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Standing Up a Cloud-Enabled Marketing Capability

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EXECUTIVE SUMMARY

Marketing's challenge has always been to develop customer insights, targeted value propositions, and powerful communications in an iterative cycle. The Internet has given marketers a glimpse of how each element of that cycle can be dramatically transformed by new technologies that allow direct customer interactions, the ability to test and modify value propositions on the fly, and the opportunity to present the communication that best fits the customer at any point in the process—while constantly iterating the process as the marketing cycle collapses toward real time.

Now, in the new era of the cloud together with the expected explosion in connected devices and the dynamic applications optimized for them-information can be continuously fed to cloud-enabled "big data" and analytic engines, opening up the promise that all of marketing could migrate to a true real-time Internet marketing model. The implications are profound, extending well beyond what has become the state of the art in digital marketing and campaigns. In the age of the cloud, to an everincreasing extent, every company must become an "app provider" using websites and cloud applications to support, enhance, and in some cases become drivers of its traditional marketing offers.

Very few chief marketing officers (CMOs) have thought through the capabilities they will need to drive these (mostly) new marketing activities. And very few are ready to lead their organizations into this new world, in which they know precisely how effective their marketing spend really is and have the opportunity to actively shape their company's products and services using the customer insights that a connected, cloudenabled world will deliver.

THE MARKETER'S CHALLENGE

Ever since its beginnings in the early 20th century, the goal of marketing has been threefold: to gain insight into customers, both current and potential; to use that information to shape the value propositions of the company's products and services; and then to communicate those propositions to each customer segment through carefully targeted messages and offerings. Over time, marketers were able to learn from each marketing cycle what kinds of value propositions would work with each customer segment, and what kinds wouldn't, allowing them to deploy their marketing resources as effectively and efficiently as possible. The best CMOs built teams that worked this cycle and used all the marketing tools at their disposal toward this end.

The key to marketing success has always been the ability to gather the best, most complete information, and then to analyze and act upon it as accurately and as quickly as possible. However, the tools were for the most part blunt, the ability to correctly correlate activities with results was lacking, and the marketing cycle was slow. The entire cycle had to be completed before marketers could extract and synthesize findings, and then act on them in the next cycle.

There were exceptions: Some cutting-edge marketers succeeded in devising ways to collect timely data about customer responses, allowing them to create ever more precise, targeted, and dynamic marketing campaigns. This was particularly true in industries like financial

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services, where the product—
noncash money—was informationbased and hence digital. Credit card
marketer Capital One, for instance,
pioneered the use of technology and
complex algorithms to analyze how
consumers responded to different
credit card offers and then used
the results to continually refine its
offerings until the customer was
enticed to sign on.

But these were exceptions. Most CMOs were content to explain the impact of their offers several months after launch, and the success of each campaign several weeks after the fact. Meanwhile, other members of the executive team continued to recite an old saw: "We know that half of our advertising budget is wasted; we just don't know which half." And the CMO was always on the defensive.

Then came the Internet. Marketers, and particularly business-to-consumer (B2C) marketers, have developed a variety of dynamic, real-time marketing tools and concepts that allow them to track customer behavior on the Internet in great detail, improving their understanding of and relationships with customers and vastly increasing the efficiency of their marketing efforts. Techniques such as database marketing, real-time

testing, clickstream monitoring, and customer relationship management (CRM)—along with the skills of search engine optimization and, more recently, social media optimization—have enabled top Internet marketers to manage, analyze, and gain insight into massive amounts of online traffic, building information-rich databases that give them the ability to design and send out real-time targeted offerings. These marketers have already entered the world of "big data" analytics. They have taken a great leap toward marketers' longstanding goal of determining exactly how their campaigns correlate to increased consumer awareness and sales conversions, and thus how to maximize returns on marketing investments.

Internet marketers have also begun to master the skill of modifying elements of the offer such as price and marketing creative material—even the product itself—based on insights about the customer that have been gathered and stored over time and, in some cases, are gleaned from the behavior of the customer in the moment. We have all experienced websites that dynamically change as we visit and explore them. And few are unaware of the power (and appropriateness) of technology tools that, for example, allow

cloud pioneer Google to read your Gmail messages and present you with tailored offers in real time with no human intervention at all. These Internet marketers, many of whom began their careers in the Internet era and are thus unencumbered by legacy issues, were the first pioneers and are fast becoming the experts in cloud-based, customer-centric innovation based on real-time insights, technology-enabled analytics, and dynamically integrated marketing organizations.

Yet all too many CMOs in consumer-driven industries continue to lament the inadequacies associated with their traditional marketing tools, even as they establish entirely separate online marketing organizations grounded in new Internet marketing capabilities—with little or no transfer of know-how or skills back to the rest of the marketing team. The "digital" part of their marketing efforts is for the most part restricted to the campaign and consideration funnel rather than integrated across the full value chain of marketing activities, from strategy and offer design through service and loyalty. Most CMOs in business-oriented industries have not yet felt the need to fully embrace Internet marketing beyond modest tests and forays into the field.

A CONNECTED, CLOUD-ENABLED WORLD

Now, however, new technologies associated with the advent of cloud computing are extending the depth and reach of connected, real-time marketing well beyond simple Internet portals and siloed digital marketing efforts and campaigns. Connected mobile devices, Internetenabled technologies and appliances, and sensors embedded into almost everything from cars to shoes to pallets of produce on their way to the grocer—together with the explosive growth in dynamic applications leveraging these devices—are all feeding information to "big databases" at rates unimaginable just a few years ago.

Our work on the impact of Generation C (connected, communicating, content-centric, computerized, community-oriented, always clicking) and the coming wave of digitization highlights some of the facts: There are 4.6 billion mobile phones in use around the world, more than 10 billion apps have been downloaded as of early 2011, humans are generating 100 million tweets a day, 645 million wireless sensors will be sold in 2015, and IBM is projecting

New technologies associated with cloud computing are extending the depth and reach of connected, real-time marketing.

that perhaps 1 trillion sensors will eventually be deployed around the world as "smart dust."

And floating above it all is a new locus of "big data" and computing power—cloud computing—that allows companies to capture and sift through customer information, both structured and unstructured, and gather real-time and contextually grounded insights. Internet marketers are already beginning to understand and make use of these concepts—concepts that traditional marketers still only dream of.

The impact of the cloud on how companies receive and deploy the information technology they need to run their businesses will be pro-

found, as infrastructure and applications alike become more flexible and efficient. And the scale and speed of the coming changes will be unprecedented. Revenues for cloud services, including both applications and system infrastructure, will total more than US\$30 billion in 2013, according to our analysis of current projections, and will keep growing in the double digits over the next several years, making cloud computing the fastest-growing sector of the information technology industry.

Independent software vendors (ISVs) will most likely sense this opportunity first. Those on the cutting edge, like Salesforce.com, are already offering their software entirely over the cloud, through a software-as-

a-service (SaaS) model. The cloud provides to business-to-business (B2B) companies the ability to capture real-time information about how actual end-users set up and use their products, to sense in real time any problems users are having, and thus to deliver up-to-the-minute, contextual marketing messages and responses to users with maximum effectiveness—information they can share with their client chief information officers (CIOs) as a powerful selling point as well. There is also an untapped opportunity to use that information to collaborate with CIOs to create a curated, authorized application store available to every employee, and to build pricing models for those applications, including variable, "by the drink" plans

for higher-end features, ensuring that CIOs get the maximum return on their precious IT spend. And thanks to the insight they gain about features and usage, ISVs can make sure their own product development, sales, and service resources—and their marketing dollars—are being spent as wisely as possible.

Social networks such as Facebook, as well as financial services firms and retailers—indeed, any company that connects with its customers through cloud-based software or services—will see their business models change in a similar fashion, as both they and their customers learn to make

the most of the intimate connections between their businesses. And ultimately, virtually every product and service will be connected to the Internet just as today's computing and communication end-point devices are now.

Indeed, in this world, all kinds of companies will become "app providers," offering software and other cloud-enabled tools together with their products and services. It is just these continuous, tight connections companies can make with their customers that will enable the true promise of marketing in the cloud—a new and higher level of continuous

contact along the entire marketing value chain, increasing the level of insight among marketers and boosting relevance and loyalty.

Ultimately, the marketing cycle itself will shorten, becoming virtually instantaneous, as it is in Internet marketing. But it will become much wider in scope, all the way from upstream marketing strategy and product design to downstream sales, service, and loyalty. And the new cycle will affect all the connected devices that link customers to cloud-enabled databases, and all the customers who use those devices.

Marketing in the cloud will enable an increased level of insight among marketers and a boost in relevance and customer loyalty.

THE INTEGRATED VALUE CHAIN

The shift to the cloud offers CMOs an opportunity to completely rethink how they organize and lead their marketing operations, and to put in place the tools, processes, structures, skills, and resources needed—indeed, an entirely new marketing value chain—to take advantage of connectivity and the cloud.

The traditional marketing value chain begins with the effort to gain insight into customers and develop and test new products in light of those insights. These upstream efforts are designed to tease out the needs and desires of customers as well as trends in the marketplace that are affecting the competitive environment. Midstream efforts include articulating the customer value propositions as

well as the channel, pricing, and communications strategies designed to carry out those propositions. Further downstream is the sales effort, including the communications infrastructure that enables the sales and post-sales activities such as billing, setup, technical support and ongoing service, and opportunities for upgrading and up-selling.

Where the connected, cloudenabled world will have the greatest impact on marketing will be in the opportunity to deepen relations with customers at every point across the value chain, and ultimately to integrate the value chain completely, blurring the distinctions between up-, mid-, and downstream efforts (see Exhibit 1).

Exhibit 1 Cloud-Enabling the Marketing Value Chain



Source: Booz & Company

Upstream

At the upstream end of the chain, where marketers traditionally sought to gain insight into their customers and markets, they will now be able to gather much more frequent feedback from customers and massive amounts of real-time data on how customers use their products. The level of detail will prove invaluable as companies refine and develop their target segmentations and products.

Capturing customer insights at this level will require new technologies including in-memory computing to gather the deluge of online usage data, and to manage and analyze it.2 The processes for capturing insights will have to be modified and sped up if the data is to be used to rapidly refine and customize product offerings and to ensure that further communications with customers reflect the most recent information available—a key technique for increasing relevance, the dream of every marketer. While these new tools and resources will require additional expenditures in the short term, the increase in process automation will save money over time.

Moreover, this flood of new data will create the need for entirely new skills, business intelligence techniques, and even organizational structures. Cutting across the traditional marketing value chain, these capabilities will ultimately promote a far greater level of integration among all aspects of the marketing function—even extending beyond the marketing organization itself, as CMOs work with product teams to promote customer-centric innovation by embedding marketing functionality into everything they sell.

Midstream

Traditionally limited to the development and execution of channel, pricing, and communications strategies, midstream efforts can now be integrated with upstream efforts, enabling marketers to increase the frequency of product releases, including real-time updates for existing customers. Channel strategies will shift as a much larger proportion of sales occur directly online, and traditional channel partners will give way to new ones such as telecom operators, software hosts, and even PC-based app stores. Pricing will become much more flexible, and more complex, as it shifts to new business models such as demand-based subscription models that can be differentiated for each customer without being visible across the customer base. And communication with customers will become more or less constant, as digital marketing becomes the norm.

Moreover, the insights gained about how customers use cloud-enabled products and services will allow marketers to reach out to them in new, more targeted ways. Whether such techniques increase the ongoing tension between marketers and their customers over security and privacy concerns will depend on the ability of marketers to offer "in context" messages that are more relevant and feel less intrusive. Marketers must structure their products, offers, and campaigns in ways that ensure customers don't feel invaded, and finding the right balance in terms of privacy and security concerns will continue to require diligence and vigilance on the part of marketers.

Over time, companies will need to rethink their strategy for their sales channels and channel partners. This will prove a particular challenge to companies with long-established roots in the physical world, and long-standing relationships with the marketing partners that enabled them to distribute their heretofore often physical services. Companies that already have experience in offering on-demand SaaS, as well as social media firms, retailers, and anyone who delivers services through the cloud, are likely to find themselves on an easier path to effective connected, cloud-enabled marketing. But no company has yet to make the full transition to this brave new world.

Downstream

The availability of so many more customer touch points throughout the value chain, and real-time data that can be integrated into cloudbased offers and applications, will transform traditional downstream sales and service efforts, speeding them up and making them more iterative. The greater interaction with end-users—and not just with corporate purchasers, in the case of B2B sales—will affect how sales are made and after-sales activities like setup and technical support are conducted. Such services will likely evolve into additional products to be sold, potentially as part of all the added cross- and up-selling opportunities that will become available.3 And we are already seeing the creation of social networks of end-users who will first recommend. then champion, and eventually influence the design of those products and services that win in the

marketplace.⁴ This, too, will demand new technologies and capabilities.

This scenario has particularly profound implications for B2B companies, whose marketing efforts have long been hobbled by their inability to see into, understand, and react to how the end-users of their products and services use them. In particular, those companies that have relied on channel partners of all types will have new opportunities to gain direct access to their customers, but this will force them to decide whether to continue to work with intermediaries or to bypass such channels by developing new directto-customer, cloud-enabled channels.

Companies well established in the connected cloud are already trying out different approaches to digital campaigns. Birst, a purveyor of business intelligence software on a SaaS basis, still prefers to personalize

its work as much as possible. It begins the sales process by offering the client a proof-of-concept demo, and follows up with a live demo by a Birst representative, which includes a personalized analysis of the modules most suited to the client's needs. Then comes the offer of a free trial. In marketing Google Apps, on the other hand, Google automates the process completely. Owners of Google accounts can sign up for a free trial, but there is no personal contact, and the actual sales process is conducted entirely online, as is any support needed.

Throughout the marketing value chain, the cloud will open up new ways to accomplish the traditional objectives of marketers, but only if CMOs are willing and able to embrace the new world and bring their organizations into it.

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LEADING THE CHARGE

The very wealth of data produced and stored in the cloud, however, poses the risk of overwhelming CMOs and their organizations. Companies looking for a competitive advantage as business computing shifts into the cloud and devices become connected must develop new ways to capture and analyze all that data, and ultimately to integrate it throughout the marketing value chain. This is not a trivial task: The era of "big data" analytics will require computing horsepower that few marketers have harnessed to date. How will connected, cloudenabled marketing change the relationships between companies and their customers and partners, and how best can the CMO leverage the benefits to boost the effectiveness and efficiency of marketing activities across the marketing value chain? Which CMOs will be ready to lead this marketing revolution? And what capabilities, organizations, and

processes will they and their teams need to win?

Internet Marketers

If you are the CMO of an Internetonly company, then the marketing capabilities you and your team have today will be almost exactly those needed to win in the new world—but not quite. For you the challenge is to look ahead, reimagine yourself as an application provider, and think hard about the possibilities there will be when the physical world becomes "an Internet of things" and cloud infrastructure allows you to build much larger data sets, leverage much greater computing power, and reach even larger customer populations. You may also need to widen the breadth of your "digital" marketing efforts beyond the campaign and consideration funnel to include the entire—and now fully dynamic marketing value chain. How will you expand your team and broaden

your scope to take advantage of the fact that you understand this new world and most other marketers do not? You are out in front, but your first-mover advantage needs to be combined with speed and resources to maximize the benefit of expanding opportunities.

And you are valuable today: Perhaps other companies will pay a great deal to have you and your team help fix their problems.

Hybrid Marketers

If you are the CMO of a traditional company that nevertheless has a component of its marketing function focused on Internet marketing, or you are moving your products into the cloud—and you have access to a dedicated online division with Internet marketing expertise—then your challenge is more complex. You need to quickly rethink your approach to your function. How do you take the capabilities that reside within your company and use them to seed the rest of the marketing function? How do you introduce and/or speed up marketing rotations and exposure so that all of your

marketers learn the skills needed in the future? Where should you supplement your team with new people and capabilities, and where do you need to trade out? How do you want to transform your marketing organization to ensure that the function works more fluidly across the marketing value chain?

As to your company's products and services, where will you begin the migration to this new marketing model? What tests will you run? What prototypes will you ask your product development teams to build? Which customer segments will you embrace first? And what road map will you put in place to devote an increasing portion of your spend, your team, and your effort not just to complementary Internet marketing activities, but to connected, cloud-enabled marketing and customer-centric innovation, especially for those channels and customers you were reaching before?

Perhaps most critically, how do you prepare yourself to lead in this new world? Do you really understand what it entails? Are you fit to lead

those who do? And will you be able to teach those who do not? The prize is great for CMOs who are ready to lead, but over time, more and more CMOs will be recruited—and let go—depending on how they answer these questions.

Traditional Marketers

If you are the CMO of that rare B2C company with no Internet marketing activities—are there any left today?—or one of the many B2B companies that have managed to ignore most of the innovations the Internet marketers have been making, then you have a lot of work ahead of you. It's time to take a crash course in digital marketing, quickly hire people with the experience and skills necessary to ramp up new campaigns, and find partners that can help get your new efforts off the ground as soon as possible.

The alternative: Move to a pocket of marketing that will remain unenlightened by the new marketing paradigm—if you can find one.

GETTING STARTED

Achieving success in connected, cloud-enabled marketing will be an ongoing process that requires companies to be agile and innovative in a fast-changing marketing environment. Under these conditions, CMOs will be forced to become experts in all aspects of real-time marketing and "big data" analytics, and will need to transform their marketing organizations into real-time dynamic execution engines. Those who figure out how to do this first, and transform themselves into true application providers, will gain a real competitive advantage over the laggards. Every large company will expect its CMO to understand these new requirements and be able to put them into practice.

As CMOs begin making plans to build the capabilities that will be needed, they should enlist the aid of the Internet marketers on their teams with the most relevant, developed capabilities to take the following steps:

1. Assess where your company stands now. Determine your current real-time data processing and iterative sales capabilities, and the current

- state of all your Internet marketing efforts.
- 2. Identify who has the requisite skills and experience. If your team does not have these, figure out where to find them.
- 3. Define the future state of your marketing organization. Analyze how your marketing organization is currently structured, and its long-standing ties with other parts of your company. Then work out a transformation plan for establishing and promoting cloud marketing.
- 4. Make a comprehensive plan to create a true continuous marketing capability. Determine the new technologies and processes required, the resources needed to obtain them, and the partners that can help you get them fastest. Collaborate with your CIO to make sure that cloud-enabled marketing is also high on your company's IT road map and priority list.
- 5. Start now. There is not a moment to lose.

CMOs will need to transform their marketing organizations into real-time dynamic execution engines.

Endnotes

- ¹ "The Rise of Generation C: Implications for the World of 2020," by Roman Friedrich, Michael Peterson, Alex Koster, and Sebastian Blum (Booz & Company, 2010). www.booz.com/media/uploads/Rise Of Generation C.pdf
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