

Seniors, Mobile Communication, and Healthcare



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Overview

In January, 3Cinteractive joined President Donna Shalala and her team at the University of Miami for the Global Business Forum. The 2011 Global Business Forum focused on the business of health care and served as a call to action for thought leaders and change agents from public and private sectors of healthcare. The following is a review of 3Ci's presentation at the Global Business Forum. The presentation was developed and delivered by Barry Hix, 3Ci's General Manager of Healthcare Solutions, who served as a speaker at the forum's panel session on "Elderly Adopters: Older Adults and the Promise of Health Care Technologies".

Seniors, Mobile Technology, and HealthCare:

Is Grandma "hip" yet?

Given the subtitle, you may ask, how does grandma's current or projected status as "hip" relate to the structural and behavior challenges facing healthcare markets? It is a fair question. However, before addressing grandma's status as socially progressive in the age of the iPhone, iPad, and "I've had enough", we will first examine the priority of arresting disease progression in seniors and the challenge of intervening in disease progression. Our review of seniors, mobile technology, and health care will conclude with a look at the current utilization of mobile technology across seniors and the forces that can be expected to drive senior adoption of mobile technology in the months ahead.

The Priority of Arresting Disease Progression in the Senior Population

Nothing will impact health care more than the dramatic shift of the age demographic of the U.S. population. Consider, according to the Centers for Disease Control and Prevention (CDC),

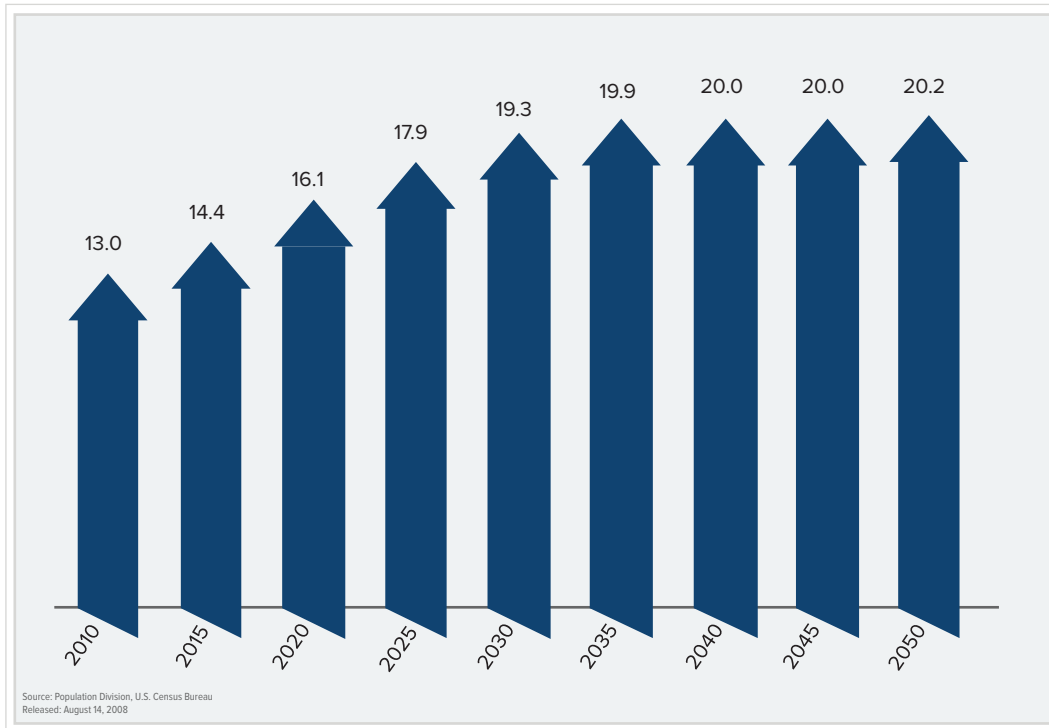
1. Beginning on January 1, 2011 and continuing for 20 years, 10,000 people will turn 65 every day.
2. By 2030, the 65 and older population is projected to be over 71 million. The 75 and older population is projected to be over 33 million.
3. By 2045, the number of centenarians in the U.S. is projected to reach 757,000.

And, as you can see in the following graphs from the U.S.

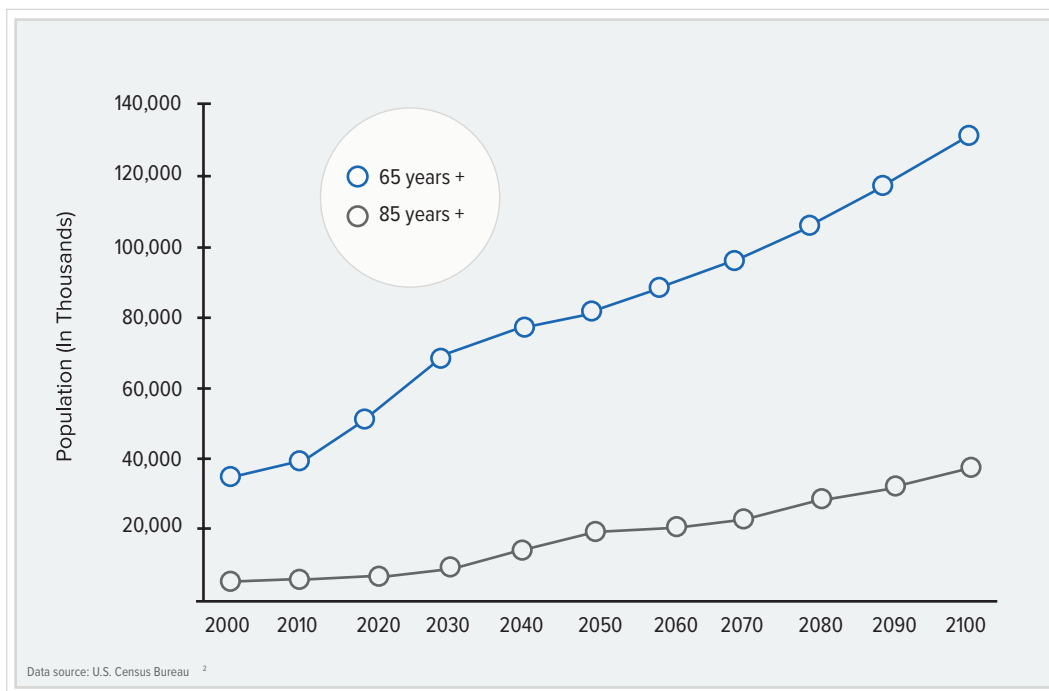
Census Bureau, by the year 2020, 16.1%

(almost 1 out of 6 Americans) will be over the age of 65. In addition, the trajectory of the rise in the over 85 population nearly parallels the rise in the over 65 population. The expected increase in the senior population does not consider the potential impact on longevity resulting from advances in genetic testing, vaccines, and personalized interventions for chronic disease.

Projected Percent of the U.S. population Aged 65 and Older: 2010 to 2050



Changing Demographics of the U.S. Population, 2000-2100



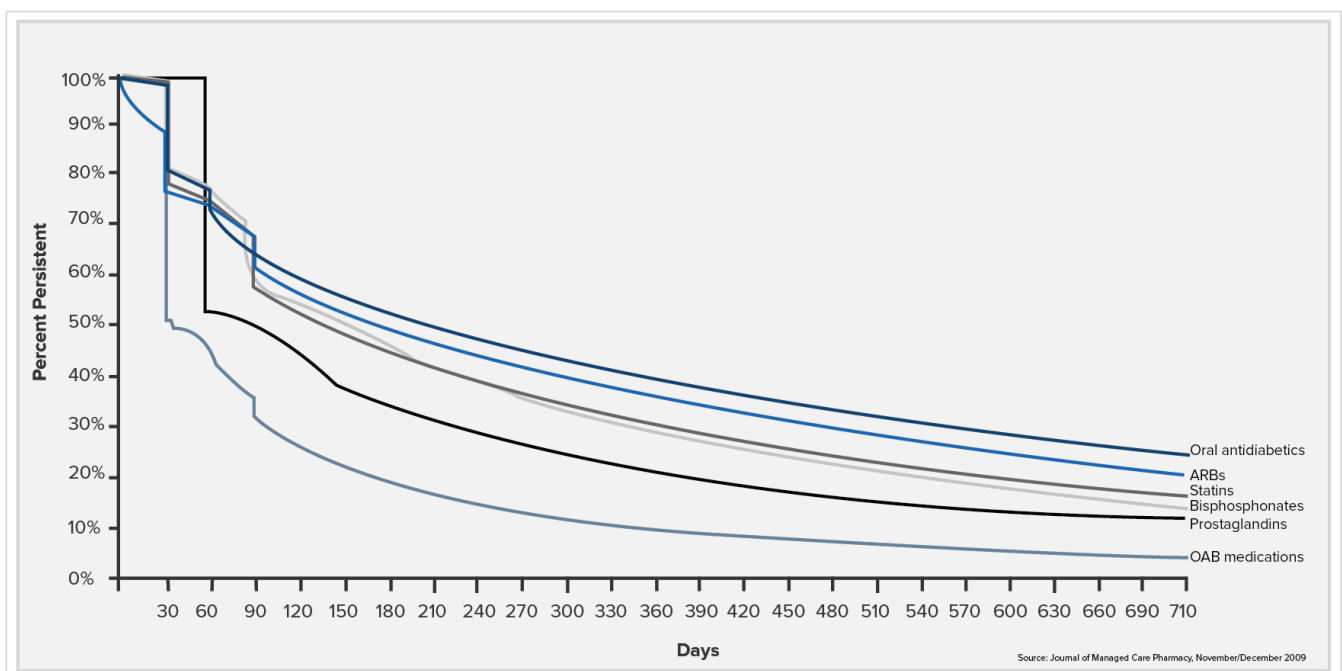
For the 10,000 seniors who turn 65 everyday, the probability that the “new senior” will purchase healthcare services increases by a multiple of 3. We can refer to this phenomenon as “Senior Math”. And, as a result of “senior math”, the healthcare outlay for seniors represents 60% of the total healthcare spend (currently \$2.5 Trillion and projected to \$4.3 Trillion by 2016 or 20% of the GDP).

The Challenge of Successfully Intervening in Disease Progression

Given the progression of technology in healthcare, healthcare professionals are better equipped today to diagnose and intervene in disease progression. Significant advancements in interventions over the past 25 years span the pharmaceutical, medical device, surgical, and ancillary services landscape. We are diagnosing disease and intervening in disease with greater precision than at any point in the history of medicine.

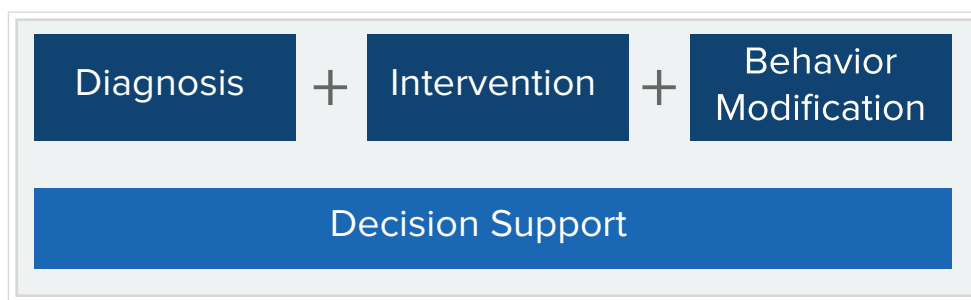
Unfortunately, health care does not end with diagnosis and intervention. In fact, over the past twenty years, medical professionals have closely examined the compliance and adherence patterns for pharmaceutical interventions prescribed for chronic disease. And, as you can see in the graph below (C. McHorney, JMCP, Nov/Dec 2009), patients routinely fall off therapy shortly after receiving a prescription from their doctor, with 50% of patients non-persistent at month six and 80% non-persistent at month 12. Sure, there are a number of factors that contribute to non-compliance and non-persistence. Still, our efforts to positively impact persistency behavior have not improved over the past 20+ years despite our improved understanding of the challenge. And, unfortunately, patient adherence to other healthcare services such as medical device intervention or physical therapy regimens displays a similar decline in compliance and adherence relative to time or prescribed visits.

Time to Discontinuation of Six Chronic Therapy Classes



Have we considered the total cost of non-persistency? There is the obvious direct and indirect cost attributed to disease progression. Where is the hidden cost? I think it is fair to say that a significant portion of the hidden cost is buried in spends allocated for treatment of chronic disease where the treatment regimen is suboptimal due to non-compliance and non-persistency. In these instances, individuals and public and private payers of healthcare are paying for intervention but are not getting the desired result – a patient that crosses the targeted therapeutic threshold for the intervention (i.e. the patient who reaches goal cholesterol). As a result, the efficacy and outcomes achieved in a controlled clinical environment are not realized in the practice of “real” medicine. This represents tremendous waste! In the pharmaceutical industry, this waste could be as high as 50% of the total spend for pharmaceuticals targeting chronic disease.

So, where do we go from here? We must change behavior. We must change behavior so that we can realize the promise of improved diagnostics and interventions. We must add consistent and persistent behavior modification to the outcomes equation.

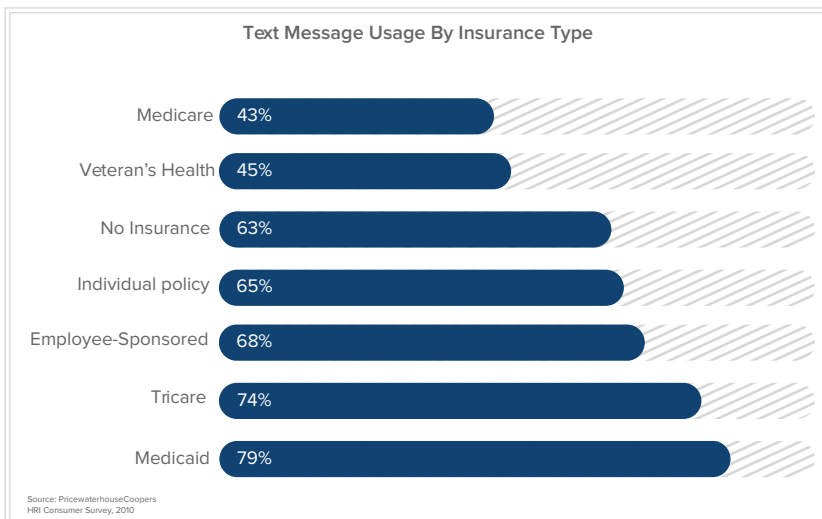


But, how do we motivate positive behavior change? Well, the answer is multi-faceted and specific to the individual. Yet, I think we can all agree that we must leverage the power of technology and certainly the technology which is very personal to most Americans regardless of race or social standing – the personal mobile device. Mobile communication technology in the most fundamental form, SMS text, has been shown to improve compliance and persistency by 12% (The HAART Cell phone Adherence Trial: WelTel Kenya¹). Adding the power of mobile monitoring, mobile web for disease and lifestyle education, and mobile connectivity to case managers can play a critical role in driving compliance and persistency well north of the results seen from simple text reminder messaging. But, can it work in seniors? Will seniors, who are the greatest consumers of health care, utilize mobile communication? Can we really expect grandma to become “hip”?

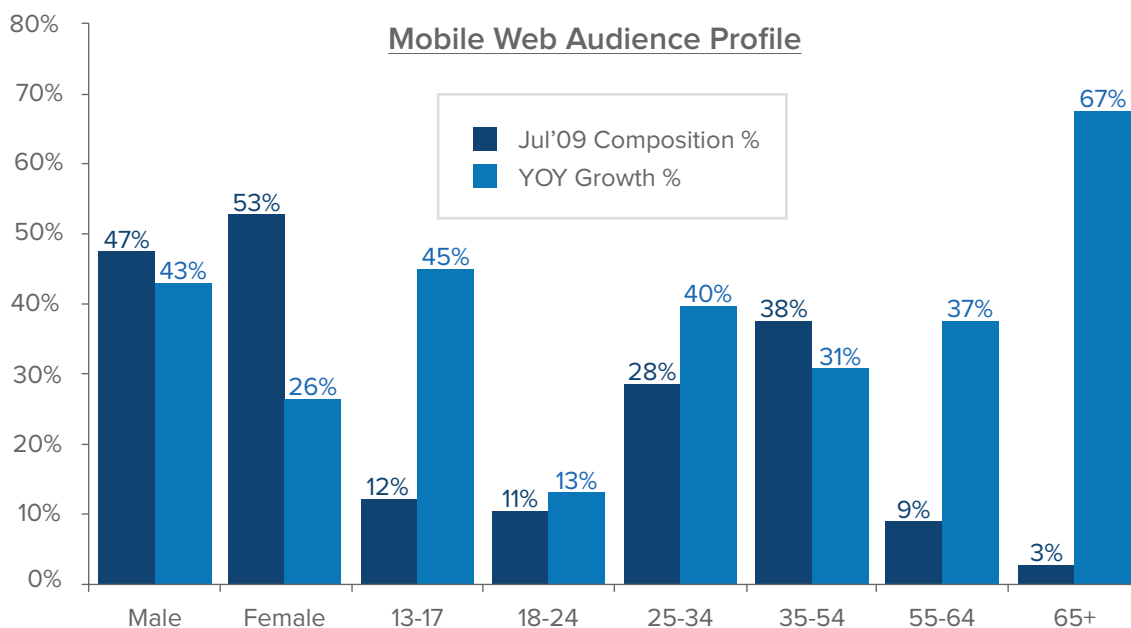
Mobile Utilization and the Senior: Is Grandma Going Mobile?

Well, the answer is most likely sooner than you think. In fact, Evercare recently conducted a study of 100 centenarians and found that 8 had sent a text message (vs. 1 the prior year). Yet, as you can see in the graph below, the Medicare population is not engaging in mobile communication at levels similar to the younger demographics. In particular, mobile text messaging is utilized at significantly lower levels than the younger cohorts with employer-sponsored health insurance.

But, will seniors remain “mobile indifferent”? The graph below depicts seniors as the fastest growing segment with respect to mobile web utilization (though the growth is from a small base). The senior cohort can be expected to lead YOY growth of mobile web utilization as more baby boomers enter the senior cohort and as growth in female utilization continues to outpace males.



Per GreatCall, by 2012, 80% of seniors are expected to communicate using text messaging. In fact, seniors rank text messaging as their second most desired feature (behind voice). In addition, seniors utilize text messaging as a non-voice application second only to taking pictures. Seniors are making the transition to mobile.



Source: The Nielsen Company

The Forces Driving Increased Adoption of Mobile Technology Across the Senior Population

Commercial, social, and scientific forces will fuel the emergence of the senior as a relevant participant in mobile communication. Of course, we would say that commercial and social forces play a critical role in driving adoption of technology across all demographics. In seniors, these forces are similarly powerful, but perhaps for different reasons.

Commercial Driver

Perhaps Adam Smith said it best, “It is not from the benevolence of the butcher, the brewer, or the baker that we expect our dinner, but from their regard for their own interest”.

In the mobile communications landscape, Smith’s view applies to the senior market. Mobile device manufacturers are examining the very same data that I shared earlier with respect to seniors and mobile utilization. Future growth, with respect to vocal and non-vocal communication, must come from the senior market as market saturation continues to take place in younger demographics.

As a result, carriers can be expected to deploy product development and marketing campaigns with the “mobile senior” in mind. As an example, carriers can be expected to develop device platforms that are “senior friendly” which recognize the physical (often arthritis) challenges prevalent in the senior population. In the elderly, device technology must also recognize the cognitive factors. The elderly have the same capacity for learning but the learning rate can be slower than younger demographics. Both the technology and the training to support

Social Driver

Social factors will play a leading role in pulling seniors into the mobile market. As we age, our social network constricts. As the number of relationships constrict, seniors desire a deeper relationship with their limited network, a network that is typically limited to dearest friends and closest family members. For the senior, this limited circle of influence often includes a child or grandchild. The desire to communicate routinely with loved ones will be a primary social driver to mobile expansion in seniors. We saw this phenomenon with respect to the Internet and “wired” grandma, we will see a similar effect transform mobile communication in seniors. Junior’s Junior and Katherine’s Katie have gone mobile. Grandma and Grandpa will follow at an increasingly greater rate in the months ahead.

Science Driver

Science, and particularly the increased specificity of disease intervention, will also be a primary driver of adoption across seniors. Personalized medicine, fueled by increased specificity of diagnostics and prescribed interventions, will require direct, personal communication. For example, the pharmaceutical industry has been forced to migrate from developing and marketing blockbuster molecules targeting the masses with chronic disease to molecules targeting subsets of populations of the same chronic disease.

For the manufacturer, the migration to increased molecule specificity will translate to reduced effectiveness for traditional mass marketing approaches. As a result, marketing budget allocations will transition to targeting smaller population subsets. The marketing budget can be expected to shift increasingly from spends directed to patient acquisition to spends focused on patient retention. The smaller candidate pool for highly specific interventions will require greater emphasis on sustaining a meaningful dialogue with the patient. Declining persistency will not be offset by new patient acquisitions. The populations for molecules targeting specific population subsets will be too small. As a result, marketers will turn to personal communication both for patient acquisition and patient retention. Mobile communication is waiting to serve as the bridge for healthcare organizations, pharmaceutical manufacturers, retail and specialty pharmacies, and insurers (via their case managers) to reach, educate, and motivate defined patient populations.



Summary

So, we return to our original question, is grandma “hip” yet? Well, I think we can say that grandma is no longer mobile naïve given the adoption of mobile text in the Medicare population. And, if not “hip”, grandma is certainly progressing towards relevant connectivity via a mobile device. She wants to communicate. She desires connectivity with her social circle, a social circle that can and should include the healthcare professionals she trust to manage her health.

Mobile communication can serve as a relevant and powerful bridge to connectivity, to education, and ultimately behavioral change. Behavior change that includes improving compliance and adherence to prescribed interventions. With radical improvement in compliance and adherence to dietary, lifestyle, and prescribed interventions, we can expect to see patients across all demographic profiles optimizing their health status across their lifespan. And, given the current and future power of genetic testing, we can envision scenarios where future disease will be arrested at the earliest possible stage. Yes, we should expect to see grandma and grandpa enjoying yoga at sunrise, tennis after breakfast, and golf in the afternoon and choir practice after dinner. Rather “hip”!

So, what does this mean for marketers of healthcare services to seniors? Is it important for marketers of services to seniors to begin thinking about their mobile strategy? It seems the way we communicate has changed on the hour across the younger demographic. In seniors, it will soon feel like communication patterns are changing at a slightly lesser pace, perhaps weekly. Yet, when we compare the change in communication patterns across seniors to the previous decade, we realize the new “slow” in communication is actually quite fast and can be said to be racing towards a new connectivity paradigm for seniors. As an example, consider the 43% adoption of text in the Medicare population reported by Price Waterhouse for 2010 compares to 30% adoption reported by Nielsen for the first half of 2010.

The movement to mobile communication is underway. As a result, the time to begin launching and maturing a mobile communication strategy to seniors is now. Starting now will enable the marketer of healthcare services and interventions to seniors to have a mature mobile platform by 2012. I suspect that by the year 2012 marketers and healthcare professionals will no longer be yelling, “The Seniors are coming”! Instead, we will say, “The Seniors are here”! “And, by the way, grandma and grandpa look rather hip”.



Author Bio

Barry Hix, General Manager, Healthcare Solutions

Barry Hix is a healthcare executive with over 20 years experience serving public and private companies in the pharmaceutical, healthcare delivery, and medical device industries. Hix's experience includes leadership positions in general management, commercial strategy, reimbursement, and policy. Today, Hix serves as the General Manager of Healthcare Solutions for 3Cinteractive, helping 3Ci's healthcare clients to deploy mobile communication technology into healthcare markets to support clinical, operational, and marketing priorities. Hix holds a B.S. in Industrial Management from the Georgia Institute of Technology, a MBA in Marketing from Georgia State University, and a Masters in Public Health from Emory University.

Company Overview

3Cinteractive® provides integrated mobile software and services that help businesses communicate with consumers on their mobile device. Our mobile business solutions improve efficiencies by extending operational and CRM processes to the mobile channel.

3Ci's cloud-based mobile platform – Switchblade® – allows businesses to deliver a rich consumer experience on any mobile device or carrier, using integrated mobile technologies such as messaging, voice, mWeb and smartphone apps. And our XaaS services suite makes it easy for businesses to deploy and maintain effective mobile business solutions.

3Cinteractive processes billions of mobile transactions per year – supporting mission critical business processes for clients across industries.

Company History

For more than two decades, the founders of 3Ci have been designing and deploying technology solutions in telecommunications, e-commerce and data networking for businesses throughout the world. This experience has enable us to amass a unique set of technology assets and expertise that make enterprise-class technology solutions part of our DNA.

With 3Cinteractive, we have narrowed our focus into building a best-in-class mobile software platform and services that help businesses communicate with consumers on their mobile devices. The culmination is our flagship product, Switchblade, a cloud-based mobile platform. Switchblade is flexible, stable, extensible and scalable. It standardizes individual carrier requirements and dissimilar handset technology so mobile initiatives can be deployed in many parts of the world, in many languages and in any industry.

The market for our services is experiencing tremendous growth in the United States and around the world. The age of the Digital Lifestyle are upon us, and next generation platforms in social networking and mobile are driving unprecedented changes in communication and commerce. Most importantly, ground zero for this revolution is not the PC, but the mobile device. Notably, the adoption of these changes into our daily lives is happening much more quickly than the adoption of the desktop Internet that occurred in the late '90s, and it is happening independent of economic conditions. At 3Ci, we are helping drive this growth—in America and around the world—with our platform and solutions.





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