CFI Group Smartphone Satisfaction Study 2009

Smartphones, Providers, and the Customers Who Love (and Loathe) Them

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ACSI American Customer Satisfaction Index™

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Introduction

We are now in a world of cell phone ubiquity where smartphones represent one of the last remaining areas for growth and expansion for wireless companies. Once the dominion of business users, consumers are adopting smartphones in large numbers. Apple's iPhone is largely credited for spurring consumer interest in smartphones, which are being used more like mini-computers than cell phones.

When smartphones first came on the scene, business users replaced their PDA with a hybrid cell phone that could also manage email, calendars, and perhaps a game of solitaire during board/bored meetings. But new consumer smartphone adopters aren't just checking email and making appointments; they are streaming video on YouTube, listening to streaming radio on Pandora, downloading games, booking reservations on OpenTable, publishing reviews on Yelp, surfing the web, tracking their GPS, and checking Facebook and Twitter 10 or 15 times a day. These new users are placing an enormous strain on wireless networks, threatening customer satisfaction and challenging even the most firm business models.

In order to provide fresh insights into this new class of smartphone users and shed new light upon the wireless companies' emerging target market, CFI Group surveyed 1,074 respondents and applied the methodology of the American Customer Satisfaction Index, to determine:

- The profile of the emerging smartphone user. How are consumers using smartphones? How is it different from business users?
- How do the different smartphone platforms compare in terms of customer satisfaction? The obvious story is that the iPhone is king of the smartphones. But why is the iPhone so popular? Which smartphones are best-positioned to challenge the iPhone?
- What is the relationship between smartphone satisfaction and satisfaction with the wireless provider? What is the potential impact of increased smartphone adoption on other networks? Are exclusivity contracts, like those between AT&T and the iPhone or between Sprint and the Palm Pre, potentially a bad thing for providers?

About the CFI Group Smartphone Satisfaction Study

CFI Group partnered with e-Rewards to gather online survey interviews with 1,074 smartphone owners from August 3-10, 2009.

CFI Group (www.cfigroup.com) conducts its measurement consulting practice worldwide through offices on four continents. Launched in 1988 by University of Michigan professor Claes Fornell, CFI Group is headquartered in Ann Arbor, Michigan. It uses the rigorous measurement science of the American Customer Satisfaction Index (ACSI) to diagnose its clients' customer relationships, resulting in exacting advice on actions that strengthen these relationships and improve clients' overall financial performance. CFI Group clients include British Telecom, DIRECTV, Sky, the U.S. Federal Government, UPS, Yahoo!, and other leading companies around the world.

Key Findings

Smartphones and User Trends

- *iPhone is the undisputed leader in smartphone customer satisfaction*
  iPhone scores 83 out of 100 on the ACSI scale. Android and the Palm Pre follow at 77. BlackBerry scores 73, Palm Treo at 70, and 'Other' smartphones lag at 66.
- *New smartphone users more oriented to personal vs. business needs*
  Whereas early smartphone adopters were mostly business users using email and calendar functions, newer smartphone users, who represent the future trend of smartphone adopters, are attracted by consumer-oriented functions and applications and are more likely to use their phone for personal, not business, needs.
- *Personal consumers expect more from their smartphone*
  While business users are more likely to use their phone just to check email and voice mail, personal users are more likely to use their phone to play games, surf the web, take pictures, and play or stream audio/video.
- *Business users typically place fewer demands on the network capacity of the phone*
  Personal users, in contrast, are more likely to engage in data-intensive activities that strain the performance of the provider network.
- *The most satisfying smartphones offer consumer-oriented functionality*
  Better web browsing experience, easier multi-media playback, and a wealth of applications produce higher satisfaction. iPhone, Android and Pre users are much more likely to use their smartphone for network-intensive activities.
- *Generic 'Other' smartphones perform the most poorly in customer satisfaction*
  Smartphones running the Symbian or Windows Mobile operating systems aren't even a part of the conversation, even though they run on the majority of smartphones. These platforms do not adequately support the consumer-oriented functionality that new adopters of smartphones desire.
- *Consumers who upgraded to "name brand" smartphones and smartphone platforms have higher satisfaction*
  Consumers with generic 'Other' smartphones are less satisfied because generally they got the phone because of a discount or deal or the phone was pushed onto them by their provider.

About ACSI Methodology

The American Customer Satisfaction Index (www.theacsi.orgis the only uniform, national, cross-industry measure of satisfaction with the quality of goods and services available in the United States. A distinguishing feature of the ACSI methodology is its patented scientific approach to customer satisfaction measurement.

When applied to your organization, the unique cause-and-effect methodology of the ACSI shows how satisfied customers are today, and how satisfaction leads to desired results. This one of a kind methodology also gauges satisfaction with specific elements of the customer experience that influence overall satisfaction and future success.

The ACSI is an important indicator of economic performance, both for individual firms and for the macro economy. The national ACSI score has been shown to be predictive of both consumer spending and stock market growth. Perhaps most revealing, however, are the linkages found between aggregate ACSI growth, aggregate corporate earnings growth (among S&P 500 companies), and average Market Value Added (MVA), which measures a firm's success in creating wealth for shareholders. University of Michigan researchers have found that a 1% year-over-year increase in a company's ACSI score results in 2.2% additional growth in stock value.

Key Findings

- *Word of Mouth recommendation is a key driver of the smartphone purchase decision, and WOM is even more important for first time buyers*
  For users who purchased their first smartphone in the past year, 43% of iPhone users and 22% of non-iPhone users got their phone wholly or in part because of a recommendation from a friend or colleague.
- *92% of iPhone owners say they have their ideal smartphone*
  iPhone is also the most popular alternative for all smartphone owners.
- *Satisfaction with applications available for the iPhone scores 92, with Android in second place at 83*
  iPhone, Android and Pre owners download more applications than BlackBerry, Treo, and other smartphone users.
- *The most satisfying smartphones perform "personal use" and data-intensive functions much better than the rest, suggesting that as more smartphones evolve into mini-computers for the general consumer, more strain will be put onto carrier networks*

Consumer Views on Smartphone Network Providers

- *There is little relationship between users' satisfaction with their smartphone and satisfaction with their providers*
  The iPhone's high satisfaction does not improve AT&T's customer satisfaction in any meaningful way. Smartphone satisfaction accounts for about 15% of a person's likelihood to recommend the network.
- *Similarly, there is little evidence that satisfaction with the smartphone is in any way affected by satisfaction with the provider*
- *Verizon and T-Mobile have the highest overall smartphone provider satisfaction*
  Smartphone users rate Verizon and T-Mobile the highest, with satisfaction scores of 79. AT&T underperforms – which ironically could be a result of the iPhone's popularity and its exponential network demands.
- *Loyalty is highest for Verizon customers*
  86% of current Verizon respondents choose Verizon as their ideal provider. Verizon is also the single most attractive alternative provider for any smartphone customer not currently with the carrier. Given Verizon's perceived advantage in coverage, they are the logical attractive alternative provider.
- *Smartphone providers battle on coverage*…
  Verizon's brand message is resonating with smartphone customers as consumers feel that they get the best coverage with Verizon.
- *Pricing…*
  T-Mobile and Sprint are the most competitive in terms of price. Verizon trails Sprint and T-Mobile badly on price competitiveness, but still leads AT&T. iPhone data plans are a pricey jump for millions of new smartphone users who had never had to pay for a data plan before.
- *And customer service*
  T-Mobile leads on customer service, followed closely by Verizon and then Sprint.
- *Verizon, the company perceived to have the best network, lacks any exclusive agreement with the most satisfying smartphones*
  Verizon's key strength relative to other providers (according to customers) is its network, an advantage that could disappear if it had an influx of network-heavy smartphones.

Key Findings

- *AT&T's iPhone users are less satisfied with the provider than its non-iPhone smartphone users*
  No phone places a heavier burden on the network than the iPhone, and AT&T's network problems are well known. Half of iPhone respondents would like to defect to a different provider.
- *Consumers who switch carriers to get their smartphone of choice are less satisfied with the provider than those who did not switch*
  40% of iPhone respondents said that they changed providers in order to get their phone (compared to 12% of Android and 9% of Pre). Customers who are forced to switch providers are not predisposed to liking the new carrier. The iPhone has been a double-edged sword for AT&T: though it has signed up millions of new customers attracted by the iPhone, many of them may be dragging down AT&T's satisfaction and public reputation.
- *Usage trends indicate a movement towards network-intensive smartphones. As they become ubiquitous in the marketplace, other networks may suffer the same issues as AT&T*
  As smartphone growth increases, all networks (not just AT&T's) could be strained, leading to lower customer satisfaction across all providers.

Profile of a Smartphone User

New Smartphones = New Customer Demands

Smartphones[1] are the growth segment in the mobile phone industry. Why do users get a smartphone? Here's what they told CFI Group:

Fig. 1: Smartphones are for web browsing, email… and applications

	iPhone	Android	Palm Pre	BlackBerry	Palm Treo	Other
Main reason to get smartphone (select all)						
Browse the web	77%	86%	71%	59%	41%	43%
Send/receive email	75%	76%	73%	72%	45%	40%
Availability/diversity of apps	65%	62%	57%	30%	45%	20%
Calendar and appointments	53%	47%	57%	44%	59%	32%
Look/design	48%	41%	53%	31%	32%	34%
User interface/operating system	43%	50%	45%	19%	18%	11%
Recommended from others	35%	26%	13%	26%	18%	14%
I was ready for a new phone	23%	28%	27%	28%	25%	41%
Price/promotional offer	17%	33%	29%	39%	18%	43%
Required for work	5%	7%	8%	23%	16%	6%
Other	5%	11%	4%	6%	7%	5%

It's no surprise that web browsing and email are the dominant reasons for most users to get their phone. The exceptions are the older Treo, where keeping track of appointments in a calendar is the chief reason, and the generic 'Other'[2] smartphone, where price and promotional offer play a big role in the smartphone purchase decision.

There is clear differentiation between the newer smartphones (iPhone, Android, and Pre) and the older smartphones. Older phones offer prospective buyers the nuts and bolts – email, calendar, and perhaps web browsing – but little else. Applications, mostly an afterthought for older smartphones, are critical for customers of newer smartphones. Applications are cited as a main reason to get a smartphone among 57%-65% of iPhone, Android, and Pre customers; only 30% of BlackBerry and 20% of 'Other' smartphone users say they got a smartphone for its apps. The interface/operating system and looks/design of the phone are also more important for purchasers of newer smartphones. In short, customers expect more from these newer smartphones. These higher expectations raise the stakes for customer satisfaction – do these things well, and customers will be delighted; do them poorly, and customers will punish the failures.

What about users who never had a smartphone before? As we can see from the table in figure 2, BlackBerry, iPhone (and generic smartphones) are most likely to be a user's first smartphone; Android and Pre appeal more to smartphone veterans.

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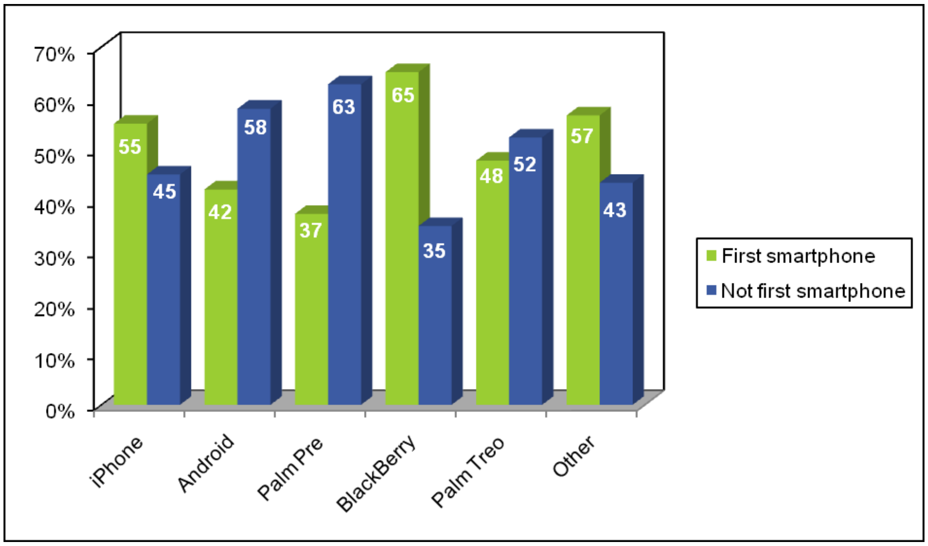
[1] There is no universally accepted definition of a smartphone. For our study, we defined a smartphone as a mobile phone that can be used to browse the web, download additional programs/applications, send and receive email, and type messages with either a physical or on-screen keyboard.

[2] Refers to all other smartphone platforms including Symbian and Windows Mobile. See page 18 for more detail.

Profile of a Smartphone User

Fig. 2: Android, Pre appeal to experienced smartphone users



Profile of Switchers to Smartphones

To find out how new smartphone users differ from longtime smartphone users, we looked at first-time smartphone users who owned their phone for less than one year. We segmented these groups by iPhone and non-iPhone users and found trends in common to both groups.

New smartphone customers:

- Are lower income (lacking the funds to be early adopters)
- Pay for their phone themselves (vs. a work or family subsidy)
- Use their phone for personal (vs. business) reasons
- Did not have or replace a PDA with a smartphone
- Use their phones for email less often

This data helps to tell us why the smartphone market is exploding. New customers are paying for the phones themselves, and their lower incomes mean they couldn't afford the high prices paid by early adopters. In the world of the $500 smartphone, these customers would be shut out. But with the new customer discounts now offered on smartphones, a barrier to entry has been removed and sales have soared.

Smartphones, Subsidies, and Contracts

Even though only 17% of iPhone users say they got their iPhone from AT&T due to a price break or promotional offer, all new iPhone users are getting quite a deal on the actual iPhone. Unofficial estimates claim that AT&T pays Apple three times what a customer pays AT&T to acquire an iPhone. That short-term cost to AT&T is balanced by the long-term revenue stream of an iPhone customer on a mandatory two-year contract that allows the company to recover the cost of the subsidy. It's similar to the razors-and-blades business model that Gillette has perfected. The subsidy model is not unique to the iPhone and is a common practice throughout the mobile sector.

AT&T did not always offer so handsome a discount for the iPhone. The first iPhones sold for $599 and $499, depending on the memory, and it sold reasonably well. But when AT&T and Apple discounted the price by $200, sales really took off. Now a top-of-the-line Apple 3GS with 32MB of memory costs a new AT&T subscriber $299, though if you want to give that same phone as a gift or purchase it without committing to a contract, it costs $699.

Profile of a Smartphone User

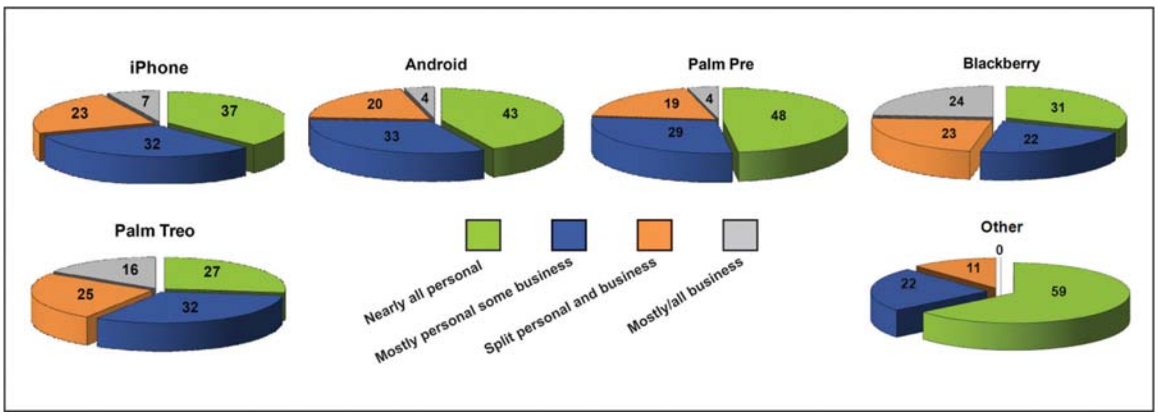
Why do these new smartphone users get a smartphone in the first place? For new, non-iPhone, smartphone customers, the main reasons are simple inertia – the contract on their old phone was up and/or they saw a promotional offer for a smartphone. This is in addition to the desire to browse the web, send and receive email, or make appointments – some of the universal features of smartphones.

New iPhone users, in contrast, are even more likely to mention the benefits of owning a smartphone – email and the web, making appointments, and the applications available for the phone. Here we can see how iPhone sows the seeds of its customer satisfaction. Customers who seek out the iPhone do so specifically to get the benefits of owning a smartphone. Generic smartphone users, in contrast, are relatively more likely to get a smartphone 'just because'. That's no way to build a passionate customer base; customer satisfaction (and advocacy) is created when companies meet and exceed the ever-expanding requirements from customers.

Personal Users = More Strain on Networks

Among all smartphone platforms, the BlackBerry and Treo are the most business-oriented. But across the sample we found users are more likely to use their phone for personal, not business, needs.

Fig. 3: Personal users dominate the smartphone market



Compared to personal users, business users are more likely to be:

- Male
- Older
- Higher income
- Using their smartphone as a replacement for their PDA

And behaviorally, compared to personal users, business users are:

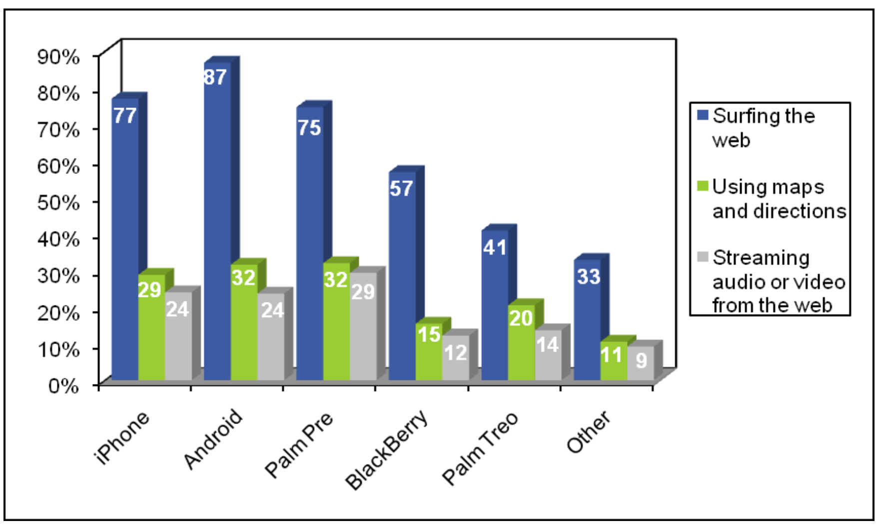
- Less likely to download applications to their phone
- More likely to use their phone to check email and voicemail
- Less likely to use their phone to play games, surf the web, take pictures, play or stream audio/video

In short, business users typically place fewer demands on the network capacity of the phone. Personal users, in contrast, are more likely to engage in data-intensive activities that strain the performance of the provider network.

New Smartphones = More Strain on Networks

We asked customers to report how often they do various things on their smartphone, such as surf the web or stream music or video. BlackBerry, Treo, and 'Other' smartphone users are least likely to do these things. iPhone, Android, and Pre users are much more likely to use their smartphone for network-intensive activities. The percentage of users actively engaged in three of the more network-intensive activities is below:

Fig. 4: Newer smartphones lead to more intensive network use



What does this mean? First, it suggests that the iPhone is not unique in encouraging network use. In fact, if Android or Pre were to rival iPhone in total number of users, T-Mobile or Sprint may encounter similar network issues to AT&T[3]. Second, it suggests that Verizon, the major provider without an exclusive smartphone agreement for iPhone, Android, or Pre, may think twice before promoting the new wave of smartphone. Verizon's key strength relative to other providers (according to customers) is its network. If Verizon were to overtax its network, it could see its advantage disappear.

[3] The customer's view of provider networks is discussed in more detail on page 19. The technological merits of each provider's network are beyond the scope of this article.

Profile of a Smartphone User

Summary of the New Smartphone User

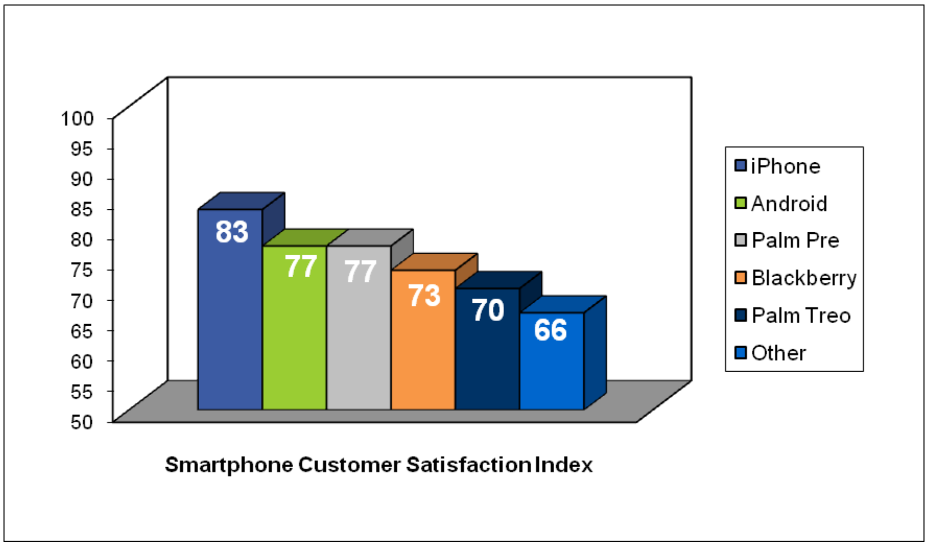
We know that business users are more likely to have been early adopters of smartphones; personal users are later adopters. We also know that newer smartphone users are expecting more from their phone. And we know that the newer smartphone models – iPhone, Pre, and Android – are more likely to attract users who expect to do more things on their phone. All of these trends mean that increased smartphone adoption (more personal users, more users in search of additional smartphone features, more users of newer phones) will likely lead to more stress on provider networks. We'll return to this point when we talk about the network providers for smartphones. But first we'll look at the smartphones themselves.

Battle of the Smartphones

The iPhone Wins on Customer Satisfaction…

CFI Group used the methodology of the American Customer Satisfaction Index to create Customer Satisfaction Index (CSI) scores for each type of smartphone.[4] The CSI for iPhone stands at 83, 6 points higher than the nearest competitors, Android and Palm Pre. BlackBerry is a 73, while the Treo is at 70 and 'Other' smartphones (including Windows Mobile and Symbian phones) come in with a CSI of 66.

Fig. 5: iPhone and newer models lead on customer satisfaction



and Word of Mouth…

iPhone, not surprisingly, also has the best word-of-mouth. 90% of iPhone customers have recommended their phone, and over one-quarter of iPhone customers claim that others have purchased the iPhone based on their recommendation. Why does word-of-mouth matter? 35% of iPhone users and 19% of non-iPhone users said they got their phone, wholly or in part, because of a recommendation from a friend of colleague. If we look at users who purchased their first smartphone in the past year, those percentages jump up to 43% and 22%, respectively. iPhone is obviously winning the word-of-mouth battle, and it shows in their sales (nearly 9 million iPhones in use). But across all types of smartphones, recommendation is a critical (and growing) element of customer acquisition. And the overwhelming factor that drives likelihood to recommend the phone is satisfaction with the phone.

[4] CSI scores can range from 0 to 100. CSI scores are averages, not percentages. CSI scores above 80 are considered very good while scores below 70 are a cause for concern.

Battle of the Smartphones

and Loyalty

What kind of smartphone do people want? The following table is instructive. The rows represent the respondent's current phone. The columns represent the respondent's ideal smartphone. The cells that are **bolded** indicate where respondents' ideal phones match their current phones. A whopping 92% of current iPhone users say their ideal phone is the iPhone – by far the highest loyalty figure. BlackBerry is the most attractive option for iPhone users who want to switch, but it's a tiny fraction (only 3% of iPhone users). If we look down the iPhone column of the table, we see that the iPhone is always the most popular alternative to the respondent's current smartphone.

Fig. 6: iPhone loyalty outstrips all other phones; generic smartphones lacking

		Ideal smartphone					
		iPhone	Android	Palm Pre	BlackBerry	Palm Treo	Other
Current phone	iPhone	**92%**	1%	1%	3%	0%	2%
	Android	25%	**58%**	1%	7%	0%	9%
	Palm Pre	35%	3%	**56%**	3%	3%	1%
	BlackBerry	43%	0%	5%	**49%**	0%	3%
	Palm Treo	39%	0%	23%	16%	**16%**	7%
	Other	47%	3%	9%	18%	3%	**19%**

- A majority of Android and Pre owners say they would stick with their current phones, though the iPhone is a viable alternative.
- The Pre is (slightly) more popular than the Android as an option for current BlackBerry and 'Other' smartphone users.
- Among the 'name' smartphone brands, BlackBerry is in the weakest position relative to iPhone. Over half of the BlackBerry owners actually prefer a non-BlackBerry phone, with iPhone again the preferred option.
- Customers have very little loyalty to the Treo or generic 'Other' smartphone. Fewer than 1 in 5 current Treo or 'Other' customers say their phone is their ideal phone; over 80% want to switch, usually to the iPhone.

Increasing Competition to the iPhone

Clearly, the iPhone is in a strong position on customer satisfaction. But there is some evidence that the game is not over. Two of the more recent smartphones, Android and Pre, are the most competitive with the iPhone. As we shall see, if the iPhone were to lose its application supremacy, that advantage would dwindle even more. In addition, BlackBerry appears to be gaining ground. If we segment our sample and look only at respondents who have owned their phone for 6 months or less, the CSI among BlackBerry users shoots up to 76 (from 73). In other words, older versions of the BlackBerry are dragging down the BlackBerry's CSI score, and BlackBerry is narrowing the gap with iPhone with its newer phones. But even with a CSI of 76 among new users, BlackBerry still trails iPhone by 7 points (new iPhone users have roughly the same CSI as long-time iPhone users).

Battle of the Smartphones

The iPhone Is Fun, Versatile – Never Boring

We asked respondents what words they associated with their phones. The iPhone tends to have the most positive associations. Once again we see Android and Pre provide some competition to iPhone. BlackBerry does reasonably well as essential and versatile, but it is considered neither cool nor cutting edge – which ties in with its users being much less likely to recommend it to friends or colleagues. Note that being a business tool is not a bad thing; customer satisfaction among respondents who said their phone was a business tool was equal to those who said their phone was not a business tool.

Fig. 7: Percent of users associating the word/phrase with their smartphone

	iPhone	Android	Palm Pre	BlackBerry	Palm Treo	Other
Versatile	72%	71%	61%	61%	52%	50%
Fun	72%	66%	55%	41%	34%	39%
Cool	69%	67%	63%	33%	27%	36%
Essential	62%	50%	49%	51%	59%	38%
Cutting edge	62%	53%	63%	22%	20%	21%
Business tool	33%	26%	21%	39%	45%	20%
Boring	0%	1%	4%	5%	2%	7%

Better Interface, Memory, Looks, Applications, Durability = Higher iPhone Satisfaction

Why is the iPhone winning the smartphone war? It has everything to do with the phone, and (as we shall see), little to do with the provider.

We measured eight specific elements of using the phone:

- Ease of navigating the interface
- Operating free of technical problems/bugs
- Amount of memory/storage
- Looks and design
- Variety of applications available
- Ease of shopping for applications
- Battery life
- Standing up to everyday use/durability

Battle of the Smartphones

Here are the average scores for each element for each smartphone, again on the 0 to 100 scale:

Fig. 8: iPhone wins, generic 'Other' smartphone loses across most elements of smartphone performance

	iPhone	Android	Palm Pre	BlackBerry	Palm Treo	Other
Ease of navigating the interface	88	83	85	73	73	66
Operating free of technical problems or bugs	79	74	75	66	65	65
Amount of memory-storage available	86	77	76	73	71	70
Look or design	91	78	90	78	75	74
Variety of applications available	92	83	50	71	72	61
Ease of shopping for applications	86	81	71	67	67	59
Battery life	61	52	53	64	64	61
Standing up to everyday use-durability	83	81	73	75	78	73

On each specific element (except battery life), iPhone trumps the competition. Its largest leads are on memory/storage and the variety of available applications. The latter is no surprise, as iPhone's app store has gained much renown. Contrast to the Palm Pre, which is a worthy competitor to iPhone on some elements but trails badly in the applications area.

iPhone and Android Dominate on Applications

We asked customers how often they downloaded applications to their phone. iPhone customers (71%) and Android (77%) have the highest percentage of users who said they downloaded applications at least weekly, followed by Palm Pre at 53%. BlackBerry (31%), Treo (27%) and 'Other' (13%) users are much less likely to download applications weekly. Keep in mind we are just measuring the rate at which applications are downloaded; we do not assess how often those downloaded applications are used (though the natural assumption is that applications are downloaded to be used, and that higher download rates translate into higher application use).

iPhone and Android users are also downloading the most applications. 42% of iPhone users have downloaded 20+ applications to their phone, followed by 24% of Android users. BlackBerry, Treo, and 'Other' smartphones have the most users who have never downloaded an app to their phone.

Fig. 9: iPhone, Android users most likely to download apps

	iPhone	Android	Palm Pre	BlackBerry	Palm Treo	Other
Number of applications downloaded, life of phone						
None	1%	3%	7%	17%	20%	33%
1-4	9%	16%	32%	39%	48%	42%
5-9	19%	22%	45%	28%	23%	13%
10-19	27%	33%	11%	9%	2%	6%
20-29	16%	11%	0%	1%	0%	0%
30+	26%	13%	3%	2%	5%	1%

Battle of the Smartphones

Where iPhone really pulls away is in the total spent on apps. We asked users to estimate how much they have paid for applications they have downloaded to their smartphones.

Fig. 10: iPhone users spend the most on their apps

	iPhone	Android	Palm Pre	BlackBerry	Palm Treo	Other
Total amount spent on applications, life of phone						
Less than $10	52%	86%	71%	53%	50%	33%
$10-$24	25%	7%	4%	14%	14%	11%
$25-$49	12%	4%	7%	7%	2%	9%
$50+	8%	1%	3%	4%	11%	3%

Nearly half (45%) of iPhone users have spent $10 or more on applications, compared to only 12% of Android users (since most Android applications are free). Palm Pre has a higher proportion of for-pay applications, but because it offers so few applications (relative to iPhone and Android) there is a smaller revenue stream. A few BlackBerry and Treo users do spend a fair amount on applications as part of the ‘business’ roles of their smartphones.

iPhone Stands Out on Entertainment

Does the iPhone have any ‘killer’ features? We asked respondents to rate the performance of various features of smartphones. iPhone has clear leads only on ‘playing audio/video stored on the device’ and ‘playing games’. On everything else, iPhone faces stiff competition from other phones, especially Android and Pre. Following is a list of features rated by respondents and their scores on a 0-100 scale (features are listed in descending order of most frequently used to least frequently used):

Fig. 11: Feature performance across smartphones

	iPhone	Android	Palm Pre	BlackBerry	Palm Treo	Other
Checking-sending email	87	84	89	86	81	71
Checking voice mail	88	87	89	85	87	81
Surfing the web	81	82	86	71	70	60
Playing audio or video stored on the device	87	79	80	71	79	68
Playing games	82	78	71	65	74	61
Syncing with PC or other accounts	83	76	79	74	72	64
Taking pictures	71	71	80	74	72	69
Using maps/directions	79	83	83	73	69	64
Using Bluetooth	76	79	78	74	76	70
Streaming audio or video from the web	74	71	76	60	69	55

Battle of the Smartphones

The iPhone, and to a lesser extent the Android and Pre, are not just smartphones but also entertainment devices. Just as computer sales soared when they became more than 'business machines', smartphones are following the same pattern.

We can also see that surfing the web is a much more positive experience among users of the newer smartphones (iPhone, Android, and Pre all score in the 80's; the other phones score 71 or below). While this is good for customer satisfaction with the phone, it encourages strain on networks, which could be bad for customer satisfaction with the providers.

Summary of the Smartphones

Some quick bullets on the various non-iPhone phones:

Android

- Closest competitor to iPhone on navigating the phone and using applications
- Trails iPhone on hardware issues – memory, looks, battery life
- As newer Android-compatible phones are released[5], Android will likely close the gap with iPhone on hardware

Palm Reinvents (Again)

The tale of Palm's demise, as ever, may be premature. Treo represents the dying business-only smartphone breed, but the Pre and the new Pixi represent the new personal smartphone breed that iPhone has captured so well (so well, in fact, that iPhones are also popular among business users). While the Treo is clearly a laggard in performance relative to newer smartphones, the Pre is a solid competitor to the iPhone. With its new WebOS on the Pre and Pixi, Palm is positioning itself well for the growing personal/consumer smartphone segment.

One of Pre's technical advantages over the iPhone is its ability to run multiple applications at once. At this time, however, Pre cannot leverage this advantage, because the Pre's application offering is so poor compared to the competition. If Pre can increase the quality and quantity of its apps, it will be better able to showcase its multi-tasking superiority and become an even more serious threat to iPhone's dominance.

Pre

- Most competitive with iPhone on a feature-specific basis (except for games)
- Rival to the iPhone on looks/design
- Like Android, a poor battery life
- Woefully short on available applications

BlackBerry

- CSI is 73, a full 10 points behind iPhone, and Likelihood to Recommend is 73, a 14-point gap from iPhone – though newer BlackBerry owners rate their phones better than those with older versions of BlackBerry
- Just about the only market-leading aspect of the BlackBerry is its battery life
- Its business emphasis is made clear by its poor scores for playing games, using audio or video
- Much buggier than iPhone, Android, and Pre
- Painful application-shopping process

[5] Android users referenced in this article are primarily using an HTC phone.

Battle of the Smartphones

Treo

- Clearly in a weakened position, with a CSI of 70
- Good battery life
- Legacy platform can't compete with the next generation of smartphones

Other

- There's clearly no love for the 'anonymous' smartphone
- CSI is 66, and Likelihood to Recommend is 63, by far the lowest across phone types
- On feature after feature, the scores are the lowest – the generic 'Other' smartphone does nothing particularly well
- While, like with BlackBerry, owners of newer 'Other' smartphones have a higher CSI (69 for those who got their phone in the past 6 months), the low customer satisfaction engendered by these phones is not good news for the Symbian or Windows Mobile platform, or the providers who emphasize these phones

Woe to the Generic Smartphone

Throughout this report we have focused on the main 'branded' smartphones like iPhone, Android, Pre, BlackBerry, and Treo. And yet there are many more smartphones in use today, manufactured by the likes of LG, Samsung, Motorola, and Nokia, running either the Windows Mobile or Symbian operating system. What's going on with these smartphones?

For one thing, many users can't identify their operating system. While Android users know they have phone on the Android platform, most Windows Mobile or Symbian users have no idea what operating system is running their phone. This lack of branding and awareness can only hurt the generic smartphone.

Customers rate the generic smartphone poorly. Why? Earlier we mentioned that generic smartphone users are the most likely group to get their phone because of a deal or 'just because' they ended up replacing an old non-smartphone with a new smartphone. Many generic smartphone customers aren't actively seeking the smartphone; rather, providers are pushing these smartphones onto the customer. Providers push smartphones because they open up potential revenue streams for users (see: Smartphones, Subsidies, and Contracts). But there is no better way to harm customer satisfaction than to give customers something they don't really want and ask them to pay more (in the long run) for that privilege.

In order for Nokia, LG, Samsung, Motorola, and the like to compete with the well-branded smartphone, they need to work with providers to make sure customers understand the benefits of their particular smartphone. At some point smartphones will reach a point of (perhaps temporary) convergence, where all smartphones offer similar core features and functionality (much like automobiles today). But until that convergence is reached, without strong customer-centric messages the generic smartphone will suffer.

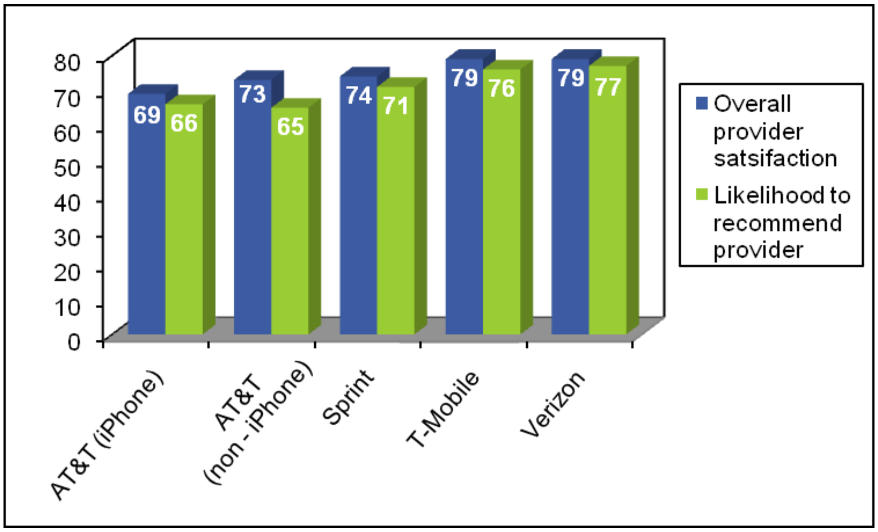
We have seen how the iPhone is currently winning the smartphone war, with strengthening competition from Android and Pre and newer versions of the BlackBerry. Smartphones don't exist in a vacuum, however – they must operate on a provider network. In the next section, we will see how the big networks (AT&T, Sprint, T-Mobile, and Verizon) fare in meeting the needs of their smartphone customers.

Battle of the Smartphone Providers

Verizon and T-Mobile Lead, AT&T Underperforms

Recent articles have speculated that AT&T's network may be a victim of the popularity of the iPhone. The theory says that as customers flock to the iPhone and use its wide array of features, the AT&T network is taxed, leading to problems for all AT&T customers, iPhone users or not. While we cannot comment on the technical issues AT&T faces, our data clearly shows that AT&T is underperforming as a carrier among smartphone customers. We asked customers to rate their overall satisfaction with their provider and their likelihood to recommend their provider. To examine whether or not the iPhone is disproportionately affecting AT&T, we split AT&T into two groups – iPhone users and non-iPhone users (i.e. customers who have a smartphone with AT&T that is not an iPhone).

Fig. 12: Verizon and T-Mobile lead, AT&T trails on customer satisfaction and word of mouth



Verizon and T-Mobile are in the best position, with satisfaction scores of 79 and likelihood to recommend scores in the upper 70's. AT&T has poor word-of-mouth, though those AT&T smartphone customers without an iPhone are more satisfied with AT&T than iPhone customers.

Loyalty is highest for Verizon customers; 86% of current Verizon respondents choose Verizon as their ideal provider. In fact, Verizon is the single most attractive alternative provider for any smartphone customer not currently with Verizon. AT&T does reasonably well among non-iPhone owners; 75% of them would like to stay with AT&T. But if we look at iPhone owners, half of respondents would like to defect – mainly for coverage reasons. Given Verizon's perceived advantage in coverage, they are the logical attractive alternative provider.

Verizon: The Best Provider with the Worst Smartphones?

Unlike AT&T or Sprint, Verizon has never touted an exclusive relationship with a 'name' smartphone (the BlackBerry Storm notwithstanding). It's clear that customers love Verizon as a smartphone provider. And Verizon's failure to offer the network-heavy iPhone may be a blessing for Verizon's internal infrastructure.

However, only 38% of Verizon smartphone owners say that their current phone is their ideal smartphone – the lowest percentage of any provider. Verizon is in a strong position with customer satisfaction. But if Verizon fails to offer its customers the smartphones they want, it may eventually lose to those providers who offer more full-featured smartphones that appeal to the growing personal consumer segment. And if Verizon did offer best-in-class smartphones, given customers' preference for Verizon, it could achieve a dominant position in the market place.

Battle of the Smartphone Providers

Fig. 13: Verizon customers are the most loyal

		Ideal provider					Percent of respondents who switched providers to get their current smartphone
		ATT	Sprint	T-Mobile	Verizon	Other	
Current provider	AT&T, iPhone	**50%**	6%	7%	31%	5%	40%
	AT&T, non-iPhone	75%	**2%**	2%	18%	4%	7%
	Sprint	11%	**64%**	5%	17%	3%	12%
	T-Mobile	13%	**3%**	71%	13%	0%	12%
	Verizon	6%	3%	3%	**86%**	2%	8%
	Other	19%	**0%**	6%	31%	44%	22%

Why are many AT&T iPhone users unsatisfied? Why do they want to leave AT&T? The beginning of an answer is in the last column of the above table. Two out of every five iPhone users came to AT&T from another provider in order to acquire the iPhone. These customers are not predisposed to liking AT&T, and they make it clear in their lack of loyalty. We will return to this thought shortly.

Verizon Rules the Coverage Roost; T-Mobile Wins on Pricing and Services

Verizon and T-Mobile's dominance continues when we examine the average scores for five specific elements of carrier performance:

- Ability to connect from any location
- Ability to maintain a constant connection
- Competitiveness of prices
- Variety of packages/pricing plans
- Quality of customer service

Fig. 14: T-Mobile is best across the board; AT&T the worst

	AT&T (iPhone)	AT&T (non-iPhone)	Sprint	T-Mobile	Verizon
Ability to connect from any location	67	70	73	72	76
Ability to maintain a constant connection	65	67	72	75	77
Competitiveness of prices	59	63	78	77	68
Variety of packages/pricing plans	60	59	71	77	69
Quality of customer service	68	69	73	77	75

Verizon's brand messaging clearly resonates; smartphone users think Verizon provides them with the most complete coverage. AT&T is in the worst position, while Sprint and T-Mobile are in the middle.

In terms of price, T-Mobile and Sprint are the clear leaders. Verizon trails Sprint and T-Mobile badly on price competitiveness, but still holds a lead over AT&T. Note that AT&T lags severely on price even among non-iPhone users, suggesting that AT&T has work to do with its entire customer base.

Battle of the Smartphone Providers

Even though Catherine Zeta-Jones does not answer the phone when customers call for help, T-Mobile leads on customer service, followed closely by Verizon and then Sprint. AT&T trails, which is not surprising – the high demands of iPhone users, combined with price and coverage issues, means that more calls will be placed to AT&T customer service – and high call volumes are anathema to good customer service.

The Dangers of Forced Migration

AT&T is learning the hard lessons of exclusivity. Customers prefer at least some choice. But with the iPhone, there is no choice of provider – once you choose the phone, you choose the provider. By all accounts, the iPhone has been a cash cow for AT&T. But that cash comes at a cost. As we noted earlier, in our sample 40% of iPhone respondents said that they changed providers in order to get their phone (compared to only 12% of Android and 9% of Pre, the two other exclusive phone-provider relationships at the time of the survey). Those 40% of customers didn't choose AT&T for their previous mobile phone for a reason. Has AT&T been able to win them over? The following scores show the answer is clearly no:

Fig. 15: Customers forced to migrate undermine AT&T's customer satisfaction

	Did not switch to AT&T to get iPhone	Switched to AT&T to get iPhone
Overall provider satisfaction	72	64
Likelihood to recommend provider	71	58
Ability to connect from any location	71	61
Ability to maintain a constant connection	68	59
Competitiveness of the prices	63	54
Variety of packages/pricing plans	64	54
Quality of customer service	70	65

This phenomenon is not AT&T-specific: we found similar patterns for customers who switched to Sprint to get the Pre or switched to T-Mobile to get the Android. A couple implications from this table:

1. Switchers are least likely to penalize AT&T's customer service (only a 5 point gap between the switcher and non-switcher score). Not surprisingly, switchers are most upset about the prices – if they are willing to change providers to get the iPhone, it means they are willing to pay a price premium (on their 2-year contract) to do so. Customers don't want to have to pay that premium for the iPhone, but they will.
2. By forcing customers to join the AT&T network in order to acquire the smartphone, AT&T is in effect inviting satisfaction 'saboteurs' onto its platform. These dissatisfied customers worsen AT&T's word-of-mouth and raise AT&T's cost of doing business, from responding to calls to customer care to addressing inquiries by the media. If AT&T only had customers who freely chose AT&T as their provider, there may still be complaints about the service but at not nearly as high a volume. This potential loss of customer goodwill and AT&T's reputation is the price of exclusivity.

Battle of the Smartphone Providers

What can be done? That AT&T only trails a bit on customer service is a signal that AT&T must return to its roots – reach out. If AT&T can develop and implement proactive customer communication strategies and provide their customers with timely, useful information, it will help to repair the damaged goodwill caused by perceived price gouging or poor network service. If its network performance really is lagging, it needs to be fixed; if AT&T's network is no less fast or reliable than the competition, it needs to publicize that message.[6]

Apple Is Not Hurt (Yet) by AT&T Dissatisfaction

Customers' relative dissatisfaction with AT&T must play a role in their satisfaction with and likelihood to recommend the iPhone, right? The answer is 'not really'. In our study we found that customers are able to delineate pretty well between their phone and their provider. Characteristics of the phone drive satisfaction with the phone, and characteristics of the provider drive satisfaction with the provider. We found little evidence to support the claim that satisfaction with the phone drives satisfaction with the provider, or vice versa.

The following table shows the relative influence of satisfaction with the phone and satisfaction with the provider on explaining a person's likelihood to recommend their smartphone.

Fig. 16: Provider satisfaction plays no role in likelihood to recommend iPhone

Influence on Likelihood to Recommend Phone	iPhone	Android	Palm Pre	BlackBerry	Palm Treo	Other
Satisfaction with Phone	99%	64%	79%	88%	97%	81%
Satisfaction with Provider	1%	36%	21%	12%	3%	19%

As expected, satisfaction with the phone is most important, across all platforms, for explaining why people recommend the phone. But note the iPhone column – only 1% of a person's likelihood to recommend the iPhone can be explained by their satisfaction with AT&T. This is good news for Apple – so far, customers have not penalized Apple for any perceived shortcomings of the AT&T network. Android users, in contrast, are more likely to rely on their satisfaction with the network (in this case, T-Mobile) in recommending their phone. This again makes sense, as T-Mobile is one of the leaders in provider satisfaction.

But does the iPhone help AT&T's reputation? Not in any meaningful way. The following table shows the relative influence of satisfaction with the phone and satisfaction with the provider on the likelihood to recommend the provider. The patterns here are much more similar from smartphone to smartphone; smartphone satisfaction accounts for about 15% of a person's likelihood to recommend the network. The iPhone has no particular advantage relative to other phones.

Fig. 17: Few differences in role of phone satisfaction in likelihood to recommend provider

Influence on Likelihood to Recommend Provider	iPhone	Android	Palm Pre	BlackBerry	Palm Treo	Other
Satisfaction with Phone	14%	17%	11%	12%	11%	8%
Satisfaction with Provider	86%	83%	89%	88%	89%	92%

[6] An alternative solution is a higher prevalence of WiFi networks, which would offload some iPhone traffic from AT&T's network. However, with the limited availability of free WiFi and a growing demand for 'tethering' (using the smartphone as a modem for a computer), the WiFi option is unlikely to provide any short-term relief.

Conclusions

In the CFI Group Smartphone Satisfaction Study, we have found that:

- Newer smartphone users are placing more demands on networks than early adopter, business-oriented users
- Newer smartphones, with their better web browsers and applications, also encourage more network use
- The iPhone deserves its public accolades; customers love it
- Android is an up-and-coming competitor to the iPhone; customers like using the Android and its applications, and as newer Android-compatible phones are released the hardware gap with iPhone will diminish
- Pre is a strong entry for Palm into the new smartphone market. If Palm can shore up its applications availability, it will be even more competitive
- All is not lost for BlackBerry, though legacy phones are a drag on BlackBerry's customer satisfaction
- The 'generic' smartphone is unloved, unappreciated, and unlikely to encourage any devotion among its users. Its main role appears to be as a stepping stone to a 'branded' smartphone
- Verizon and T-Mobile are the top-rated providers of smartphone service, with AT&T trailing the pack
- Verizon's failure to offer attractive smartphones is countered by their great performance as a provider
- Customer satisfaction scores for AT&T customers are consistent with the theory that iPhone users are straining AT&T's network
- Forced migrations and exclusive phone-network relationships can be bad for customer satisfaction with the provider. Those iPhone users who were forced to switch to AT&T to get the iPhone are damaging AT&T's reputation, rating AT&T much more poorly than customers who were with AT&T before their iPhone

Satisfaction is a long-term asset on the balance sheet. From a satisfaction point of view, Apple is benefitting much more than AT&T with the iPhone. AT&T is clearly hoping that the short-term revenue gains of the exclusive iPhone relationship will offset the costs of lower customer satisfaction. Would AT&T be better off allowing other providers to sell the iPhone, shoulder more of the network burden, and take those customers who were forced to switch to AT&T and are more prone to complain about AT&T publicly? That's for AT&T to answer; we just know that the exclusive iPhone relationship is not all positive for AT&T.

While Apple is not yet threatened by its exclusive relationship with AT&T, at some point the scales may tip. Customers could avoid the iPhone if they believe the stories about AT&T's network problems. Verizon is walking the exact opposite line – providing great service but inferior smartphones. Verizon has happy customers, but if customers continue to demand smartphones that Verizon fails to supply, again the scales may tip.

Conclusions

Our data indicates there is little future for the ‘generic’ smartphone. Or, to be exact, the first generation of ‘generic’ smartphones. The iPhone has clearly raised the bar, but given the performance of the initial versions of the Pre and Android, the gap is narrowing. It’s clear from our data that the Android and Pre are worthy competitors to the iPhone, and more recent versions of the BlackBerry pose a bigger threat. As more applications are developed for the Pre and Android (and BlackBerry), and as hardware grows more competitive with the iPhone, customers will likely look to other criteria for choosing their phone – including evaluations of the provider. We will, in short, return to the earlier days of mobile phones, when coverage and price and plans mattered much more than the technology of the phone.

Our data also indicates all new smartphones, not just the iPhone, encourage a large amount of network usage. Business users and early adopters are less likely to burden the network as much as personal users and late adopters. As smartphone growth increases, all networks (not just AT&T’s) may be strained, leading to lower customer satisfaction across all providers. The carrier with the technological advantage will be best positioned to handle the smartphone explosion.