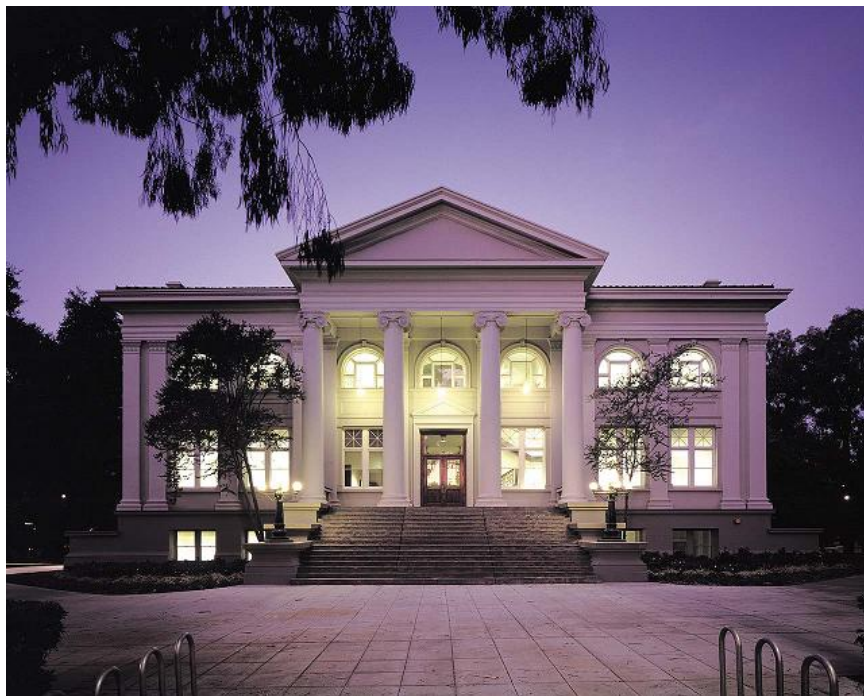


T-MOBILE USA, INC.
CLIENT REPORT
SONTAG SOLUTIONS



MARISSA KUHRAU

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DON SWAN

PROFESSOR LIKENS' SENIOR SEMINAR

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EXECUTIVE SUMMARY

T-Mobile US, Inc. (the Company) is a national provider of mobile communications services including postpaid and prepaid¹ wireless voice, messaging, and data services, and wholesale wireless services headquartered in Bellevue, Washington. Currently the fourth largest provider of mobile communications services in the U.S., the Company provides services to over 55 million customers in postpaid, prepaid, and wholesale markets nationwide.

Over the years, T-Mobile has perpetually lagged far behind the top three rivals in the domestic wireless communications industry² in terms of network technology, product offerings, and customer base. Most recently, T-Mobile was the last of the four major carriers to deploy LTE³ network technology, as well as the last to offer the most popular smartphone in the U.S., the Apple iPhone.⁴ However, after aggressively expanding their LTE coverage starting in 2012, and later introducing the iPhone 5, T-Mobile is finally catching up with the larger carriers in terms of service quality and offerings. Immediately following these improvements, the Company launched what they call the “Un-carrier

¹ When a customer selects a postpaid service plan, the mobile network operator provides service and the user is billed after according to their use of mobile services at the end of each month. Conversely, with a prepaid service plan (also commonly referred to as pay-as-you-go), users purchase credit in advance to pay for mobile services at the point the service is consumed. If there is no available credit, then access to the requested service is denied by the mobile phone network. “Prepaid Mobile Phone”; “Postpaid Mobile Phone.”

² Verizon, AT&T, and Sprint

³ LTE stands for “long-term evolution,” and is considered the most advanced network technology available to cellular-enabled devices to date. Commonly marketed as 4G LTE, this technology offers superior service to both the network operator and the subscriber. The network technology itself is easily deployable, and increases the capacity and speed of wireless data networks. Gompas, “Deep Dive.”

⁴ “comScore Reports U.S. Smartphone Subscriber Market Share.”

Value Proposition,” which aims to reposition T-Mobile as a dependable provider of high-speed LTE service on a full range of desirable devices for an “unrivaled customer experience.”⁵ Since this strategy was initiated in March 2013, T-Mobile has witnessed enormous customer growth, adding over 8 million customers between December 31, 2013 and December 31, 2014.

While it may appear that T-Mobile’s downward trajectory has been reversed, the Company’s sole focus on customer growth has adversely affected its bottom line. In order to maintain high growth and customer retention, we recommend that T-Mobile should focus on its new initiative, “Un-carrier for Business”, to continue gaining market share by targeting the small business segment. Additionally, T-Mobile should continue to purchase spectrum strategically in order to maintain network quality while keeping capital expenditures in check. Finally, T-Mobile should aim to reduce the costs of Un-carrier promotions in the consumer segment in the next few years, while simultaneously continuing to invest in churn reduction initiatives and overall customer experience.

⁵ “T-Mobile US, Inc. Form 10-K,” 9.

COMPANY BACKGROUND

History and Overview

T-Mobile, US, Inc. originated as a subsidiary of Western Wireless Corporation, established in 1994 under the name VoiceStream Wireless PCS. In 2001, a German telecommunications company called Deutsche Telekom AG acquired VoiceStream Wireless and another southern U.S. regional network operator named Powertel, Inc. for \$35 billion and \$25 billion, respectively.⁶ As VoiceStream wireless grew to serve 7 million subscribers, it was rebranded as T-Mobile, USA, Inc., “the U.S. operating entity of T-Mobile International AG, the mobile communications subsidiary of Deutsche Telekom AG.”⁷ Six years later, the company acquired SunCom Wireless Holdings, Inc. for \$2.4 billion, adding SunCom’s 1.1 million customers and expanding the company’s network coverage.

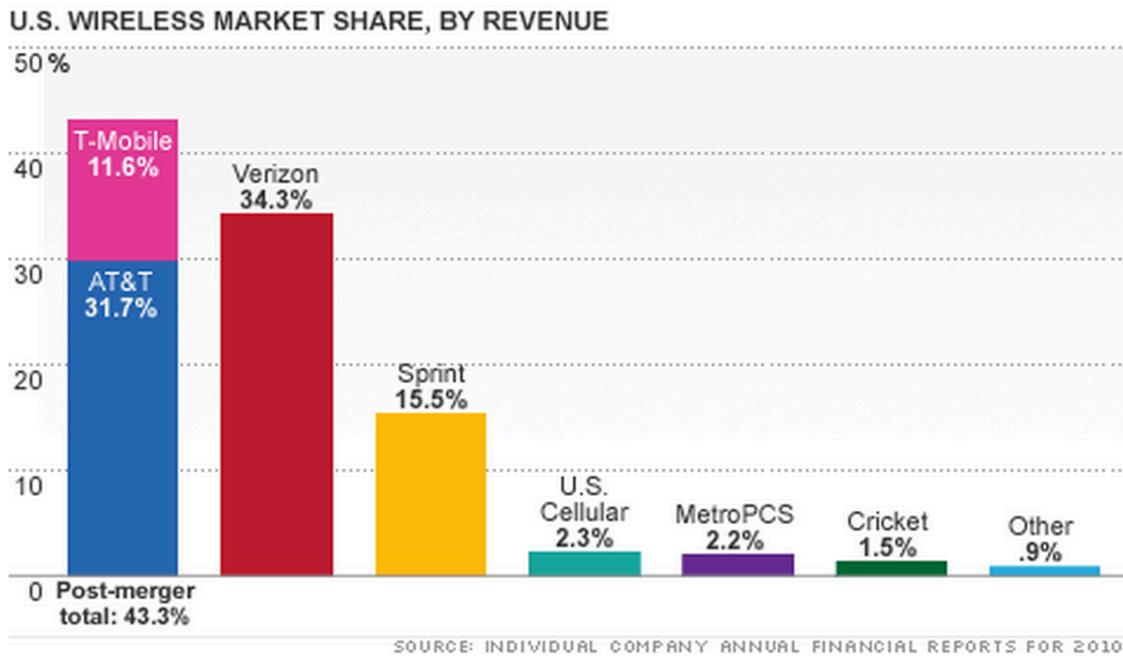
On March 20, 2011, the board of Deutsche Telekom AG approved a \$39 billion offer from AT&T for T-Mobile USA, Inc. If the merger had been completed, it would have expanded AT&T’s customer base to approximately 130 million users, making it the nation’s largest wireless carrier and “shift[ing] the competitive landscape of the U.S. industry.”⁸ As such, the merger was subject to heavy scrutiny from the Federal Communications Commission, who had recently warned of growing concentration among wireless providers “and, for the first time in years, didn’t conclude in its annual

⁶ “VoiceStream - about Us.”

⁷ “T-Mobile US.”

⁸ Das, “AT&T to Buy Rival in \$39 Billion Deal.”

industry report that the industry is competitive.”⁹ As shown in the chart below, the merger would give AT&T and T-Mobile a combined market share of 43.3% of the U.S. wireless market.¹⁰



Ultimately, the United States Department of Justice sued to block the deal on the grounds that it would violate antitrust law by “substantially lessen[ing] competition” in the wireless market.¹¹ AT&T had also committed to pay Deutsche Telekom a \$3 billion fee, in addition to \$1 billion in rights to AWS¹² spectrum if as a “break-up fee” if the deal failed to gain regulatory approval.¹³ Therefore, as a result of AT&T’s failed acquisition attempt, T-Mobile was able to build out its network infrastructure and become more attractive to users, and thus become a disruptor in the market. Since AT&T’s failed

⁹ Ibid.

¹⁰ Cowley, “AT&T Sets aside \$4 Billion for T-Mobile Breakup Fee.”

¹¹ Bliss, “T-Mobile Antitrust Challenge Gives AT&T Little Recourse.”

¹² “Advanced Wireless Service,” a.k.a. a wireless telecommunications spectrum band used for mobile voice and data services, video and messaging

¹³ Manjoo, “T-Mobile Turns an Industry on Its Ear.”

attempt to acquire T-Mobile, there have been a number of reports indicating potential mergers with companies like Softbank¹⁴, Iliad¹⁵, and Google, but although some of these bids were announced publically, none have come to fruition. Analysts speculate that Deutsche Telekom would still be open to a bid that would be “attractive” to the company’s current shareholders, but antitrust experts remain skeptical that regulators would approve such an acquisition.¹⁶

T-Mobile US, Inc. was formed under the terms of a complex business combination involving a reverse merger between T-Mobile USA and MetroPCS. T-Mobile USA’s parent, Deutsche Telekom, received shares of common stock of the combined company in exchange for its transfer of all T-Mobile USA’s common stock. While this exchange closed in April 2013, Deutsche Telekom maintains at 67% ownership of T-Mobile US, Inc. common stock. The main objective of the combination was “to provide T-Mobile with expanded scale, spectrum, and financial resources to compete aggressively with other, larger U.S. wireless carriers.”¹⁷ T-Mobile US, Inc. continues to be the fourth largest provider of postpaid service plans and the third largest provider of prepaid service plans in the U.S., in addition to mobile communications services beyond wireless voice including messaging, data, and wholesale wireless services with a network covering more than 280 million people nationwide.

¹⁴ The parent company of Sprint Corporation

¹⁵ The parent company of a French carrier named Free Mobile

¹⁶ “Wireless Mergers Will Draw Scrutiny, Antitrust Chief Says.”

¹⁷ “T-Mobile US, Inc. Form 10-K,” 2.

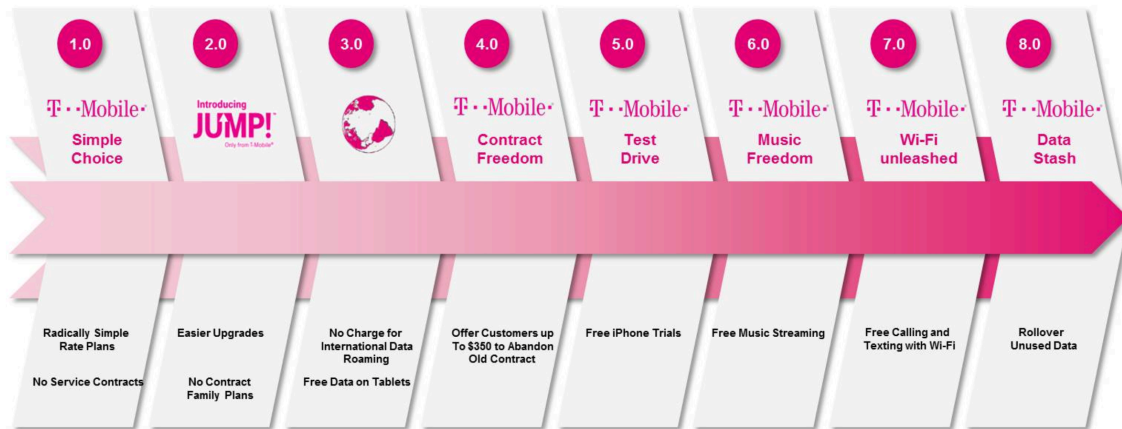
T-Mobile currently provides services to over 55 million customers in postpaid, prepaid, and wholesale markets, and preliminary results from their 4Q14 indicate that after a record year of customer growth, they are close to surpassing their rival Sprint, the third-largest carrier behind AT&T and Verizon, in total customer count. T-Mobile added 2.1 million customers in 4Q14, bringing their total customer count to 55.018 million, whereas Sprint reported 55.037 million customers at the end of the 3Q14. T-Mobile appears to be the fastest growing wireless company of 2014, capturing nearly 90% of the industry postpaid phone growth in 4Q14 and nearly 100% in full-year 2014.

T-Mobile primarily generates revenue by offering affordable wireless communication services to its customers, as well as a wide range of wireless handsets and accessories, including smartphones, wireless-enabled computers such as notebooks and tablets, and data cards, which are manufactured by various independent suppliers. The Company's most significant expenses are related to acquiring and retaining high-quality customers, expanding and providing network services, acquiring and retaining customers, compensating their 40,000 employees, and operating and expanding their network.

Business Strategy

In 2013, T-Mobile launched the “Un-carrier” strategy with the objective of “eliminating customer pain points from the unnecessary complexity of the wireless communication industry.”¹⁸ Phases 1.0 through 8.0 of the Un-Carrier proposition are described in more detail in the graphic below:

¹⁸ Ibid., 4.



To summarize each phase succinctly: in March 2013, T-Mobile introduced phase 1.0; Simple Choice™ plans, which eliminated annual service contracts and allowed qualified customers to purchase smartphones and pay for them with a low out-of-pocket payment and 24 interest-free monthly installments. In July 2013, the Company unrolled phase 2.0; “JUMP!”, which allowed participating customers to upgrade their eligible device when they want, rather than on a predetermined schedule. In October 2013, the Company unveiled phase 3.0, which provides Simple Choice™ customers reduced U.S. to international calling rates, and messaging and data roaming while traveling abroad in over 100 countries at no extra cost with Simple Global™. Part 2 of phase 3.0 allowed every T-Mobile tablet user to use up to 200 MB of free LTE data every month for as long as they own their tablet and use it on T-Mobile’s network. In January 2014, phase 4.0 eliminated one of the last remaining obstacles for customers wanting to switch from other carriers to T-Mobile by offering to reimburse customers’ early termination fees when they switch from other carriers and trade in their eligible device. In June 2014, phase 5.0 allowed customers to test T-Mobile’s network using an Apple® iPhone® 5 with unlimited nationwide service for seven days at no charge. As of June 2014, phase 6.0 or “Music Freedom” allowed Simple Choice customers to stream music from popular music

services without counting it against their data allotment. In September 2014, phase 7.0 delivered coverage to customers in more locations, providing Wi-Fi calling and texting¹⁹ for Simple Choice customers on capable smartphones. In December 2014, phase 8.0 or “Data Stash” gave customers the ability to roll their unused high-speed data each month so they can use it when they need it for up to a year. Starting in January 2015, this service became available at no extra charge to every T-Mobile customers with a postpaid Simple Choice plan who has purchased additional LTE data.²⁰

This strategy has undoubtedly generated strong customer growth, evidenced by the fact that the T-Mobile provided service to 47 million subscribers at the end of 2013, and has now surpassed 55 million as of their most recent quarter. T-Mobile likely took most of its market share from Sprint, which lost 646,000 customers – translating to a revenue decline of 1.8% – over the past year.²¹ T-Mobile reported an overall porting ratio²² of 2.1:1 against the other three top providers in 2014.²³

¹⁹ As opposed to reading a cell tower signal

²⁰ “T-Mobile US, Inc. Form 10-K,” 8.

²¹ Knutson and Dulaney, “Sprint Takes \$1.9 Billion Write-Down as Brand Name Loses Value.”

²² Customers switching their from another network to T-Mobile

²³ “JP Morgan.”

FINANCIAL ANALYSIS

Financial Overview

T-Mobile has experienced mixed financial performance in recent years. One of the company's strengths is its recent record of revenue growth. In particular, the company has seen considerable growth in branded postpaid service revenues, which increased \$1.2 billion or 9% in 2014, compared to 2013. This increase is primarily attributable to the customer growth as a result of the continued success of the Un-carrier proposition. Similarly, branded prepaid revenues have grown tremendously since 2012, however this growth is primarily driven by growth of the customer base from the expansion of the MetroPCS brand.²⁴ Results from the fourth quarter of 2014 clearly indicate that T-Mobile is gaining market share from its three primary competitors²⁵, and analysts speculate that it is only a matter of time until the Company surpasses Sprint to become the third largest carrier in the U.S.²⁶

²⁴ "T-Mobile US, Inc. Form 10-K," 46.

²⁵ Verizon being the largest, followed by AT&T and Sprint

²⁶ Aycock, "T-Mobile Passing Sprint Is Matter of Time."

T-Mobile Income Statement Key Items

| Consolidated Statements of Comprehensive Income (Loss) (USD \$) | 12 Months Ended | | |
|--|----------------------|----------------------|----------------------|
| In Millions, except Share data, unless otherwise specified | Dec. 31, 2014 | Dec. 31, 2013 | Dec. 31, 2012 |
| <i>Revenues</i> | | | |
| Branded postpaid revenues | \$14,392 | \$13,166 | \$14,521 |
| Branded prepaid revenues | 6,986 | 4,945 | 1,715 |
| Wholesale revenues | 731 | 613 | 544 |
| Roaming and other service revenues | 266 | 344 | 433 |
| Total service revenues | 22,375 | 19,068 | 17,213 |
| Equipment sales | 6,789 | 5,033 | 2,242 |
| Other revenues | 400 | 319 | 264 |
| Total revenues | 29,564 | 24,420 | 19,719 |
| <i>Operating expenses</i> | | | |
| Cost of equipment sales | 9,621 | 6,976 | 3,437 |
| Selling, general and administrative | 8,863 | 7,382 | 6,796 |
| Depreciation and amortization | 4,412 | 3,627 | 3,187 |
| Cost of MetroPCS business combination | 299 | 108 | 7 |
| Impairment charges | 0 | 0 | 8,134 |
| Gains on disposal of spectrum licenses | -840 | -2 | -205 |
| Total operating expenses | 28,148 | 23,424 | 26,116 |
| Operating income (loss) | 1,416 | 996 | -6,397 |
| <i>Other income (expense)</i> | | | |
| Interest expense to affiliates | -278 | -678 | -661 |
| Interest expense | -1,073 | -545 | 0 |
| Interest income | 359 | 189 | 77 |
| Other income (expense), net | -11 | 89 | -5 |
| Income (loss) before income taxes | 413 | 51 | -6,986 |
| Income tax expense | 166 | 16 | 350 |
| Net income (loss) | 247 | 35 | -7,336 |
| Basic EPS | \$0.31 | \$0.05 | (\$13.70) |

However, this increase in revenue is partially offset by lower branded postpaid average revenue per account, a performance measure that was negatively impacted by the continued growth of the Company's Simple Choice plans, which have lower monthly service charges compared to traditional bundled plans. The chart below shows that

branded postpaid phone ARPU decreased \$3.59, or 7%, for 2014, compared to 2013 as a result of lower monthly service charges and promotions for services in 2014.²⁷

| (in millions, except average number of customers, ARPU and ABPU) | Year Ended December 31, | | |
|--|-------------------------|-----------------|-----------------|
| | 2014 | 2013 | 2012 |
| Calculation of Branded Postpaid Phone ARPU: | | | |
| Branded postpaid service revenues | \$ 14,392 | \$ 13,166 | \$ 14,521 |
| Less: Branded postpaid mobile broadband revenues | (261) | (169) | (185) |
| Branded postpaid phone service revenues | \$ 14,131 | \$ 12,997 | \$ 14,336 |
| Divided by: Average number of branded postpaid phone customers (in thousands) and number of months in period | 23,817 | 20,424 | 20,872 |
| Branded postpaid phone ARPU | \$ 49.44 | \$ 53.03 | \$ 57.23 |

Over the past twelve months since the Un-Carrier proposition was first launched, branded postpaid customers on Simple Choice plans has increased from 69% of the branded postpaid customer base to 89%.²⁸ This growth in Simple Choice plans is additionally worrisome given the significant negative impact of the growth in Simple Choice plans on roaming and other service revenues, which decreased \$78 million, or 23% in 2014, compared to 2013. This decline is primarily attributable to a decline in ETFs²⁹ following the introduction of the no annual service contract feature of the first phase of the Un-carrier proposition launched in March 2013.³⁰ That being said, T-Mobile has seen a steady reduction (improvement) in branded postpaid churn rate, partially in response to churn reduction initiatives to improve customer experience and therefore customer retention. Postpaid churn improved to 1.58% in 2014, compared to 1.69% in 2013 and 2.33% in 2012.³¹ For comparison, Sprint's postpaid churn was 2.24% in 2013 and 2.16%

²⁷ "T-Mobile US, Inc. Form 10-K," 62.

²⁸ Ibid., 26.

²⁹ Early termination fees

³⁰ "T-Mobile US, Inc. Form 10-K," 47.

³¹ Ibid., 10.

in 2014.³² Verizon and AT&T have the lowest postpaid churn rates of the four. Both Verizon and AT&T had postpaid churn rates of 1.04% in 2014.³³ T-Mobile currently generates the vast majority of its services revenues by providing services to branded postpaid customers – in 2014, 64% of the Company’s service revenues were generated from branded postpaid customers, “compared with 31% from branded prepaid customers and 5% from wholesale customers, roaming and others services.”³⁴ Additionally, the Un-carrier strategy and substantially grown revenues from equipment sales due to significant growth in the number of devices sold due from higher gross customer additions and device upgrade volumes.³⁵

These negative consequences of the first phase of the Un-carrier strategy on service revenue are particularly concerning, because although the initial phases were successful in terms of customer growth, the costs of these offerings could ultimately prove financial unsustainable as the Simple Choice customer base continues to grow. However, if T-Mobile continues to invest in customer experience and retention to build a strong foundation of customers, they may be able to scale back some of the promotional spending on the Un-carrier programs and grow average revenue per user to offset those expenses. Indeed, the Company has already begun growing its average billing per user (ABPU), which hit \$61.80 in the fourth quarter of 2014, the highest in company history.³⁶

³² Ibid., 41; “Sprint Corporation 10-Q,” 54.

³³ “Verizon Communications, Inc. Form 10-K”; “AT&T Inc. Form 10-K.”

³⁴ “T-Mobile US, Inc. Form 10-K,” 11.

³⁵ “The volume of device sales increased 48% in 2014, compared to 2013.” Ibid., 48.

³⁶ “T-Mobile: On The Path To Threatening AT&T And Verizon For Dominance In Wireless.”

Despite these concerns, T-Mobile's gross profit margin for the fourth quarter of its fiscal year 2014 is essentially unchanged when compared to the same period a year ago, and exceeds that of its rival, Sprint, at 0.84%, (compared to Sprint's -3.88%). However, the company's profitability is expected to suffer in the next year due to heavy investments in attracting and retaining new customers. While these investments have certainly generated significant customer growth, the 48% increase in number of devices sold due to higher gross customer additions and higher device upgrade volume has increased cost of equipment sales \$2.6 billion, or 38%, in 2014 as compared to 2013.

As a counter to these strengths, the company has favored debt over equity in the management of its balance sheet. Currently the debt-to-equity ratio of 0.73 is significantly higher than the industry median of 0.54, suggesting that T-Mobile's debt levels may warrant re-evaluation. Even though the debt-to-equity ratio is weak, T-Mobile's current ratio and quick ratio are strong at 1.59 and 1.20 respectively, demonstrating the ability to handle short-term liquidity needs.

T-Mobile Balance Sheet Key Items

| Consolidated Balance Sheets (USD \$) | Dec. 31, 2014 | Dec. 31, 2013 |
|--|----------------------|----------------------|
| In Millions, unless otherwise specified | | |
| <i>Current assets</i> | | |
| Cash and cash equivalents | \$5,315 | \$5,891 |
| Accounts receivable, net of allowances of \$83 and \$109 | 1,865 | 2,148 |
| Equipment installment plan receivables, net | 3,062 | 1,471 |
| Accounts receivable from affiliates | 76 | 41 |
| Inventories | 1,085 | 586 |
| Deferred tax assets, net | 988 | 839 |
| Other current assets | 1,593 | 1,252 |
| Total current assets | 13,984 | 12,228 |
| Property and equipment, net | 16,245 | 15,349 |
| Goodwill | 1,683 | 1,683 |
| Spectrum licenses | 21,955 | 18,122 |
| Other intangible assets, net | 870 | 1,204 |
| Equipment installment plan receivables due after one year, net | 1,628 | 1,075 |
| Other assets | 288 | 292 |
| Total assets | 56,653 | 49,953 |
| <i>Current liabilities</i> | | |
| Accounts payable and accrued liabilities | 7,364 | 4,567 |
| Current payables to affiliates | 231 | 199 |
| Short-term debt | 87 | 244 |
| Deferred revenue | 459 | 445 |
| Other current liabilities | 635 | 353 |
| Total current liabilities | 8,776 | 5,808 |
| Long-term debt | 16,273 | 14,345 |
| Long-term debt to affiliates | 5,600 | 5,600 |
| Long-term financial obligation | 2,521 | 2,496 |
| Deferred tax liabilities | 4,873 | 4,645 |
| Deferred rents | 2,331 | 2,113 |
| Other long-term liabilities | 616 | 701 |
| Total long-term liabilities | 32,214 | 29,900 |
| <i>Stockholders' equity</i> | | |
| Total stockholders' equity | 15,663 | 14,245 |
| Total liabilities and stockholders' equity | \$56,653 | \$49,953 |

It is important to note that the Company's interest coverage is quite poor, with an EBIT/Interest ratio of 1.0. However, this EBIT/Interest ratio is not as bad as Sprint's at -1.1.

T-Mobile Cash Flow Statement Key Items

| Consolidated Statements of Cash Flows | 12 Months Ended | | |
|--|------------------------|----------------------|----------------------|
| (USD \$) | | | |
| In Millions, unless otherwise specified | Dec. 31, 2014 | Dec. 31, 2013 | Dec. 31, 2012 |
| <i>Operating activities</i> | | | |
| Net income (loss) | \$247 | \$35 | (\$7,336) |
| Depreciation and amortization | 4,412 | 3,627 | 3,187 |
| Deferred income tax expense | 122 | 10 | 308 |
| Amortization of debt discount and premium, net | -47 | -62 | -81 |
| Bad debt expense | 444 | 463 | 702 |
| Losses from factoring arrangement | 179 | 0 | 0 |
| Deferred rent expense | 225 | 229 | 206 |
| <i>Changes in operating assets and liabilities</i> | | | |
| Accounts receivable | -90 | -158 | -299 |
| Equipment installment plan receivables | -2,429 | -2,016 | -521 |
| Inventories | -499 | 42 | -2 |
| Deferred purchase price from factoring arrangement | -204 | 0 | 0 |
| Other current and long-term assets | -328 | 314 | -196 |
| Accounts payable and accrued liabilities | 2,395 | 611 | -32 |
| Other current and long-term liabilities | 312 | 141 | 50 |
| Net cash provided by operating activities | 4,146 | 3,545 | 3,862 |
| <i>Investing activities</i> | | | |
| Purchases of property and equipment | -4,317 | -4,025 | -2,901 |
| Purchases of spectrum licenses and other intangible assets, including deposits | -2,900 | -381 | -387 |
| Cash and cash equivalents acquired in MetroPCS business combination | 0 | 2,144 | 0 |
| Net cash used in investing activities | -7,246 | -2,092 | -3,915 |
| <i>Financing activities</i> | | | |
| Proceeds from issuance of long-term debt | 2,993 | 2,494 | 0 |
| Repayments of long-term debt and capital lease obligations | -1,019 | -9 | 0 |
| Proceeds from issuance of preferred stock | 982 | 0 | 0 |
| Proceeds from issuance of common stock | 0 | 1,787 | 0 |
| Proceeds from financial obligation | 0 | 0 | 2,469 |
| Net cash provided by financing activities | 2,524 | 4,044 | 57 |
| Change in cash and cash equivalents | -576 | 5,497 | 4 |
| <i>Cash and cash equivalents</i> | | | |
| Beginning of year | 5,891 | 394 | 390 |
| End of year | \$5,315 | \$5,891 | \$394 |

Spectrum purchases

The wireless telecommunication services industry is capital-intensive with prohibitive barriers, despite government deregulation and FCC plans to initiate spectrum leasing to

third parties. The need for network capacity expansion, spectrum sharing and network build-out is likely to result in alliances among carriers and infrastructure providers. In January 2014, T-Mobile entered into agreements with Verizon for the acquisition of 700 MHz A-Block spectrum licenses in exchange for approximately \$2.4 billion in cash and transfer of certain AWS spectrum and PCS spectrum. The spectrum licenses to be acquired from Verizon cover more than 150 million people, including approximately 50% of the U.S. population and 70% of T-Mobile's existing customer base, in 23 markets. These transactions are expected to "further enhance the company's portfolio of U.S. nationwide broadband spectrum" and enable the expansion of LTE coverage to new markets.³⁷ Despite this recent agreement, T-Mobile and Sprint are at a perpetual disadvantage in spectrum auctions, simply because Verizon and AT&T are able to place higher bids on higher quality spectrum.

Stock Performance

T-Mobile's stock has ranged \$24 and \$33 per share in the past six months. Currently the stock trades for approximately \$32 a share as of April 15. T-Mobile has a market cap of \$25.74 billion. The Company is trading at 106.23 P/E ratio (much higher than the industry median of 24.0) and at a price to book ratio of 1.64 (lower than the industry median of 9.3). T-Mobile's earnings expectations and outlook are highly dependent on continued customer growth, interest rate fluctuations, and shifts in business strategy to encourage an increase in productivity.

³⁷ Ibid., 13.

COMPETITIVE ANALYSIS (FIVE FORCES)

Market Definition

T-Mobile is classified as one of the four largest U.S. providers in the wireless communications industry, which together own 80% of the total wireless market.³⁸ T-Mobile primarily competes against three national wireless carriers that offer predominantly contract-based service plans, the largest being Verizon (VZ), followed by AT&T (T), followed by Sprint (S). The market caps for these four companies are 205.25B, 170.70B, 19.95B, and 18.79B for Verizon, AT&T, Sprint, and T-Mobile respectively. Verizon and AT&T are significantly larger than Sprint and T-Mobile, and given the benefit of scale in the wireless industry, Verizon and AT&T enjoy greater resources and economies of scale than their two smaller counterparts. Additional competitors include numerous smaller regional carriers (such as TracFone Wireless, Inc. and Virgin Mobile USA, Inc.), many of which offer no-contract, prepaid service plans. Finally, T-Mobile competes with providers who offer similar communications services like voice and messaging, using alternative technologies or services – for instance, Twilio, a communications software that allows apps to embed call, voice, and text messaging features in web, desktop, and mobile applications.

Internal Rivalry

The wireless market is highly saturated, meaning that further growth is largely achieved through product improvements or market share gains. Given this level of situation, there

³⁸ “T-Mobile: On The Path To Threatening AT&T And Verizon For Dominance In Wireless.”

is very little scope for new subscriber growth, resulting in cutthroat competition between carriers to poach others' existing subscribers. In the wireless industry, these competitive factors primarily consist of pricing, service and product offerings, customer experience, network investment and quality, development and deployment of new technologies, and regulatory changes.³⁹ Additionally, because the wireless business requires upfront, fixed costs that require heavy capital investments, T-Mobile and Sprint are at a competitive disadvantage compared to other large U.S. wireless carriers. In the last two years, new management has positioned T-Mobile as a disruptor in the market, reinvigorating the brand to gain subscribers and operating leverage to spread revenue across their large fixed-asset base. Simultaneously, the third largest U.S. carrier, Sprint, continues to lose market share as a result of financial difficulties for a number of years following the recession. Unable to raise adequate capital to finance LTE network upgrades, Sprint's service quality is far behind the curve in terms of service quality, and as a result has lost millions of subscribers – to the benefit of T-Mobile.⁴⁰ However, because some competitors have shown a willingness to use aggressive pricing as a source of differentiation, the competitive factors described here “will continue to put pressure on margins as companies compete to retain the current customer base and continue to add new customers.”⁴¹ In addition to low profits, the telecom industry suffers from high exit barriers due to specialized equipment, making liquidation relatively difficult.

³⁹ “T-Mobile US, Inc. Form 10-K.”

⁴⁰ “T-Mobile: On The Path To Threatening AT&T And Verizon For Dominance In Wireless.”

⁴¹ “T-Mobile US, Inc. Form 10-K,” 13.

Buyer Power

Buyers in the wireless communication industry have increasing bargaining power as a result of the increasing number of choices between telecom products and services. While there is some differentiation in terms of service quality and customer service, for the most part there is not much differentiation between basic services. This translates to buyers treating basic services as a commodity, that is, seeking low prices from companies that offer reliable service. Additionally, switching costs between providers are relatively low for residential wireless customers (which is why Sprint has lost so many subscribers in recent years); however, these costs differ across market segments. For larger business customers, especially those that rely more on customized products and services, switching costs are substantially higher.⁴²

It is important to note that while buyers treat basic service as a commodity, in most cases it is not a search good – namely, a product or service with features and characteristics easily evaluated before purchase. Prior to T-Mobile’s unique new offerings, pricing was anything but transparent due to the industry standard of long, incomprehensible service contracts with complex hidden fees for any services above the most basic package. T-Mobile hopes to challenge this standard with its Un-carrier strategy, which is designed to eliminate consumer pain points, by providing transparent pricing, flexibility, and high quality customer service.

⁴² “The Industry Handbook.”

Supplier Power

Suppliers in the wireless communications industry provide high-tech broadband switching equipment, fiber-optic cables, mobile handsets and billing software to telecommunications operators. While it may appear that these equipment suppliers have significant bargaining power over wireless service providers, there are actually a number of large equipment vendors to dilute this bargaining power. One unique aspect of supplier power in the telecommunications industry is the high degree of government regulation over spectrum and towers. Because high-quality spectrum is a crucial determinant of service quality, and the finite amount of high-quality spectrum is distributed through FCC auction to the highest bidder, smaller firms (i.e. not Verizon or AT&T) are limited by resource constraints in this highly competitive landscape. To mitigate this disadvantage, the companies have “argued for rule changes that would set aside 40 MHz of an expected 70-80 MHz for smaller firms.”⁴³

Like equipment suppliers, product suppliers have relatively weak bargaining power in the wireless communications industry because there are such a large number of vendors. One exception to this assessment of product supplier power relates to exclusive contracts with individual carriers for certain wireless handsets or accessories. In this way, product suppliers can limit certain carriers from distributing popular handsets, which can put carriers at a significant disadvantage. For example, T-Mobile was the last major U.S. carrier to enter an agreement to distribute Apple products, putting them at a huge

⁴³ “T-Mobile, Sprint Gambling on Increasing Spectrum Set-Aside.”

disadvantage for the five years between then the iPhone was originally launched, and when T-Mobile finally started carrying it in 2013.⁴⁴

Threat of New Entrants

Barriers to entry in this industry are exceptionally high, which is why it is so closely regulated by the Federal Communications Commission. The first barrier to entry is obtaining a telecom license – operators must apply to the FCC to receive regulatory approval and licensing. The second significant barrier to entry is acquiring spectrum, which is regulated by FCC-auctioned licensing. Given the finite amount of high-quality radio spectrum that lends itself to mobile voice and data applications, this regulation is intended to avoid the negative externalities of an oligopoly. However, some have argued that the larger concern is the duopoly formed by the two incumbent operators, Verizon and AT&T, and their continued dominance over both spectrum and customer base. However, there is some speculation that because T-Mobile has been so disruptive as an independent company, officials will be even more wary of approving future consolidation in the industry.⁴⁵

Threat of Substitutes

The most significant threat to the wireless communications industry are technology substitutes such as Internet telephony service providers (ITSPs), which offer “digital telecommunications services based on Voice over Internet Protocol (VoIP) that are

⁴⁴ Stern, “T-Mobile iPhone Coming in 2013.”

⁴⁵ “Wireless Mergers Will Draw Scrutiny, Antitrust Chief Says.”

provisioned via the Internet.”⁴⁶ Some of these technological developments are considerably more convenient and cost-effective than the services provided by traditional wireless carriers, such as video chat, email, and instant messenger services. While it is unlikely that any of these services will replace traditional voice and messaging services any time in the near future, it will be important to continually monitor the growth of ITSPs, as well as upcoming communications companies like Twilio.⁴⁷

SWOT ANALYSIS

| Strengths | Weaknesses |
|---|--|
| <ul style="list-style-type: none"> • Strong customer growth • Reliable and quality service • New leadership and the Un-carrier proposition | <ul style="list-style-type: none"> • Steady decline in ARPU • Network capacity constraints |
| Opportunities | Threats |
| <ul style="list-style-type: none"> • Well-positioned to be acquired • Expansion of the business market segment • Acquiring higher-quality spectrum | <ul style="list-style-type: none"> • Poor interest coverage |

Strengths:

Strong customer growth

T-Mobile delivered a record year of customer growth in 2014, and is expected to succeed Sprint as the third largest domestic wireless carrier in a few months if they haven't

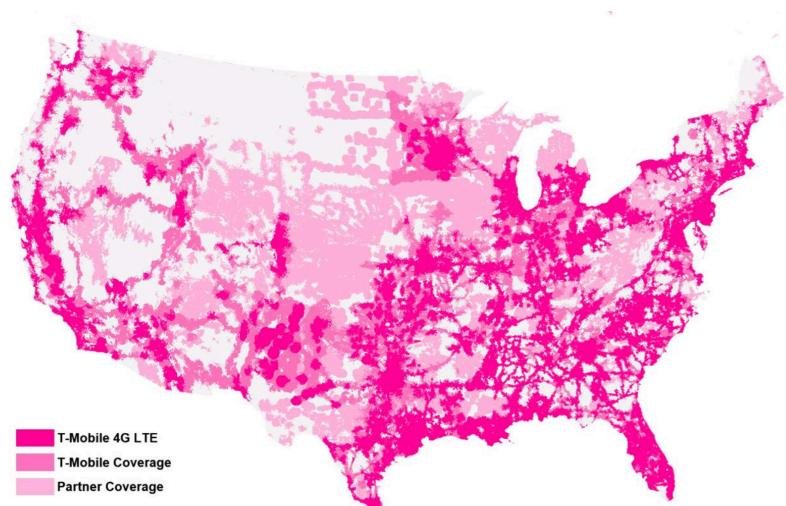
⁴⁶ “Internet Telephony Service Provider.”

⁴⁷ A communications software that allows apps to embed call, voice, and text messaging features in web, desktop, and mobile applications

already.⁴⁸ T-Mobile attracted 8.3 million new customers in 2014, 4.0 million of which were branded postpaid phone net adds, capturing nearly 100% of industry postpaid phone growth in 2014.⁴⁹

Reliable and quality service

T-Mobile has rapidly expanded their 4G LTE network with 265 million 4G LTE POPs (point-of-presence) at the end of 2014. Customer data on millions of real-time speed tests involving more than 1 million consumers have revealed that T-Mobile’s nationwide 4G LTE network is the fastest network in the nation. The Company is currently “building out our network to utilize our recently acquired 700 MHz of A-Block spectrum licenses, which will boost network reach, improve in-building coverage and extend coverage to more areas.”⁵⁰ The map below shows T-Mobile’s current coverage broken down by 4G LTE, basic coverage, and partner coverage. The company is hoping to cover 300 million people with LTE by the end of 2015.⁵¹



⁴⁸ “T-Mobile: On The Path To Threatening AT&T And Verizon For Dominance In Wireless.”

⁴⁹ “T-Mobile US Reports Fourth Quarter and Full-Year 2014 Results.”

⁵⁰ “T-Mobile US, Inc. Form 10-K,” 8.

⁵¹ Ibid.

New leadership and Un-carrier proposition

Prior to 2012, when T-Mobile was entirely owned by its parent company Deutsche Telekom, it lacked the strategic focus and innovative management it needed to remain competitive with other larger U.S. wireless providers. When T-Mobile USA, Inc. was formed through a complex deal involving a reverse merger with MetroPCS⁵², a new management team led by “[o]utspoken CEO John Legere” to revive the business.⁵³ The strategic shifts implemented by the new leadership – including investing in LTE build-out, negotiating a deal to carry Apple products, improving overall coverage, and simplifying the pricing strategy – has completely transformed the company.⁵⁴

Management credits most of these gains to the Un-carrier strategy, which has taken T-Mobile from losing millions of subscribers per year, to gaining 4 million postpaid subscribers since the first phase of the strategy was implemented in March 2013.

Additionally, postpaid churn⁵⁵ has decreased from over 2.4% in 2011 and 2012, to only 1.5% in 2014.⁵⁶ This momentum in customer growth combined with T-Mobile’s recent network modernization and LTE deployment position the Company as a strong threat to Sprint, and if these trends of success continue, the industry behemoths (Verizon and AT&T) might be forced to respond.

⁵² PCS stands for “Personal Communications Service”

⁵³ “T-Mobile: On The Path To Threatening AT&T And Verizon For Dominance In Wireless.”

⁵⁴ Ibid.

⁵⁵ Defined as the annual percentage rate of subscriber deactivations

⁵⁶ “T-Mobile US Reports Fourth Quarter and Full-Year 2014 Results.”

Weaknesses:

Steady decline in ARPU

While the Un-carrier program has unquestionably had a strong impact on customer growth and retention, some of the aspects of this promotion are financial unsustainable in the long run. The most prominent signal of this unsustainability is the steady decline in average revenue per user, which has decreased \$7.79, or 13.6%, since 2012. In the same period that ARPU has been in decline, postpaid churn rate has declined significantly, indicating that the most likely culprit of declining revenue per customer is phase 4.0, which offers customers up to \$350 reimbursement of the early termination fees (ETFs) from their former contracts, rather than T-Mobile's lack of annual service contracts.

Network capacity constraints

As customer demand for data services grows, T-Mobile is at a competitive disadvantage in terms of network capacity constraints, and will possibly experience deterioration in their quality of service if they fail to gain access to necessary spectrum before reaching capacity (because acquisition of spectrum is determined by government auction).⁵⁷

Opportunities:

Well-positioned to be acquired

After years of discussion about a potential merger, the third-largest wireless phone operator, Sprint Corporation, settled on the terms for a \$32 billion acquisition of T-Mobile in June 2014. However, the following month Sprint and its corporate parent, the

⁵⁷ "T-Mobile US, Inc. Form 10-K," 92.

Japanese telecommunications company SoftBank, decided to drop their pursuit of T-Mobile after conceding that antitrust regulators would block the deal. A recent wave of consolidation in the telecom industry, including Comcast's proposed takeover of Time Warner Cable and AT&T's purchase of DirecTV has sparked concern about concentrating too much power in the hands of too few companies. However, the failed effort to merge leaves open the question of what paths Sprint and T-Mobile will pursue as smaller competitors to the two giants of their industry (together, Sprint and T-Mobile hold less than a third of the industry).⁵⁸

T-Mobile has an even longer history of failed mergers, in fact, the Company's recent investments in network modernization and deployment of LTE can be attributed to the \$4 billion breakup fee it received from AT&T when U.S. regulators blocked AT&T's \$39 billion bid for the carrier in 2011.⁵⁹ Especially in light of the Company's newly acquired, highly coveted assets (in terms of spectrum and customer base), analysts have identified T-Mobile as a prime target for acquisition during potential consolidation in this space, and rumors continue to circulate about potential suitors including Google, Dish Network, and a French mobile upstart called Iliad.⁶⁰ In fact, Google recently announced in January that they plan to sell mobile phone plans directly to customers, managing their calls and mobile data over T-Mobile and Sprint's cellular networks (once they are able to reach a deal). Reporters state that "[i]t was not clear how widely Google plans to offer the wireless service, how much it would cost, or which mobile device manufacturers, if any,

⁵⁸ "Sprint and SoftBank End Their Pursuit of a T-Mobile Merger."

⁵⁹ Munson, "Sprint, T-Mobile Set \$2B Breakup Fee, T-Mobile Name for Combined Co."

⁶⁰ "T-Mobile: On The Path To Threatening AT&T And Verizon For Dominance In Wireless."

have agreed to work with Google for its new service,” suggesting that it may be too early to tell how this will affect T-Mobile and the wireless carrier industry overall.⁶¹

Expansion of the business market segment

The next phase of the Un-carrier strategy applies the same promotions that have been so successful among residential wireless customers and customizes them to appeal to the business market segment. The new program will give small businesses that require less than 20 lines a rate of \$16 per line, and those with over 20 lines a rate of \$15 per line. For larger companies needing over 1,000 lines, the businesses will receive a rate of \$10 per month for each line. Additionally, each connection permits unlimited calls and text messages, comes with 1 GB of data and a free GoDaddy.com domain and website coupled with email and other tools from Microsoft Office’s 365 Business Essentials. Finally, the Company has also initiated “major discount programs for families of business subscribers opting to be a part of this service. Under its new Business Family Discounts, the carrier will consider the company-paid line as the first line on a family plan. The switch will allow up to a remarkable 50% savings for customers using T-Mobile’s Simple Choice family plan.”⁶² This new offering presents an enormous opportunity for T-Mobile to continue gaining market share. The vast majority of U.S. businesses – 99.7% – have less than 500 employees and “don’t have the money or resources to waste debating, negotiating and deciphering the carriers’ hidden pricing.”⁶³ T-Mobile is the perfect solution for the “70 percent of U.S. businesses that say they’re sick of the game and want

⁶¹ “Google to Sell Wireless Service in Deals with Sprint, T-Mobile.”

⁶² “T-Mobile Woos Business Customers with New Pricing Plans.”

⁶³ “After Revolutionizing Wireless for Consumers, T-Mobile Un-Leashes Un-Carrier for Business.”

simple, transparent pricing.”⁶⁴ Currently, the big carriers receive over \$80 billion in revenue from domestic business subscribers, and if T-Mobile is able to capture some portion of those customers, the Company could pose a substantial threat to even the largest, most dominant players in the wireless space.⁶⁵

Acquiring higher quality spectrum

T-Mobile has reportedly been holding back in recent spectrum auctions, strategically bidding on minimal gains to their portfolio in order to save and bid more aggressively an upcoming auction of Broadcast Incentive Auction (low band 600 MHz).⁶⁶ It is interesting to note that in these same auctions, AT&T and Verizon, “increased their share of industry capacity by just 2% collectively to 38%...this compares to industry revenue share of 73%. If capacity utilization approached 100% as we think it will, these carriers either have to find a great deal more spectrum or relinquish a great deal of revenue share.”⁶⁷ Either way, T-Mobile stands to gain by absorbing some portion of the lost revenue share, or alternatively, by receiving attractive spectrum assets and becoming a stronger target for acquisition.

⁶⁴ Ibid.

⁶⁵ “T-Mobile Introduces New Pricing, Benefits for Businesses.”

⁶⁶ Goldstein, “Analysts: AWS-3 Auction Helps AT&T Catch up to Verizon in Spectrum Ownership in Major Markets.”

⁶⁷ Ibid.

Threats:

Poor interest coverage

While T-Mobile's overall debt level is not inconsistent with others in the industry – with a Debt/EBITDA ratio of 3.3 compared to Verizon's 3.1, AT&T's 2.5, and Sprint's shocking 17.7 – the Company's level of interest coverage raises a red flag. With an interest coverage ratio of 1.0, T-Mobile is barely generating sufficient net income to satisfy interest expenses. The good news is that T-Mobile has \$5.3 billion in cash and cash equivalents, which is “sufficient to meet the anticipated liquidity requirements of the Company in the next 12 months” in addition to intended uses for “general corporate purposes, including capital investments, enhancing [the Company's] financial flexibility and opportunistically acquiring additional spectrum in private party transactions.”⁶⁸

⁶⁸ “T-Mobile US, Inc. Form 10-K,” 66.

STRATEGIC RECOMMENDATIONS

Focus on Un-carrier for business

While T-Mobile's phase 9.0 "Un-carrier for Business" has gotten a lot of positive press since the recent announcement, there is no guarantee that the Un-carrier proposition will appeal to business customers in the same way that it has to the consumer segment. In particular, business customers might value network quality and reliability over low costs, which could work against T-Mobile as consumer subscriber growth continues to strain their network capacity. Additionally, business accounts currently make up only 13% of T-Mobile's wireless sales, meaning that the Company is facing an uphill battle in terms of attracting a segment of subscribers that is largely unfamiliar territory.⁶⁹ In light of these issues, it is imperative that T-Mobile focus on promoting this phase of the Un-carrier initiative in a way that will specifically appeal to the 99.7% of U.S. businesses that have less than 500 employees and therefore can't afford to over search for reasonably priced wireless service.⁷⁰ Beyond T-Mobile's core tenets of simplicity and transparency, T-Mobile must continue performing well on network quality tests in order to establish an additional advantage in catering to the business segment.

Especially given the questionable financial sustainability of the Un-carrier initiative in the consumer segment, T-Mobile must continue its current rate of subscriber growth in order for these aggressive pricing strategies to succeed. We recommend that T-Mobile devote an equal if not greater amount of resources to promoting Un-carrier for Business

⁶⁹ Bylund, "What's the Big Deal With T-Mobile USA's 'Business Un-Carrier' Plan?."

⁷⁰ "After Revolutionizing Wireless for Consumers, T-Mobile Un-Leashes Un-Carrier for Business."

as they did for the original Un-carrier phases, making sure to customize these marketing initiatives in a way that will address unmet needs in the business segment.

Continue to purchase spectrum strategically

In addition to focusing on appealing to the business market segment, T-Mobile must continue to strategically evaluate its spectrum purchases in order to maintain network quality while keeping capital expenditures in check. In light of the T-Mobile's newly acquired, highly coveted asset base, the Company is a very attractive target for acquisition, and rumors continue to circulate about potential suitors including Sprint, Google, and Dish Network, among others.⁷¹ As such, T-Mobile must strive to strategically add to its spectrum portfolio in a way that will maintain this status as well as their network quality without overcommitting to capital expenditures before they are financially stable enough to do so. Despite the great year that T-Mobile has had in 2014, they must continue to be cautious and think like an underdog – especially in ramping up spending on network-related goals – simply because of their vast competitive disadvantage both in terms of resources and economies of scale compared to Verizon and AT&T.

It is similarly important that T-Mobile maintain a realistic perspective about their chances of being acquired, and that they maintain their spectrum spending accordingly. The nation's leading antitrust enforcer has been vocal about the fact that "further consolidation among top wireless carriers would face intense scrutiny because consumers

⁷¹ "T-Mobile: On The Path To Threatening AT&T And Verizon For Dominance In Wireless."

have enjoyed ‘much more favorable competitive conditions’ since the division blocked a proposed merger between AT&T and T-Mobile in 2011.”⁷²

Reduce Un-carrier costs in consumer segment over time

Finally, it is clear that T-Mobile must eventually address their steadily declining ARPU, and the clearest method of achieving this goal is to slowly ease back from their Un-Carrier promotions in the consumer segment. This is certainly a longer-term recommendation that must be phased in over the course of several years, and T-Mobile must be strategic about in selecting a time that will result in minimal erosion of the Company’s recent success in improving their branded postpaid churn rate. It appears that the best possible target for this cost reduction is phase 4.0 of the Un-carrier strategy, that is, reimbursing ETFs up to \$350 for customers that switch to T-Mobile. As soon as the Company sees a declining marginal return on this expenditure (and ideally before this is the case) the Company should discontinue this promotion. This strategy will inevitably result in a decrease in customer growth, and an increase in churn rate given that T-Mobile no longer requires annual service contracts, but it is a necessary move in terms of ensuring future financial sustainability.

⁷² “Wireless Mergers Will Draw Scrutiny, Antitrust Chief Says.”

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