

The Convergence of IT Big Data & Marketing



Regis McKenna
2014
Alliance of Chief Executives

Harvard Business Review



REGIS MCKENNA

JEFFREY M. HERTZFELD

CHARLES H. HOUSE AND
RAYMOND L. PRICE

JOHN SEELY BROWN

ROSABETH MOSS KANTER

ROBERT G. ECCLES

ROBERT KUTTNER

R. DANIEL FOSTER

ESTHER DYSON

PAUL H. ZIPKIN

JOHN THORBECK

MARKETING IS EVERYTHING



JOINT VENTURES: SA
FROM PERESTROIKA

THE RETURN MAP: T

RESEARCH THAT R

CHAMPIONING
BELL ATLANTIC

THE PERFORMA

HOW 'NATION
NATIONAL C

HBR CASE ST
THE CASE C

FOUR COR
MICRO CA

IN QUEST
DOES M

FIRST P
THE T

DEBA
WAY

HBR

JANUARY-FEBRUARY 1991

Marketing Is Everything

by Regis McKenna



The 1990s will belong to the customer. And that is great news for the marketer.

Technology is transforming choice, and choice is transforming the marketplace. As a result, we are witnessing the emergence of a new marketing paradigm – not a “do more” marketing that simply turns up the volume on the sales spiels of the past but a knowledge- and experience-based marketing that represents the once-and-for-all death of the salesman.

Marketing's transformation is driven by the enormous power and ubiquitous spread of technology. So pervasive is technology today that it is virtually meaningless to make distinctions between technology and nontechnology businesses and industries: there are only technology companies. Technology has moved into products, the workplace, and the marketplace with astonishing speed and thoroughness. Seventy years after they were invented, fractional horsepower motors are in some 15 to 20 household products in the average American home today. In less than 20 years, the microprocessor has achieved a similar penetration. Twenty years ago, there

Regis McKenna is chairman of Regis McKenna Inc., a Palo Alto-headquartered marketing consulting firm that advises some of America's leading high-tech companies. He is also a general partner of Kleiner Perkins Caufield & Byers, a technology venture-capital company. He is the author of Who's Afraid of Big Blue? (Addison-Wesley, 1989) and The Regis Touch (Addison-Wesley, 1985).

DRAWING BY TIMOTHY BLECK



Major Technologies Driving Marketing

- Mass Production & Mass Media
- Mainframe computer & the Database
- The Microprocessor: Programmable devices & systems
- Software /Programmability
- The Internet
- Mobile
- Social Media
- The Cloud / Big Data

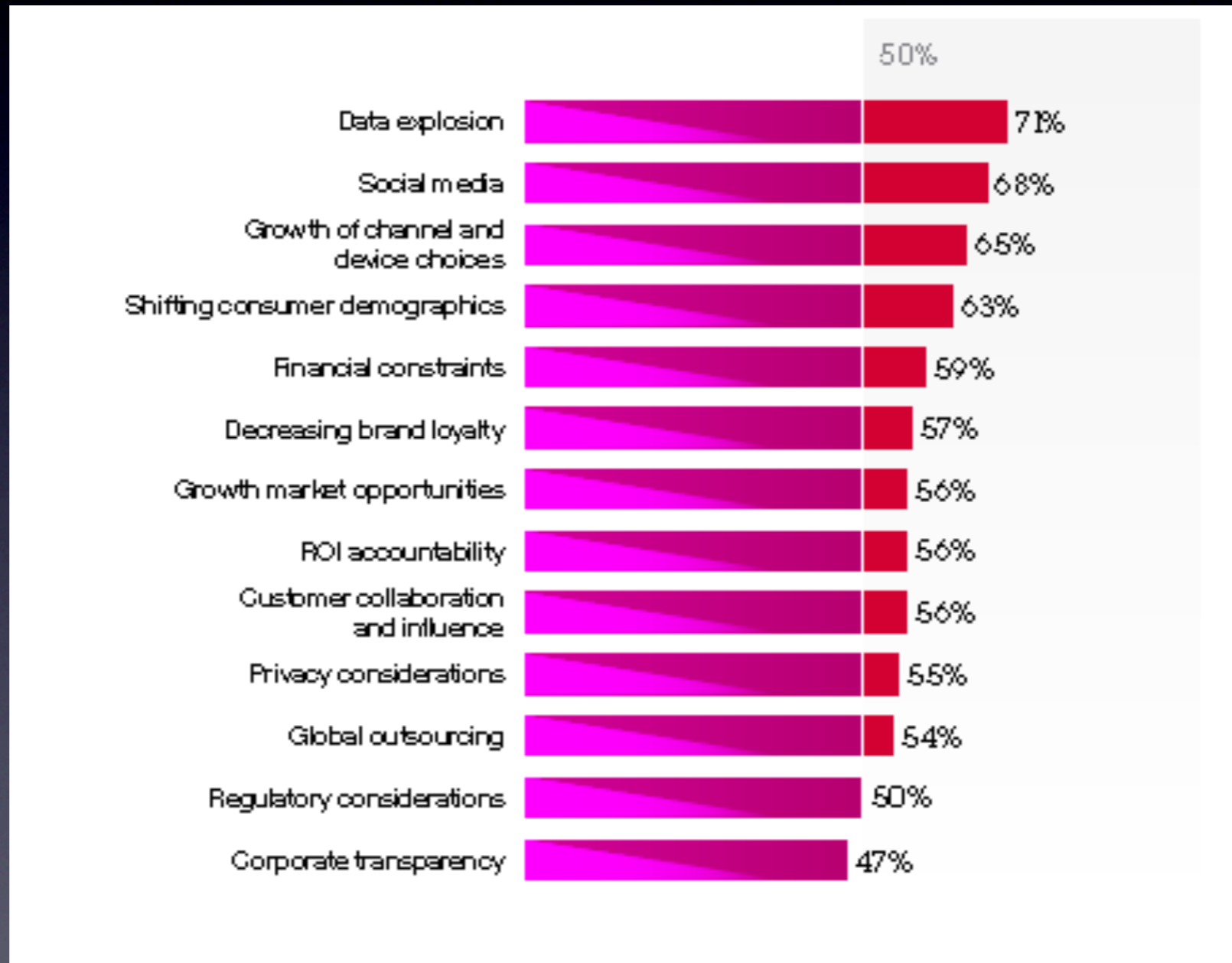
“The capacity of electronic mass communication to transcend time and space creates instability by disconnecting people from past traditions, but it also liberates people by making the past less determinate of experiences in the present.”

Time Passages George Lipsitz



IBM CMO Study: World-wide Survey of 1700 Chief Marketing Officers

Percent Reporting Underprepared



IBM 2012 CMO Study

Business Performance Management Forum Report

Based on interviews with 300 US-based company executives
(e.g. Pfizer, Xerox and Deloitte)

- Unable to understand and adjust to what their customers want
- More than 60% said they were ill-equipped to respond to changes in the market
- Blame for failure to read the market: lack of good information technology systems
- Fewer than 1 in 3 said they were able to get real-time views of their business operations and customer expectations

Turbulence for the CMO

Charting a path for the seamless customer experience

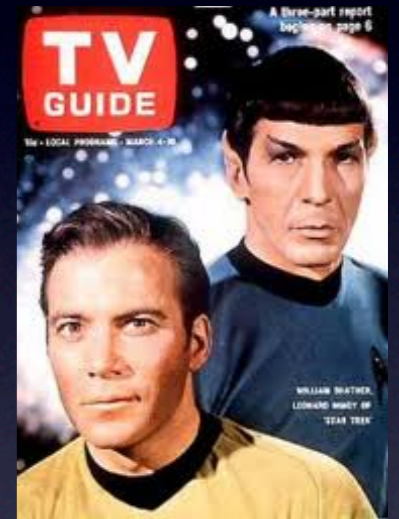
Survey by Accenture Interactive, 2012

Based on Insights survey of more than 400 senior marketers from 10 countries, CMOs need to:

- Fundamentally change the marketing operating model.
- Build new skills internally.
- Get the right set of partners.
- Drive digital orientation throughout the enterprise.
- Expand their ability to restructure the organization and work horizontally to deliver seamless and relevant customer experiences across all touch points all day, every day, will be essential to business survival
- Out with the old ways of understanding customers

Creative Destruction: Old Gives Way to the New

- The Daily Mail, The Guardian, The Telegraph, The Sun, The Independent, The Times and The Financial Times all reported year-on-year decreases in circulation. -Enders Analysis 2012
- World-wide digital Advertising >\$100 B in 2012 or 20% of all media advertising. Digital ad spending growing faster than all other media combined.
- TV Guide, with a peak circulation of 20 million, was sold for one dollar, less than the price of a single copy.
- [Bell Labs](#) research: online video to account for 77% of US TV viewing by 2020. [Nielsen](#) show that this change is already underway: recent study in the US found that 18-24 year olds spent 1 hour and 45 minutes less watching TV in 2012 than they did each week in 2011, with much of this time being replaced with online and mobile video.



A Technology-Driven Marketing Revolution Underway: transactions to interactions

- Marketers now have access to more market and consumer data than ever before
- That data is now real-time, ever-changing, tagged by both qualitative and quantitative events
- Moore's Law has given allowed for the development of low cost computing, storage and communications that enables new ways of interacting with and monitoring customer activity in real-time
- Movement from transactions to interactions: social media, Apps, smart phones & devices, mobile, the internet of things and The Cloud

Major IT/Marketing Trends 2013 -2020

- Geographic expansion of the Internet
- Social Media
- Mobile smart phones & devices
- Apps
- The “Internet of Things”
- The Cloud
- Big Data / correlation of unstructured & unstructured data
- Real Time Decision Systems

The World of Big Data

Volume - Velocity - Variety

Volume of Data:

The large amount of data being stored in data warehouses

Velocity of Data:

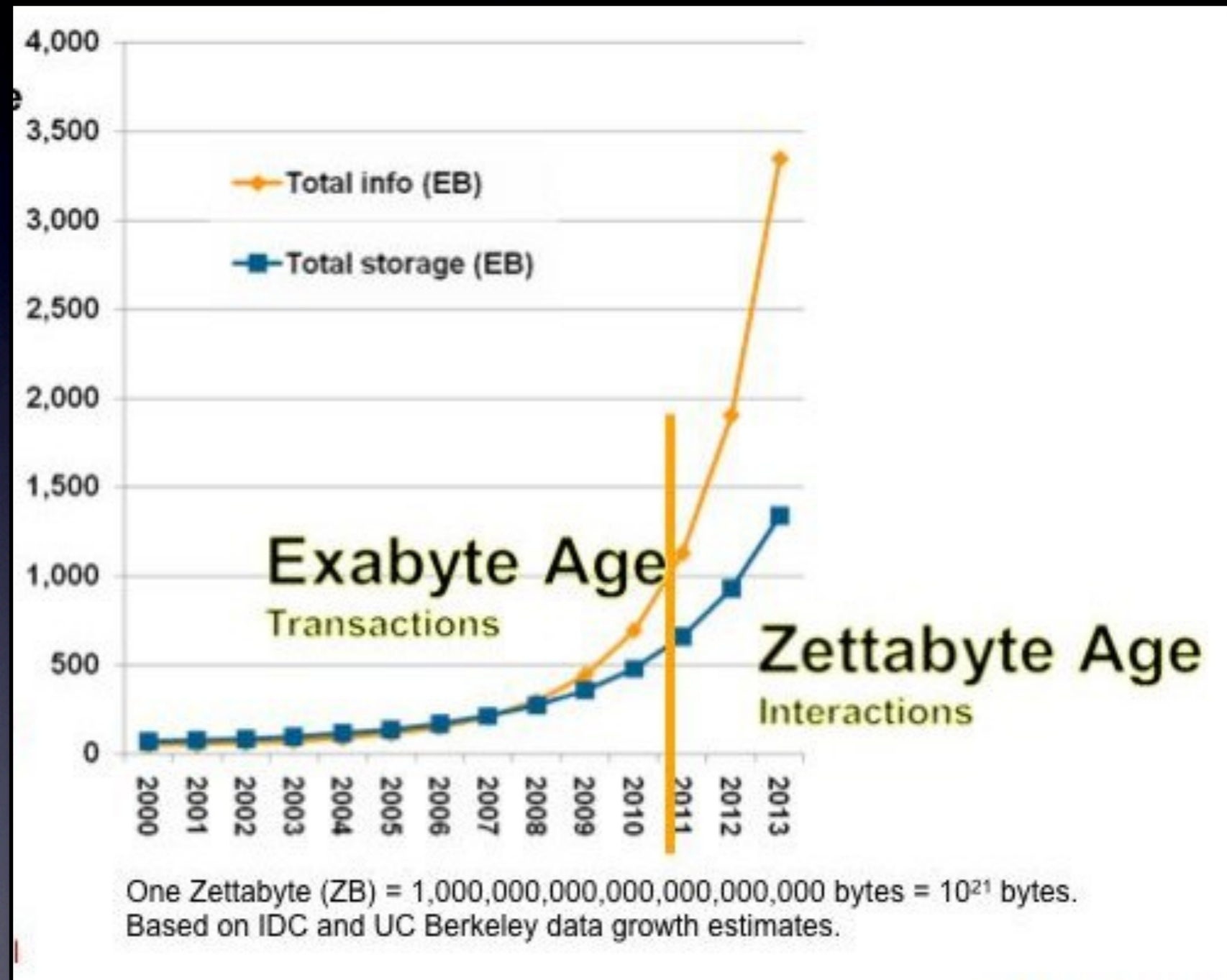
Where the data is being generated real time

Variety of Data:

Structured and unstructured data as well as structured data and data from sensors or the “Internet of things”



More Data Generated in Past 3 Years than in the Past 40,000 Years



Source: Teradata

The Internet of Things

- The Internet of Things is rapidly becoming a major portion of Big Data. Mobility plus sensor, RF and other communications technology means an increase of real-time ,dynamic location information
- Embedded digital sensors provide location, changes in status, time, progress, warnings, and more. When an object can represent itself digitally, it can be monitored and controlled from anywhere
- This connectivity means more data, gathered from more places, with more ways to increase efficiency, real-time response improve safety and security.
- As the things we buy and use become smarter, the concept of real-time customer service becomes a reality

“Big data analytics is a technology-enabled Strategy for gaining richer, deeper, and more accurate insights into customers, partners, and the business - and ultimately gaining competitive advantage. By processing a steady stream of real-time data, organizations can make time-sensitive decisions faster than ever before, monitor emerging trends, course-correct rapidly, and jump on new business opportunities.”

Intel white paper:
Big Data 101: Unstructured Data Analytics

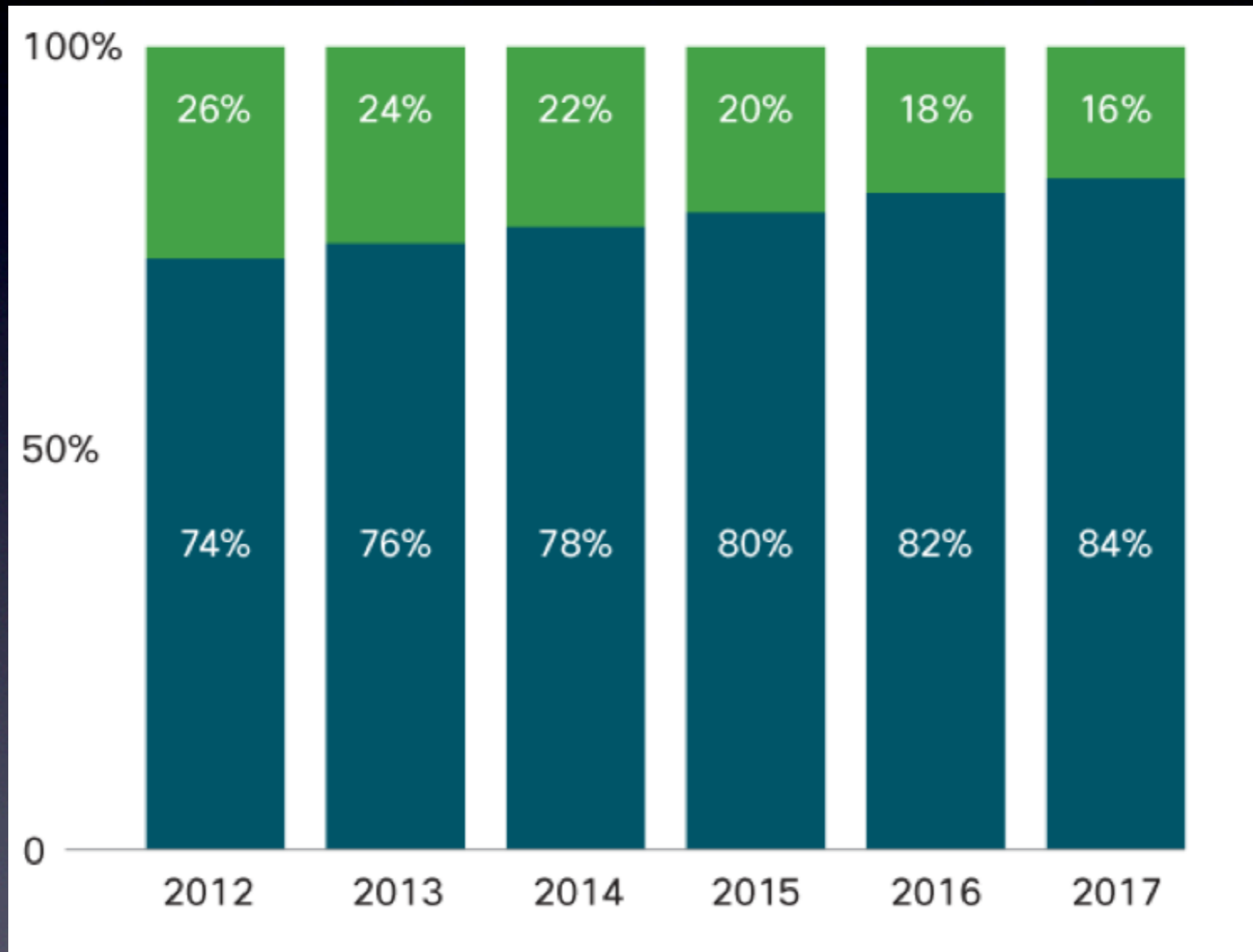
21st Century Realities: Mobile

- People are more mobile
4.3 Billion World-wide
- Mobile – number of people accessing the internet via a mobile phone increasing by 60.3% to 818.4 million in the last 2 years
- Older users adoption – On Twitter (a mobile app) the 55-64 year age bracket is the fastest growing demographic with 79% growth rate since 2012
- Asia-Pacific: 2.43 Billion users; MEA & Africa: 525.8 Million; Latin America: 414.7 Million; Brazil: 142.7 Million; USA: 246.5 Million

Source: eMarketer 10/1/13



84% of All Mobile Data will be Due to the Cloud in 2017



Source: Cisco VNI Mobile Forecast, 2013

Apps: Something for Everybody

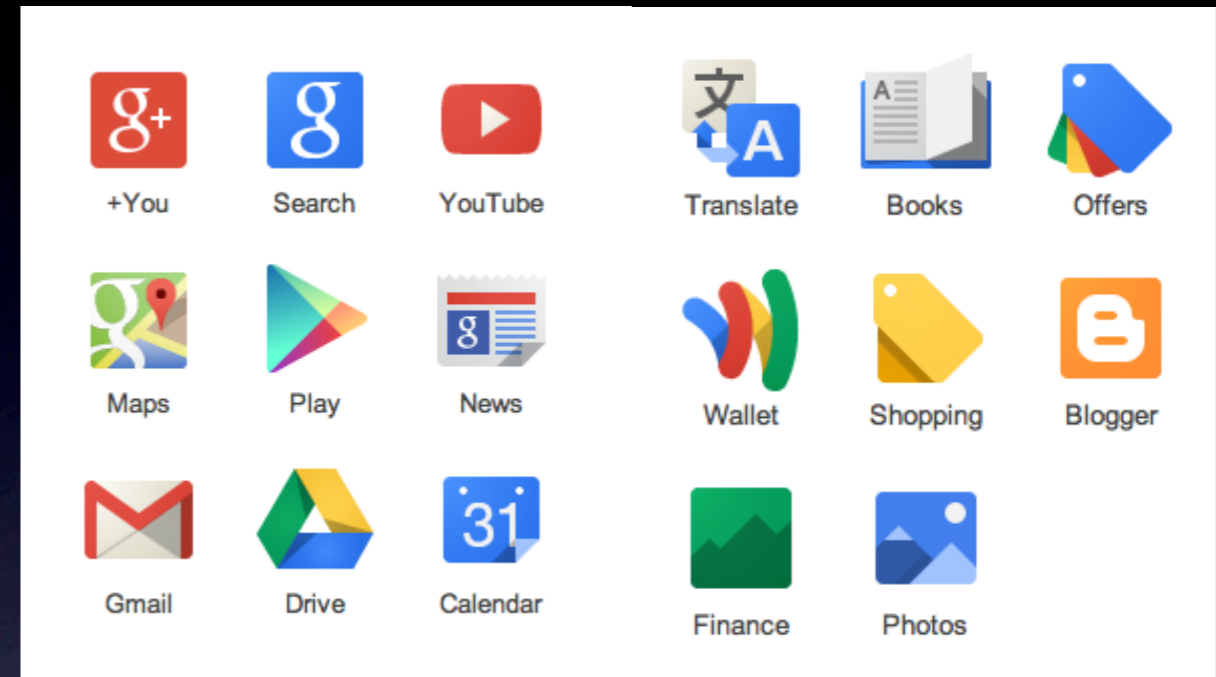
- Apps are conversations with your customers
- Apps as online user selected segmentation
- 102 Billion downloads this year - 90% on Apple & Google devices
- From games, food, health, life-style and books to finance, education, business and news and an almost infinite variety of subgroups - revenue growing by 85% over 2012
- Gartner estimate: \$27 Billion in 2013 to \$76.5 Billion in 2017
- Great way to select, know and interact with your customers

All My Stuff

Apple



Google



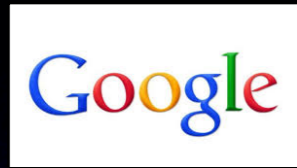
Amazon

<p>Amazon EC2 » Web service that provides resizable compute capacity in the cloud.</p>	<p>Amazon S3 » Highly-scalable, reliable, and low-latency data storage.</p>	<p>Amazon RDS » Managed MySQL, Oracle and SQL Server databases.</p>
<p>Amazon CloudWatch » Monitoring for AWS cloud resources and applications.</p>	<p>AWS Data Pipeline » Orchestration for data-driven workflows.</p>	<p>Amazon DynamoDB » Fully managed NoSQL database service with seamless scalability.</p>
<p>Amazon EBS » Highly available, highly reliable, predictable storage volumes.</p>	<p>Amazon ELB » Web service that provides scalability and high availability.</p>	<p>Amazon ElastiCache » Managed scale-out caching.</p>
<p>Amazon SNS » Web service to set up, operate, and send notifications from the cloud.</p>	<p>Amazon Elastic Transcoder » Convert your media files easily, at low cost and at scale.</p>	<p>Amazon SQS » Scalable queue for storing messages as they travel between computers.</p>
<p>Amazon SWF » Workflow service for building scalable, resilient applications.</p>	<p>AWS Marketplace » Partner software pre-configured to run on AWS.</p>	

“Google Wants Your Data In The Cloud ... But Only The Google Cloud”
Matt Asay- ReadWrite.com

Create Your Own Channels Accessible Anywhere

Search



Community



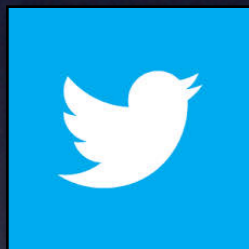
Educate/Entertain



Photo Sharing



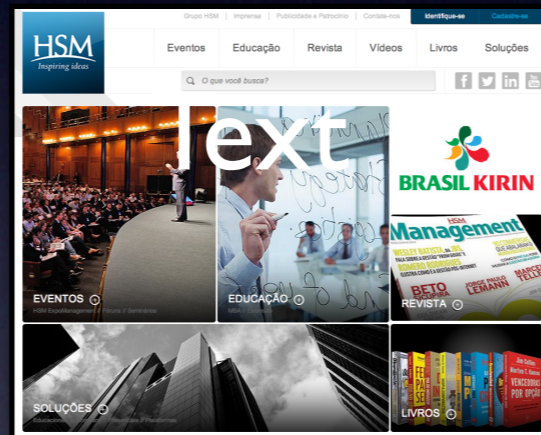
Apps



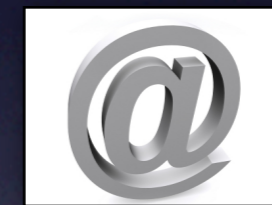
Notify



Transactions



Web Page/Blog



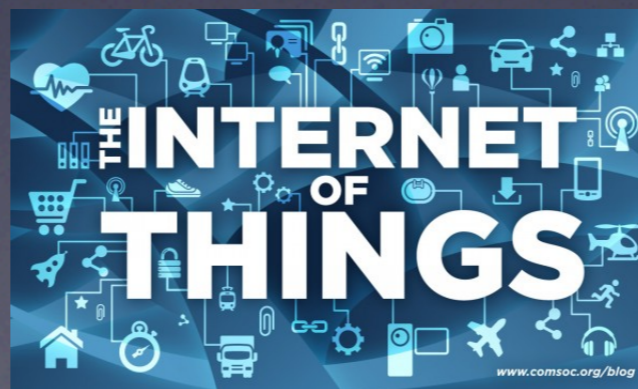
Dialog & Listen



Listen

Location

Process Transactions



State	Company	Address	City	State	Zip	Country	Phone	Fax	E-mail
1201	Kaao Dive Shoppe	4316 Suppabud Hwy	Sale	TX	74766	US	808 955 6339	808 955 6278	
1202	Lincoln	PO Box 2547	Fremont	CA	94555	US	925 955 4958	925 955 4958	
1203	Sight Drive	11 Hopkiss Lane	Kato-Papilio	CA	95757	US	925 618 0708	925 618 0708	
1204	Carpan Dive World	PO Box 541	Great-Caplan	VA	22184	US	808 455 9716	808 455 9716	
1205	Tom Sawyer Diving Co	3231 11th Frederick	Chesapeake	VA	23060	US	808 955 6271	808 955 6490	
1206	Blue Jack Aqua Center	23 789 Paddock Ln	Sale	TX	74766	US	409 465 7623	409 465 7623	
1207	MP Dive Club	32 Main St	Chesapeake	VA	23060	US	808 455 9716	808 455 9716	
1208	Dunes Paradise	PO Box 6745	Kaui-Kaui	HI	96796	US	808 955 6271	808 955 6490	
1209	Fantastique Aquatics	222 998 #13A 77A A	Boquete	CR	60628	CR	051 1773434	051 1773431	
1210	Marine Divers Club	872 Owen St	Milwaukee	WI	53211	US	414 688 0269	414 688 0269	
1211	The Diver's Choice	12541 Underwater Fwy	Mechanic	PA	17033	US	808 955 6271	808 955 6490	
1212	Blue Sports	203 12th Ave Box 74	Gibbstad	OR	97187	US	503 772 5204	503 772 4888	
1213	Malak SCUBA Club	PO Box 8534	Kaui-Kaui	HI	96796	US	214 649 9008	214 649 4707	
1214	Auton Club	PO Box 5651 F	Siemata	PA	12274	US	610 670 0239	610 670 0239	
1215	Vanessa SCUBA Center	PO Box 68	Hopki	MA	01903	US	019 345 0343	019 345 0343	
1216	Island Divers	6123 113 Shore Avenue	St Simons Is	GA	31521	US	770 423 5675	770 423 5675	
1217	Adventure Undersea	PO Box 704	Eden City	MD	21741	US	01 34 89064	01 34 89064	
1218	Blue Sports Club	62365 Hwy Prince St	Largo	FL	34684	US	612 897 0342	612 897 0342	

Database

Social Media and other Channels or Data Sources

Considered as separate and discrete

All have one thing in common: They are cloud based

Increasingly, major providers are offering most or all of these services as a single source for diverse modes of consumer experiences

All of the individual “components” - data bases (past transactions), internet of things (time and place), social media channels (attitudes and opinions) can be seen as one marketplace architecture

Create Your Own Channels Accessible Anywhere

Search



Community



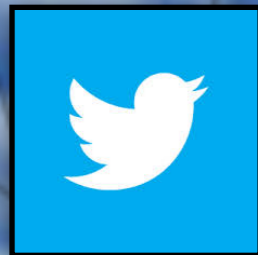
Educate/Entertain



Photo Sharing



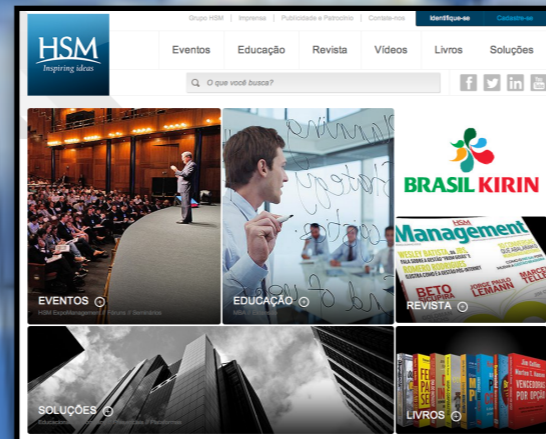
Apps



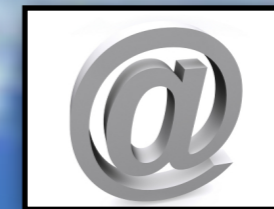
Notify



Transactions



Web Page/Blog



Dialog & Listen

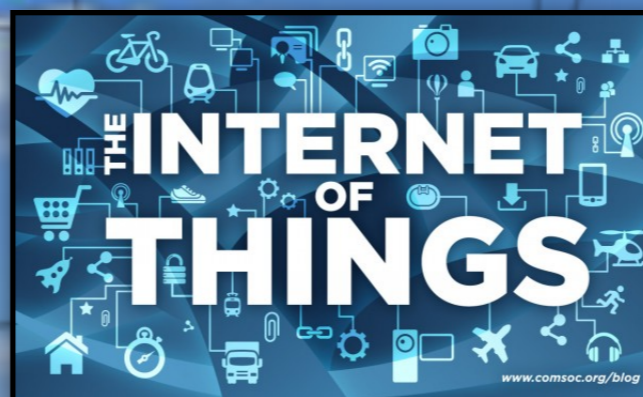


Listen

Location



Process Transactions



Client	Company	Address	City	State	Zip	Country	Phone	Fax
1201	Kaao Dive Shoppe	4316 Sugalindan Hwy	Sulu	Philippines	9606	PH	091-955-6339	091-955-6278
1202	Lincoln	PO Box 2547	Fremont	California	94555	US	925-955-4958	925-955-4958
1203	Sight Drive	11 Hopkins Lane	Kato-Pagitan	Cebu	357	PH	032-6187018	032-6187043
1204	Carapan Dive Hotel	PO Box 541	Sarangani	Philippines	0115420344	PH	0115420344	0115420344
1205	Tom Sawyer Diving Co	323-1 Third Frederick	Chualar	CA	95028	US	530-738-3032	530-738-7772
1206	Blue Jack Aqua Centre	23-789 Paddock Ln	Salt Lake City	UT	84119	US	401-405-7623	401-405-9403
1207	VP Dive Club	32 Main St	Chualar	CA	95028	US	530-453-9716	530-453-9716
1208	Down Paradise	PO Box 6145	Kailua-Kona	HI	96756	US	808-955-6211	808-955-6490
1209	Fantastico Aquatica	221-998 #134-771A	Boquete	Colombia	057-1773434	CO	057-1773434	057-1773431
1210	Marine Divers Club	872 Queen St	Kitchener	Ontario	N2H 2E1	Canada	416-898-0269	416-898-4399
1211	The Diving Centre	115341 Underwater Way	Mechanic	PA	15203	US	610-955-2786	610-955-6703
1212	Blue Sports	203 12th Ave	Bozeman	MT	59717	US	406-772-6204	406-772-6868
1213	Malak SCUBA Club	PO Box 8534	Kailua-Kona	HI	96756	US	217-649-9008	217-643-4707
1214	Autism Club	PO Box 5618	Sioux Falls	SD	57104	US	605-970-0235	605-970-0262
1215	Sancti Spiritus Center	PO Box 618	Hopki	Massachusetts	011340763	US	011340763	011340763
1216	Island Divers	6133 1/3 Shore Avenue	St Simons Is	GA	31521	US	770-423-5676	770-423-5676
1217	Adventure Undersea	PO Box 704	Eden City	MD	21114	US	01134-8984	01134-8984
1218	Blue Sports Club	12365 Hwy 100	Largo	FL	34684	US	612-897-0342	612-897-0340

Database

Launching a New Program

- Set up Cloud-based program center
- Develop a specific Mobile App to engage customers or potential customers
- App feeds database
- Create YouTube video for testimonials/training/how to/education
- Engage Facebook community for engaging conversations
- Use LinkedIn for additional resources
- Keep communication and content fresh with blogs, Webinars
- Twitter: Notify of events, updates, celebrations, testimonials, point at other channels
- Cross correlate retail or sales transaction with unstructured social data
- Use Google analytics or other BI tools
- Use data analytics to predict behavior or possible outcomes



Marketing is Disappearing into the Clouds

Real Time Systems

- Until recently, marketers viewed social media as a new tool for capturing and selling users in real time
- *But without a real-time IT infrastructure, social media loses its real value*
- The value in social media is realized by the ability to correlate it with a wide range of other user data sources: database info, location, trends, history, demographics, patterns, choices and more
- **Advances in IT technology are capable of managing, analyzing and correlating user data, structured and unstructured, generating customized response and applying predictive analytics in real time**

Business Realities: Everything is Marketing

- Competition for customers, sustaining productivity and market uncertainties are driving a restructuring of the old business models and the creation of new, global, flexible, real-time, network-based information models
- People, things, events & business processes represented in software – allows for programmable, flexible, customized solutions
- Business models fragmenting operations yet integrating “click, buy, cash and ship” end to end is new model
- Information logistics networks manage efficient, dynamic information and physical goods distribution and service response define the leaders in every growth business & industry

IT is Revolutionizing Marketing

From retail to healthcare, entertainment and communications, business-to-business and services, competition for customers, sustaining productivity and market uncertainties are forcing a restructuring to real time business models based on new value-creating services that, in turn are based on information network architectures and enterprise-wide connected processes

Marketing & IT Converge

Marketing Functions

IT Processes

Product Refinement	➔	Direct-connect: Product & Customer Feedback
Distribution	➔	Logistics -inventory, scheduling, status
Pricing	➔	RT competitive analysis, dynamic changes
Forecasting	➔	Correlation and predictive analytics
Segmentation	➔	Data Mining/dynamic transaction management
Research	➔	24/7 realtime feedback and analytics
Service	➔	Real-time/ Self-Service / Media Networks
Advertising	➔	Embedded key-word links/eMail/Social Media
Competitive Analysis	➔	Business Intelligence / Google analytics
Customer Management	➔	SalesForce.com-like
Lead qualification & sales mgt	➔	Customer self selection such as through social media
Customer generation	➔	

Other online management activities include licensing, franchising, loyalties, rights management, fee sharing, etc.

Issues

- Privacy
- Security
- Cost
- Complexity
- Learning curve
- Management: Marketing or CIO

Traditional View of Marketing's Role

- To be the intermediary between the development of the product or service and the marketplace
- Persuasive selling using the media and convincing prospective customers to buy through mediated communication channels
- To articulate the market position and message of the enterprise in such a way as to influence changes in customer and market behavior
- To define and project to the market an skillfully crafted image or brand

A New Role for Marketing

Marketing is an integrating architecture enabling the continuous process of learning whereby the enterprise gains knowledge interacting with customers and the marketplace so as to rapidly adapt and respond creatively and competitively.

Advice to Marketers

Imagine the Future



“Marketing is Everything”



**Differentiate through
IT Strategy**



**IT + Marketing -
Partners -learn from
each other**



**Take a Marketing
Leadership Role**



Experiment & Risk



This presentation is a work in progress.
Please do not distribute or reuse without
discussing with author.

Thank you.

Regis McKenna
regis@regis.com