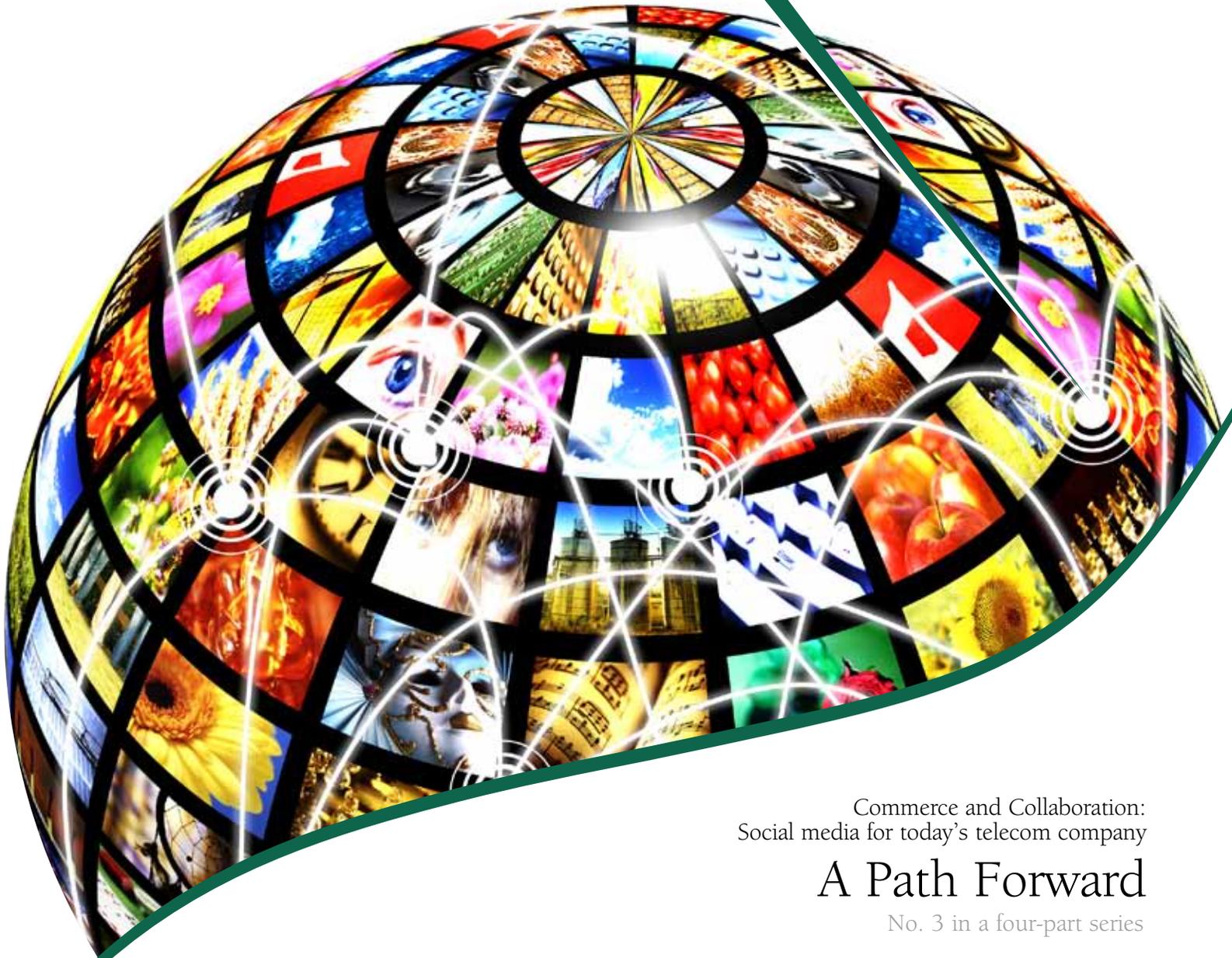


Just because your enterprise has a social media account, doesn't mean you have an enterprise social media strategy.



Commerce and Collaboration:
Social media for today's telecom company

A Path Forward

No. 3 in a four-part series

Sweet! I just canceled my cable, downloaded Netflix for a fraction of the cost, and I'm watching all the Sopranos I missed right from my phone!

Yeah, it's crazy to pay for cable when you can Hulu!

I am all about Google TV! How do they do it?!! Why would anyone pay for cable?



Business dislikes this comment

Ditto! I just got U-verse, and have unlimited options all for one fee on one bill! 20 Mbps down! Weeeee!



We have seen that social media usage is growing quickly across all platforms. Yet, its power to grow or destabilize customer relationships promises to have its greatest impact on mobile devices. Not only is mobile data usage rising, but Internet companies are also building new applications to simplify mobile access using geo-location to create context across relationships of people, presence, time and location. If telcos ignore such trends, they risk being dis-intermediated, whereas, the mobile network operator is simply a “pipe” without the ability to monetize social media. In the third of our four-part series we explore how to address the economic and technical challenges raised by profound shifts in how customers obtain services, share information and communicate with enterprises. We look at how on-demand, pay-as-you-go software services help telcos to minimize heavy up-front investment while adapting rapidly to operating in a new environment.

The Upgrade Conundrum

Affordable mobile data pricing plans, network upgrades and attractive wireless devices have transformed the communications landscape in the last couple of years. According to Capgemini research, total mobile data traffic in the US exceeded one exabyte in 2010, up 112 percent from the end of 2009. That equates to an average monthly data consumption of approximately 325 MB per US mobile data user. Paradigm shifts across the cable provider market are also being felt where customers are “cutting the cord” with their cable provider to attain more relevant on-demand services through Hulu, Netflix or Google TV.

Such a rate of change and expansion is driving nearly every industry to use mobility to engage with customers, suppliers and influential on-line communities. However, most existing enterprise IT systems are ill-equipped to harness the power of “machine to machine” computing including smart

phones and connected tablets. Such an evolution creates an investment dilemma.

Enterprises can completely overhaul legacy IT systems to accommodate mobile customer care applications. Or they can outsource the problem. Or they can find ways to meld traditional customer interfaces with new ones such as Facebook, Twitter and the capabilities of next generation “search” referred to as, semantic web. None of the choices are easy. And there is the risk of using point solutions that compound the slow and incremental build-up of large technology challenges. For example do you remember not being able to send SMS messages between different mobile network operators?

Replacing legacy IT systems with a modern infrastructure is a complex undertaking that implicates the entire business. Even if the huge upfront capital investment in new infrastructure is available, such a project draws heavily on management time. Success depends on a strong political will and dedicated leaders to pilot the strategy. It also requires considerable technical expertise, which is neither cheap nor easy to find. And the pay-back comes only after many months or years of effort — if ever.

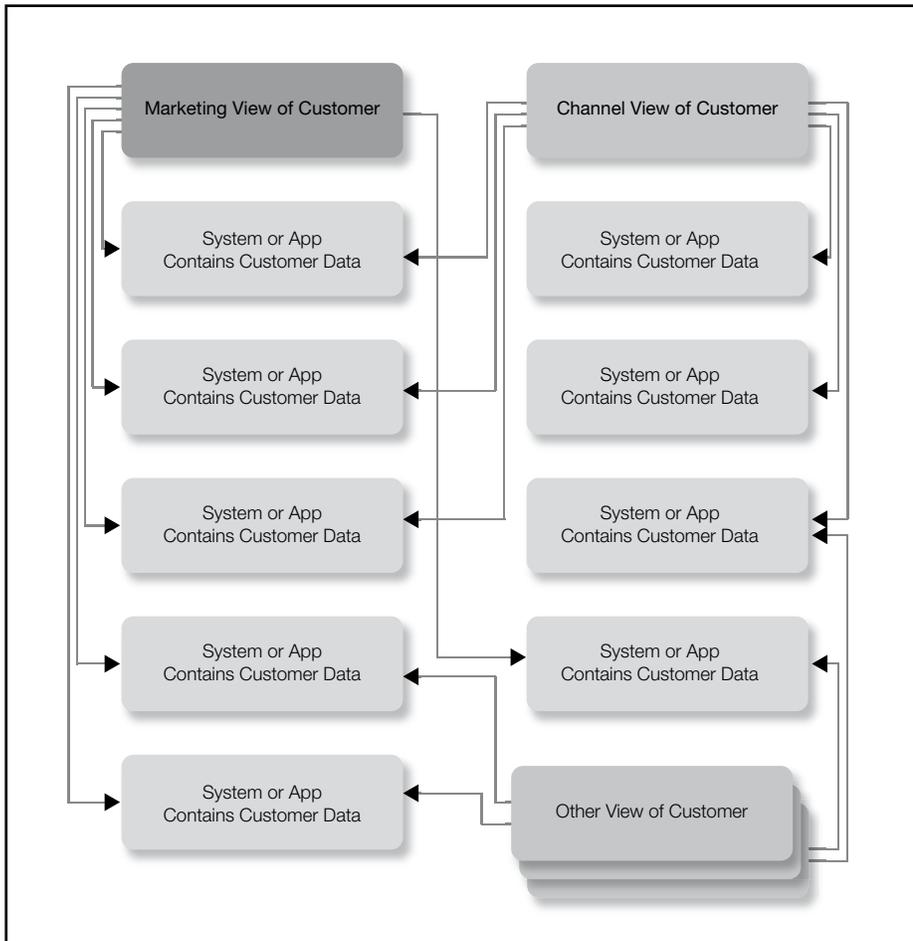
An obvious alternative is outsourcing. But there is no guarantee of a match between your interests and those of a third party. If your organization ties into the wrong vendor, then you risk being held ransom by a monolithic IT application — after all, the easiest way for an enterprise system vendor to increase its service revenue is to make its systems complex. And when it comes to deploying new software applications with the promise of NPV (Net Present Value), any telecommunications enterprise can point to large sums of money already sunk into customer care, data warehouses, revenue management, and enterprise resource planning systems that failed to meet expectations.

There's got to be a better way for systems to keep up with the ever-changing whims of the consumer!



Business likes this comment

Figure 1: Fragmented Channel Views of Customer Data



Facebook Leads the Way in Revolutionizing the Customer Experience

Historically, mobile subscribers' experience has been shaped by the device and operating system they use, or by their choice of broadband or mobile network operator. Increasingly, there is a move towards creating a uniform customer experience that extends horizontally across systems, applications and devices.

Facebook is one of the companies leading the charge. Facebook's aims are ambitious and if it succeeds it will draw more businesses and consumers into communicating with each other within the Facebook ecosystem. This powerful paradigm supports the move away from the browser-based web experience to a loosely coupled set of application programming interfaces (APIs). In this way, Facebook strengthens relationships with its users, collects customer analytics and creates advertising-driven revenue opportunities across its connected community of "friends."

At the heart of Facebook's mobile strategy lies its single sign-on mobile application. As its name suggests, the application makes it much easier for smartphone or tablet users to log into services and applications with a single click. The user enters their Facebook username and password only once and thereafter can access any mobile application by clicking a "Login with Facebook" button. The check-in process is based on the same permission system implemented across more than half a million games and apps currently available on the Facebook website.

Facebook is also leading the way in geo-location services. Location-based technologies (see sidebar) share similarities with status updating services, such as Twitter, according to the Pew Research Center¹.

Location-Based Technologies are Changing the Game

Geo-location technologies built into smart phones and other mobile devices allow people to share their location, making it easier to hook up with friends nearby and to interact with local businesses. Users might want to plug into location-based feeds from retailers to receive on-the-spot deals in a shopping mall. Or they can post restaurant reviews. The technology could be used in new real-life gaming, allowing users to check into various locations and get prizes. Companies are increasingly building geo-location services initiatives into their business plans.

Given the options, procrastination may seem the wisest tactic. However, increasingly telcos' competitors and partners are deploying innovative IT tools to serve mobile customers in new ways.

Just got a tweet from Joe's. He's extending the Beer-n-Wings special for the game tonight! See ya there.



Business likes this comment

¹ Pew Research Center Report: www.pewinternet.org/Reports/2010/Twitter-Update-2010

According to their report, status updating services have grown in popularity over the past few years, from 6 percent of online adults saying they had used such a service in August 2008, to 24 percent in September of 2010. It laid the foundation in August 2010 when it launched Facebook Places, which enables Facebook users to share their whereabouts in real-time via mobile devices. Facebook is doing all it can to make Places easy for application developers to use. Then in November 2010, Facebook launched Facebook Deals, which stores and restaurants use to offer discounts and coupons to customers who check in to the company's facebook page, thereby translating a virtual following into real-world revenues.

Given its clout, Facebook's mobile strategy is likely to impact your business, whether you view it as a partner or a competitive threat. In December 2010, Facebook had over 200 million mobile users², up from 65 million in September 2009. And it is easy for businesses to deploy since developers need only add a few lines of code to their mobile software. Such capabilities create a more secure, relevant and integrated experience than using a web-browser.

These initiatives illustrate how social media platforms can provide an opportunity to create monetary value out of your customer connections. They also show how effective engagement with customers via social media can translate into customers recommending your offers and services across their social networks. And by allowing customers to ask questions and find answers within an online community, a company can make them feel valued without adding a single call or email to a call center's workload. Facebook is just one example. Twitter, Google, Groupon and Yelp are also talking about creating convergence platforms. Yet, as attractive as these consumer-value propositions may be, they raise many concerns for enterprises that wish to benefit from them.

Putting the Pieces Together

None of the major Internet players detail how they integrate with key IT and IP wireless systems such as IMS (IP Multimedia Subsystem) supporting LTE (Long Term Evolution). And social networking does not address the question of how to integrate its new enterprise location services with key enterprise differentiators, such as business analytics or crucial structured data. In addition, social media companies continue to struggle with, privacy, security and scaling infrastructure. Meanwhile, customer privacy continues to become a major concern, fueled last spring by press revelations of Google's WiFi customer collection practices.

Effective identity, access and management are critical to the success of social media and especially for telecommunications. Capgemini leverages OAuth, SAML and OpenID to support the privacy rights of followers, leveraging the current privacy settings on Twitter and Facebook while adding levels of privacy and security. This leaves companies to overcome the disconnect between what they want to do and what their legacy IT systems can deliver. The temptation can be to give up or cobble together a makeshift solution. Instead they should be looking for a model that helps them overcome the obstacles of legacy IT infrastructures and entrenched business processes without making huge financial investments. Capgemini's pre-integrated social media platform fits the bill. (see No. 4 in this four-part series, "Making the Business Case").

Capgemini has invested significant capital into developing a strategy that enables telecommunication companies to deploy social media to their strategic advantage without substantial cost or risk. We have created a pay-as-you-go model that combines the strengths of leading software packages and new and emerging technologies, such as cloud-based Identity and Access Management (IDAM), social persona, and semantic wrappers.



²<http://blog.facebook.com/blog.php?post=463829602130>

Important Benefits of a Cloud-Based Platform

Capgemini's cloud-based social media platform is designed to deliver four significant advantages:

1. Simplified Service Activation: It allows your customer to buy a device, connect to a portal, and fully self-activate all associated services. Our packaged technology provides Master Data Management and provisioning capabilities, which confirm the consumer's credentials, define the characteristics of the offering, and activate the device's features for each authorized customer. Additional benefits may include:

- Reduced dependence on system integrators and specialists for implementation and easy integration with third-party products.
- The option of using cloud computing as a pre-built migration platform.
- Process automation which reduces operating and labor cost.

2. Post-Sales Support: The packaged strategy guides customers seeking assistance to an appropriate support resource, regardless of the channel. The process is automatic and is based on the information that customers provide. The process ends only when the customer's problem has been solved and gives them an easily invoked option to talk to an agent. The technology also includes a behavioral analysis tool that tracks the customer's use of their device, as well as any channels he or she has connected to; a customer support tool that provides access to device-specific support services; and an offering tool that provides the provisioning functionality to address issues with the customer's configuration. Additional benefits may include:

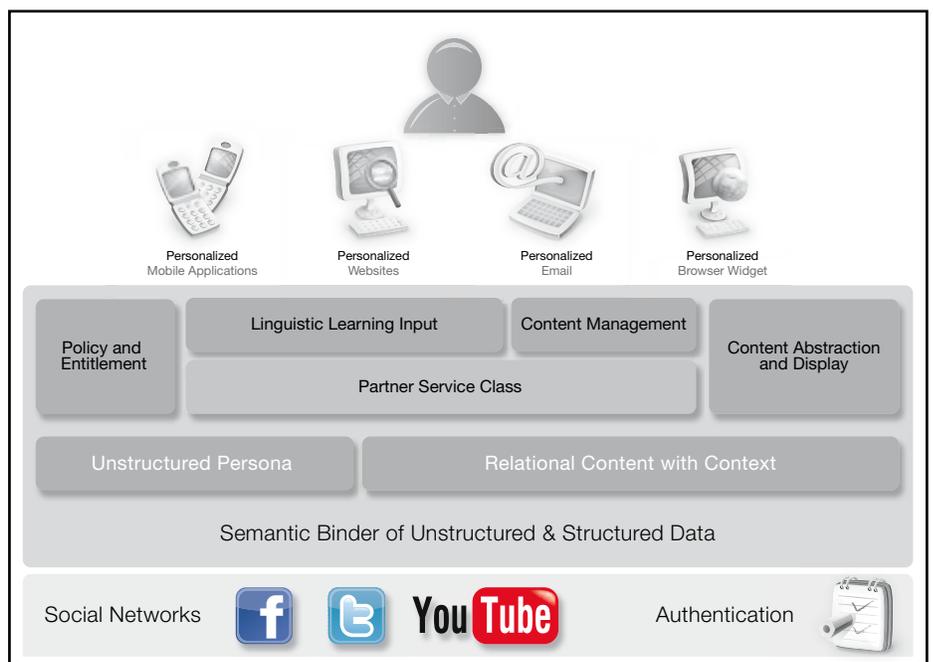
- The rapid implementation of rich functionality on an infrastructure that is economic because its cost can be shared by multiple companies
- The value that comes from a scaled infrastructure.

Awesome! Looks like the Cloud is going to be a real rainmaker for the telco business!



Business likes this comment

Figure 2: Capgemini Architectural Approach to Monetizing Social Media for the Telecommunications Industry



3. Branding: The packaged technology can monitor the web and various social media channels to detect customer sentiment through the use of a listening post or an unstructured data analysis tool. In addition, the tool can trigger actionable events and make support and PR staff aware of disgruntled customers. A brand management tool both helps reduce the risk of losing the customer and serves in managing brand campaigns. It can even engage customers in product design. Finally, the power to securely process large amounts of structured and unstructured data relating to customers' behavior, product choices, customer presence, customer context, and other information provides significant benefit.

4. Third-Party Integration: This functionality is important since third parties are typically involved in how devices are configured, supported, and sold. Consequently, a connection tool organizes the integration of third parties into these three fundamental processes. Additional benefits include:

- The freedom to experiment and innovate, since cloud computing allows users to test new applications and ideas quickly and easily without incurring extra hardware costs
- A better, faster product development lifecycle.

Capgemini provides an offering that can reduce the cost and complexity of using social media. Cloud computing infrastructure makes it possible.

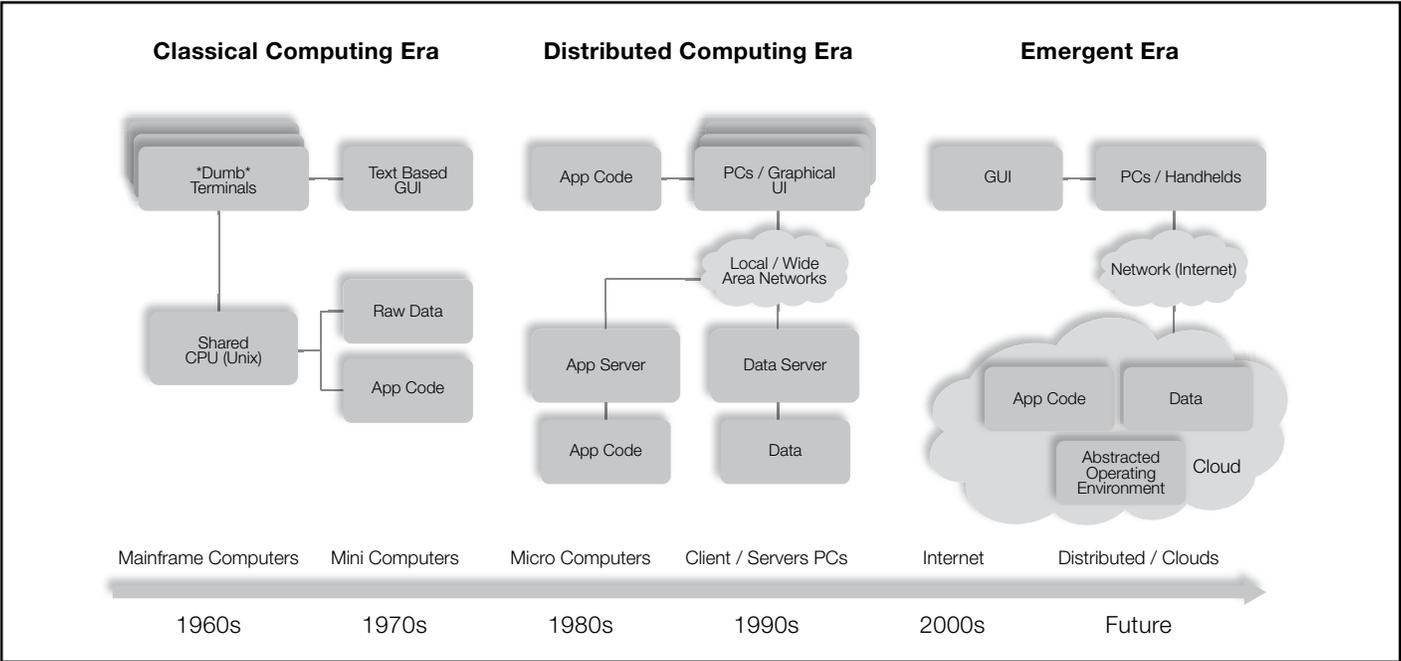
The Detailed Evolution of Computing Technology

- Classical Computing Era**
- Resources are shared
 - Code is stored on a single server
 - Data is processed on a single server
 - Security is strong (thru Unix ids)
 - Third party integration is non-existent
 - Proprietary hardware, software, OS
 - Capital intensive

- Distributed Computing Era**
- Code is split between PC and app server
 - Data is stored on a separate server
 - Processing is distributed
 - Increasing use of standards and commoditized hardware
 - Increased configuration complexity
 - Increased integration to third parties
 - Increased security risk and complexity
 - Capital intensive
 - Prone to silos and data fragmentation

- Emergent Era**
- Resources are shared
 - Hardware and operating environments are commoditized; pay-as-you-go
 - Code is stored centrally – SOA oriented
 - Data is stored centrally – MDM oriented
 - Processing is done centrally
 - GUI is served to PCs and handhelds from the cloud

Figure 3: The Evolution of Computing Technology



Simply Effective Cloud Computing

The problem with building one's own infrastructure is that it takes a lot of expertise, money and discipline to create a return on investment. In addition, the risk tends to be loaded into the early stages of the investment period with the return coming only after implementation. Meanwhile, the rapid pace of technological change means infrastructure is soon out of date.

Using cloud computing to support social media initiatives allows enterprises to buy software on demand as and when they need it. Instead of buying and integrating a large software application, operators can use virtual applications in the cloud and draw on data and functions across multiple channels and databases. This does away with the need for tightly integrated applications built into massive, inflexible, and duplicated infrastructures. It also enables operators to quickly and cost-effectively scale their usage of software services in line with customer demand.

Cloud computing allows for horizontal integration across channels, making it particularly well-adapted to supporting social media. It also benefits from large economies of scale that result in real cost benefits, since resources are shared securely between multiple tenants, who pay for what they use. In addition, cloud computing cuts the complexity associated with legacy systems, thereby further lowering costs.

So I can basically be running almost immediately and "renting" these new technologies on an as-needed basis?



Competition dislikes this comment

There are other advantages. Operators can call on cloud resources to make sense of massive amounts of structured and unstructured data. For example, operators can use the cloud to simultaneously analyze several items of rich content such as a customer's service and application preferences, as well as device and bandwidth usage. Cloud computing also facilitates service automation, thereby reducing operating and labor costs. Finally, companies can use cloud computing to develop and implement new applications.

Semantic Technology and the Anatomy of the Cloud

The cloud usually consists of three layers: the application layer or software as a service (SaaS), platform as a service (PaaS), and infrastructure as a service (IaaS). Large telecommunication companies are beginning to adopt and even resell cloud services, usually at the infrastructure layer since this is the layer for which open standards have been most extensively developed.

The significance of semantic technology is that it turns traditional thinking about data on its head. A data model is a description of the data attributes of an object such as a "product" or "customer." For example, a "product" could have a list of features, such as a quantity, qualification criteria, availability criteria, and a price. In traditional systems, this "product" data is atomized and stored in multiple applications. This means that when a user wants to adjust the data model, they have to make manual changes to all applications. Often the data model reflects where data resides in the system, which can be at odds with how business customers think data should be collected.

In contrast, semantic technology ignores the physical location of a piece of data and relies on a user to define a tag, for example “product.” Semantic technology uses the tag to identify where and how applications should store the data in question, as well as how the newly entered data relates to information stored elsewhere. As a result, a system user can easily call up a real-time unified report of all information relating to a given product.

Semantic technology means telecommunications companies can unify their views of the customer and make it readily available to all channels of customer contact. Operators can also unify the definition of various pieces of master data so that all such definitions reside in a single “virtual” instance. That means they can quickly implement a form of MDM without any need for integration work.

Capgemini’s Social Media Solution Portfolio

In designing our approach, Capgemini targeted four high-value business scenarios:

- Customer Complaint and Support Management
- Brand Management
- Rebate, Voucher, and Point Administration
- Sales, Upgrades, and Offers Automation.

We then chose the four software packages that help telecommunication companies realize the benefits of social media without the pain, cost, and stress of building a new IT infrastructure. Our approach is based on a deep understanding of social media and multi-channel customer management, as well as the latest and still-evolving technologies, including cloud computing and semantic tagging. Finally, we draw on our profound knowledge of the strategic and operational challenges faced by telecos working in a fiercely competitive industry. Capgemini’s approach to social media solution includes four software packages.

1. Customer Complaint and Support

Management: With this solution telecos can use social media to provide the outstanding service levels and immediate, personal response that consumers increasingly expect. This packaged software lets a company capture comments from customers, no matter what the source, including Facebook or Twitter. The system identifies the customer and the nature of the complaint or request using semantic technology. The comment’s content is evaluated and sent to an appropriate service or technical representative, who responds to the customer via the same media. Once the problem is resolved, the customer’s record is automatically updated.

2. Brand Management: This package helps telcos listen to the voice of the customer. The system searches social media for comments, analyzes unstructured data, and reports on its discoveries concerning customer sentiments, issues, and trends. Of primary importance is a mechanism for identifying instances that could damage the brand. Conversations are categorized by type, key influences, and key sites. In response, the company can respond and actively engage consumers in a dialogue about its products and services. Issues are resolved, myths are debunked, and relevant information is shared. This intimate response encourages customer satisfaction and loyalty.

3. Rebate, Voucher, and Point Administration: With this package, companies can use social media for marketing campaigns and promotions, and then confirm their ability to address customer's expectations. Personalization and knowledge of location allow for a delivery of services that more closely matches the customer's interests. For example, communications can be initiated over the customer's preferred channel. Cross-selling and up-selling recommendations can be based on a customer's interests. And information gathered can help application developers or the operator to build more intimate relationships with the customer.

4. Sales, Upgrades, and Offers Automation: This package helps organizations reduce costs and increase revenue by enabling the automation of business processes, flow, and the implementation of sales force automation. The strategy allows the marketing organization to manage, automate, and optimize campaigns across customer segments, types of campaigns, and marketing touch points. Store operations can improve the in-store experience based on what consumers are saying about the shopping experience, employees, return policy, store layout, and more. CXOs can learn how shoppers feel about products, pricing, and quality, while promoting brand health and community relations. In the process, customers become loyal product "experts" and generate reusable content for marketing purposes.

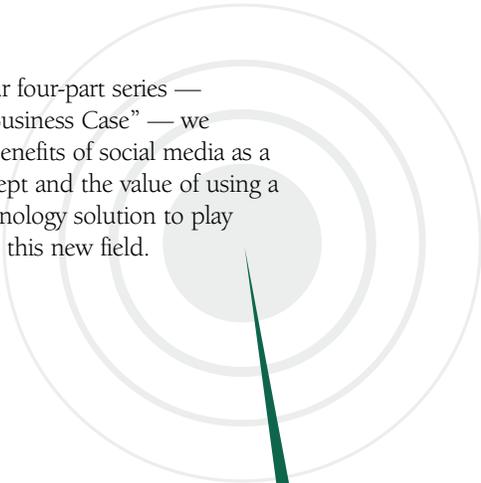
Lastly, Capgemini leverages OAuth, SAML and OpenID to support the privacy rights of followers and the current privacy settings on Twitter and Facebook, while adding additional levels of privacy and security.



In Summary

Operators cannot afford to delay putting in place a cloud-based social media solution. Customers already demand fast, personal, consistent service across multiple channels. Social media means their complaints can reach thousands of people in minutes. This makes it essential to track social media channels and deploy them as a means to resolve customer grievances and mitigate brand damage. Capgemini’s packaged technologies can enable a telecommunication company to take full advantage of social media. They create intimacy with the customer, while automating transactions and interactions, thereby hitting that sweet spot of delivering better service at lower cost. The rich and timely connections made possible by social media can increase brand awareness, create a buzz around new products and services, improve customer satisfaction, and build customer loyalty.

In No. 4 of our four-part series — “Making the Business Case” — we illustrate the benefits of social media as a business concept and the value of using a packaged technology solution to play successfully in this new field.



Okay, we’ll see if business will really adopt this technology that made our kids “thumb typist.”



Business likes this comment



About Capgemini

Capgemini, one of the world's foremost providers of consulting, technology and outsourcing services, enables its clients to transform and perform through technologies. Capgemini provides its clients with insights and capabilities that boost their freedom to achieve superior results through a unique way of working, the Collaborative Business Experience™. The Group relies on its global delivery model called Rightshore®, which

aims to get the right balance of the best talent from multiple locations, working as one team to create and deliver the optimum solution for clients. Present in more than 35 countries, Capgemini reported 2009 global revenues of EUR 8.4 billion (approximately USD \$11.6 billion) and employs 100,000 people worldwide. More information is available at

www.us.capgemini.com

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