CHAPTER 1

INTRODUCTION TO MOBILE

The mobile phone is our lifeline. It is our gateway to the world. It is our digital DNA.

YOUR DIGITAL DNA

In the 21st century, a phenomenon occurred in the United States and the world. A mobile phone began appearing in nearly every pocket and every purse of every person old enough to own one. Never before in the history of technology had one device become the centerpiece of our lives.

The cell phone you own today is your digital DNA. If you grew up in Denver, but have since moved to Austin, you have probably continued to maintain that 303 area code number, despite the fact that you live in the 512 area code now. As long as you pay your bills, you will likely die with the same mobile phone number that you have today, regardless of where you move or how many different devices you own.

Mobile phones are so very personal that even spouses do not share them. Most people would consider it an invasion of privacy if their spouse looked at their text messages without asking first. When your phone rings, it plays your favorite ringtone that you selected. Only you control what apps you put on your phone. Only you know the passwords to open them. Your mobile phone is YOU! Nothing you own is more personal.

In 1975, advertising legend David Ogilvy coined the phrase “Don’t Leave Home Without It” for American Express. This was long before the mobile phone was popular, but Ogilvy’s phrase probably typifies the mobile phone better than it ever did the credit card. Leave your mobile at home and you will likely be looking for the next place you can safely do a U-turn to go back to pick it up. If you forget your wallet, that just means you’ll be eating at Panera for lunch and using Apple Pay. The wallet can wait; the mobile can’t. Your phone is your lifeline. It is your gateway to the world.

YOUR MESSAGE ON THE MOVE

In 2007, an advertising agency came up with a catchy slogan for our business to describe its mobile marketing services: *Your Message on the Move*.

At the time, that slogan did a great job of portraying the potential that mobile marketing brought to the advertiser. A brand did not have to just reach consumers on their landline at home when they were watching television, reading the newspaper (remember them?), or on their desktop computer in the office. Now, it could reach consumers when they were out and about…and near the store. It could reach consumers on their terms and it could reach them 24/7.

But something changed along the way. Now, mobile no longer just characterizes reaching people that are on the move, because mobile has become the ordinary, not the extraordinary. Today, mobile is consumed everywhere, even on the couch at home—something that was not commonplace in 2007.

2010—THE YEAR OF MOBILE

During the early 2000s, there was a lot of discussion of the "year of mobile." Article after article touted the upcoming year would be that coveted year when mobile marketing became a "can't live without" promotional strategy. And, at the completion of the year, authors seemed convinced that the next year would definitely bring the elusive year of mobile.

Of course, the premise that one particular year could be the turning point for an industry that evolves incredibly quickly is ludicrous in the first place, but let's take a shot at this one anyway. And, to discuss mobile, it makes sense to discuss the two most influential companies in the business—Apple and Google.

In 2007, Apple developed the first iPhone. It was a game changer. Mobile was no longer just about making a cellular phone call.

Apple's new creation changed the way we thought of mobile, and the mobile phone evolved into what it is today—a multidimensional communications tool. But of course, smartphone penetration took awhile to really catch on and have enough mass appeal to be a significant factor for a marketing strategy.

In 2010, Eric Schmidt, executive chairman of Google (now called Alphabet Inc.), announced at the Mobile World Congress that his company would develop for mobile devices first, and everything else, including the then-ubiquitous desktop computer, would be secondary. This was the start of the buzzword "mobile-first" as a philosophy for doing business. Today, mobile is the single most important medium of communication in the world. Mobile has gone from a nice thing to have to a must-have for forward-thinking businesses.

So when was the "year of mobile"? In my mind, it was 2010, because that was the introduction of the moniker "mobile-first." Today, sagacious businesses know that a mobile-first strategy is the single best way to succeed long term.

CUTTING THE LANDLINE CORD

Men over 35: remember as a young teenager when you wanted to call a girl? It was one of the most stressful things you could do! Not because you had to talk to the girl, but because her dad might just pick up the landline phone and you'd have to talk to him! Things are sure a lot easier for boys today, now that mobile allows them to have one-to-one communication with the girl and no fear that her dad might pick up the phone. It is just one of the many unsung bonuses that we now take for granted with mobile.

The rise of mobile has been inversely linked to the demise of the once-dominant landline phone in the home. Consumers are continuing to abandon their landlines in rapid response to the dominance of the mobile phone. There was a time, however, when you couldn't fathom living without a landline in your home. In fact,

landlines peaked in the developed world in 2001, when 57 of every 100 inhabitants had a landline. Among the entire world, landline penetration peaked in 2005, when there were 20 landlines for every 100 people in the world.[5]

There were numerous reasons why people began cutting their landline phones in favor of going exclusively mobile. The recession of the 2000s certainly did not help the landline industry, as consumers began looking for places that they could save a buck. The landline was redundant technology and many were cut, helping households save about $600 per year for a device that was becoming increasingly less relevant in the modern world.

The wireless carriers had something to do with it, too. With stiff competition in the mobile industry, carriers began offering unlimited plans in an attempt to attract new customers. No mobile calling minute limits struck another blow to the landline providers.

Then, there were VoIP (voice over Internet protocol) services. VoIP allowed for free phone calls to be made on the Internet. New Jersey–based Vonage debuted in 2001, with a significant television-advertising budget to grow its users. Consumers couldn't seem to avoid Vonage's advertising on the Internet, as digital advertising at the time was incredibly cheap. Skype was another VoIP protocol service that consumers latched onto. Founded by entrepreneurs in Denmark, Sweden, and Estonia in 2003, it was originally named "Sky Peer-to-Peer" and leveraged the same peer-to-peer networking idea that Kazaa had established a few years earlier. Skype had amassed 683 million users when it was sold to Microsoft in 2011 for $8.5 billion.

Improved cell service was another reason that the landline became increasingly obsolete. In areas where reception was inconsistent, the introduction of home microcell towers greatly improved mobile service. These cell phone enhancements plugged into high speed Internet service to give near-perfect reception, even in homes where the traditional mobile reception was poor.

Finally, one of the major reasons for keeping a landline, emergency services, seemed less important when mobile carriers began implementing 911 services as required by a Federal Communications Commission (FCC) mandate.

When AT&T petitioned the FCC to exit the TDM (time division multiplexing) business in 2012, it seemed as though the end had come to the once-mighty home landline. One could hardly imagine how AT&T would leave the home landline business that had once made it the largest company in the world, but AT&T had no more interest in commodity home landline sales and running calls via copper wires through a PBX (private branch exchange). It was dying technology that no longer produced much revenue. AT&T knew its future was in wireless, not wired landlines.

Landline use is clearly going away, but it hasn't gone the way of the dodo bird quite yet. According to a report from the National Center for Health Statistics[6], households headed by men are more likely than those headed by women to have cut the landline cord. Poorer households, and those living in poverty, are also more likely than high-income households to be cell phone–only households.

Some like the convenience of the landline. It's in the same place all the time, so you do not have to look for it; you'll always know where it is. Others like the tradition of having a landline in the house. And you cannot mistakenly put the landline on silent when you are expecting an important phone call.

Cell phone technology simply is not as perfect as landline technology. With landlines, you do not need to keep the phone charged; the fixed phone is self-charging. Therefore, it will work in a power outage. Voice quality is almost always perfect. International calls are cheaper, and you do not need to buy a special international plan. Perhaps the best reason of all to continue to keep your landline service is that it really is not costing you anything anymore. Many service providers, such as Comcast, offer bundled services that

provide households with cable TV, Internet, and landline service for a single package price. Bundled services are especially popular in the Northeast, where landline penetration is, not surprisingly, the highest in the United States.

If you are concerned about dropping your landline service because you do not want to miss an important phone call, there is a solution that you can consider. While you cannot port a landline number to Google Voice, you can port a landline number to a mobile carrier. Once you have done this, you can then port your number a second time from the mobile carrier to Google Voice. Then, if you get an occasional important phone call on your old landline number, you can receive it on your Google Voice account. This will eliminate any concerns of losing your long-time landline number.

HISTORY OF THE MOBILE PHONE

The first mobile call was placed in St. Louis on June 17, 1946, from a telephone installed in an automobile. That was the first car phone.

In 1947, AT&T introduced cell phone service between New York and Boston. The phones were known as push-to-talk telephones. The project was approved by the FCC, but it was a massive failure due to too much interference.

William Rae Young was a Bell Labs engineer who first suggested what ultimately became the concept behind the modern-day cellular mobile phone system. It was Young's idea to create the hexagonal cell concept through cities so that every mobile phone user would be able to communicate from at least one cell tower through the telephone system. The system did not receive widespread adoption due to its required size and exorbitant cost. Only a few of the mega-rich citizens (in addition to James Bond) actually used them. While Young had what was ultimately the best idea for mobile service, it was 1971 before AT&T formally proposed Young's hexagonal cells idea to the FCC.

In the early 1970s, Motorola and Bell Labs were in a race to produce the first handheld mobile phone. That race ended when Martin Cooper, general manager of Motorola's Communications Systems Division, made the first modern mobile phone call from handheld equipment on April 3, 1973. A patent for the technology was granted on October 17, 1973.

Cooper's fame has certainly increased in recent years. He has appeared in a series of Mazda commercials and has been interviewed by *60 Minutes*. Cooper's Mazda 3 commercial appeared in Super Bowl XLVIII when Seattle thrashed Denver 43–8. "When Martin Cooper invented the mobile phone in 1973, connectivity took a mighty leap forward," the ad states. No doubt. Cooper's initial phone call was the ultimate "in your face." He called the offices of Bell Labs and Dr. Joel Engel. In the commercial, the landline recipient of the phone call is in an office, and the actor playing Cooper says, "Guess what we just did?"

"People want to talk to other people - not a house, or an office, or a car," said Cooper. "Given a choice, people will demand the freedom to communicate wherever they are, unfettered by the infamous copper wire. It is that freedom we sought to vividly demonstrate in 1973."

"As I walked down the street while talking on the phone, sophisticated New Yorkers gaped at the sight of someone actually moving around while making a phone call," added Cooper. "Remember that in 1973, there weren't cordless telephones, let alone cellular phones. I made numerous calls, including one where I crossed the street while talking to a New York radio reporter - probably one of the more dangerous things I have ever done in my life."[7]

The first mobile phone that Cooper used was known as "the brick" and it weighed in at a hefty 30 ounces! Ten years later, in 1983, Motorola introduced a slimmed down, less wieldy version of the brick. The 16-ounce, 13-inch-tall DynaTAC 8000x phone took

10 hours to charge and, when fully powered, offered a mere 30 minutes of actual talk time. The DynaTAC cost $3,995. In the movie *Wall Street*, famed actor Michael Douglas uses a DynaTAC cell phone.

Motorola rolled out the MicroTAC flip phone in 1989. It was the first commercially available flip phone. To this day, the flip phone remains the best mobile phone for prevention of the infamous butt dial. For this reason, the flip phone continues to have loyal users still hanging on to their feature (non-smartphone) phone.

In 1990, mobile phones reached critical mass as subscribers topped one million for the first time ever in the United States, encouraging producers to create new, user-friendlier phone styles. The first truly pocket-sized flip phone appeared in 1996 when the Motorola StarTAC hit the market. The StarTAC was a clamshell-style phone that weighed just 3.1 ounces and was very futuristic for its time. In fact, it was allegedly inspired by the popular science fiction television show *Star Trek*.

The Nokia 9000 Communicator was a highly innovative release in 1997. It actually included a keyboard on the phone and could send and receive faxes. It had an LCD screen and could also render web graphics in monochrome. The monochrome screen eventually gave rise to the ability for customers to customize their screens with unique graphics such as the Playboy rabbit head—then the best-selling monochrome graphic. Nokia also brought us a new pastime in 1998—playing Snake on our mobile phone. Has there ever been a more basic, yet addictive, mobile phone game?

Cameras are a very important part of today's mobile technology. Have you ever noticed that nobody sees UFOs anymore, now that we have cameras with us all the time? Including a camera on a mobile phone became a reality in 2000 when the Sharp JSH04 was introduced in Japan. It was also the first phone to allow MMS (multimedia messaging service). MMS allowed users to take pictures and send them to friends—a common feature that we take

for granted today. The first USA phones with built-in cameras were the Nokia 7650 and the Sanyo SCP-5300, introduced in 2002. The Nokia model had a 176x208 pixel color display. Compare that to the iPhone 6, which has eight megapixels in its camera.

Canadian company Research in Motion also introduced a new phone in 2002. It was an innovator with the introduction of its BlackBerry 5810 model. This was the first mobile phone that integrated data devices. For the first time, consumers could now have their e-mail and personal digital calendar with them at all times. The Palm Treo 180 and Microsoft Pocket PC soon followed, going after the same market—the on-the-go businessperson. The BlackBerry was life-changing for business people, perhaps in a bad way, because they would never again be completely away from the office. It was the perfect business phone. The BlackBerry made people completely connected to the office—and to the boss—like never before.

With mobile technology, however, you are never the leader for very long unless you are constantly innovating and consistently creating a better product than the one you offered just a few months ago. As innovative as the BlackBerry was, there was something even bigger on the horizon. Motorola hit pay dirt in 2004 with the introduction of its slim RAZR phone. The RAZR was just 0.54 inches thin and appealed to the public's demand for smaller devices. Motorola sold over 130 million RAZR phones. It had a nice run, but was eventually replaced by touchscreen technology.

Prior to 2007, most people used feature phones that operated on the Symbian operating system. These phones allowed you to talk, text, and browse the web, but they did not allow for much customization. Consumers were reliant on the apps that came preloaded on the phones. There was a race in industries like the ringtone business to get "on the deck," which was completely controlled at the carrier's discretion. In 2007 Apple began marketing the iPhone, the biggest game changer of them all. The iPhone was the world's first touchscreen smartphone and was incredibly

easy to navigate for the non-technical user. Its screen resolution and touchscreen interface were showstoppers. The iPhone quickly showed just how clunky BlackBerry and other previous smartphones were. Moreover, the iPhone was revolutionary in the sense that the software could be opened to the development community to customize it with innovative apps. These apps could utilize the built-in functions of the phone, such as the camera or the GPS, to offer a smooth and streamlined user experience. Apple's iOS was the first operating system to offer downloadable apps.

Apple did not get everything right with its debut smartphone, however. For instance, it missed simple copy and paste technology on its introductory iPhone offering, but with hardware and software updates, it was able to fix and improve its product every year.

Initially, if you wanted an iPhone, you had to use Cingular (now AT&T Wireless) as your carrier. The iPhone enabled Cingular to close the gap on market leader Verizon and helped it earn hundreds of thousands of new subscribers, especially coveted upscale consumers who could afford the high price tag of iPhone. In addition to traditional phone service, Cingular was also able to sell large amounts of data plans to its new customers.

Google purchased Android in 2005; in November of 2007, it unveiled its Google Android operating system. Its HTC Dream phone was introduced in October of 2008. As opposed to iPhone, Android was released across many handset manufacturers and was not exclusive to any one carrier. Because of this, Android attracted consumers that wanted a smartphone but did not want to change providers. Android systems were also cheaper than iPhones, thus opening up the ability to own smartphones to a larger group of customers.

As smartphones gained market share, businesses began to take notice. Their business websites needed to be optimized for the smaller screen of the phone, since consumers were now accessing the Internet on mobile in large numbers. And with two major

competitors in the operating system market, publishers needed to develop apps for both the iTunes and Android marketplaces. They also needed to develop apps for BlackBerry, but most publishers soon dropped development when BlackBerry failed to innovate beyond its initial corporate mobile e-mail success and began losing subscribers.

The playing field leveled once again in 2011 with Verizon's announcement that it had finally reached an agreement with Apple to sell the iPhone. The move upended the balance of power in the industry and ended AT&T's exclusive hold on the incredibly popular device that had fueled much of the company's growth. Sprint also joined the iPhone party in 2011 and T-Mobile got on board in 2013.

Apple shook the mobile world yet again in 2010 when it introduced the iPad. The iPad used mobile technology, but made it optional to be able to make a phone call from it. The iPad was a mobile device that was used more like a desktop computer than a smartphone. It paved the way for much of the mobile mind shift. Competitors began scrambling to compete with Apple. Dell, Samsung, Motorola, BlackBerry, Vizio, Toshiba, and Hewlett-Packard all introduced mobile tablets within a few months of the iPad's debut. Within a year, there were over eighty tablets on the market.

Ever since the smartphone appeared, there's been a general trend toward thinner and larger screen sizes. At the same time, the size of the tablet has been shrinking. The two devices compromised, and the mashup became a "phablet"—a five-to-seven-inch screen size first attributed to the unveiling of the Galaxy Note in 2011. Phablet sales surged in 2015 with the introduction of Apple's iPhone 6 Plus.

Another important development has been the wearables market. Google Glass, introduced in 2013, was essentially a smartphone with a head mount. Apple Watch, introduced in 2015, can text, support apps, use Apple Pay, track your fitness, and control your television. Oh yeah, it can also make a phone call.

You'll Always Remember Your First

Over the years, phones have changed dramatically. They have gone from weighing more than three pounds to weighing less than three ounces. They've lost their antennas. They've changed their keyboards, colors, and functions. But you'll always remember your first mobile phone, even if it seems like a dinosaur today.

The things our mobile phones do today are things that not even Captain Kirk thought about on *Star Trek*. Our phone has replaced our landline and enabled us to be untethered yet still communicative. The mobile phone has replaced our camera, our stereo, our gaming system, our alarm clock, and even our movie screen. The newest mobile phones do even more. The Galaxy S4, for instance, can detect temperature and humidity from our environment. Improved health is on the horizon with mobile as well. We have already seen the popularity of the Fitbit and the Health icon on the iPhone. Fitbit users challenge friends to stay in shape by competing for who takes the most steps in a day or climbs the most stairs. iPhones keep track of their owners' movements and cause them to go back to grab their mobile phones when walking from their office desks to the restroom so that they get "credit" for those steps. Future phones will help save lives. They will monitor your heart rate and perhaps even forewarn you of an impending heart attack or stroke. The mobile phone has come a long way from when you thought it was cool to play Snake on it.

SPINNING CONNECTIONS TO WI-FI

Early connections from mobile phones were similar to dial-up technology on the desktop years before: they were painfully slow. But, like everything else in the mobile industry, innovations were fast and furious. Analog cellular networks, known as 1G, were the most widely deployed system in North America after Dr. Martin Cooper's invention. It was known as 1G due to its being the first generation of cell phone technology.

Early GSM (Global System for Mobile Communication) networks started seeing significant deployment beginning in 1991. GSM technology, first utilized in Europe, put customer information on a removable SIM card. This enabled customers to easily swap the SIM card between phones to enable service. These second-generation mobile phone systems used digital transmission—an improvement over 1G's analog. 2G phone networks supported faster mobile phone-to-network connections for a higher quality of voice transmission. The improved technology in chip design also allowed companies to significantly reduce the size of the "brick" phones that were required with 1G technology.

2G's introduction opened the door for the most popular of all data services—SMS (short message service), or text messaging. The first phone-to-phone text message was sent in Finland in 1993. But 2G did not stop there. 2G also enabled the first downloadable content to mobile phones—ringtones. The first use of ringtone technology was by Finnish company Radiolinja in 1998. Internet service first debuted on 2G mobile phones in 1999 by NTT DoCoMo in Japan.

As mobile phones entered the 21st century, consumers began demanding more and more data services, especially improved Internet access. Enter mobile broadband, known as 3G. 3G supported data applications with much higher speeds (up to 144 kilobits per second). The high-speed connections significantly transformed the industry. The first commercial 3G network debuted in 2001, also by NTT DoCoMo. Much of the innovations in mobile phone technology came from Asia. In 2002, code-division multiple access (CDMA) technology was released in South Korea. In 2003, the technology expanded to Italy and Great Britain, thanks to its success in Asia.

In the United States, the first commercial 3G network was deployed by Monet Mobile Networks using CDMA2000 technology, but it soon after shut down. Verizon launched the first popular use of 3G in July of 2002, also using a version of the CDMA2000

technology. Rollout for 3G was slow, as it required a significant investment by mobile carriers to upgrade to the new technology. By the end of 2007, however, there were 190 3G cell phone networks in 40 countries around the world. 3G technology was ideal for the advent and ultimate proliferation of the smartphone. 3G enabled cell phones to be connected at much faster data rates, which led to an explosion in app offerings. Streaming video and music to 3G handsets was another major innovation.

Native IP Networks, or 4G services, were introduced in 2009. One of the fundamental differences between 4G phones and their predecessors was that they were IP-based, meaning that the phones were able to transmit data using the same architecture of the standard Internet Protocol. 4G phones were assigned their own unique IP addresses, which increased the overall capabilities for the devices. With 4G, maximum upload speeds increased to 50 Mbps, a whopping 10 times faster than 3G service. 4G also provided mobile broadband Internet access. For example, laptops were able to use wireless modems to connect to a mobile phone's 4G network. In addition, 4G's increased speed supported live video over the cellular network. With 4G, the consumer is "always on," with enhancements like GPS location services. We are currently still utilizing 4G networks.

MARKETING TO MOBILE DEVICES

First, there was television, and then the desktop computer. Today, cunning marketers are embracing the "third screen" of mobile and turning it into a marketing juggernaut, to the point where mobile will soon become the "first screen." Along with the increased performance of enhanced devices and connections comes an opportunity for businesses to engage and acquire new customers and users.

At one time, mobile marketing was practically synonymous with SMS text message marketing; that was all marketers really

knew. But today, there is so much more to consider regarding what can be done with mobile marketing. Mobile marketing does not mean just one thing anymore in a mobile-first environment. As the evolution continues, the rapid introduction of more mobile marketing possibilities will create even more efficient ways of reaching the mobile consumer. It may seem like mobile has come a long way, but the industry is still in its infancy, and if you have been involved in it for more than five years, then you are a veteran.

Today, mobile marketing is one of the most powerful ways to reach people. It enables you to reach a laser-targeted audience in a relevant way and engage them on their most personal of devices. Relevant marketing means engagement marketing. It is about creating a relationship with your customer or prospect by delivering content that is both relevant and personal. Mobile marketing is no longer just a trend; it is a vital way for businesses and organizations to engage existing customers and acquire new ones. Mobile marketing is modern-day marketing. Very soon, the term "mobile marketing" will sound as ancient as the daily newspaper or prime-time television. We'll all know then that mobile marketing has matured because we will drop the term "mobile" and simply call it marketing.

Want to learn more about mobile marketing? See updated statistics and other important information at RelevanceRaisesResponse.com.