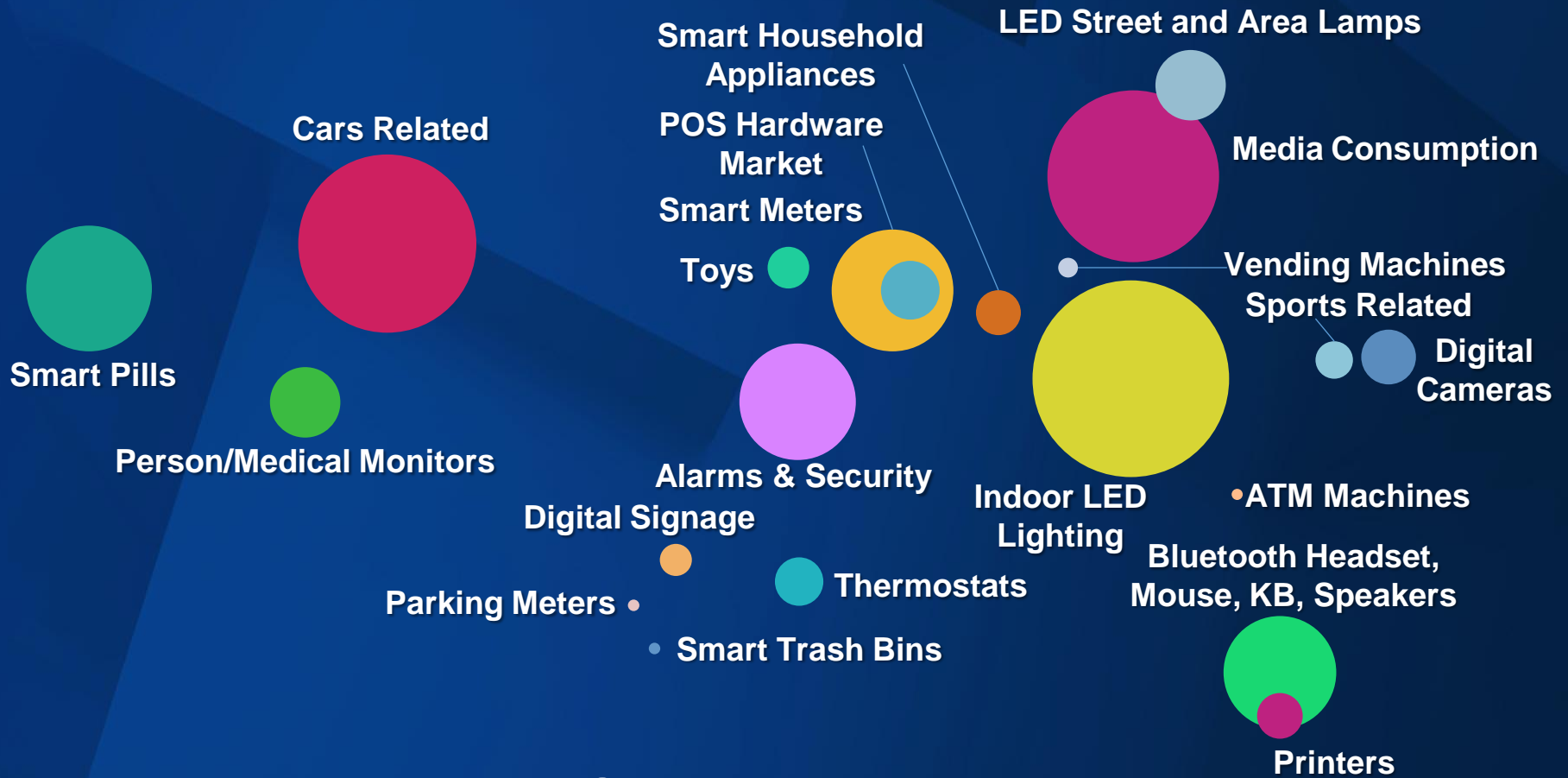
Smart dust - RFID

Sensor-based Logistics



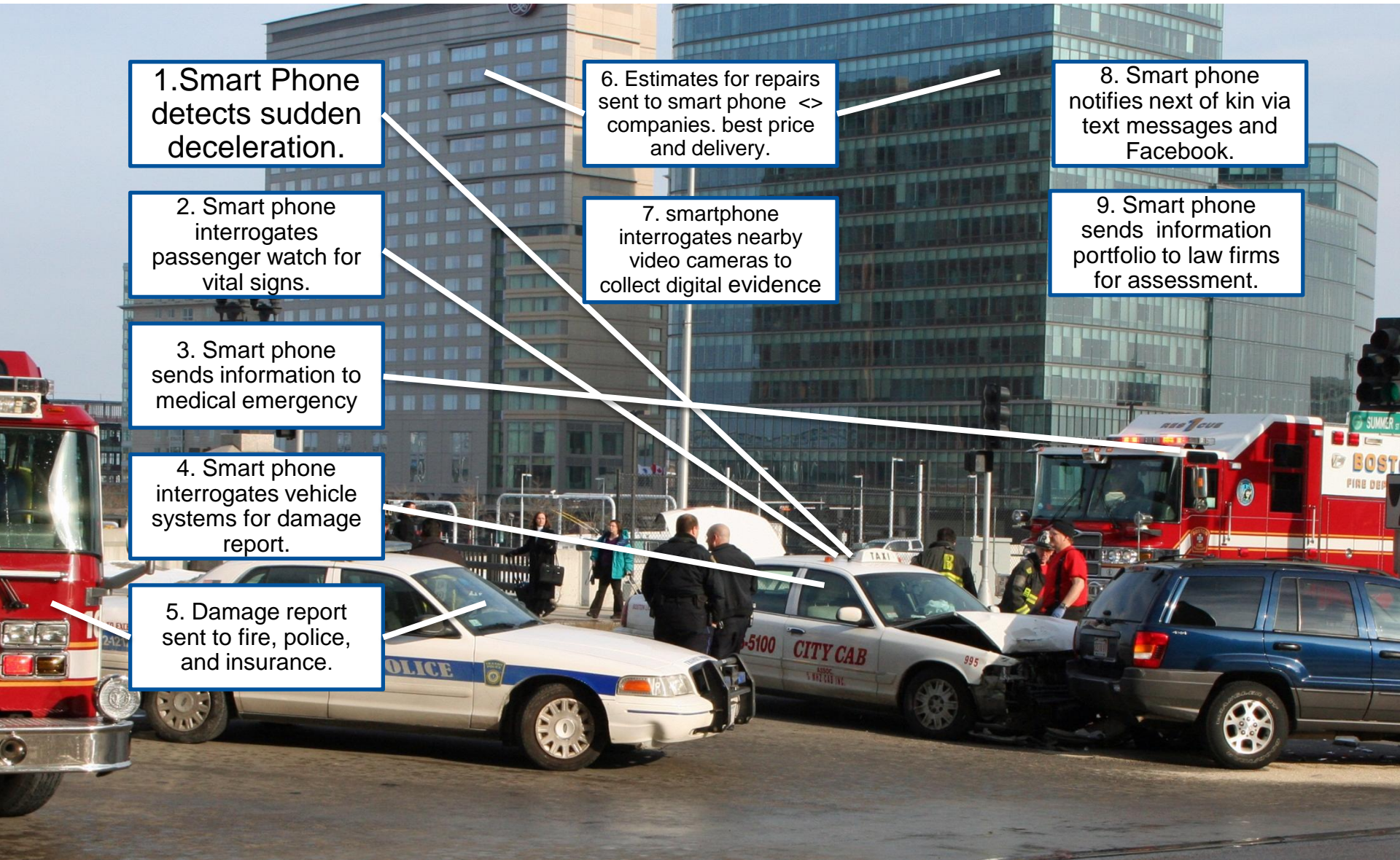
www.babolatplay.com





THE INTERNET OF THINGS

Digital Business Scenario: The Car Crash



1. Smart Phone detects sudden deceleration.

2. Smart phone interrogates passenger watch for vital signs.

3. Smart phone sends information to medical emergency

4. Smart phone interrogates vehicle systems for damage report.

5. Damage report sent to fire, police, and insurance.

6. Estimates for repairs sent to smart phone <> companies. best price and delivery.

7. smartphone interrogates nearby video cameras to collect digital evidence

8. Smart phone notifies next of kin via text messages and Facebook.

9. Smart phone sends information portfolio to law firms for assessment.

Who "Owns" the Car Crash?

Consumer Electronics

Smart Phone Car Crash Technology

Government

- Law Enforcement
- Fire
- Safety
- Sanitary and Cleanup

Healthcare

- First Responders
- Medical Specialists
- Emergency Rooms

Financial Services

- Insurance (P&C)
- Banks (Loan risks)

Automotive

- Damage Control Sensors
- Safety Deployment

Retailers

Smart Clothing, Watch

Legal

Accident Attorneys

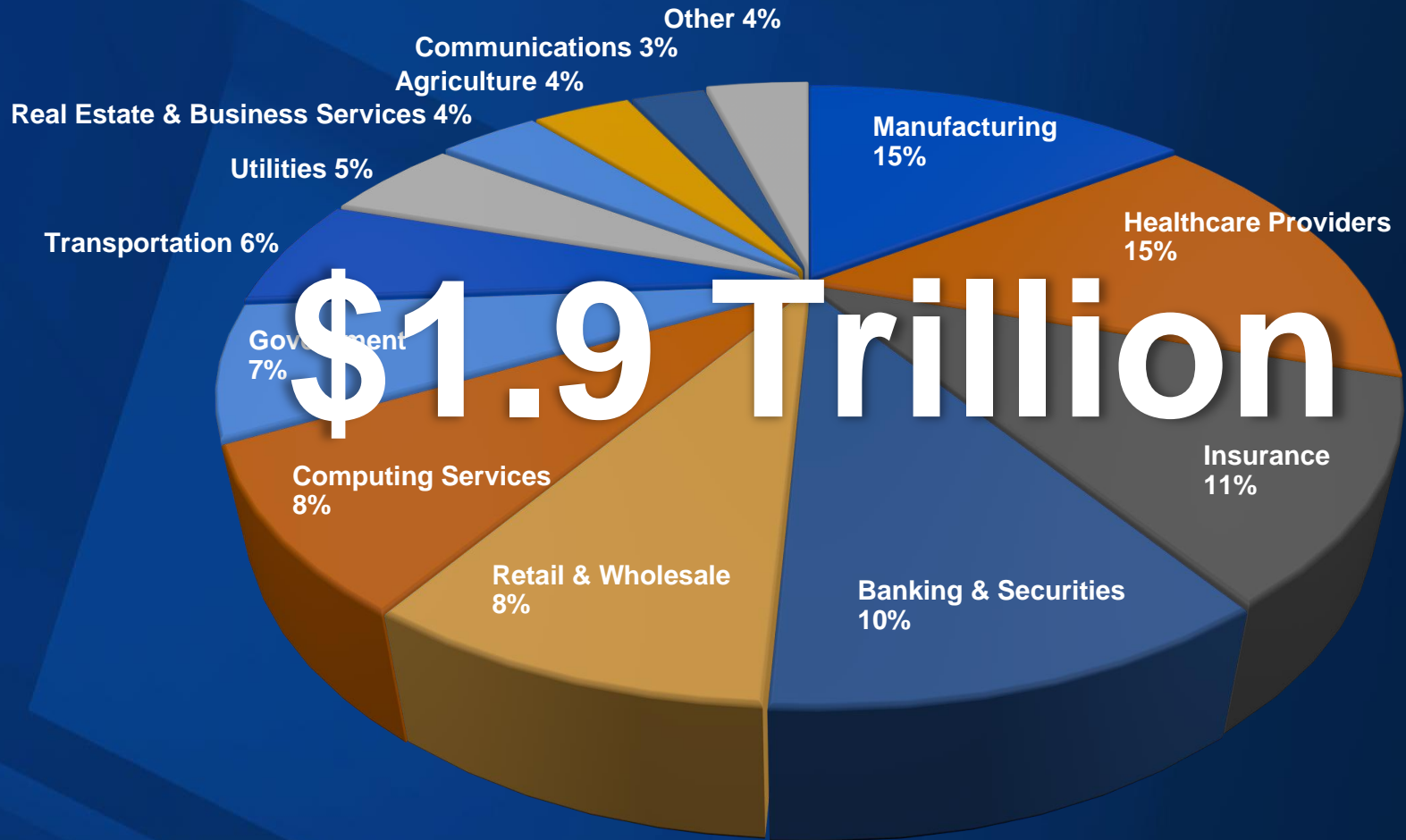
“Things” With Big Data and Analytics

- Opportunity:
 - **Optimizing food refrigeration costs**
 - Data and Analytics:
 - Collaborated with refrigeration manufacturers to feed refrigeration data from in-store controllers to a dedicated data warehouse
 - 70M refrigeration-related data points per store each year; readings every 3 seconds
 - Analyzes performance of refrigerators using IBM's SPSS and overlays this on a Google Map
 - Results:
 - **Up to 20% energy cost savings (€20M annually)**
 - Reducing maintenance by proactively addressing imminent refrigeration problems
-
- Opportunity:
 - **Improving driver safety and efficiency**
 - Data and Analytics:
 - Telematics sensors in 46,000+ vehicles capturing speed, direction, braking, drive train, RPM, oil pressure, shifting, idling time, seatbelt use, and 200 other data points including geographic and map data
 - Algorithms to determine the truck's performance and condition, recommend driving adjustments
 - Results:
 - ORION (On-Road Integrated Optimization and Navigation) system saves 8.4M gallons of gasoline per year, and reduced maintenance and accidents
by cutting 85M miles off daily routes and a 25% reduction in reversing trucks
 - Improved customer service

TESCO



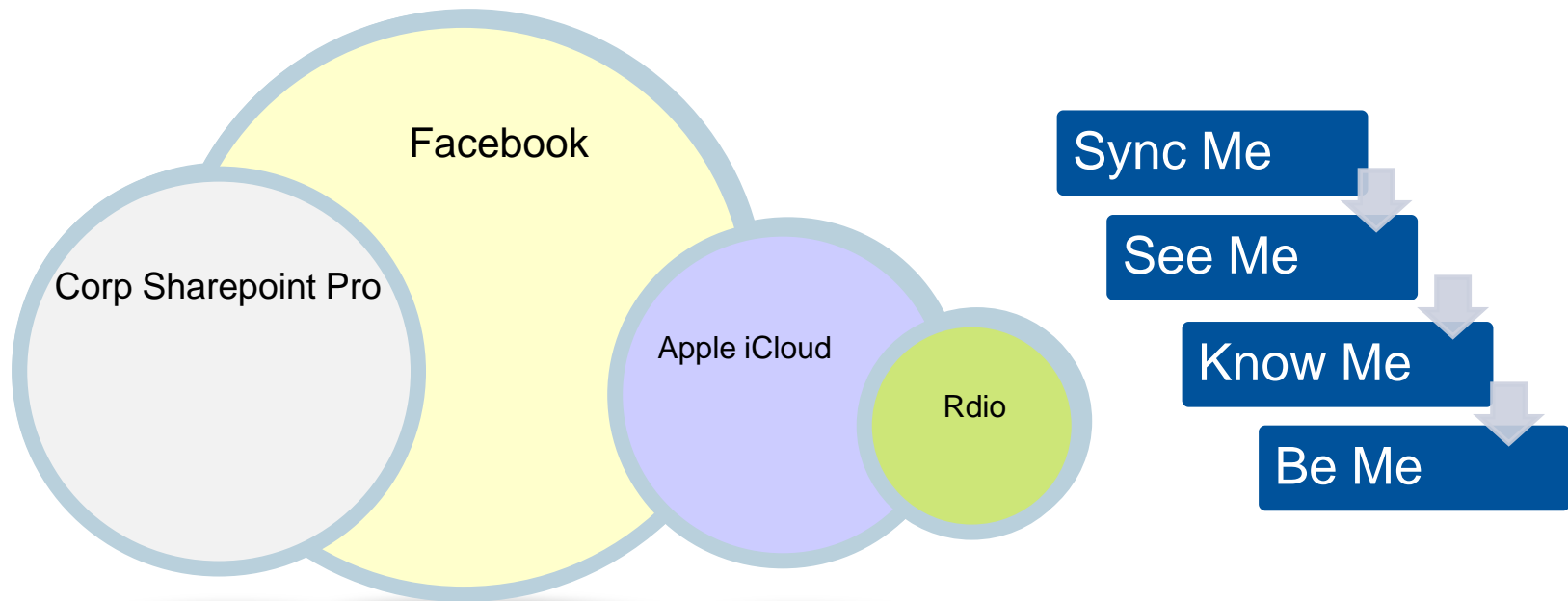
Internet of Things: Economic Value-Add ... 2020



Many Markets Will Be Created in This \$1.9T

The Rise of the Personal Cloud

6



Vendors and IT organizations must align to this next stage of consumerization

Web-Scale IT: A Result of the Cloud Provider “Singularity”

8

Web-scale IT is a pattern of global class computing that delivers the capabilities of large cloud services providers to the enterprise.

You Too can “run with the big dogs”

Etsy

facebook

amazon
web services

Google

Smart Machine Categories

9

- Sages
 - Linguistically smart Information-based helpers
 - personal assistants, smart advisors
- Doers
 - Machine-focused helpers
 - Robots, Networks of Industrial Machines



Smart Machine Categories

9

- Movers

- Autonomous vehicles

- 72% estão dispostos a adiar, até por um ano, a compra de um carro novo, se puderem adquirir um carro com este serviço.
- Quase dois terços dos entrevistados, passaram a considerá-lo um recurso importante, em seus próximos veículos.
- 67% comprariam um serviço de Wi-Fi ou conectividade, se disponíveis no carro.
- seis recursos hoje disponíveis
 - • Assistência na estrada (74%)
 - • Navegação e tráfego em tempo real (72%)
 - • Ligar o carro à distância (71%)
 - • Transmissão de música (70%)
 - • Rastreamento de seguro com base e
 - • Hotspot de Wi-Fi (50%)



3D Printing Opportunities

10



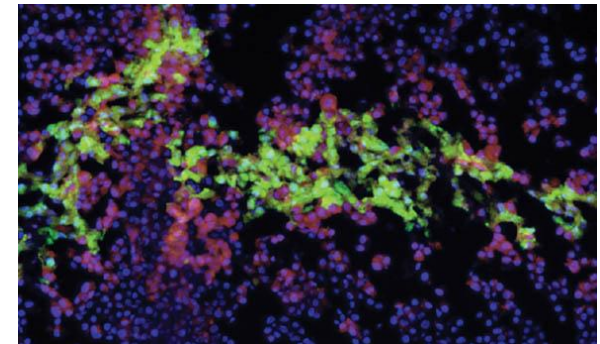
Stratasys / Solidscape
example



3D Systems
Zprinter example


















By 2016, 3D printing of tissues and organs (bioprinting) will cause a global debate about regulating the technology or banning it for both human and non-human use.



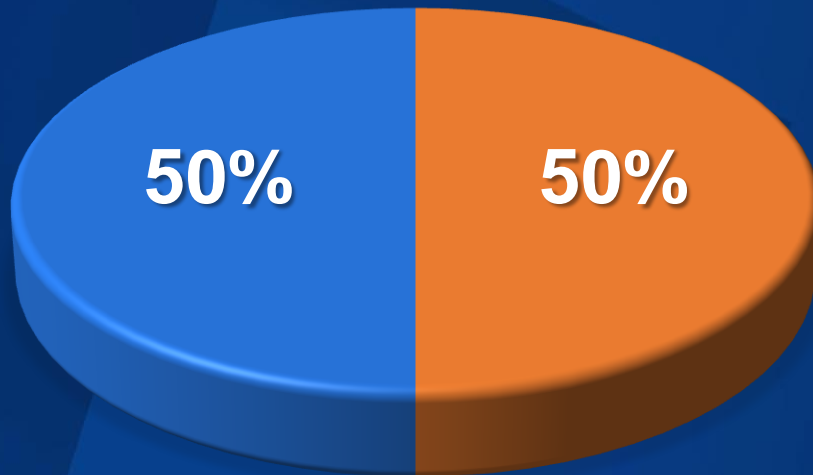
Cross-section of bioprinted human liver tissue

The Journey Onward to Digital Business

	Pre Web				Post Nexus	
	Analog	Web	E-business	D-marketing	D-business	Autonomous
Focus	Build relationships that drive business or lower cost	Extend relationships into new markets/geographies	Transform sales channel into a global medium to drive efficiencies	Exploit nexus to drive greater efficiency	Extend potential customers from people to things	Smart, semi-autonomous things become the primary "customer"
Outcomes	Optimize relationships	Extend relationships	Optimize channels	Optimize interactions	Build new business models	Maximize retention of and relationships with things
Entities	 People	 People  Business	 People  Business	 People  Business	 People  Business  Things	 People  Business  Things
Disruptions	Emerging technologies	Internet and digital technologies	Automation of business operations	Deeper customer relationships, analytics	Creation of new value and new nonhuman customers	Smart machines and things as customers
Technologies	ERP CRM	CRM Web	Electronic data interchange Business intelligence Portals	Mobile Big data Social	Sensors 3D printing Smart machines	Robotics Smarter machines Automation

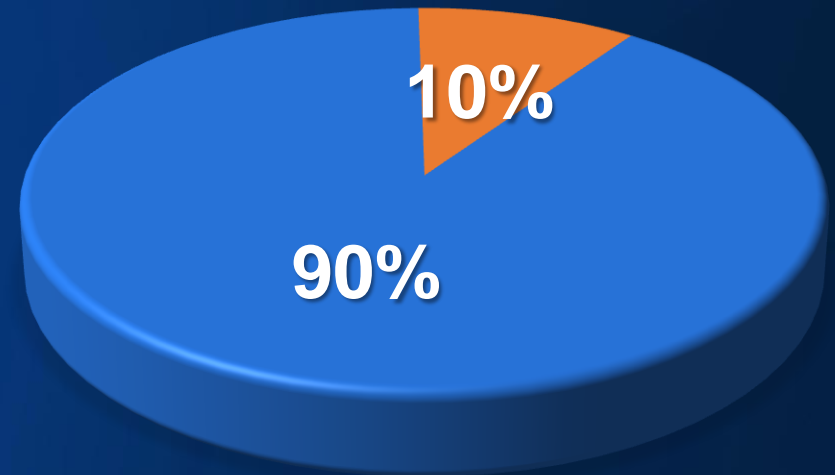
 Change of Kind
  Change of Degree

CEO



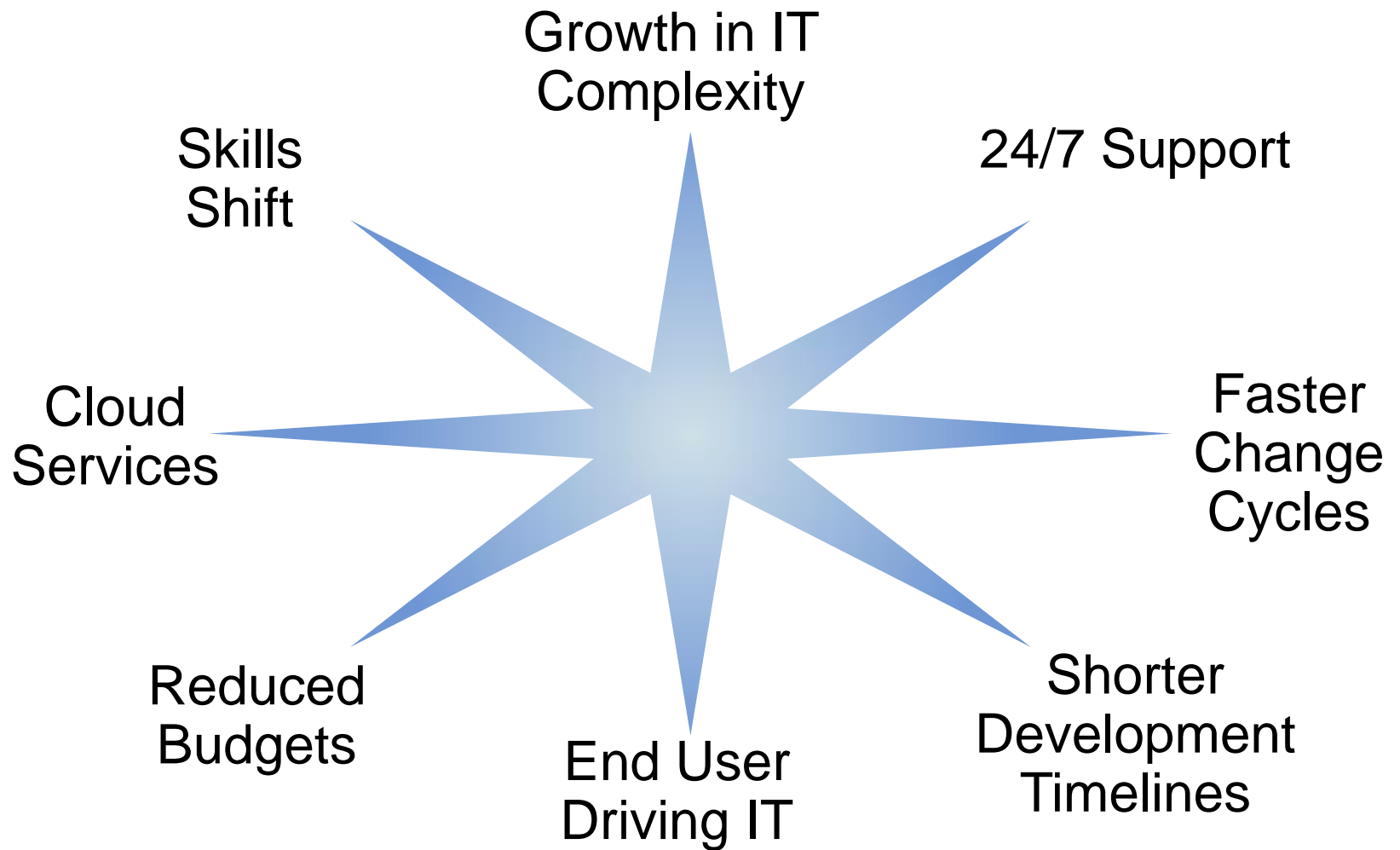
"Are you realizing the promise of information?"

IT

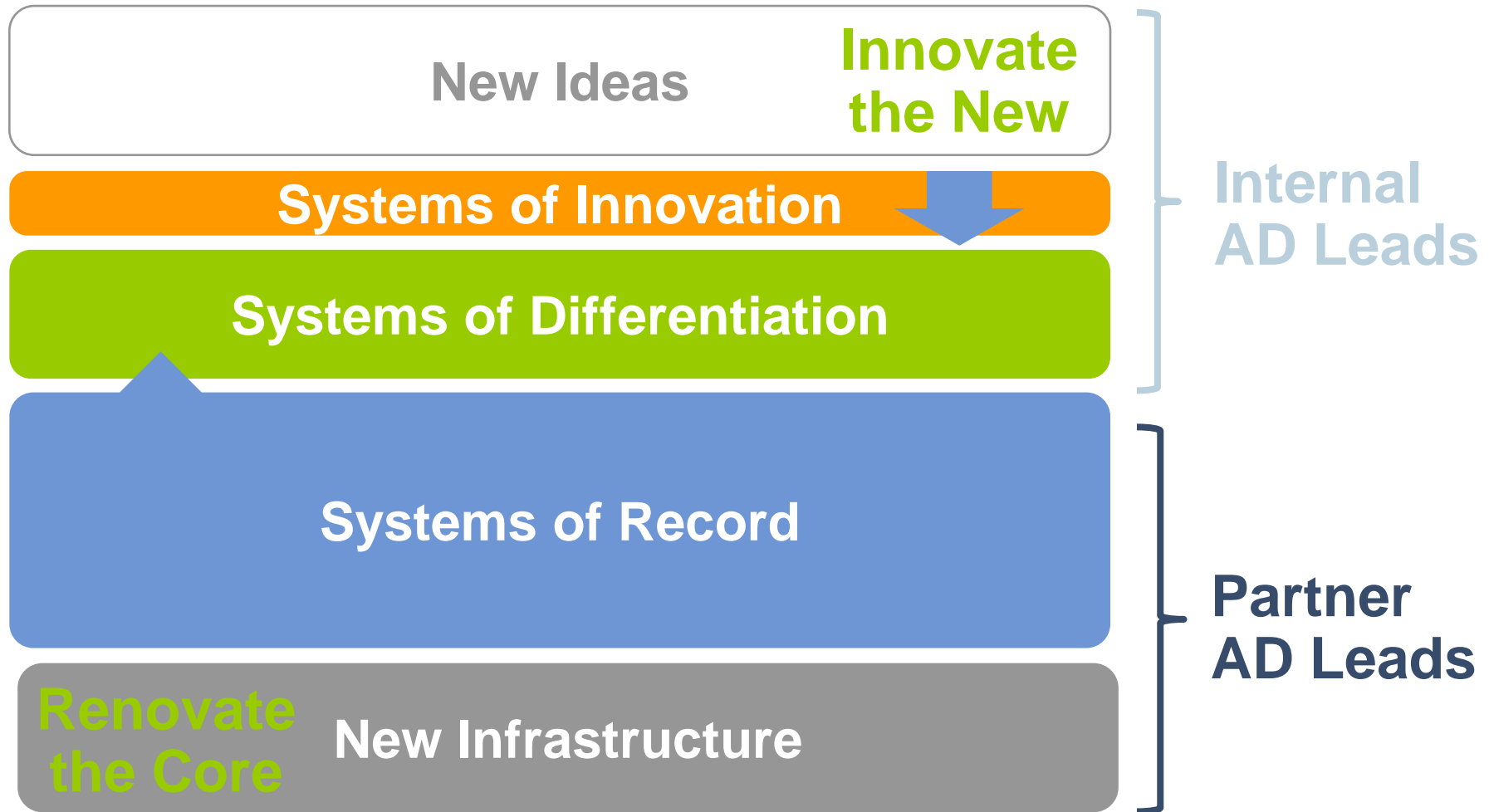


"How well is IT executing?"

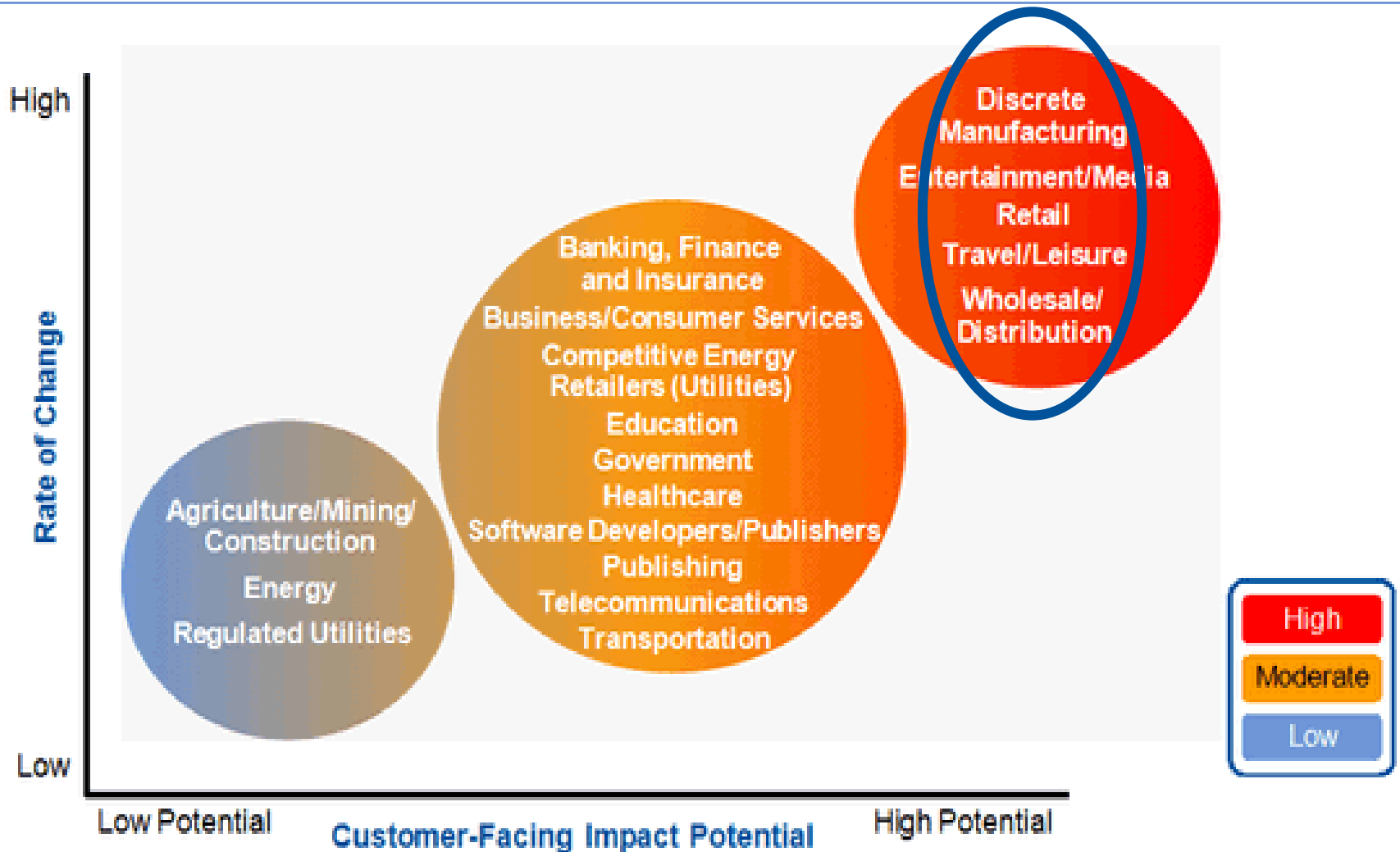
Drivers for Organizational Disruption



Use Pace-layered Application Development to Focus AD Investments



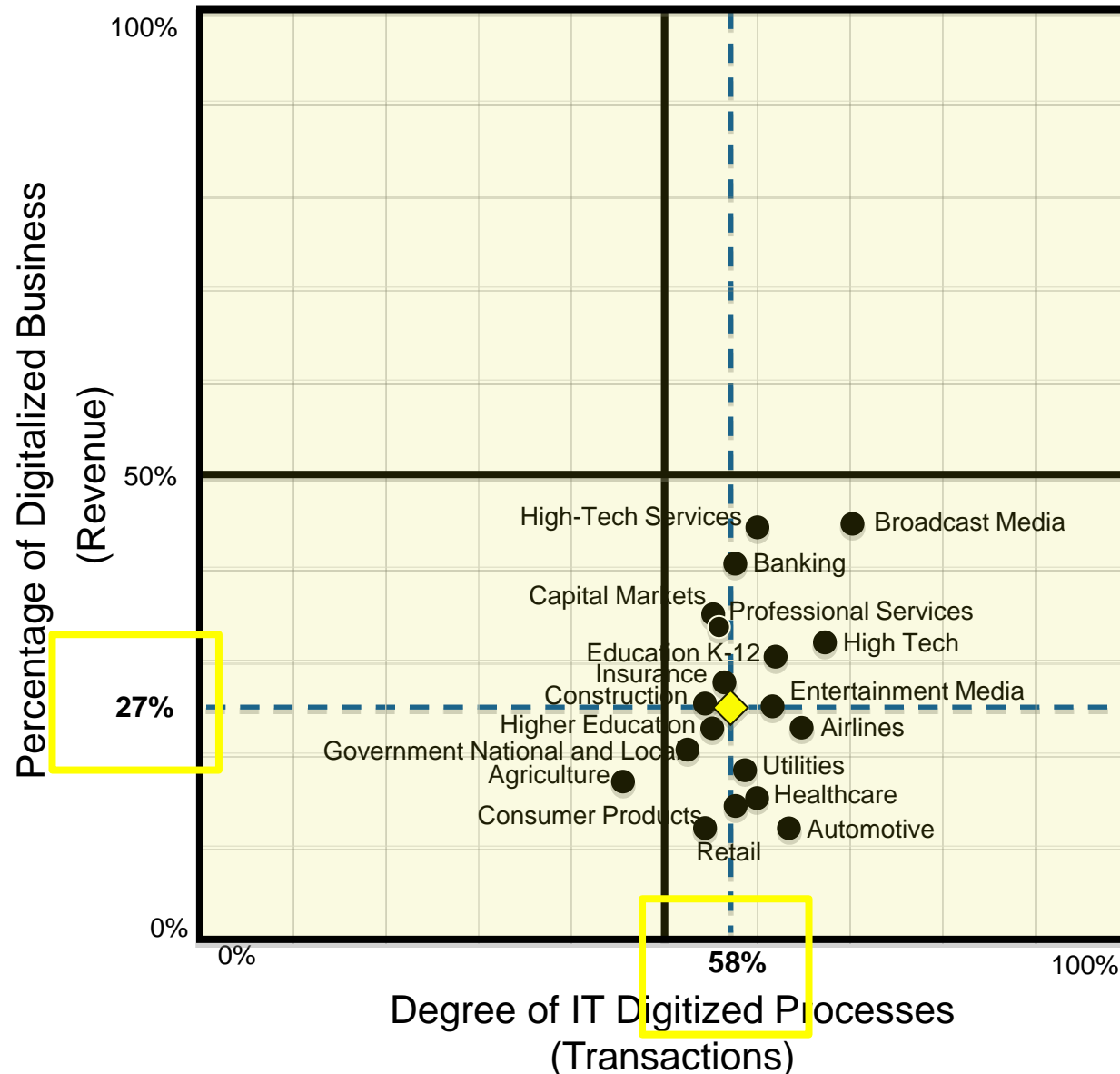
Heat Map by Industry



E-commerce x M-commerce

	2011 - Actual - %			2015 - Estimate - %			2017
	Total	U.S.	U.K.	Total	U.S.	U.K.	Total
Brick-and-Mortar Stores (customer sales that are completed in the retailer's physical branded store locations) 2	89.5	91.9	83.2	81.3	85.5	70.8	76.5
E-Commerce (customer sales that are completed via the retailer's website or other channel partner websites) 3	6.9	5.1	11.2	12.1	9.5	18.4	14.6
Mail-Order Catalog (paper-based customer orders that are received by the retailer to be processed and shipped to the customer via local post or as designated by the customer)	0.5	0.4	0.8	0.4	0.3	0.6	0.3
Call Center (customer orders that come in via phone or call center to be processed and shipped to the customer via local post or as designated by the customer) 4	1.2	0.5	2.9	0.7	0.3	1.6	0.7
Mobile Commerce (customer sales that are completed by mobile phone and via the retailer's mobile site or mobile commerce application) 5	1.0	0.7	1.8	4.1	2.7	1.1	6.5

The Opportunity for Digitalizing Business Is Real, Valuable, and Underexplored



Transforming Business — Generating New Revenue From Digital Moments



HYATT

**Business
Process**

starwood
*
Hotels and
Resorts

VS

Hotels.com

**Business
Model**



**Business
Moment**

From Outside Your Industry "Tech" Players May Become Your Competitors

Google

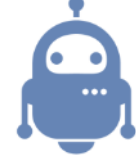
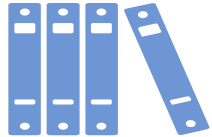


Philip Clarke
CEO, Tesco

"To compete in the new era of retailing I believe that Tesco has to be more than a retail company. We have to become a technology company too."



amazon



Not only edging into your markets, but also redefining your customer's expectations



Mobile — New Ways to Pay

Make
your phone
your wallet

Pay in-store by tapping
your phone.



[Play the video](#)

[paypass.com](#)



[google.com](#)

V.me by Visa

Personal

Business

Developer

Shop securely. Pay your way.

V.me is a new service from Visa that lets you shop without sharing your card account information with the seller when you pay.

Shop online or on your mobile device. Get timely alerts for your Visa card. With one secure account and password so you can shop with confidence.

Coming soon.

V.me is scheduled to launch in 2012. Explore the site to learn more about V.me.

[v.me](#)



[Izettle.com](#)



[paypal.com](#)



[squareup.com](#)



[intuit-gopayment.com](#)

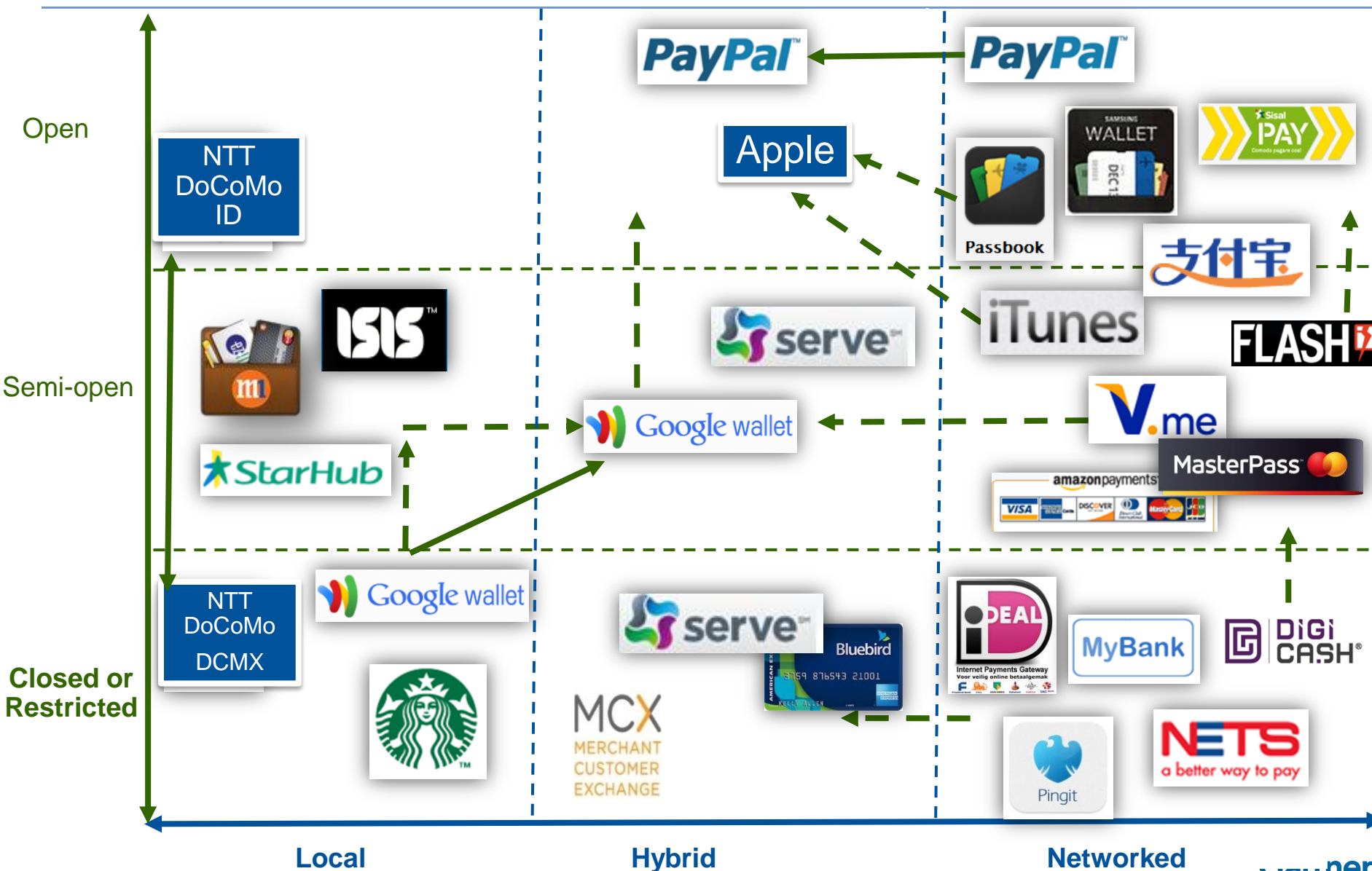


[groupon.com](#)

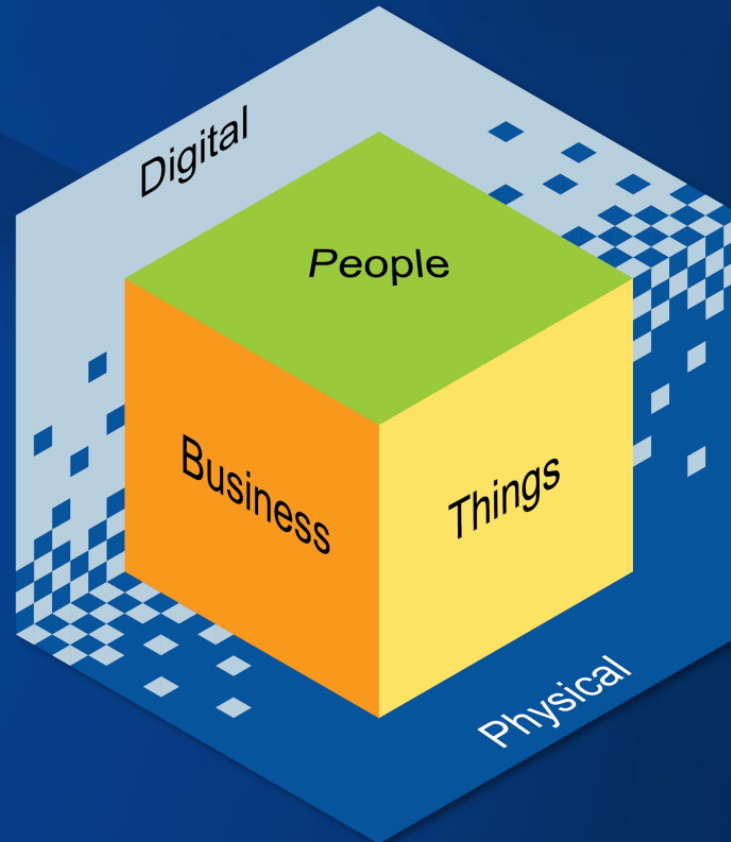
The Digital Wallet Landscape

An Ever-changing View

Strategic Intent



DIGITAL BUSINESS



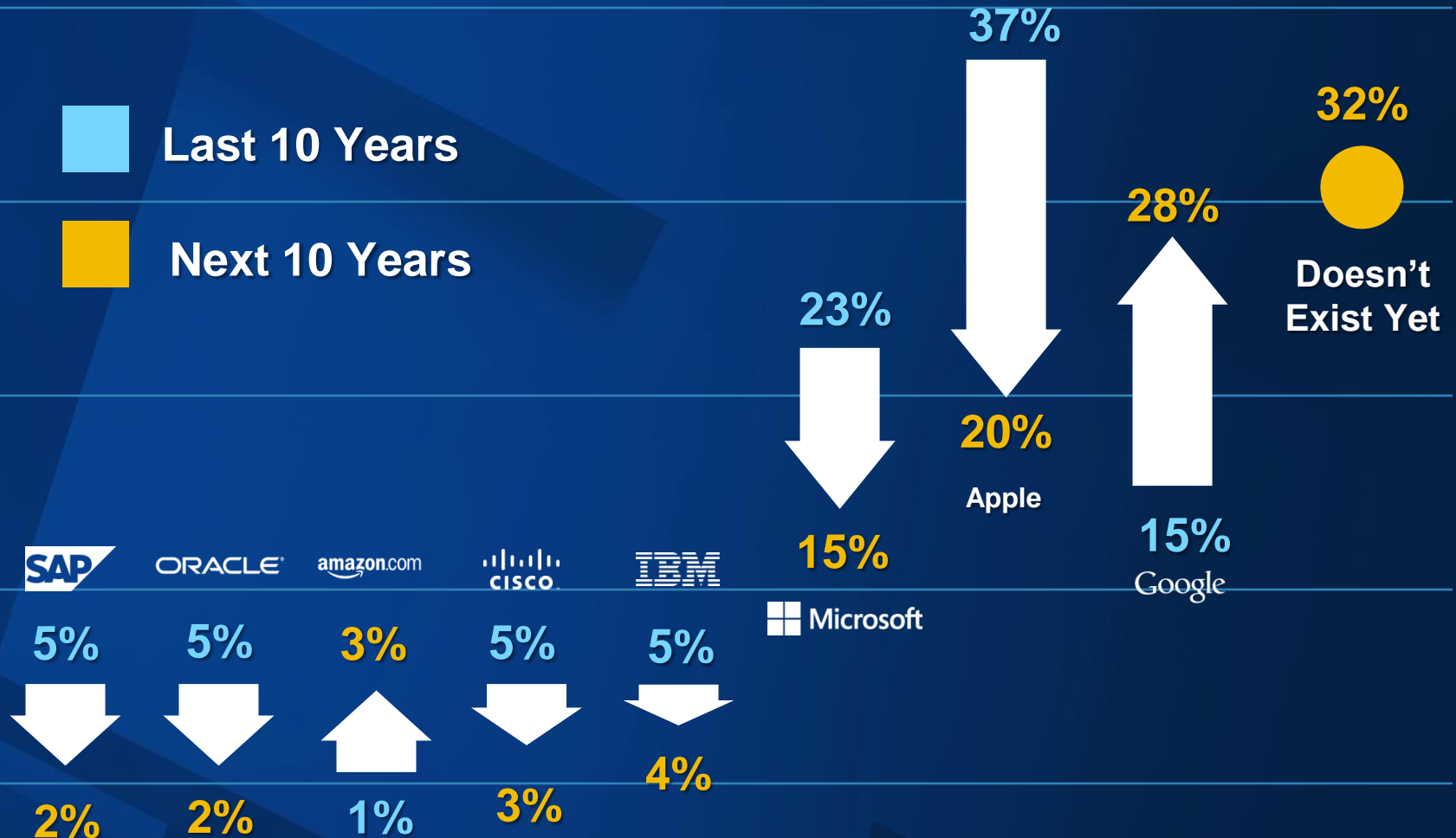
EVERY PERSON IS A
TECHNOLOGY COMPANY

Most Influential Vendors: Past vs. Future

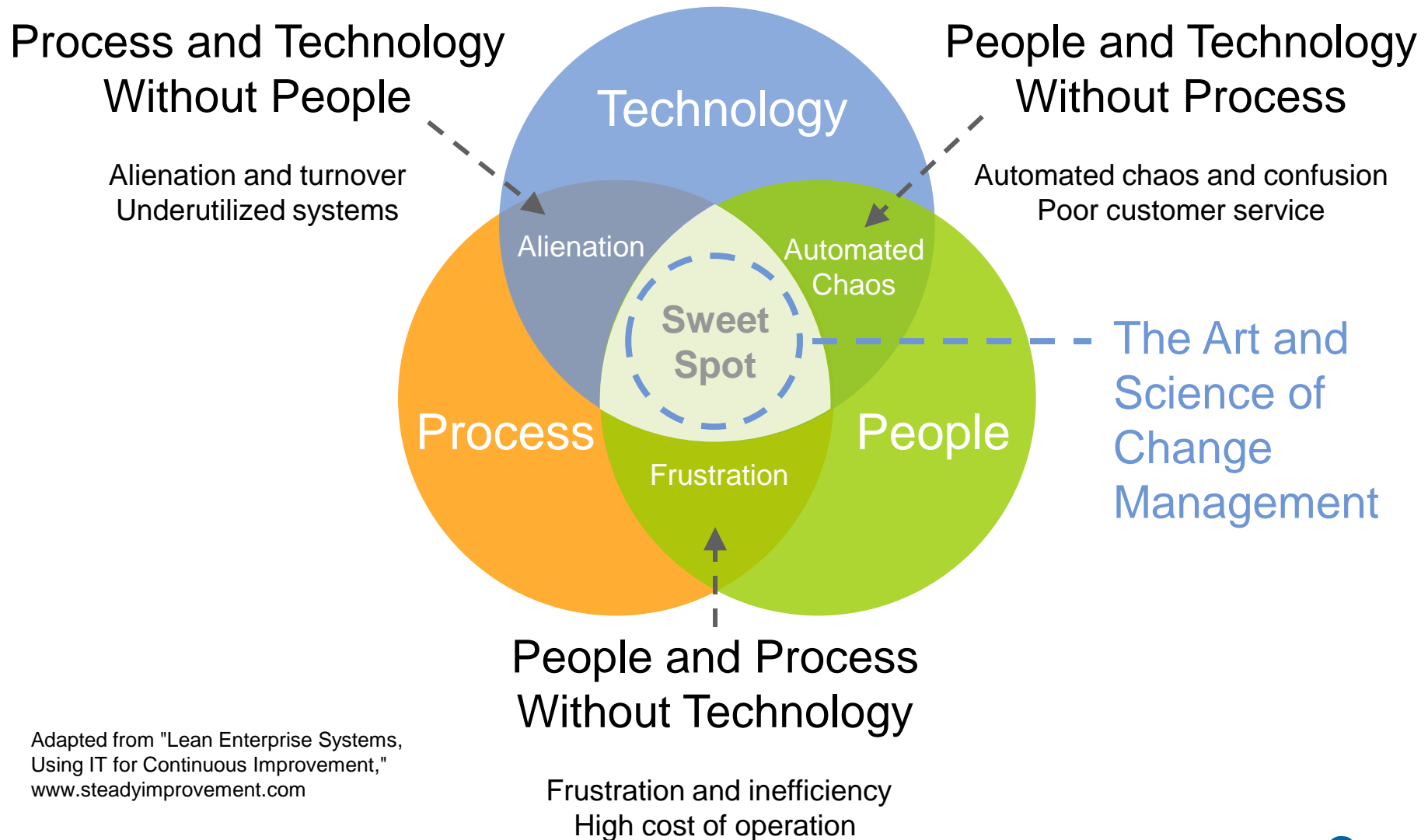
CIO Ratings of Top Suppliers

 Last 10 Years

 Next 10 Years



Business Context: Strategy Needs More Than Technology



Adapted from "Lean Enterprise Systems,
Using IT for Continuous Improvement,"
www.steadyimprovement.com



Business leaders get digital!

The Entire World Is Digital Now

"There will be **seven billion smartphones in everybody's hands** in the next five years. Now, everybody is a digital customer, so **doing things digitally is no longer a niche play**. Doing things digitally is how the entire world communicates."

Angela Ahrendts, CEO

Source: businessoffashion.com, Sep 2013

Image: Burberrryplc.com



Should Have Gone Faster



WPP Group plc

"We increased our target for digital to 40%-45% of our business. I wanted to signal to our people we wanted to be a little more energetic.

If you asked — what do I regret about the past five or ten years? We didn't go fast enough."

Sir Martin Sorrell, CEO,

source: CNBC Aug 2013

Image: WPP.com

70%

of companies have a Chief
Marketing Technologist today



80%

of them report to
Marketing

Philip Kotler no Brasil (ago/2014)

- 1 - Sua marca precisa tocar o espírito das pessoas
- 2 - Fique atento ao mobile
- 3 - Aposte nas histórias
- 4 - O Brasil precisa liderar a América Latina
- 5 - É preciso inovar sempre
- 6 - Não crie vendas, possua consumidores
- 7 - Aposte nas novas mídias
- 8 - Valorize o design
- 9 - Marketing B2B também é marketing
- 10 - Lojas físicas terão de repensar sua razão de ser

Global digital aspirations

"We're building a global technology platform whose goals are as simple, frankly, as they are audacious.

We want to know what every product in the world is.

We want to know who every person in the world is."



Neil Ashe, CEO of Global E-Commerce

Source: Walmart Labs Blog, May 2013

Image: Walmarrrt.com



No mobile, no social – no future?

“I would not want to be a traditional brick and mortar retailer that did not have mobile payment, social and digital media. Those companies are going to find themselves significantly challenged in 2014 and beyond”



Howard Schultz, CEO

Source: CNBC, Jan 2014

Image: Starbucks.com

Autonomous freedom ahead



“Not only will autonomous driving enhance safety but it will also free up time for drivers. Being connected will enable them to make the most of this extra time by providing them with access to new in-car services such as video-conferences, on-line shopping, travel information and more.”

Carlos Gohsn, CEO

Source: Renault, Feb 2014



Image: wikipedia commons



Execute

Lead

Visualize

Digital Will Change Your Customers' Needs ... Update Your Digital Strategy



BE a Digital Story Teller.

Tendencias da Tecnologia

Um mundo Digital

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