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Business Without Limits.

July 18 | Sandton Convention Centre, Johannesburg

Re-imagine the future of Telecommunications

Rob van den Dam

18 July 2013



<https://www.facebook.com/IBMSouthAfrica/events>



#IBMBC2013



The IBM Institute for Business Value creates fact based thought leadership that help clients realize business value



Future Agendas

3 to 10 year industry outlook with action oriented next steps



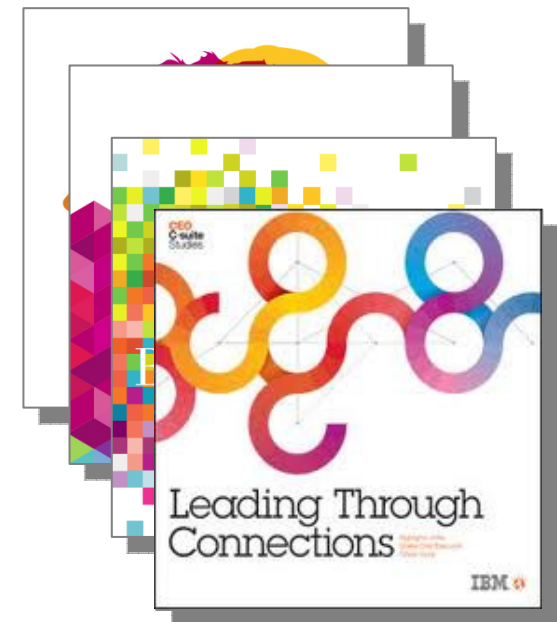
Value Realization Studies

In-depth assessment of today's critical issues, opportunities, etc.



CXO Surveys

Chief Officers studies – CEO, CIO, CMO, CFO, CHRO, etc.



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What will be CSP's role in the new world?



The 'mega' market and technological trends are creating a very new world for consumers, businesses and markets as a whole.

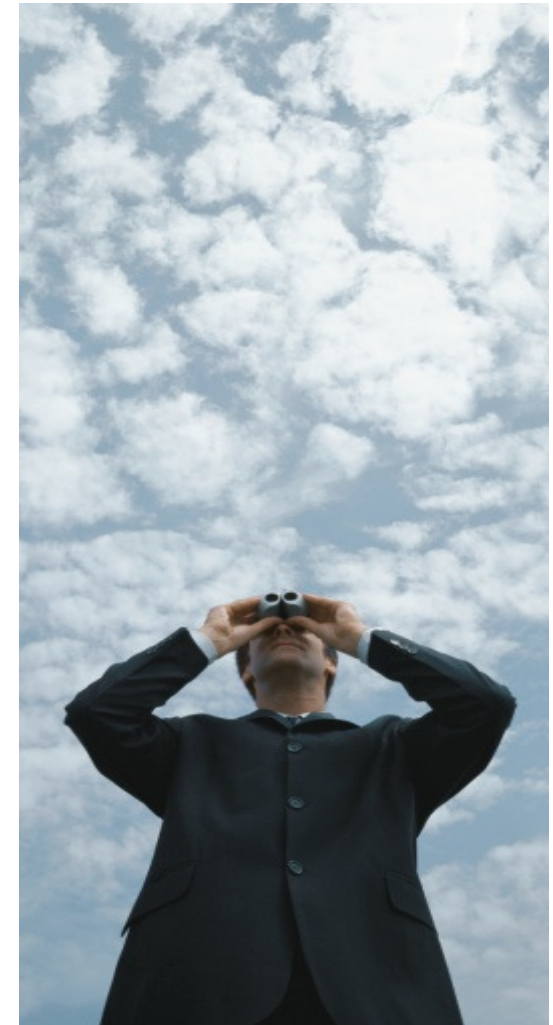
In this new world, CSP's strategic positioning and response relies on major growth plays

Prediction is very difficult, especially if it's about the future.

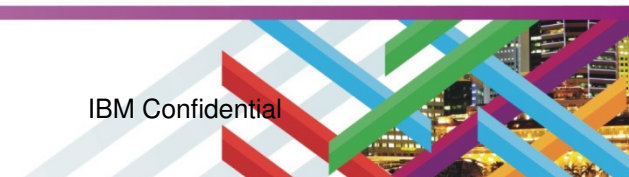
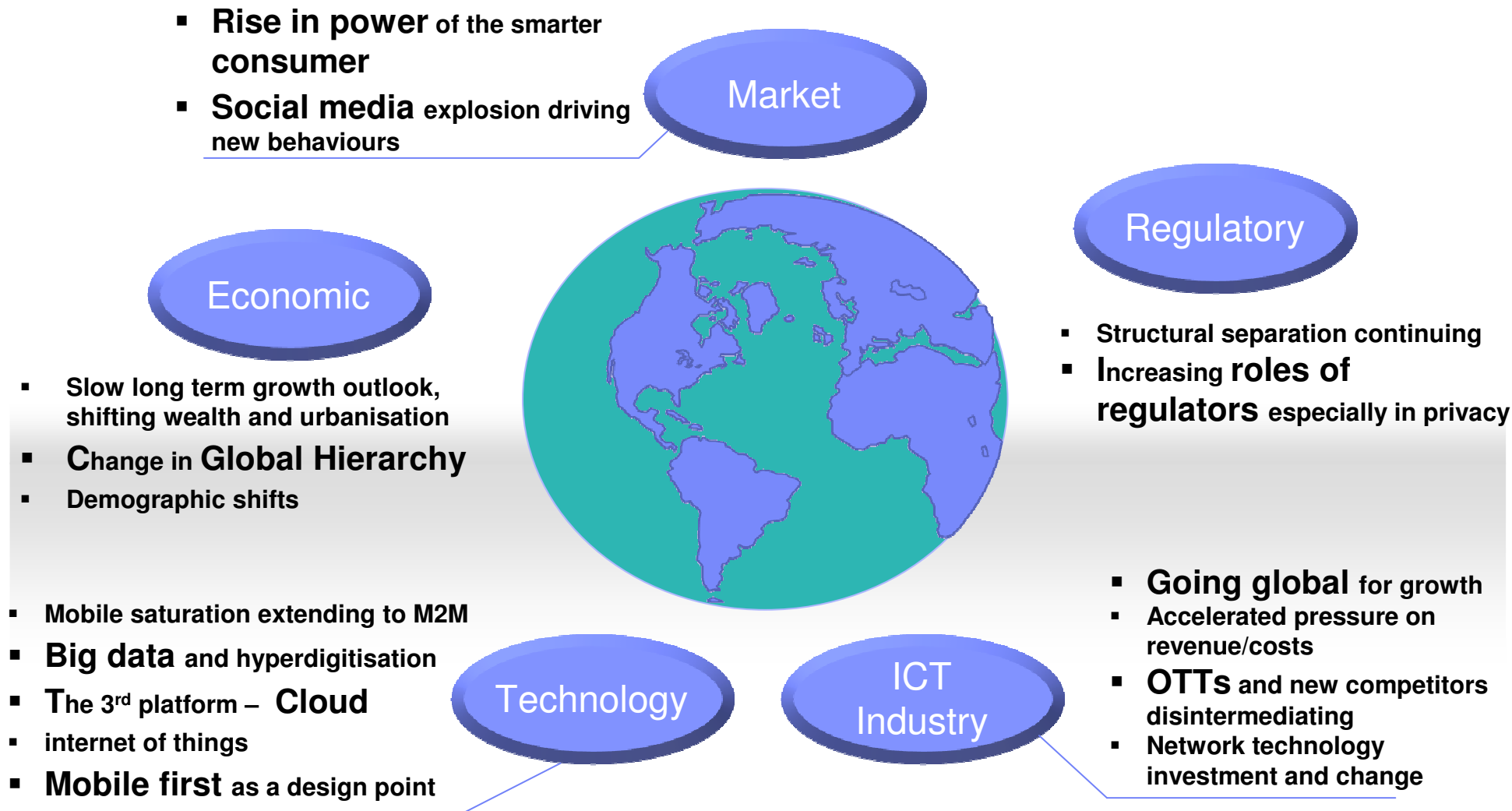
— Niels Bohr

Your theory is crazy, but it's not crazy enough to be true.

— Niels Bohr



Trends evident today are driving re-evaluation of business strategy



Agenda



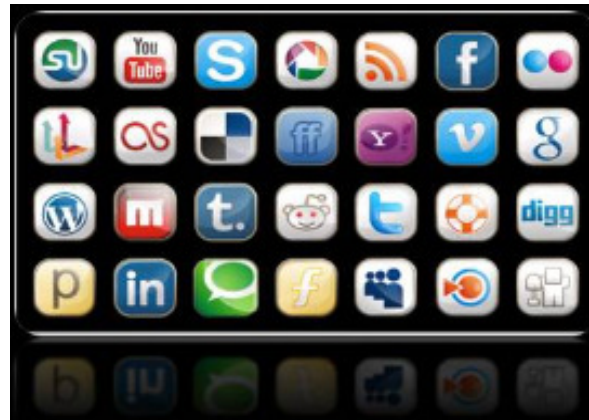
- Increasing power of the consumer
- Change in the Global Hierarchy
- Big Data
- Cloud
- CSP's Future Role



Internet, the mobile and social media has led to an amazing consumer revolution as profound as any seen before



Increasing power of the consumer/Social Media



The number of Internet users in South Africa is expected to more than **double** by 2016 to 29.8 Mio, from 12.6 Mio users in 2012

Source: PWC Entertainment and Media Outlook

3 out of **4** South African Internet users are signed up for one or more social networks

Source: The New Wave: South African Network Society project

Mobile broadband users account for \pm **3/4th** of South African Internet users

Source: PWC Entertainment and Media Outlook

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Under 25s in South Africa communicate more using social networking than all other forms of communication



Increasing power of the consumer/Social Media



UNDER 25s

		Daily Usage
1	Social Networking	90%
2	Mobile Telephony	87%
3	Email/IM/Chat	83%
4	Video Streaming	42%
5	Fixed Voice	42%
6	VoIP	24%



ABOVE 25s

1	Mobile Telephony	91%
2	Email/IM/Chat	89%
3	Social Networking	80%
4	Fixed Voice	65%
5	Video Streaming	32%
6	VoIP	25%



90% of under 25s use social networks daily

42% of under 25s with Internet stream or download video daily

Source: 2011 IBM Global Telecom Consumer Survey, South Africa N=1000

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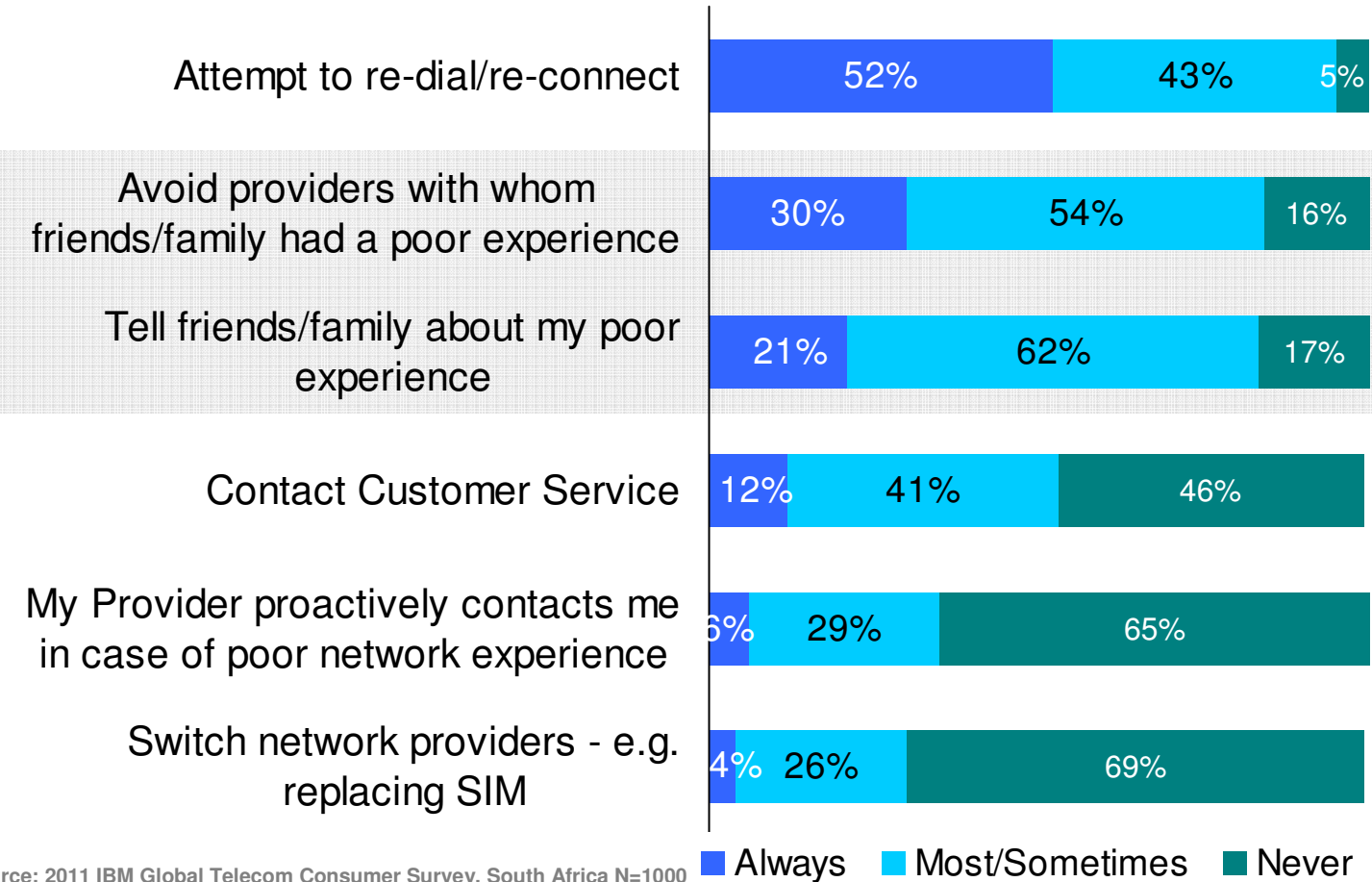


Like in many other countries, people connect – and share poor experiences - with friends and family



Increasing power of the consumer/Social Media

What happens when being disconnected?



84%
avoid Providers
with poor
experience

83% Tell
friends/family
about their poor
experience

Source: 2011 IBM Global Telecom Consumer Survey, South Africa N=1000

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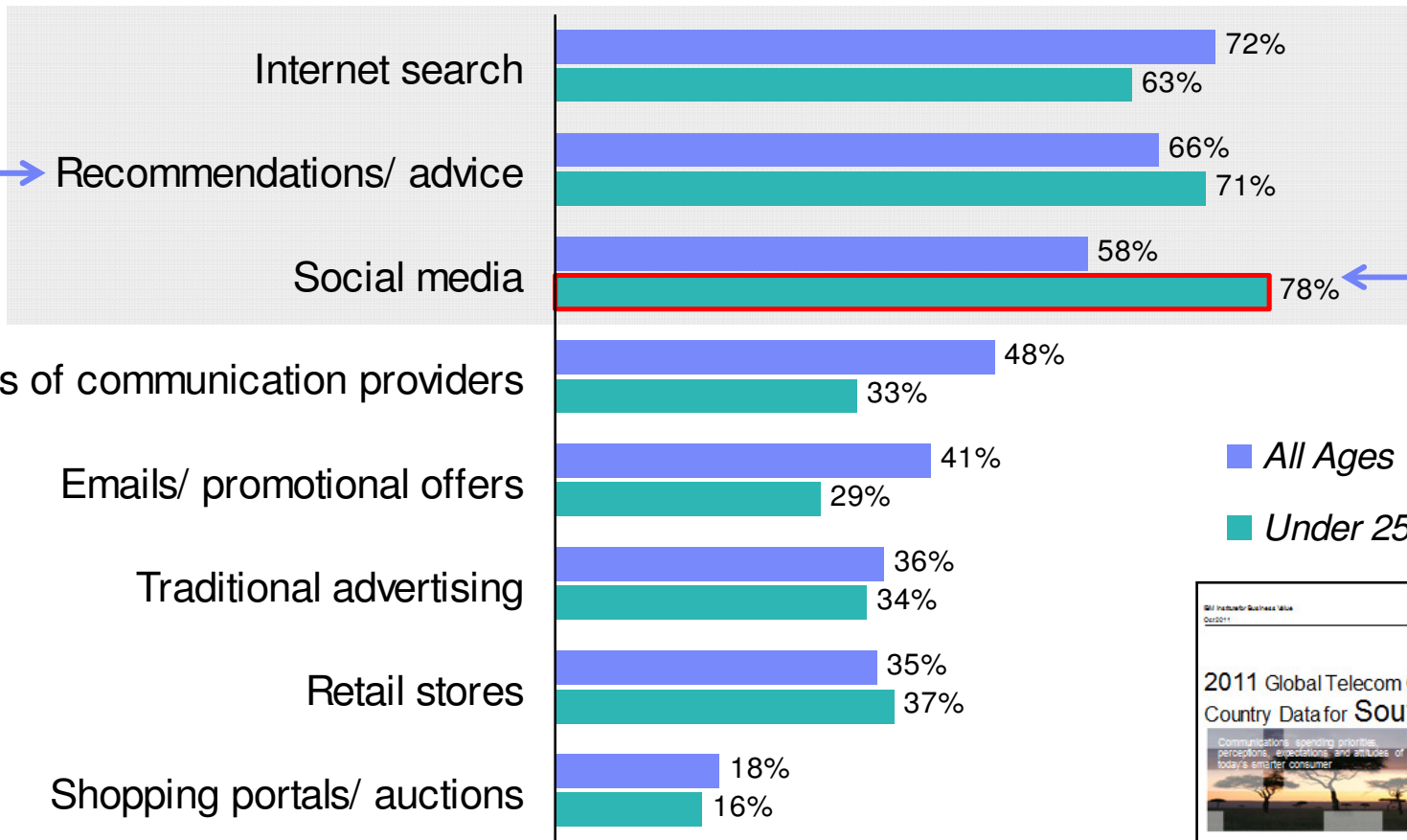


Social Media has become the preferred source of information for the new generation in South Africa



Increasing power of the consumer/Social Media

What are your preferred sources of information?



■ All Ages
■ Under 25s



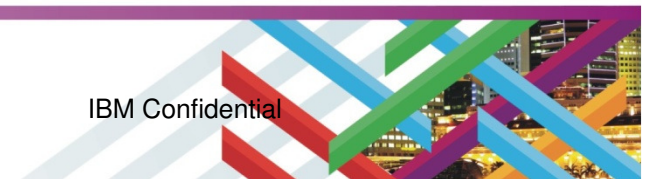
Source: 2011 IBM Global Telecom Consumer Survey, South Africa N=1000

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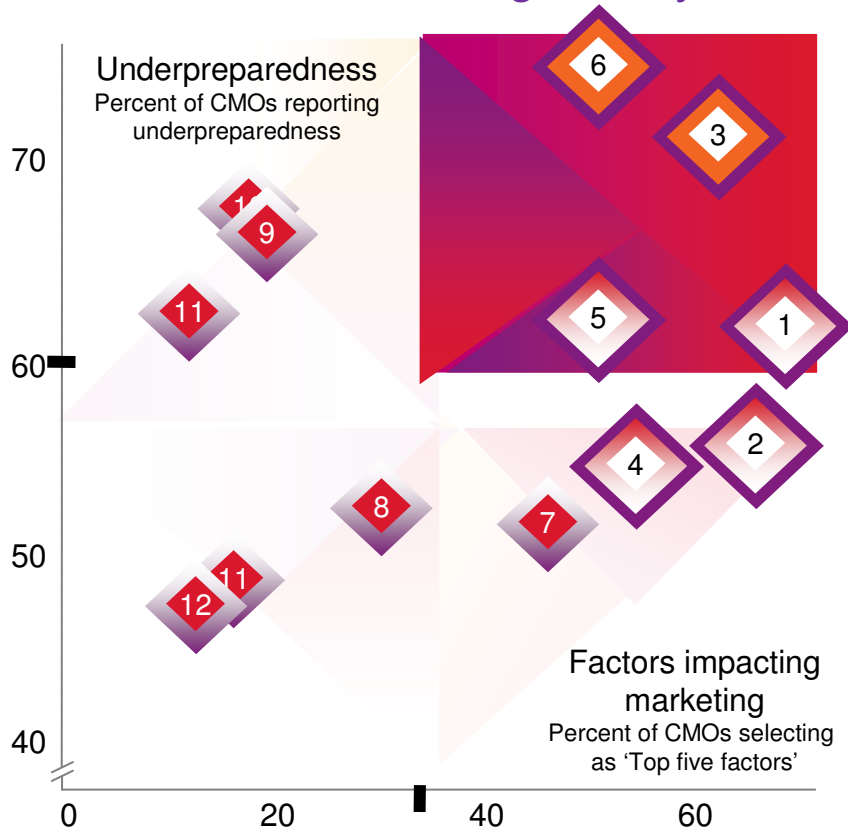
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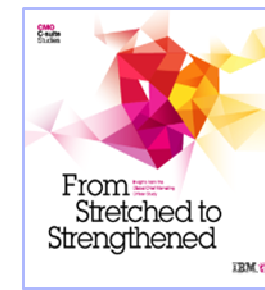
Despite CSPs are at the center of all this – they carry all this traffic – they have not kept pace with all of the changes in today’s environment **IBM**

Increasing power of the consumer/Social Media

Global CSP Marketing Priority Matrix



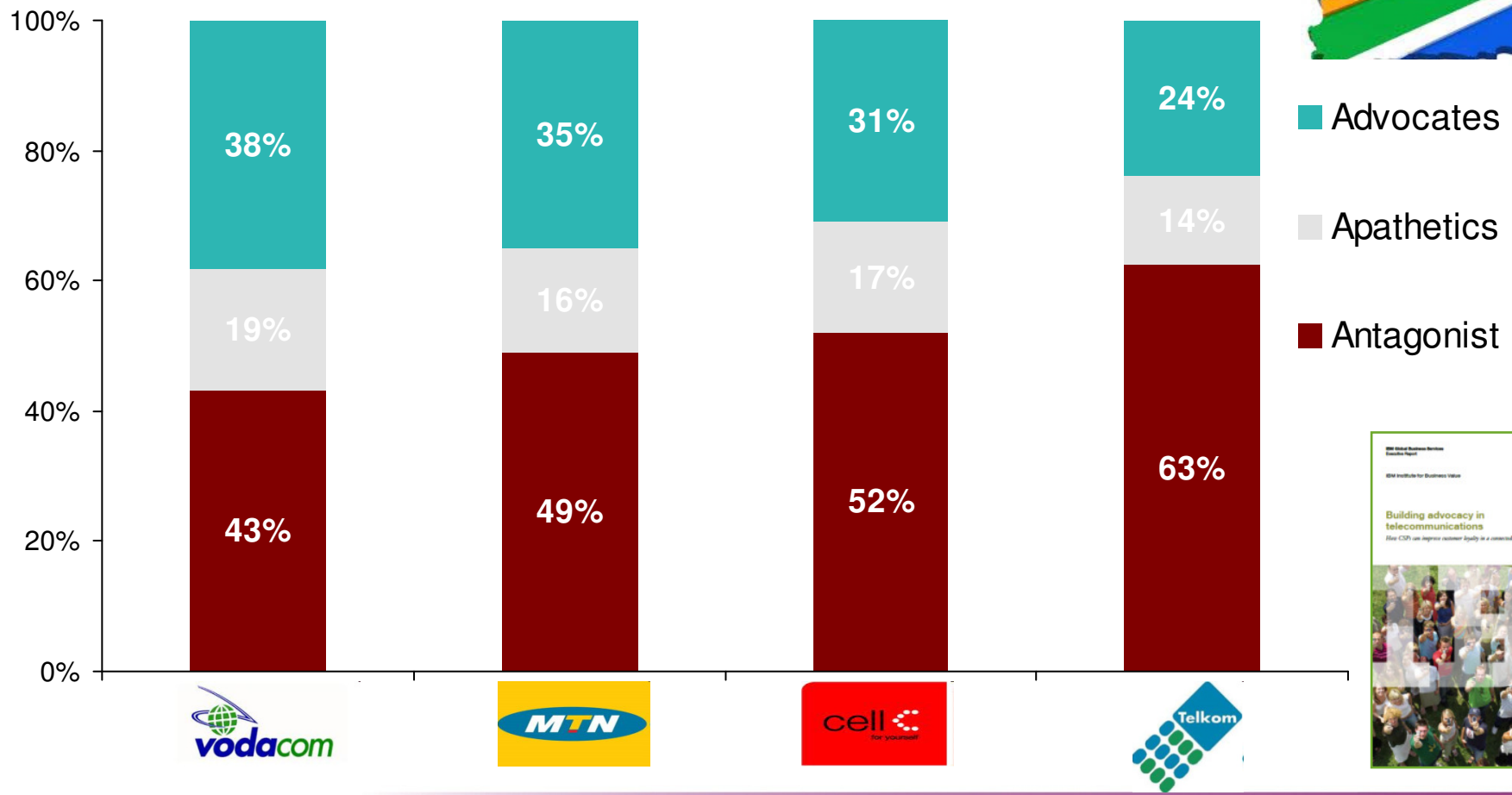
- 1 Customer collaboration and influence
- 2 Growth of channel and device choices
- 3 Social media
- 4 Data explosion
- 5 Decreasing brand loyalty
- 6 Shifting consumer demographics
- 7 ROI accountability
- 8 Regulatory considerations
- 9 Emerging market opportunities
- 10 Financial constraints
- 11 Privacy considerations
- 12 Corporate transparency
- 13 Global outsourcing
- Mean



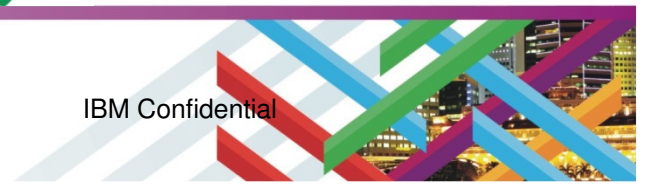
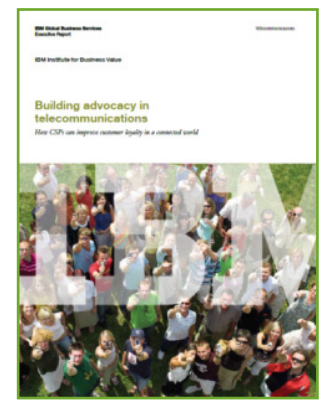
And as consumers encounter new products, services and experiences on virtually a daily basis, they fell less loyalty towards CSP brands

Increasing power of the consumer/Social Media

Source: 2011 IBM Global Telecom Consumer Survey, South Africa N=1000



- Advocates
- Apathetics
- Antagonist

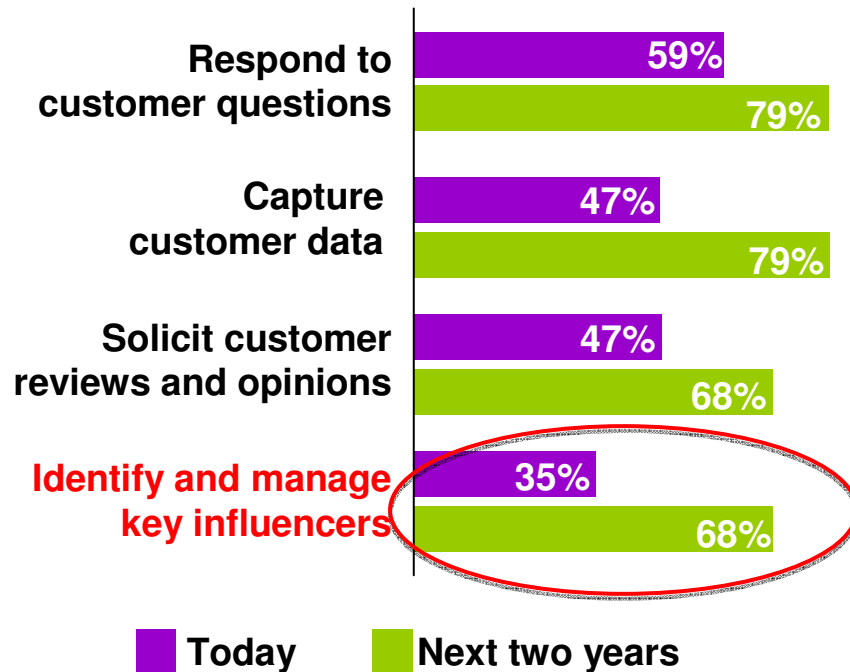


The good news is that an increasing number of CSPs have started using social media to 'listen & engage' with customers



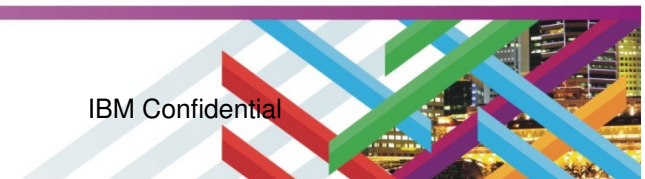
Increasing power of the consumer/Social Media

Applying social approaches to listen & engage customers



Groups	Mine Conversations	Crowdsource Insights
	Provide Answers	Influence Influencers
	Reactive	Proactive

Source: Institute for Business Value, 2012 Business of Social Business Study (% CSPs with customer-related social business activities)



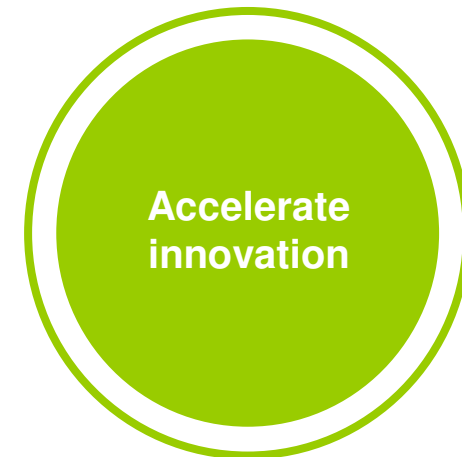
And many are planning to use social business to connect to customers, employees and partners, and to spur innovation



Increasing power of the consumer/Social Media



A *Social Business* uses collaborative tools, social media platforms and supporting practices to engage Customers, Employees, Business partners and other stakeholders in an ongoing dialogue.



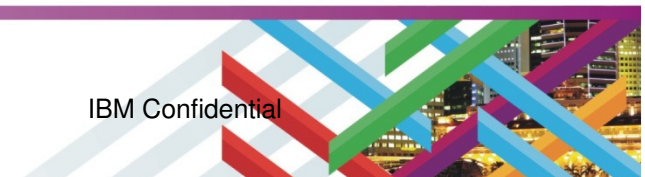
Source: Institute for Business Value, 2012 Business of Social Business Study

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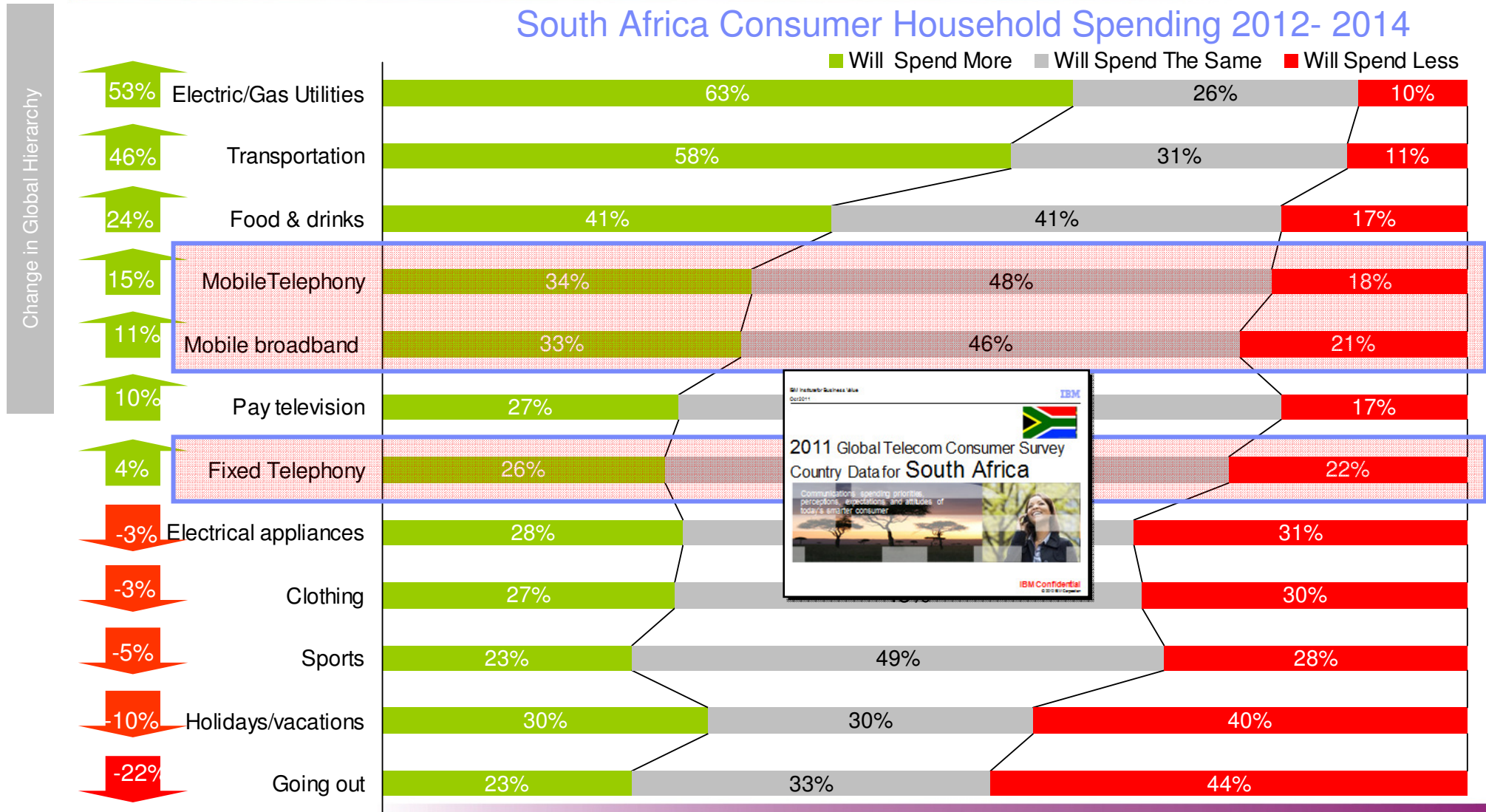
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South African consumers expect to spend more on communications services



South Africa Consumer Household Spending 2012- 2014

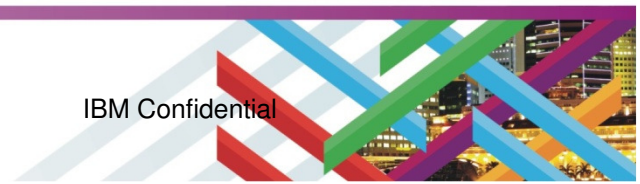


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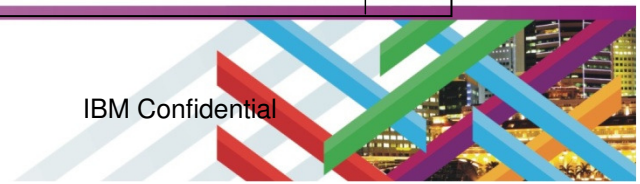
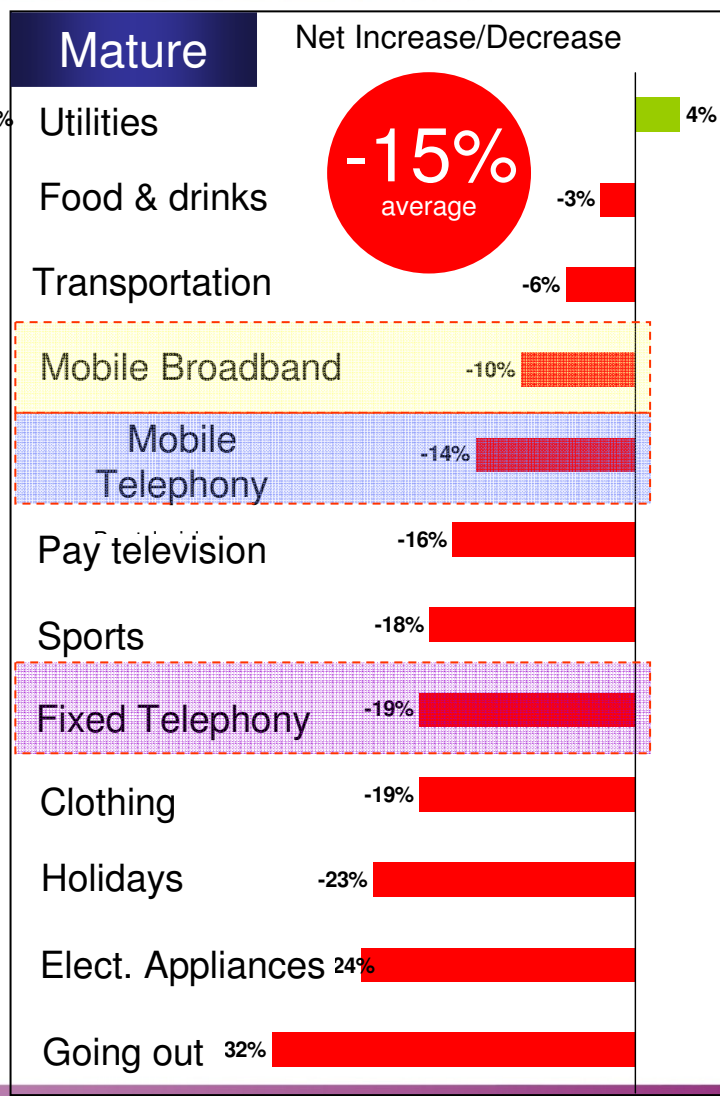
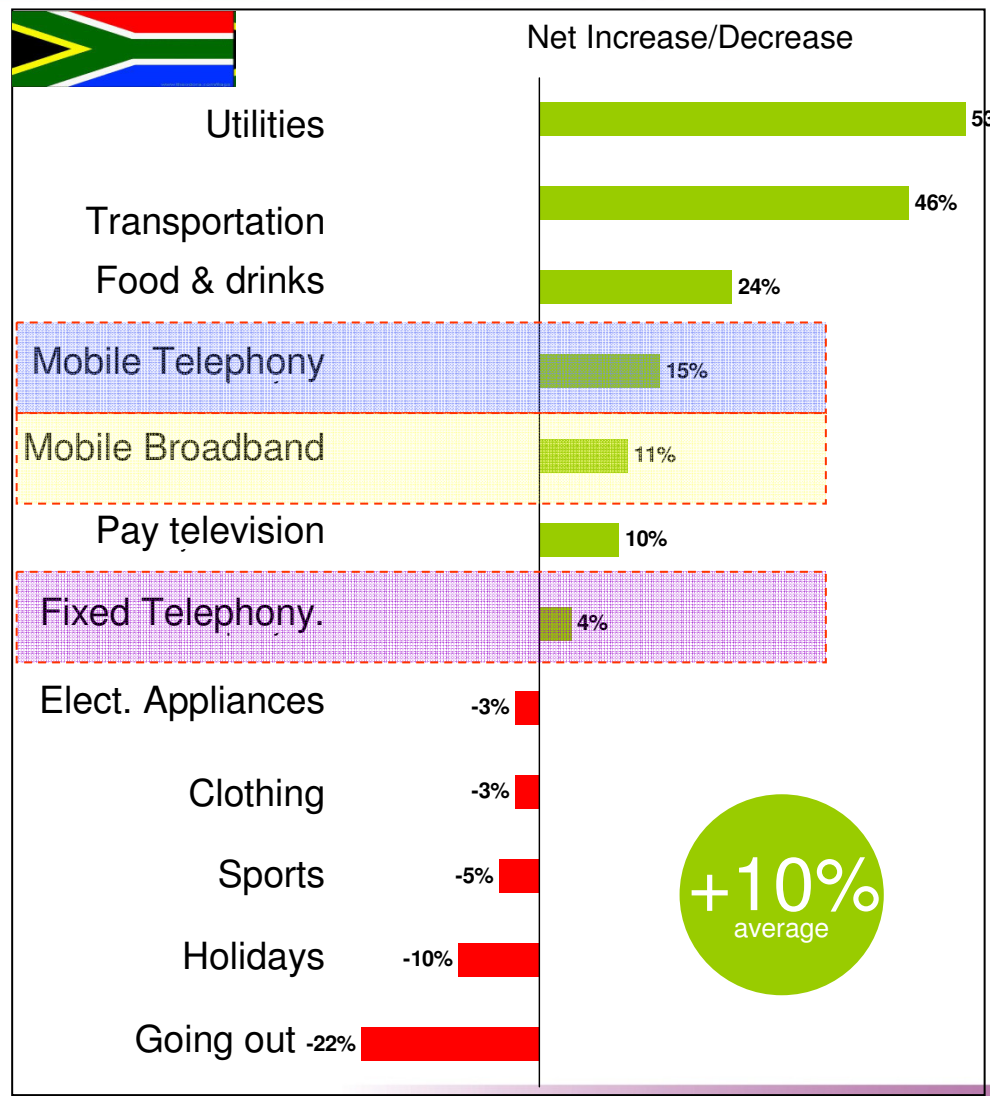
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Consumer sentiment on future spending in South Africa exceeds Mature Markets by 25%



Change in Global Hierarchy



As in many other emerging markets, South Africans expect net increase in mobile broadband spending

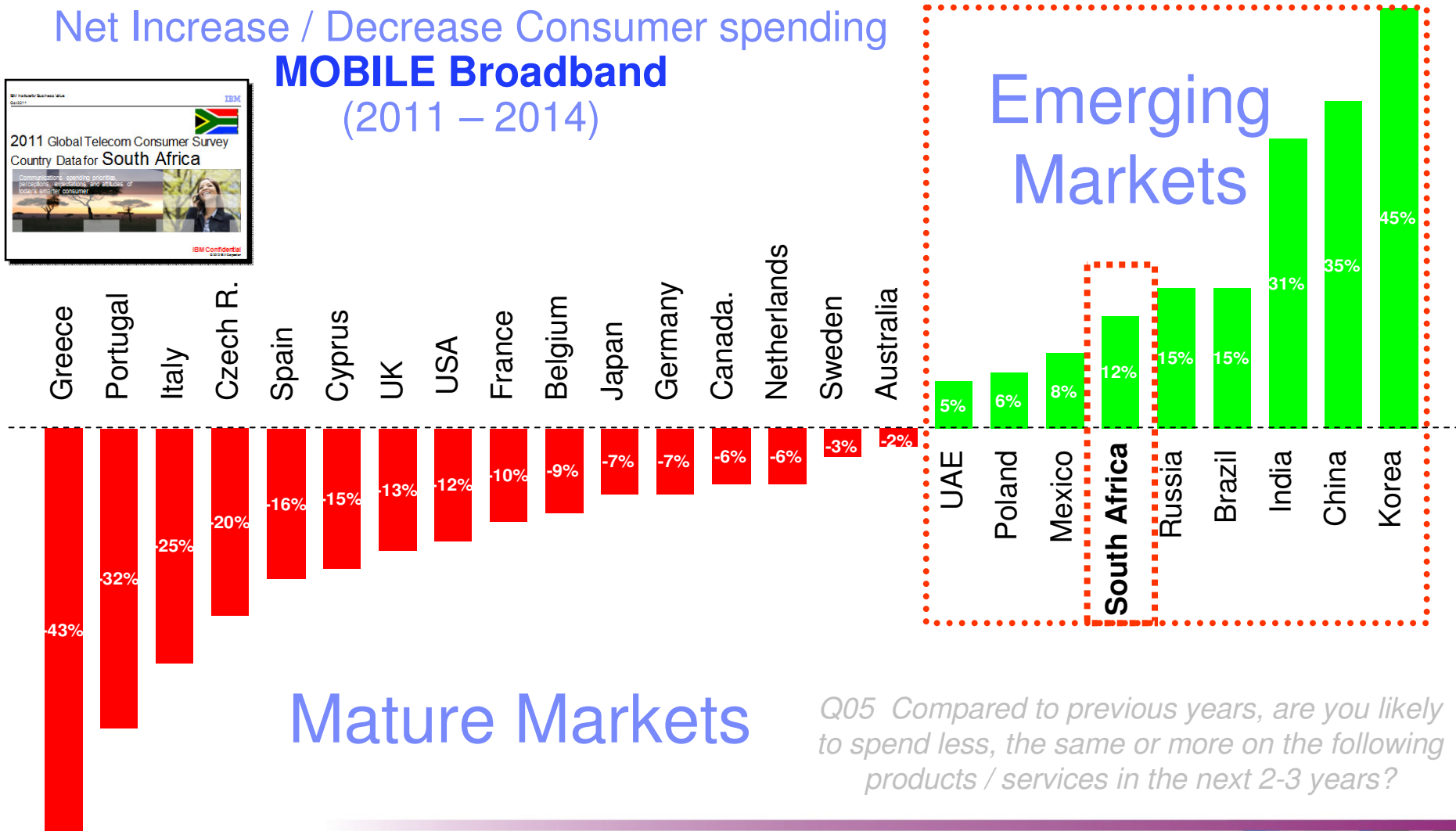


Change in Global Hierarchy

Net Increase / Decrease Consumer spending **MOBILE Broadband** (2011 – 2014)



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Mature Markets

Emerging Markets

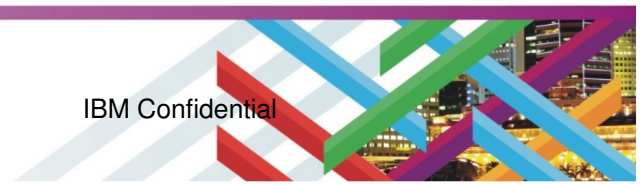
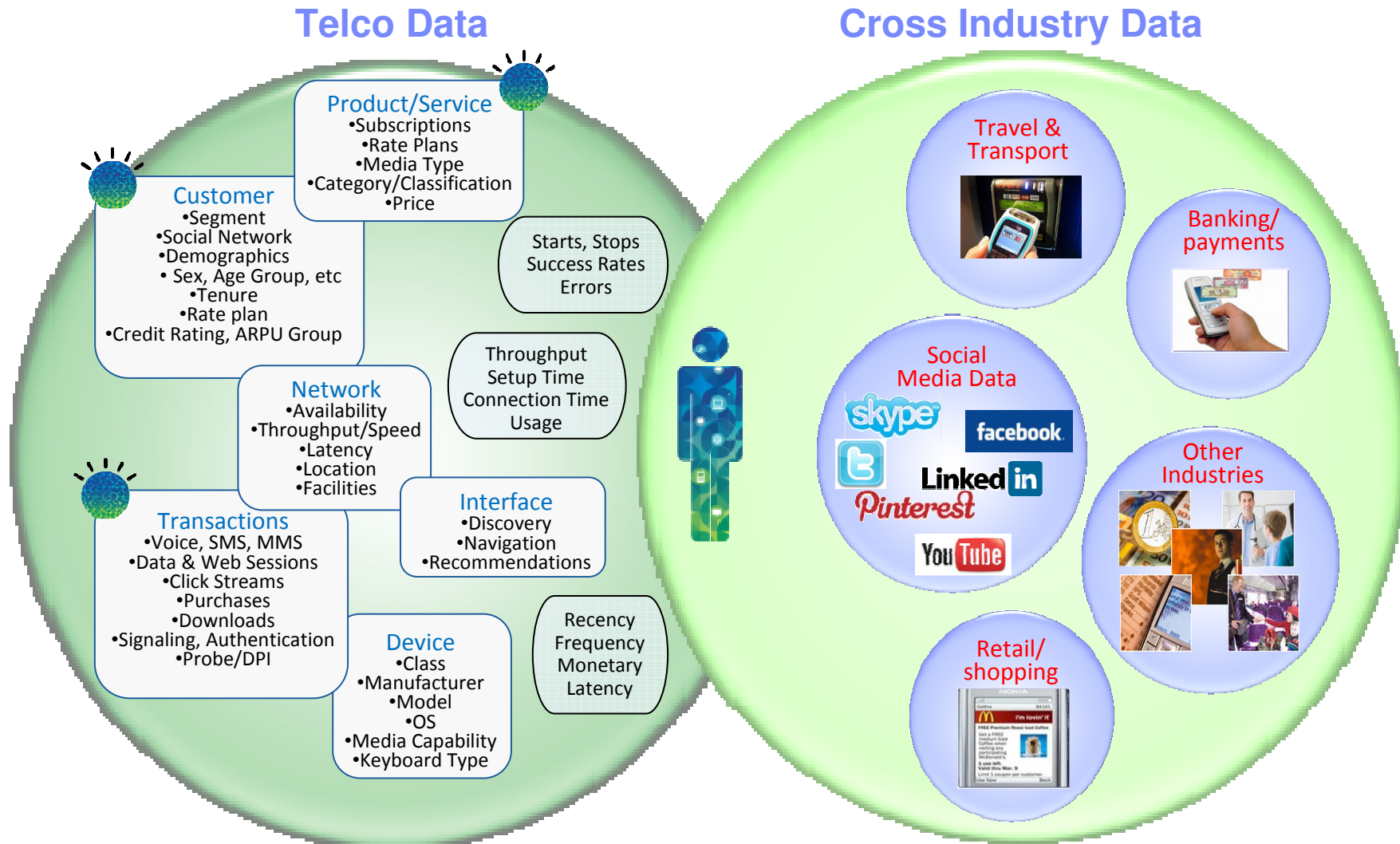
Q05 Compared to previous years, are you likely to spend less, the same or more on the following products / services in the next 2-3 years?



CSPs are at the heart of their customers' digital universe, that includes social media and transactions in adjacent industries



Big Data



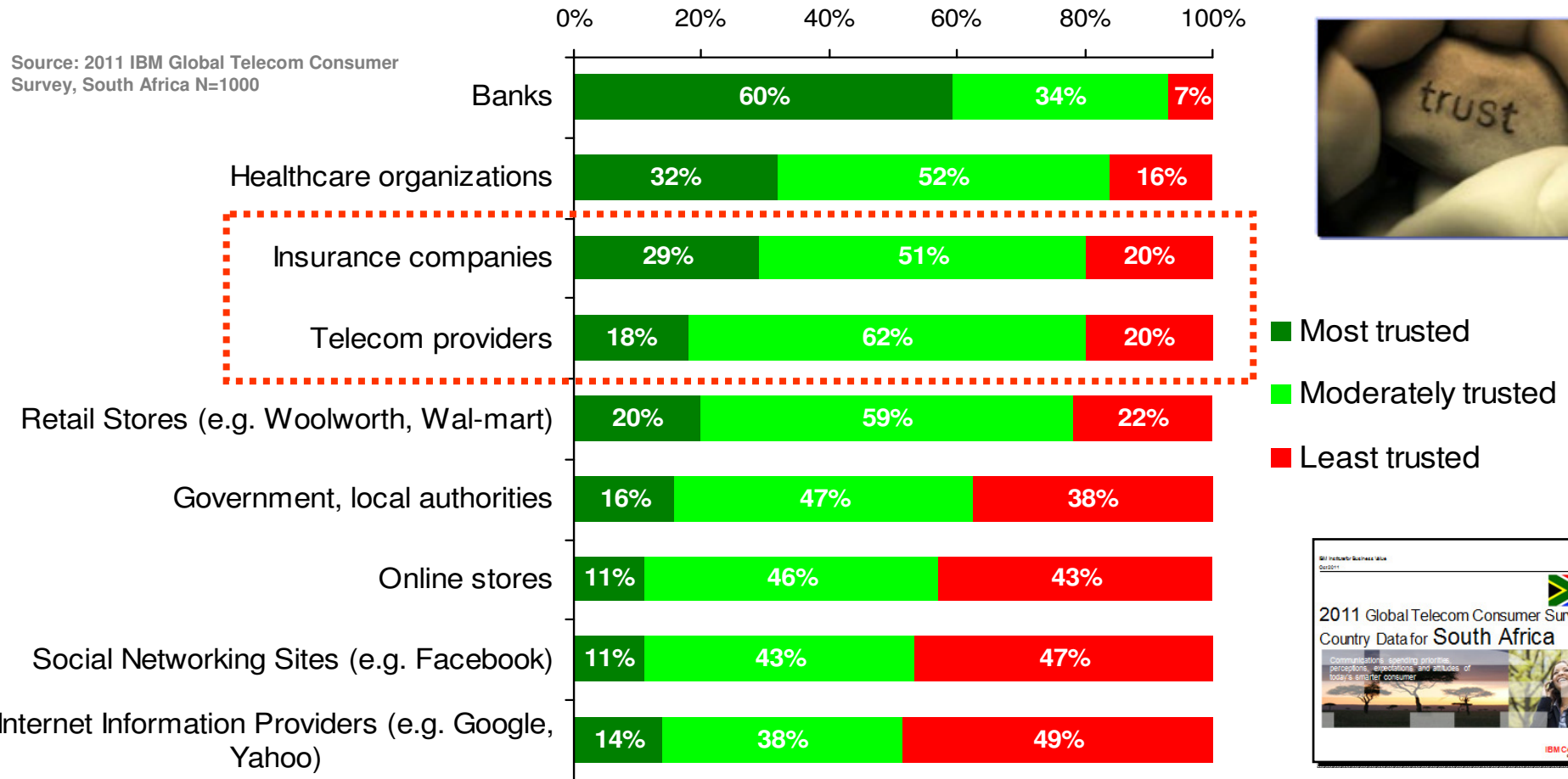
Relative to other providers, Telecom Providers score good on trust to manage consumer identity and private/personal information



Big Data

Q26 Who do you trust to manage your identity and private/personal information, including medical data, transactions and social relationships and retain your privacy?

Source: 2011 IBM Global Telecom Consumer Survey, South Africa N=1000



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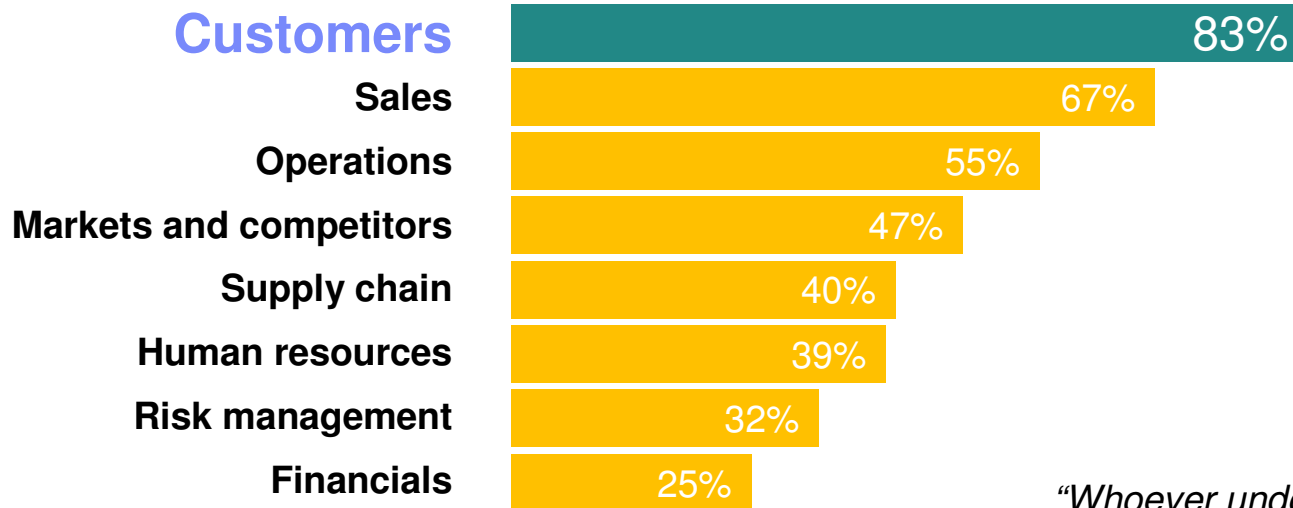


Big data has emerged as a key topic for CSPs to improve drawing insight from information to better understand customers



Big Data

Drawing insight from information – Areas of improvement



“Whoever understands the customer better and provide the products & services to fulfill it will be able to keep the customers.”

Telecom President, Malaysia

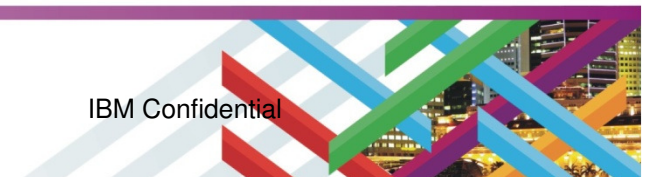
Source: Global CEO study 2012 “In which areas do you plan to improve your ability to draw meaningful and executable insights from available information?”

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An increasing number of CSPs are starting to see the enormous potential that big data can offer



Big Data



Airtel Creates 5000 Campaigns A Day Using Big Data

Telecom vertical has been among the frontrunners in the adoption of Big Data. Amrita Gangotra, Director-IT & CIO-India & South Asia, Bharti Airtel delves into Airtel's tryst with Big Data.

15th May, 2012 | in On Cue With IT Leaders

<http://biztech2.in.com/videos/business-intelligence/airtel-creates-5000-campaigns-a-day-using-big-data/133952>

BT adds big data analytics to its toolkit

December 4, 2012 Written by [Jamie Beach](#)



Big Data to help Airtel, Vodafone and Reliance to improve revenue streams

Nov 12, 2012

TELECOM LEAD

OVUM Telefonica and Verizon dial into big data
October 9, 2012
Telefonica and Verizon have unveiled plans to explore

Telstra, Optus and Suncorp eye geospatial data
Caution needed to avert breaches of privacy, says Telstra official.
Adam Bender (Computerworld) | 28 November, 2012 10:56 | Comments | Like 1 | +1 1
COMPUTERWORLD
THE VOICE OF IT MANAGEMENT

T-Mobile Adopts PureData for Analytics to Manage Big Data

15th Feb, 2013

http://www.youtube.com/watch?v=Li4_L8FOjy0

Christine Twiford
Manager of Technology
T-Mobile

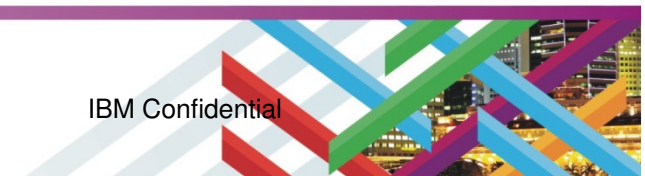
Learn More About IBM PureData System

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A number of CSPs are even thinking about exploiting customer information commercially, i.e. generating revenues from selling data



Big Data

"I think the future of Telefónica is as an information company. The network layer is a commodity...It's the layer above that, how you capture data and put sensors into the network. That's where the gold is."

Chris Parsons, VP Innovation and New Business Development
Telefónica Europe



<http://www.totaltele.com/view.aspx?ID=476702>

Precision Market Insights From Verizon To Help Brands Better Understand And Engage With Customers

New Initiative Leverages Insights from Nation's Largest Wireless Network
October 1, 2012

Know your audience more precisely.

Drive your business more effectively.

PRECISION MARKET INSIGHTS FROM VERIZON



Telcos can survive on big data alone - Sprint

Wednesday 17 October 2012

<http://www.totaltele.com/view.aspx?ID=477094>

"If telcos became nothing more than a dumb pipe, we could make a living just out of analytics," said Von McConnell, director of technology development and strategy at Sprint

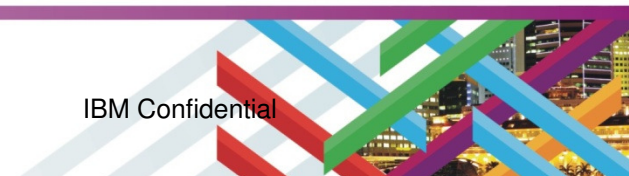


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There are many possibilities how CSPs can partner with other parties



Smarter cities



New technologies like big data, sensors, mobile, smart grids are changing the way cities operate. Big data can help finding parking spaces, avoid traffic jams, get instant help when emergencies happen. Megacity Rio de Janeiro is already using this technology by participating with IBM and Brazilian CSP Oi, among others.

Smarter cars

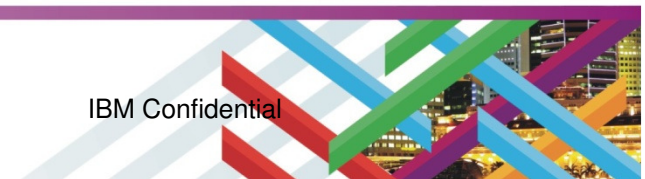


Tomorrow's motor vehicles will communicate with each other, with their drivers, their manufacturers, their surroundings, and with a variety of service providers. Data volumes related to vehicle usage are skyrocketing. Several German automakers have teamed up with Deutsche Telecom to find a solution in big data analytics.

Smarter traffic



French CSP Orange recently participated in Traffic Zen with highway operator Autoroutes du Sud de la France to create traffic forecasts. Orange brings the quality and robustness of its mobile network to inform citizens and decision-makers, enhance information broadcasts, reduce CO2 emissions, and more.



Much more than any other industry, CSPs define big data by the capabilities needed to do analytics on information *real-time*



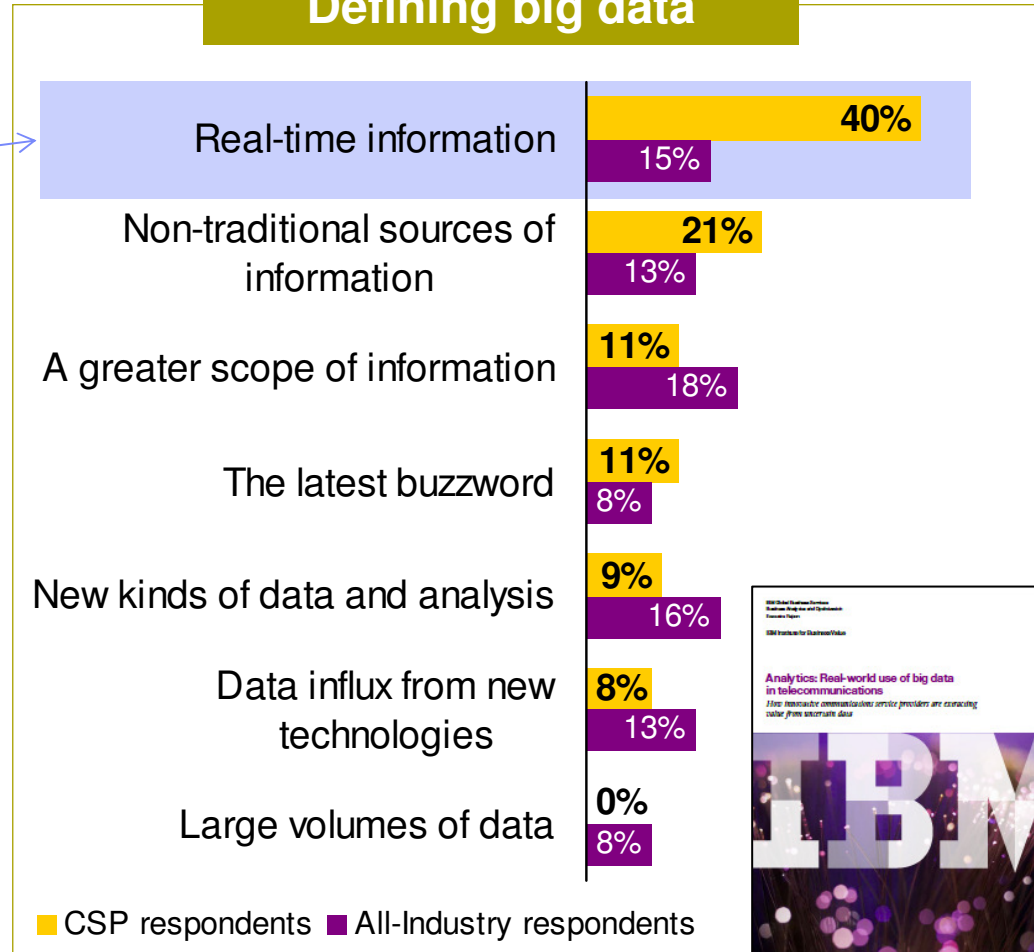
Big Data

Real-time information streaming

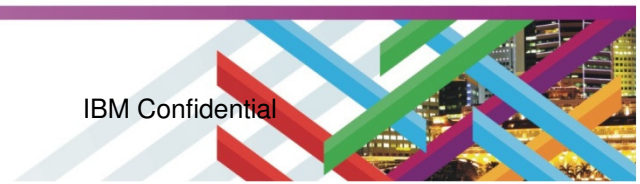
- Digital feeds from smart devices, sensors, social and syndicated data
- Instant awareness and accelerated decision making

For CSPs the *real time* aspect is extremely important as location-based services, smarter network operations, intelligent marketing campaigns, next best actions, and fraud detection require a more **contextual real-time view** of information.

Defining big data



Source: *Analytics: The real-world use of big data*, a collaborative research study by the IBM Institute for Business Value and the Saïd Business School at the University of Oxford. © IBM 2012



Two-thirds of CSP respondents identified customer-centric objectives as their organization's top priority



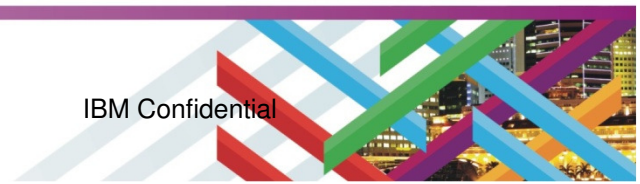
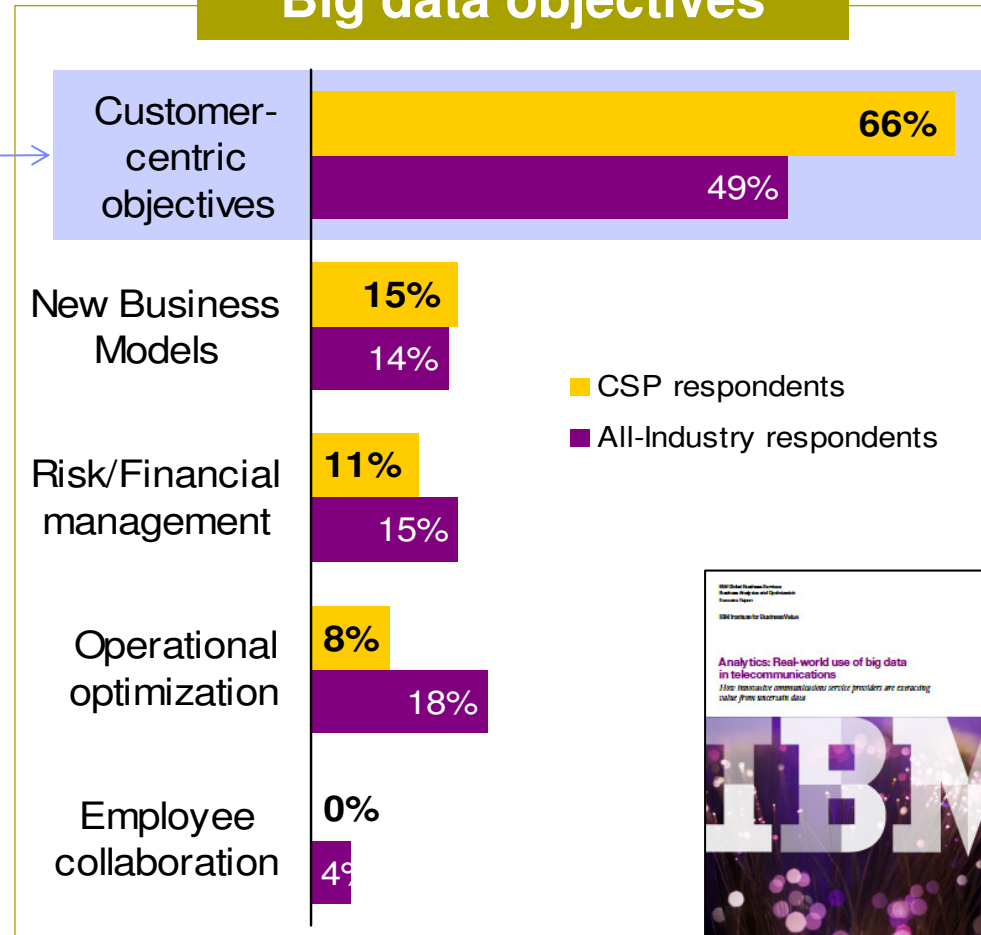
Big Data

Customer-centric outcomes

Understanding behavior patterns and preferences provides organizations with new ways to engage customers

Providing a greater customer experience, every time, is vital for limiting churn, building loyalty, and **for competing against over-the-top players**, including Google, Apple, Facebook, WhatsApp and Skype, companies that have proven adept at dreaming up compelling online experiences for consumers.

Big data objectives



In today's world, competitive advantage take a distinctive customer experience that goes beyond satisfaction



Big Data

EXAMPLES

Monitoring network performance to improve customer experience



As an example, if high value smartphone customers are experiencing poor throughput performance, big data analytics enables the CSP to know that immediately and distribute it to the most appropriate stakeholders in the organization so they can take the necessary steps to alleviate the issue and ensure customer experience is not affected, or at least acknowledged

Intelligent market campaigns to offer promotions useful for customers



As an example, the subscriber's phone usage could be automatically analyzed to determine what free add-on offer they are most likely to value. The provider could then instruct a customer service representative to call the subscriber and offer them the free add-on. The goal would be to improve customer satisfaction by demonstrating that the provider values the customer's business.

The ability to respond to customers with next best action



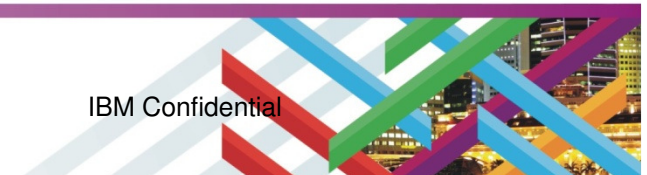
As an example, automatically authorizing a call center representative, who is speaking to a customer known to be having problems with their service, to present the customer with an offer that compensates them for their trouble and helps retain them as a customer.


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Big data also creates the need to analyze multiple data types, including location data, social media, sensor data and natural language text 

Big Data



Natural language recognition to understand the original customer questions and answers

Voice Recognition to allow a non text interface

Ability to provide “**reasoning**” when feeding back recommendations

Optimized workload to allow massively parallel searches to be handled quickly & efficiently

Free text Analysis of structured and unstructured data to aggregate the available social media and review sites

Location services to narrow down customer feedback to like customer segments

Machine learning to continuously improve the accuracy and relevance of recommendations from customer to customer

Social Media Analytics and semantic frameworks to extract the meaningful reviews and feedback from the vast arrays of available information

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Celcom Axiata Berhad uses cognitive technology to transform customer care experience



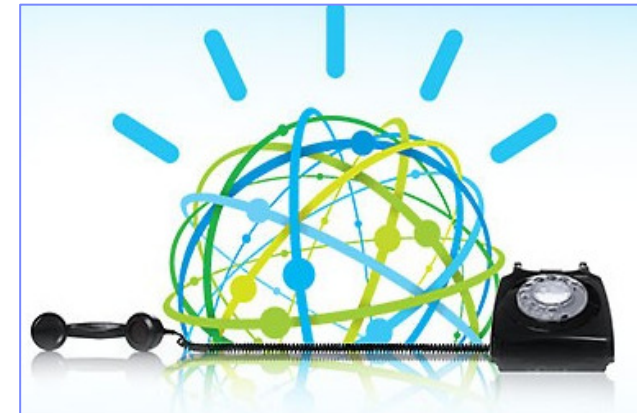
Celcom, part of the Axiata group of companies, the oldest mobile telecommunications company in Malaysia. Throughout the evolution of their business, the company has adapted to changing technologies and standards. It's Celcom's top priority to use outstanding customer service as a differentiating factor in its drive to market leadership.

Challenges

- Resolve customer issues during their first contact with customer care, in this way reducing churn
- Support customer agents in responding to queries on Smartphones as well as in recommending data plans, given the complexity and frequent device refresh cycles.

Digitization

- Cognitive technology to help contact center representatives provide faster, accurate, and consistent responses to customer questions and requests.
- Eventually give customers direct access to the system for text-based chats wherever and whenever from their smartphones, tablets or computers. For trouble-shooting and support through business processes like account opening, review, or changing plan features.



Celcom's aim is to provide consistent, high-quality support to customers across channels and agents to deliver richer customer experiences across all touch points

Source: [Forbes.May 2013](#)

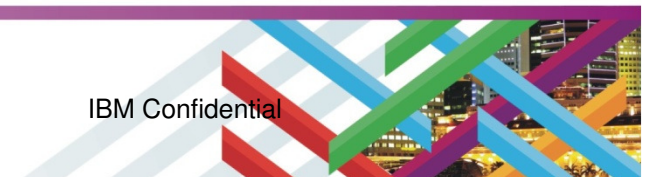
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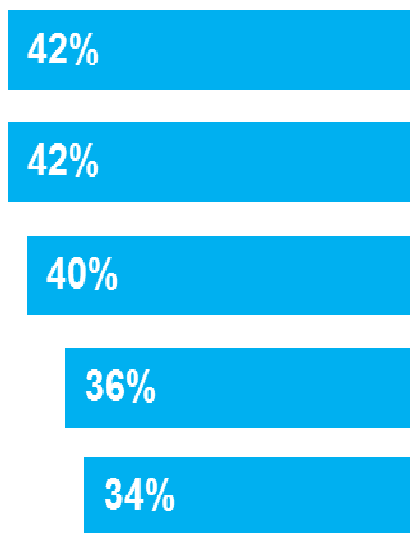


Mobile & Cloud are impacting business competitiveness, yet 82% of enterprises are underprepared



Cloud

Technology Trends Most Impacting Competitiveness



Mobile device proliferation

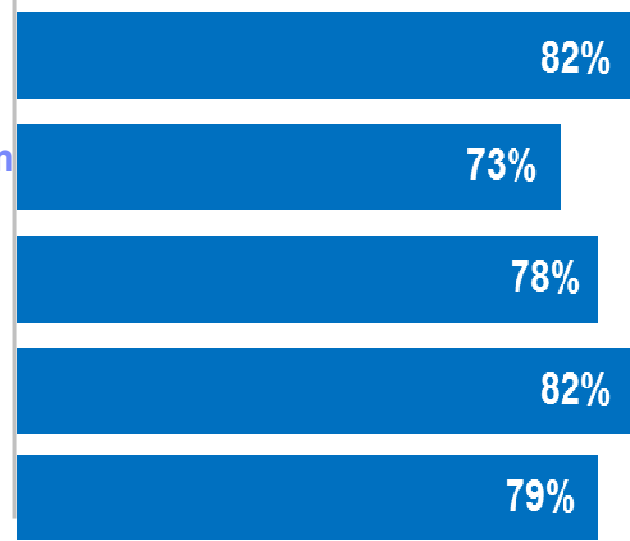
Collaboration across the ecosystem

Explosion of unstructured data

Cloud platforms and solutions

Intelligent-connected systems

Organizations **Underprepared** for Technology Trends



www.ibm.com/MobileFirst

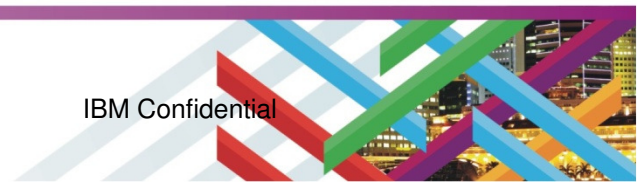
Source: The IBM Institute for Business Value study: The Software Edge, 2013. Survey respondents were allowed up to three selections

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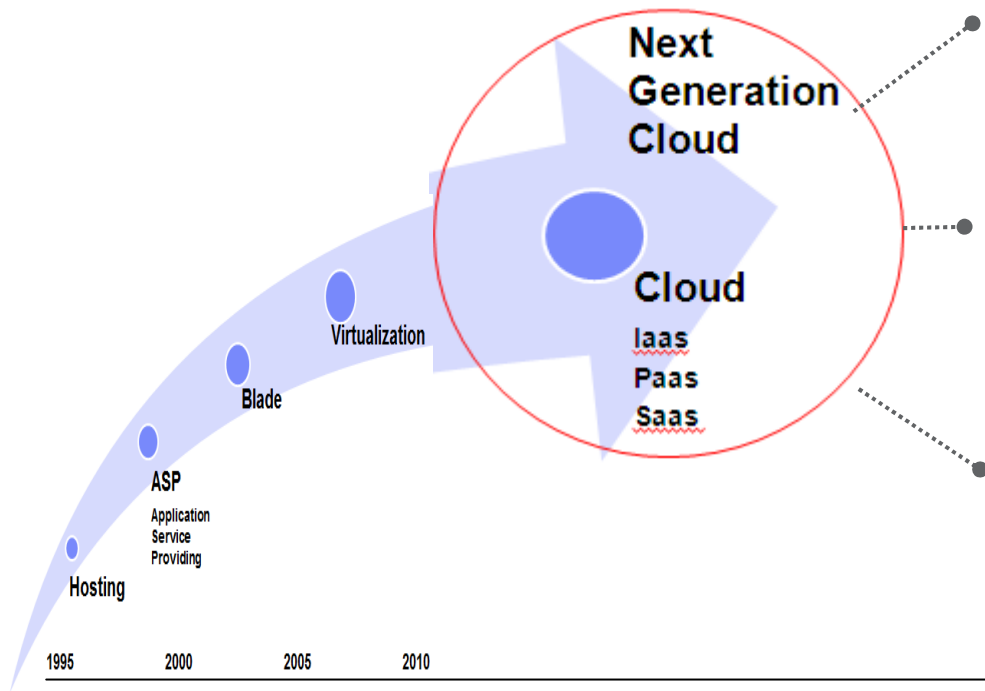
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Cloud Business Value can be created in three main areas



Cloud



Business Value can be created in **3** main areas:



Performing *current business* more efficiently and effectively

Creating *new business models* for delivery of *current services*

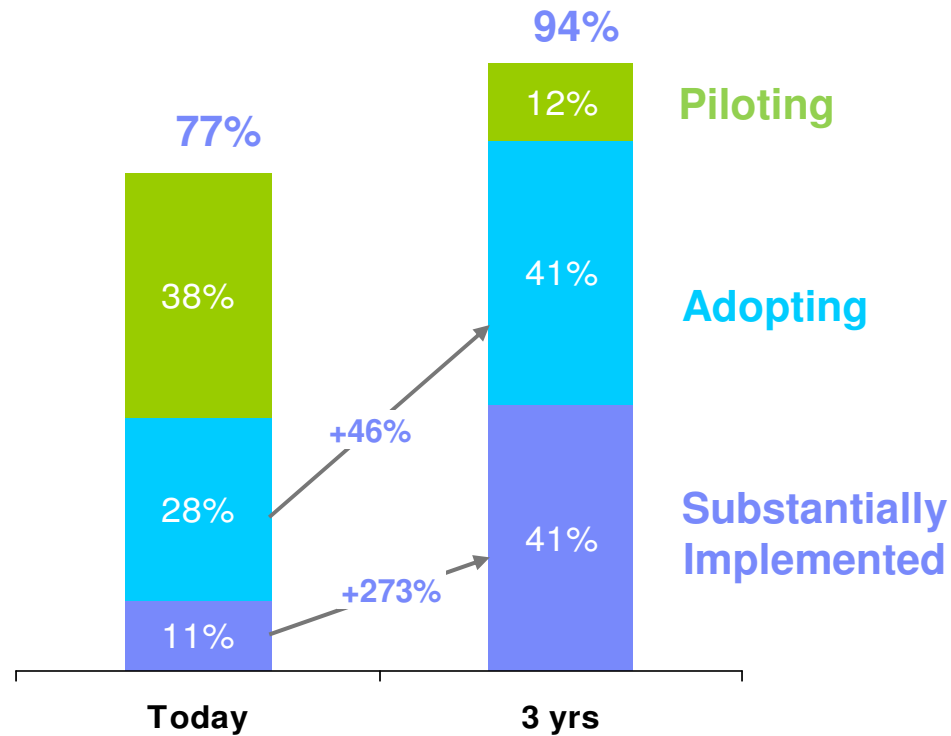
Creating *entirely new businesses*



Cloud is widely recognized by CSPs as an important opportunity

Cloud

What is Your Organization's Level of Cloud Adoption? (% of Telecom Respondents)



Source: The IBM Institute for Business Value study: The natural fit of Cloud with Telecommunications, 2012 Survey selections

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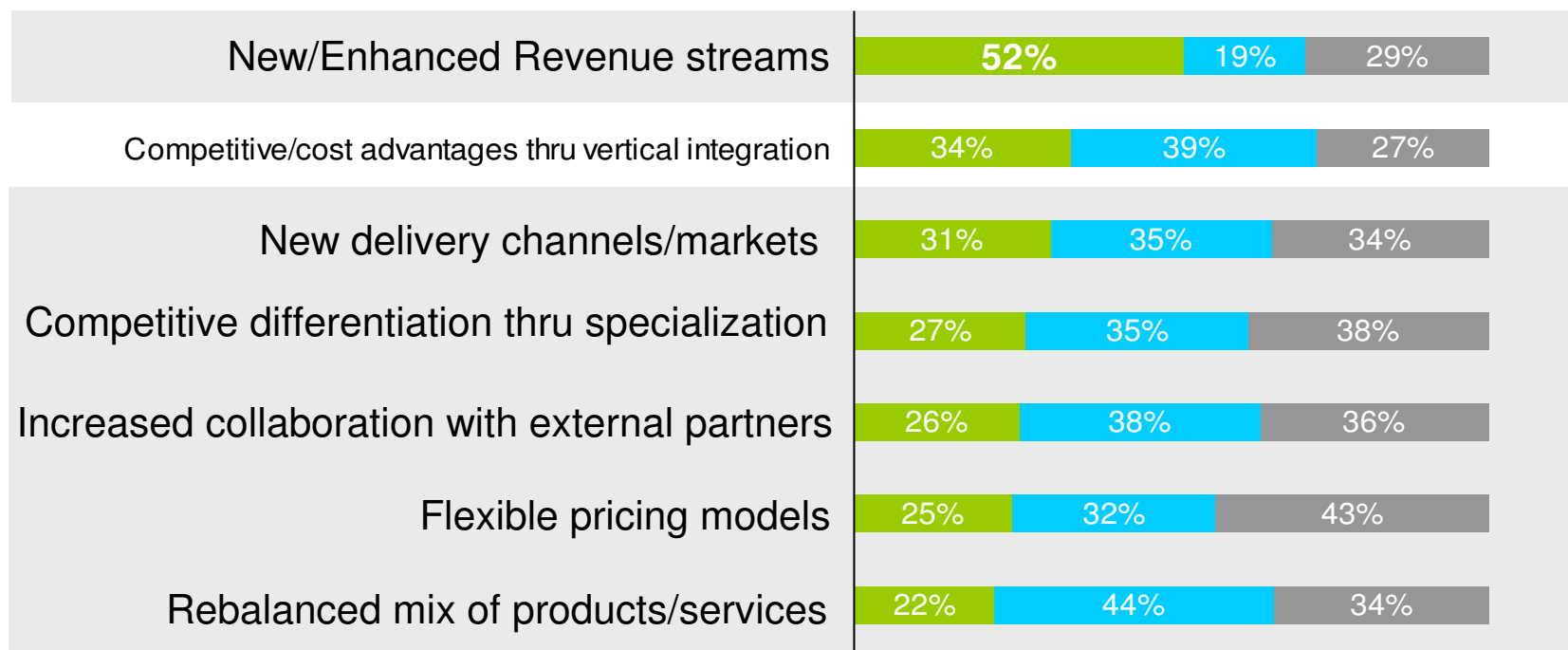


CSPs clearly intend for Cloud to improve their business capabilities, in addition to enhancing internal efficiencies



Cloud

How Important are the Following Objectives for Adopting Cloud? (% of Telecom Respondents)



Business Capabilities

Internal Efficiencies

Very Important Important Neutral to not important

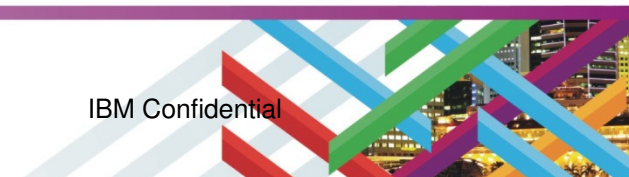
Source: The IBM Institute for Business Value study: The natural fit of Cloud with Telecommunications, 2012 Survey selections

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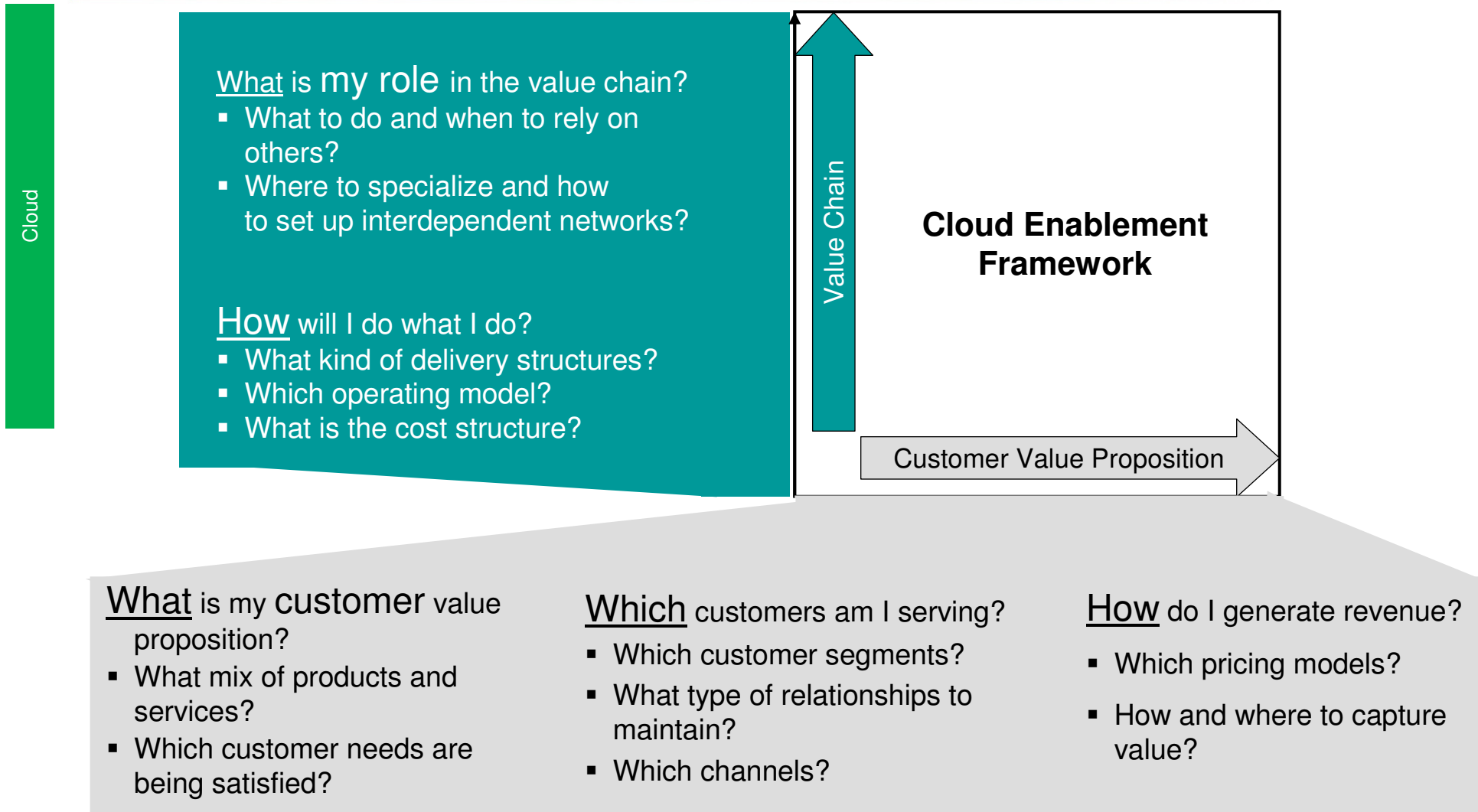
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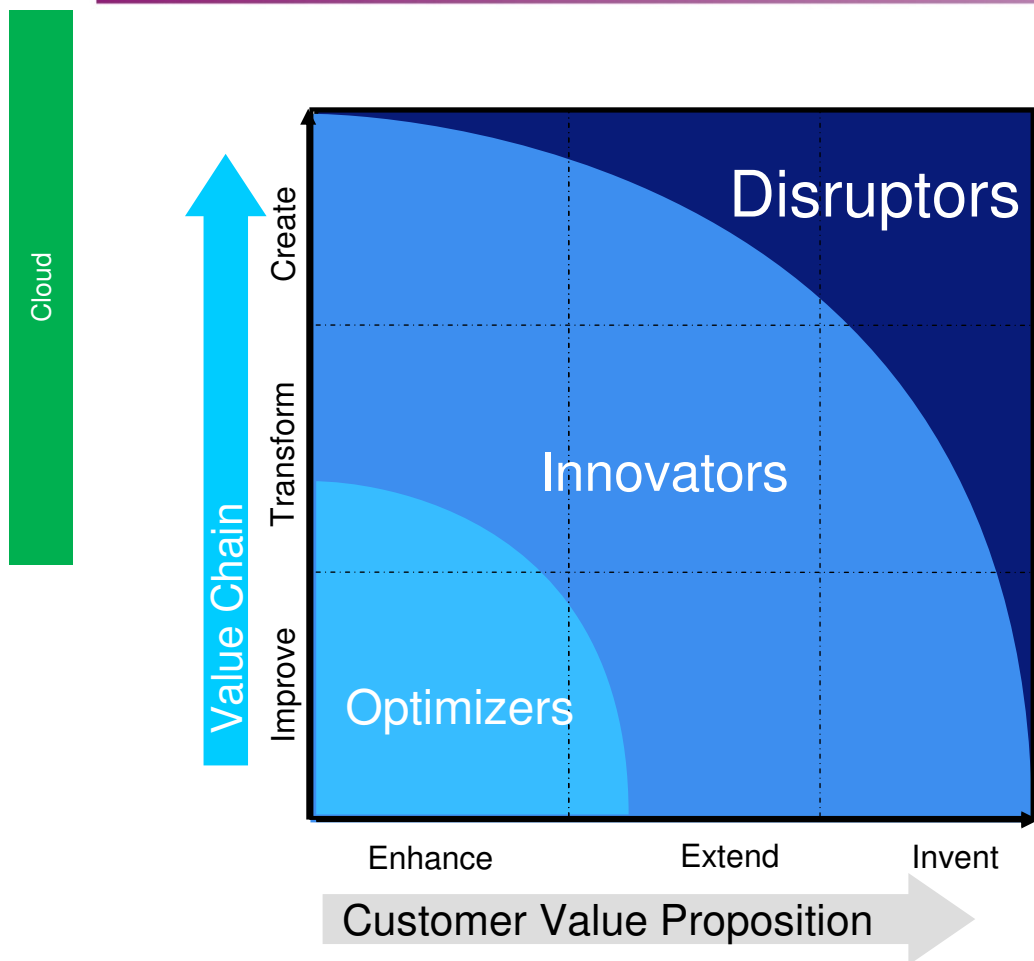
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CSPs are already driving innovation across industry value chains and customer value propositions




We classify CSPs according to the extent to which their use of Cloud impacts value chains and value propositions

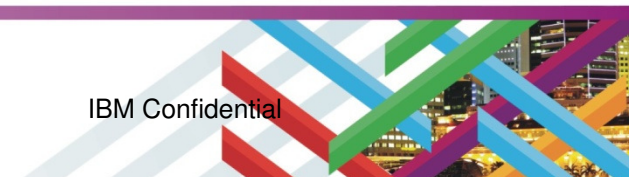


Disruptors rely on Cloud to develop *radically different value propositions*, as well as to generate new customer needs and segments, by enhancing the end-customer experience and in this way creating entirely new business.

Innovators use Cloud to *significantly* improve customer value through leveraging CSP's distinctive assets in the delivery of current services, resulting in new revenue streams based on *new business models*

Optimizers use Cloud to perform *current business* more efficiently and effectively, in this way *incrementally* enhancing their customer value proposition

Cloud Enablement Framework  CSPs should determine how and to what degree Cloud can be used to enable their business model



CSPs can help cities use cloud to integrate data across city operations enabling delivery of citizen services



Cloud

IBM Smarter City Solutions on Cloud

Get started quickly to deliver exceptional service to your citizens

Intelligent Operations Center

The graphic features a central purple circle labeled 'Intelligent Operations Center' surrounded by ten icons: a red cross, a green classical building, a purple train, a yellow book, a green power line, a blue water tap, a purple shield, a pink group of people, a purple car, and a yellow book.



Rio de Janeiro Cloud-based data solutions emergency response system planning.

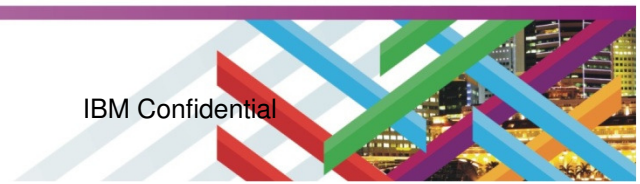
[ibm-takes-smarter-cities-concept-to-rio-de-janeiro](#)

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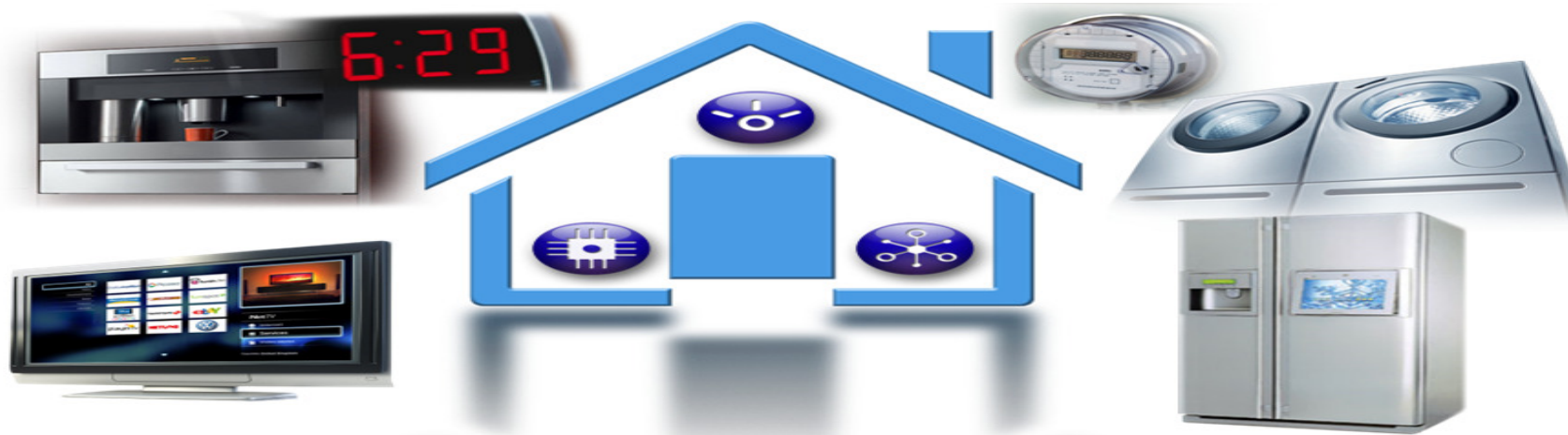


CSPs can spur the development of 'smart home' appliances using Cloud technology



Cloud

Vodafone and IBM team up on 'smarter home' initiative



Enabling *consumers* to use their smartphones in a variety of remote activities including viewing their home's utility consumption; controlling security, heating and lighting systems; and activating home appliances.

Enables *manufacturers* and service providers to collect data from appliances for product development and maintenance, and to rapidly introduce related new consumer services.

[IBM and Vodafone Advance Smarter Home Initiative](#)

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CSPs can help Connecting Healthcare in the Cloud



Cloud



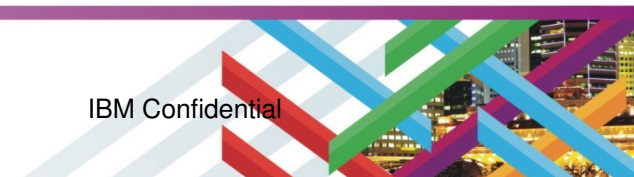
AT&T' set up its ForHealth business unit in 2010, with a vision to “accelerate the delivery of innovative wireless, networked and Cloud solutions specifically for the healthcare industry,” organized around their Cloud-based solutions.

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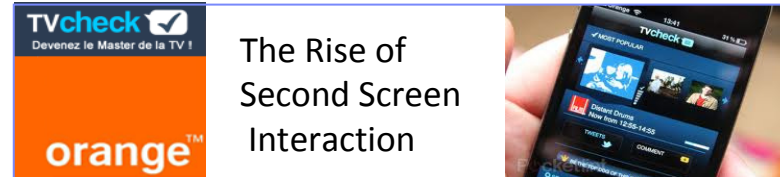
Indeed, CSPs' Cloud activities are accelerating



Cloud

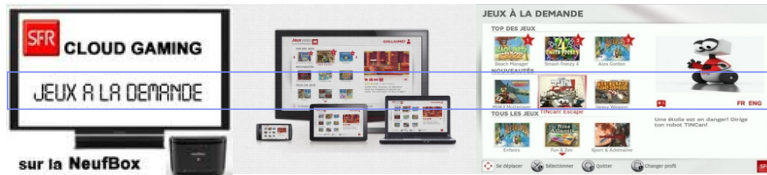


AT&T and IBM collaborates of offering a highly secure first-of-a-kind “networked enabled cloud service to enterprises who require security, availability, reliability, and scalability for their mission-critical environments.



TVcheck
Devenez le Master de la TV !
orange™
The Rise of
Second Screen
Interaction

Orange launched TVCheck allowing users to point their smartphone's camera at the TV, which then identifies a show via *cloud-based* signal processing to synchronize the screens and to enable interactivity.



French service provider SFR has launched a Cloud-based gaming-on-demand service. Games are available via a games-on-demand icon or via channel 70 on Neufbox TV.



Technology Incubation Public Cloud: an environment for business partners and ISVs can develop applications quickly and launch on the SKT network to subscribers.

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CSPs can be a key enabler of the new economy, but must embrace the digital opportunity or risk becoming utility providers of bandwidth

CSP's Future Role?

Contextual

New contextual services to improve lives

Everything Connected

Internet of Things, Multiple devices controlling multiple devices (TV, heating, car kids, etc.)

Personalized

Create own service portfolio according to their own needs, from many, many providers

Social

Social media, social business – all the time, respond, solicit, collaborate



The New World

Continued virtualization

Functions, services, enterprises

Perfect experience

All the time – know, connect, serve

Alternative me

Extensive use of avatars, concierge services, virtual interfaces

Behavioral profiling

Continuously providing insights and recommendation to the consumer to improve their lives, experiences and well being

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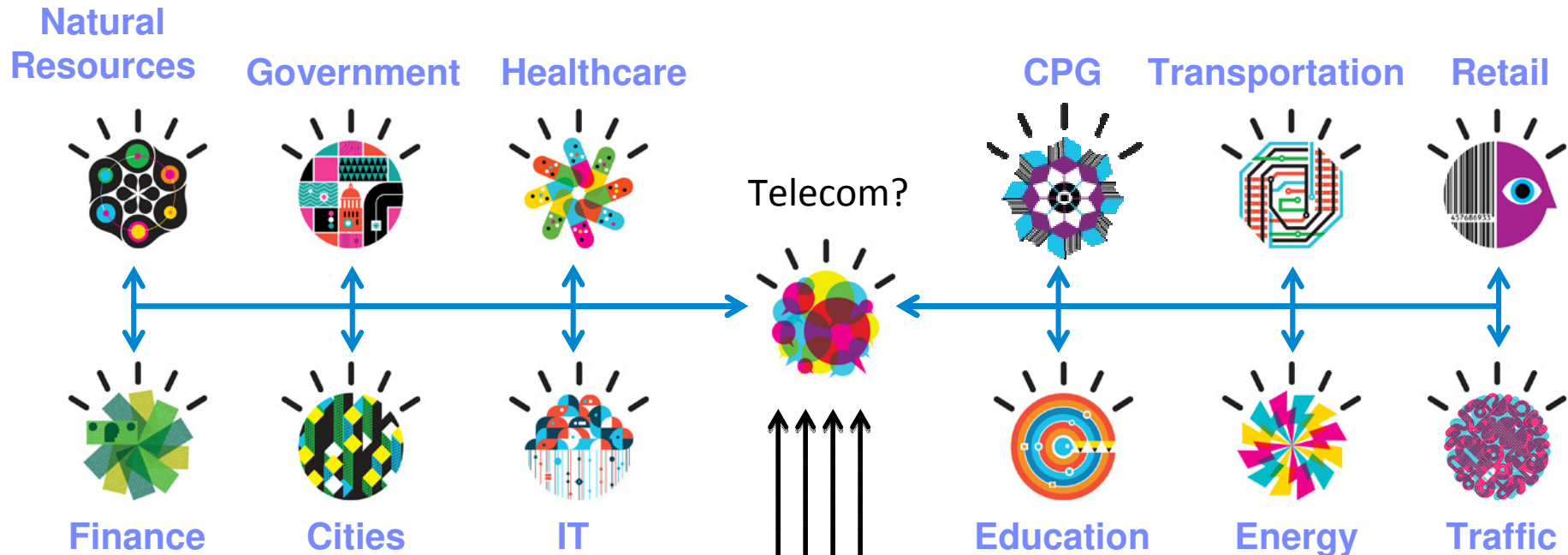
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Communications Service Providers (CSPs) have a key opportunity to play a central role in the new world



CSP's Future Role?



The DATA CSPs own enables them to add context and meaning to the data they deliver

CSPs carry all the SOCIAL traffic

As providers of connecting networks, CSPs are uniquely positioned in the CLOUD marketplace

CSPs owns the MOBILE networks

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IBV leading edge industry & market research allows for quick response to shifting market dynamics



- The Institute for Business Value (IBV) aims to help IBM Global Business Services (GBS) become the trusted business and technology advisor to the world's leading organizations
- Used to focus clients on trends correlated with outperformance
- A dedicated team of IBV professionals focused on telecom and related industries

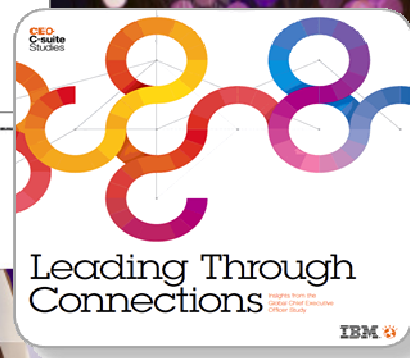
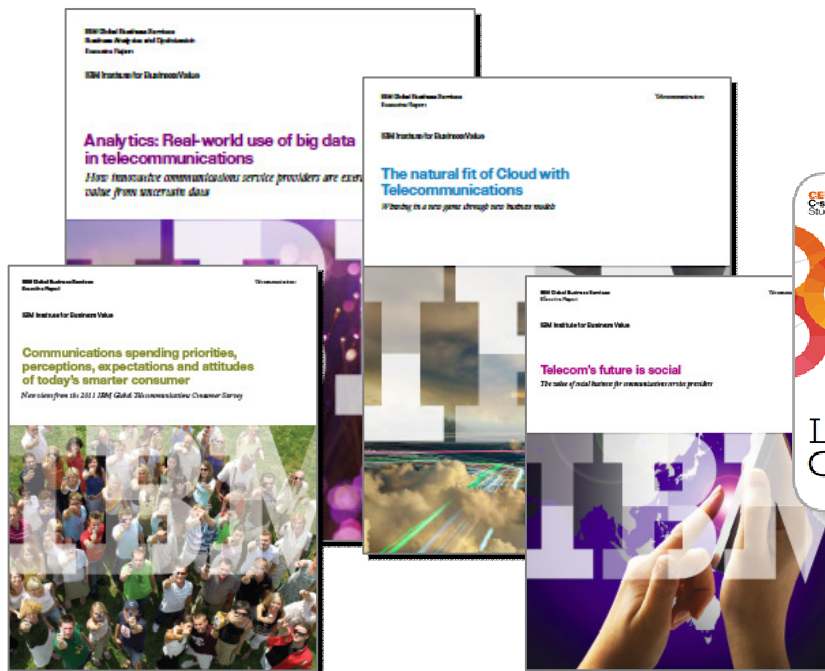


IBV Research Projects

•Future agendas: Three- to 10-year industry and/or functional area outlooks with key business trends, imperatives, and competitive implications, all providing the foundation for action-oriented roadmaps.

•Value realization studies: In-depth assessments of today's critical issues, opportunities and value potential with strategic and tactical recommendations for next steps.

•CXO surveys: Chief Officer studies-including CEO, CIO, CSCO, CFO and CHRO.



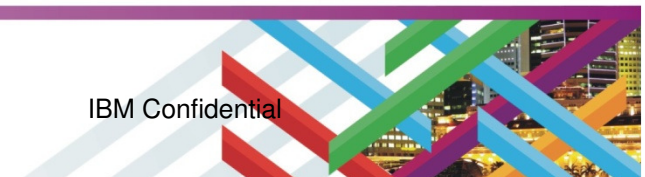
This insight allows IBM to tailor our design to the opportunities and challenges associated with the industry as well as the broader marketplace

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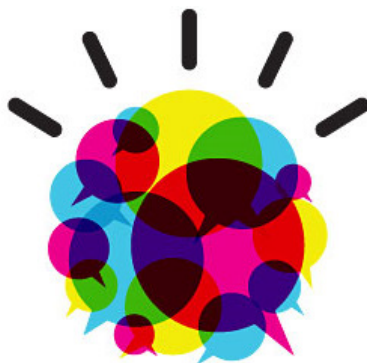
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Thank you

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