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DSL Provisioning: Redefining "Customer Service"

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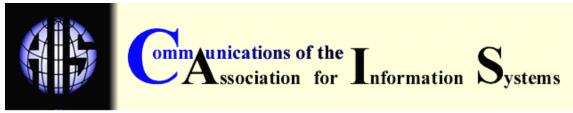
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DSL PROVISIONING: REDEFINING "CUSTOMER SERVICE"

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> > **CASE STUDY**



DSL PROVISIONING: REDEFINING "CUSTOMER SERVICE - I

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ABSTRACT

The case, based on actual experience, describes a nightmare of customer "service" interactions confronted when a Business School professor relocated from one state to another. The bulk of the case focuses on a several week's long attempt to acquire broadband DSL service from a local phone company, MightyFone. Students are provided with a rich understanding of some of the downsides of reengineering initiatives that "empower" customers. The case also provides an opportunity to discuss "last mile" issues, broadband technologies, frameworks for delivering and assessing customer service, help desk management, systems integration, IT within the context of mergers and acquisitions, regulatory hurdles, and the management of potential public relations disasters.

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Keywords: DSL, banking infrastructure, broadband, cellular phones, customer service, help desk, infrastructure, mergers, systems integration, phone company services

Editor's Note: The authors advise that this case was prepared for educational purposes and is not intended to demonstrate either good or bad administrative practices. The information in this case was drawn from public sources and from the experiences of an actual customer. The names of the DSL and ISP firms and those of their employees have been disguised. The case has been disguised but reflects an actual experience

I. INTRODUCTION

In July, 2001, Brian Cantera and his wife Marie arrived in Center City. There they would take up positions as faculty at a local university. Their teaching responsibilities would include classes in the Executive MBA program. Brian would also serve as the director of a research center whose members included information systems executives from many of the largest firms in Center City.

Brian Cantera held a Ph.D. in management information systems as well as a Masters in computer science. A computer user since 1967, he had taught with and about them for over thirty years. Between office and home he had four computers. His wife had two computers. Cantera's Apple Titanium Powerbook and his wife's IBM Thinkpad were both connected to a wireless network in their apartment, the base station for which used Apple's AirPort technology. A router connected the Air Port Base station and his desktop computer to a broadband modem.

The Canteras found that moving grew ever more complex because of the personal information system infrastructure that, like many other Americans, they surrounded themselves with. The old burdens included change of address forms, connecting and disconnecting telephone and power service, updating insurance policies, choosing retirement programs, registering to vote and drive, acquiring parking details and a new drivers license. But now there were also digital cable systems to be uninstalled, returned to the provider, and reordered, Communications of AIS Volume 7, Article 21

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web pages stored on the cable system's servers that needed to be transferred elsewhere, cellular phone service to be transferred, email addresses to be updated and so on. As professors and well-connected professionals, the Cantera's encountered these infrastructure issues both at home and the university, though in the latter location, support personnel were available to sort out some of the problems.

II. CELLULAR PHONE INFRASTRUCTURE

Upon arriving in Center City, the Canteras discovered that their cellular phones provided poor reception in parts of town and no service at all in their 31st-floor apartment. A clerk in a local Sprint retail shop explained that the cell phone numbers would have to be changed and the phones reprogrammed for Center City. While the phones were being reprogrammed, Cantera was directed by the retail representative to a side-room where he was told to pick up a telephone connected to Sprint's central order processing center. After nearly 30 minutes on the phone, he was provided with Center City's phone numbers and other identifying information, which he then was required to provide the retail clerk after the clerk finished with other customers.

While in-town cellular service appeared to improve marginally, Cantera was still unable to use the service in the apartment building. A neighbor lent Cantera his phone for a day and Cantera found the phone's Verizon service did work from the apartment. The following day he purchased two new phones and signed up for service at a local Radio Shack.

Several days later Cantera called Sprint to cancel the original service. After entering his phone number into an automated system he waited on hold for ten minutes. When an operator came on line she asked for his phone number and then asked to confirm his address. Cantera read to her the address appearing on

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his latest phone bill from Sprint – his new Center City address. She questioned the address, telling him a Baton Rouge address was listed in the file. She said she was not authorized to discontinue the service but would forward him to someone who was. But first she asked why he was shutting off the service. He provided the answers, and after another five-minute wait another representative came online. She appeared to know the reasons Cantera had given for discontinuing but tried, nevertheless, to retain his account. She also told him that he was required to pay a \$150 termination fee as he apparently, and without being orally informed, signed an agreement to keep the service for one year when he had transferred the service from Baton Rouge to Center City. He was also told that the service would stay in operation until the billing period ended. Cantera searched the Sprint web site, in vain, for an email address to submit a complaint to.

III. COMPUTER INFRASTRUCTURE

Prior to leaving Baton Rouge, Cantera also experienced considerable problems with his Macintosh Titanium computer. An Apple technical support rep requested the machine be sent back to Apple where it was given a new motherboard as well as a new hard-drive. Still problems persisted. Upon arriving in Center City, Cantera spent nearly two days on the phone with various Apple service representatives. On three different occasions and following their instructions, he completely reloaded the computer's operating system. It still was not working properly but Cantera felt he did not have any more time to spend on the phone with the representatives from Apple - each of whom seemed to treat his call as if it was the first.

Near the end of September, fully two months after he originally sent the computer to Apple for repair, Cantera received an email from Apple requesting him to

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complete "a follow-up web survey regarding your recent Mail-In Repair experience". Cantera cut and paste the above paragraph into an open ended question on the survey form. Two months later he had received no response.

IV. BANKING INFRASTRUCTURE

In Louisiana, Cantera and his wife both banked with Bank One and, increasingly were relying on it for more and more automated and online services. Their mortgage payments as well as several other payments were made automatically, their payroll checks were automatically deposited, and Cantera used the system to pay monthly bills. About 25 payees were now listed and he valued being able to pay a bill in just a few seconds.

Cantera had initially been relieved to find that Bank One operated banks in his new home state. That relief was cut short, however, when told he could not make a deposit into his Louisiana account from a Bank One office in Center City. He would have to either mail the money to Louisiana or open a local account. As he would have to change banks anyway, Cantera went to the Wells Fargo web site to see what was entailed in registering for their online banking services. Here he found a bewildering array of products, but no easy way to put together the package of accounts and services he already had with Bank One. He called Well's Fargo's service number and, after being asked to enter the first three letters of the name of his state was automatically forwarded to a line that was neither answered nor equipped with a reassuring recording.

Several days later he visited a Wells Fargo retail outlet. Eric, a young banker moonlighting as an undergraduate major in computer science at the University of Center City, quickly and competently set up his account. To assist him in making the sale, Eric produced a brochure promoting packages of services, including

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one that duplicated Cantera's services with his Bank One account. Cantera suggested that this kind of service packaging was missing from the web site. Eric smiled and said that the bank encouraged its employees to use and provide feedback on the online use of their own personal accounts. He said he had raised this same issue but, thus far, saw no improvements in the site.

V. BROAD-BAND INFRASTRUCTURE

At his previous home Cantera paid for high-bandwidth ISP service through the local cable company. The Canteras had waited almost six months longer then they had initially been told before the service became available in their development. But, once it was installed they were quite satisfied with it. The only negatives were occasional downtime, some slowing down in the late afternoon and early evening, and the need to keep a separate ISP provider for times Cantera was on the road. His wife also used the dial-up ISP connection as she found it inconvenient to move to a different part of the house to access the wideband service. The cable service provided the Canteras with one static IP address and, for an extra five dollars a month, a second one that Brian used with a second computer. The IP addresses meant that Cantera could access his desktop computer from outside the house - for example he could run programs from his home desktop computer while using his laptop machine in a classroom. However, he chose not to put his web pages on his desktop machine but instead relied on server space provided by his Internet provider. Access speed from the cable modem exceeded that of Cantera's connection at the University.

Initial investigation of the cable provider in Center City suggested that it would be more expensive to duplicate the arrangement in his previous home. After only a cursory examination he instead chose to install DSL service as provided by MightyFone, the local phone company. Several levels of service were available. Cantera decided that Extended Service best met his needs. While Basic Service

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provided only a single dynamic IP address, the extended service included five IP (internet protocol) addresses. The provider rated the systems speed as varying between 384,000 and 1.5 million bits per second (bps) for download and 128,000 bps for upload. He would thus be able to connect two of his computers and his wife's computer directly to the network. Two other IP addresses were still available. One, for example, might be used for a baby-monitoring camera that Cantera could use to check on the couple's soon to be born baby. Cantera also made a note to buy an extra cellular card so that overnight guests could use the last IP. He also briefly considered "lending" the last IP address to a neighbor who lived one floor below them; he suspected, however, that this act would probably be a violation of the DSL provider's service agreement.

PROVISIONING

Near the middle of July, 2001 Cantera placed an order with MightyFone for Extended DSL service. It would cost him \$64.95 per month. He decided he neither needed nor, at \$179.95 per month, could afford, a higher speed option which promised download speeds of 1.5 - 6 million bits per second and an upload speed of 384 kbps. Several days later the self-installation box arrived. In it were three pamphlets, each describing installation procedures for a different computing environment, a SpeedStream® modem, a CD containing the necessary software, and six filters that had to be used with any other device in the house that was to be connected to phone lines. These would filter out the special codes required to operate DSL. Cantera installed the filters, wired up the modem, loaded the software, and waited. Nothing happened. The four lights on the front of the modem were all on; three were green but the fourth continued to blink red.

According to MightyFone's online documentation, DSL service required the subscriber to be located within 14,000 cable feet of the central office. Even within

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that range, the web site warned, only 60-65% of lines would be of sufficient quality. Cantera initially thought the line distance or quality might be the problem, but, given that there were over one hundred apartments in his building and that many of the tenants were professionals like he and his wife, it seemed likely that MightyFone would have already informed him if there were a known problem with the building's wires. While the technical support representatives appeared to know nothing about the connectivity within the particular building, the problem turned out instead to lie with the reed to make some connections in the local switching office. After about two weeks and several phone calls, the service finally came on-line.

Through this process, Cantera began to realize that at least some aspects of the service were not being provided locally through MightyFone but rather by some of the BigFone (MightyFone's parent company) "brands" or other divisions. Several times he spoke with representatives who were located in California. One of the support phone lines to which he was referred opened with the recorded message:

"You have reached the WayOutFone Internet Provisioning Group."

A recorded message at another line welcomed Cantera to BigFone Internet Services, serving DessertFone, WayoutFone, and MightyFone. Still another, of the five support numbers Cantera added a fourth brand, USAFones, to those apparently being supported by BigPhone Internet Services. And, one of the online screens Cantera had seen (see Figure 5 below) as well as several calls with technicians suggested that, Proisp, a large national internet service provider was also involved. In 2000, BigFone had acquired a 43% share of Proisp.

Whichever organization handled the calls, they all required listening to a series of recorded messages and then selecting from various options, which usually led to

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more recordings, and still more options. Cantera learned, and sometimes was prompted by service representatives, to write these options down to speed his way through the maze. He also had begun taking down employee numbers and keeping track of how long he was on hold.

THE CALL CENTER

A typical call required anywhere from ten to thirty minutes to get through to a human and, once there, Cantera was again usually put on hold four or five times. The total time required from the usual call varied from an hour to two, with little more than a few minutes of it actually talking to a service representative. When they did put Cantera on hold, which was much of the time, representatives almost unfailingly came back on the line every three minutes to indicate that they themselves were on hold with a higher-level technical representative and did Cantera mind waiting longer. In several instances there were as many as a dozen of these interactions before the conversation was completed – usually with a request to call back a day or two later.

The representatives were very polite. They first asked for the subscriber's phone number and name followed by the name of the person they were speaking to. They then asked if they could use Cantera's first name in the conversation. They then would ask questions like the make and model number of the digital modem, and the operating system being used. On one occasion Cantera asked them why they always asked for this same information and was told that it might have changed since the previous call.

Technicians sometimes gave Cantera "case numbers," which appeared to be linked to particular calls. Sometimes they would ask for these when he called back. Technicians on two occasions seemed befuddled when Cantera was

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unable to provide a case number even though the previous representative did not provide one. He began to ask for the case number before he got off the phone.

While the Canteras eventually were able to get the service installed, a number of hiccups occurred along the way. The hiccup with the most far-reaching implications was the failure of the original order taker or an order fulfillment representative to realize this installation was Enhanced DSL rather than Basic DSL service. A technical support representative confided to Cantera that, because his order was mistakenly initially set up as Basic DSL service rather than Enhanced DSL, they now had "to work their way backwards to sort out the problem."

In his many conversations with level-one technical representatives, several of whom seemed as frustrated by their organization and systems as Cantera had become, Cantera learned several interesting things. For instance, one representative informed him that, contrary to Cantera' own experience, that Enhanced service was always installed by an on site technician. Still the representative comforted him by telling him that he was better off with self-installation as the home installers often didn't know what they were doing. Scheduling also seemed to be a problem. The representative mentioned a customer who he claimed he had talked with earlier that day who, apparently due to a scheduling snafu, was besieged by eight different installers in a single day. It also seemed clear to Cantera that the level-one technicians were poorly trained and often appeared unable to do anything other than basic triage. They could usually figure out whom to call or escalate the problem to, but they seemed either unable or unauthorized to solve his problems.

When asked, one representative described the organization structure as consisting of three levels of technical support – level-one, level-two, and operations. Unfortunately, it proved to be almost impossible to directly speak to

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a level-two representative. Instead, the level-one support personnel relayed information from the customer to level-two or proposed actions from the level-two representative back to the customer. Each time Cantera called it was like calling for the first time.

ACCESSING THE ACCOUNT MANAGEMENT TOOL

Cantera experienced problems in almost every step of the original provisioning, including learning on one occasion that the previous representative had mistakenly closed out his record and, in doing so, apparently deleted the entire past record of his calls. Nevertheless, by the second week in August Cantera was connected to the Internet. And each of his allocated five IP addresses were activated. He could now surf the Internet and, using email forwarding services provided for free by Apple, send email. He also set up his web home page on his desktop machine.

He could not, however, reach the login screen for the DSL Account Management Tool. As a result, he was unable to ascertain what his login ID and password were and, without them, was unable to set up his MightyFone email account or access other online resources such as instructions for accessing the service from other dial up lines or setting up web pages on the provider's central server.

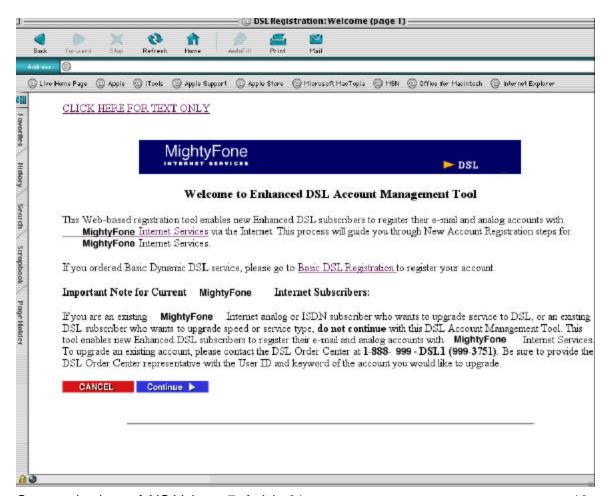
Cantera once again called up the BigFone DSL service line and began a long and tortuous process of trying to gain access to the Account Management Tool. Various technical support representatives provided him with several different web addresses for registering for the Account Management site. Two of these were incorrect.

When he finally connected to the appropriate site he saw the screens shown in Figures 1 through 3. As noted in Figure 2, the user is required to enter both the Communications of AIS Volume 7, Article 21

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subscriber phone number and a customer number. The directions called for the subscriber phone number to be entered in a precise format, with a space after the area code and a hyphen separating the next three digits from the last four. Cantera had learned that entering the number any other way resulted in an error. Cantera had been directed to retrieve the customer number from his phone bill. Unfortunately, as a new subscriber, Cantera had no bill to refer to and would not for another week. He was, however, able after several phone calls, to reach a service representative to provide this number over the phone. After several more failures and subsequent phone calls he was told that, while that was indeed his customer number, it had not been properly entered in the system when the order had initially been set up. He was assured that this problem had been escalated and would be resolved within 24 hours.



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Figure 1. DSL Account Management Tool Welcome Screen

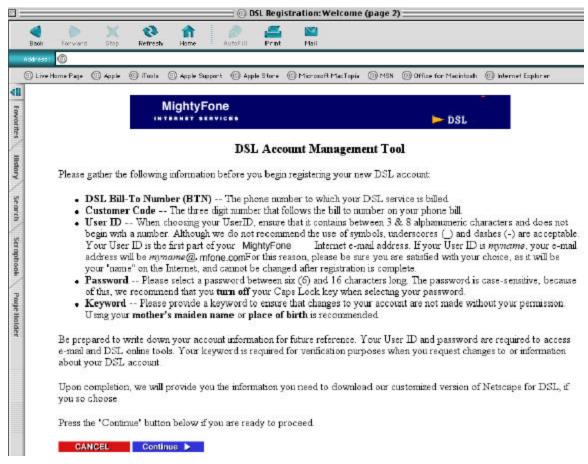


Figure 2. DSL Account Management Tool Instruction Page

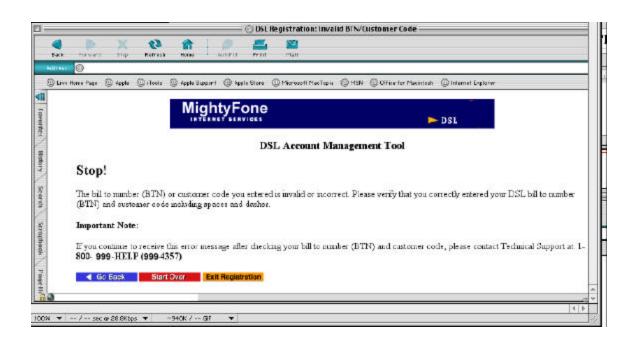


Figure 3. DSL Account Management Tool Login Error Screen One

It wasn't. Several days later, however, Cantera found that he could now see a new screen (Figure 4) rather than the screen that he had terminated on previously (Figure 3). A follow-on screen (Figure 5) indicated a new error condition. A call to the service representative led to promises that the problem would be escalated and would be fixed in twenty-four hours. Two days later the problem persisted. Cantera called again. This time he was able to get through, for the first time, to a level-two technical support person. The representative assured him that the problem had been re-escalated. This time the anticipated delay was reported as 48 hours. Another call, three days later, indicated that the anticipated delay was 72 hours and, as this was Labor Day weekend, the delay would naturally be longer. This time the representative noted that the case was already "on the spread sheet" and that further escalation might only confuse things. The representative also said he has seen similar problems in recent days and felt certain that Operations would quickly sort the problems out.

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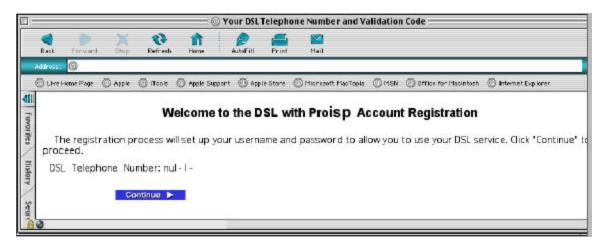


Figure 4. DSL Account Management Tool Login Welcome Screen

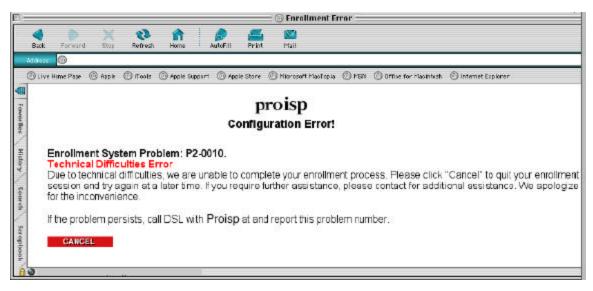


Figure 5. DSL Account Management Tool Configuration Error

Four days later the service was still not working and no one had called from BigFone Internet Services. Cantera called again and managed to get the call elevated up to "operations," apparently the highest level in the technical scheme. He was told that the problem was "a registration problem" and that the registration people, located in another office, only worked from 8am to 5pm. The representative suggested calling back during business hours so this problem could be followed up on immediately. Again "the spreadsheet" was mentioned Communications of AIS Volume 7, Article 21

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and Cantera asked him if there were dozens, hundreds, or thousands of entries on it. He was assured that it was a small number and certainly not in the thousands.

Hearing Cantera' frustration with both the lack of service and the need to work his way each time through the cumbersome service hierarchy, the representative provided a direct dial-in number to operations. At 9AM the next day Cantera called that number. A recording indicated that this number was for internal use only and that customers should dial another number. Cantera stayed on the line and started working through this new hierarchy of recorded messages. The representative he finally reached said that the registration office was in California and was not yet open. He said that he would call once the office was open and then call Cantera back. Cantera asked, "are you REALLY going to call back?" The representative said he would. Cantera added his employee number to those of the two level-two support personnel he was able to get through to.

CIRCUMVENTING THE HIERARCHY

Forty-eight hours later Cantera' frustration was running high. Two days passed and the Account Management Tool was still not accessible and the promised call back once again did not materialize. Cantera, recalling seeing a follow-up email (Sidebar I) from a marketing arm of the DSL provider, decided to take action.

He composed a short email message to the state's Public Services Commission requesting information on how to report the inferior service from the DSL provider. He included his phone number in the note and also noted that if the PSC was unable to assist he would take the matter up with the Better Business Bureau. In addition to the PSC he sent a copy of the note to the email address attached to the service follow-up note he previously received from the marketing staff. The previous evening Cantera sent a similar email message to an email Communications of AIS Volume 7, Article 21

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address he found on the MightyFone site (see Sidebar 2 for the note and response).

Sidebar 1. Request for Customer Feedback

From: survey.research@acme.com

Date: Mon, 13 Aug 2001 12:40:52 -0400 (EDT)

To: BCantera

Subject: Your MightyFone DSL Self-Installation Experience

Dear Brian Cantera:

On behalf of the BigFone DSL technical help desk, Acme Marketing Research would like to thank you for your recent telephone inquiry on 8/10/2001. The voice of the customer is very important to BigFone Advanced Solutions Inc. as it continually monitors and improves its customer service. Your feedback is key to evaluating the BigFone DSL technical help desk team's performance.

We invite you to provide feedback about your recent telephone interaction with the BigFone technical help desk on 8/10/2001. You can provide your opinions by completing a brief 5 minute survey. Please click on the URL hyperlink

http://www.sendyourfeedback.com/bigfoneemail

or cut and paste the address into your Internet browser. When you reach the login screen, enter the following login ID and password.

Your login ID is: xxxxxx Your password is: xxxxxx

For your convenience, the survey is available 24 hours a day, seven days a week through 08/27/2001, and can be accessed from any computer with Internet access. Please contact Acme Marketing Research with any survey questions at survey.research@acme.com.

Sincerely,

The Acme Marketing Research Team



Sidebar 2. Notes to and from MightyFone Support Desk

From: support@mightyfonel.net

Date: Fri, 7 Sep 2001 12:53:33 -0700 (PDT)

To: BCantera

Subject: Re: Internet Services: Internet Service

Hello User BCantera

I have received your email regarding your mail problem.

Unfortunately, you have reached the wrong department to have these issues resolved.

Please contact the Self Install Department at 1-999-999-9999.

you for choosing MightyFone Internet Services.

Regards,

Shawn

Technical Analyst

BigFone Internet Services

Try our online help at http://.bigfone.proisp.net.

Remember its quick, hassle free, and is always available!"

~*~*~*~*~*~*`*~*~*~*~*~*~*~*~*~*~*~*~*

You Wrote:

To: support@bigfonel.net Customer Name: Brian Cantera Email Address: BCantera

City: Center City State: QQ

Phone: 000-999-9999

Zip: 99999

Email Tracking Number: 82450

Message:

I have been trying to get my DSL account registered for over one month. I have probably called over 20 times and each time I am told the problem is being "escalated." This morning employee VA2187 told me he would call be back later in the day. He did not.

If someone does not call me with a guaranteed solution in 24 hours and if that solution is not in place in 72 hours I will write a complaint to the state public service commission, the Better Business Bureau and the CEO of MightyFone

Twenty-four hours after he sent the second message, at 9am on a Saturday, the phone rang. It was Aaron¹ calling from MightyFone Internet Services. He said

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¹ Not his real name

that he was following up the previous day's email and that things would now be brought under control. He tried to reassure Cantera, saying that this was now a "one stop shopping" situation and that he would personally ensure that the service was established. He then, apparently reading from the computer record, noted that the system was installed successfully on August 6. Cantera pointed out to him that there had been many subsequent calls and that, while the system was installed, he was still unable to register with the Account Management Tool. Aaron mentioned a more recent date when a representative called and, encountering an answering machine, left a message saying that he had called.

After politely listening to Cantera fume for several minutes about the poor service and his impression about the inadequacy of BigFone's systems, Aaron reaffirmed his intention to get to the bottom of the matter. Within an hour Aaron called back. He noted that the problem appeared to be solved and that he was just going to go through the final registration process with Cantera to ensure there were no problems. He asked Cantera to go to the site to register while they stayed on the phone together. The Account Management Tool remained inaccessible. Aaron said he would need additional time and would call back.

When he called back, later that afternoon, he reported that the problem was with the customer number. Previous representatives apparently did not enter the correct customer number in the system. Cantera informed him that this particular problem was discovered several weeks before and was, supposedly fixed. Aaron replied that the fix apparently did not go through and that the request was now being escalated to the proper office where it would be fixed within 24 hours. Aaron assured him that that he would personally track this over the next twenty-four hours. Cantera asked Aaron if he would share the complete record of Cantera' previous calls to the provider. This request would be difficult to meet, he was told, as the messages were not in a form that could easily be emailed. He did, however agree to provide his direct phone number.

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Cantera then asked him for the dates of his own previous calls to the service center. He was told there were six case records in the record. These occurred on: July 31, Aug 1, 6, 10, 28, and 29. Incredulous, Cantera asked about the call only three days before in which he had obtained the employee number for the second tier tech support representative, the representative who had not returned his call. No, Aaron admitted, there was no record of that call. Cantera reminded him that he had made at least a dozen other calls that were not included in the record. Yes, said Aaron, who said that he had been suspicious of that when he had found no record of the call Cantera had mentioned. He then suggested that technical representatives who were unable to fix a customer's problem might sometimes not enter them into the system.

Cantera then complained about the computer systems, noting that MightFone personnel should, by just entering his phone number, automatically be able to pull up every single contact he ever had with a support representative. Aaron replied that this was impossible as there was not one software tool that was being used, but rather many different ones. The recent merger and the need to integrate the systems from each of the partners to the merger, he said, really caused much of the problem.

By Monday morning at 9:45 am, 48 hours after Aaron's first call, there were no further callbacks and Cantera was still unable to log in. Unable to stay home to wait any longer for the call, Cantera decided to call Aaron. The number he had written down appeared to be a wrong number – it was neither Aaron's name nor voice on the recorded message, nor was there a company affiliation. Cantera did not leave a message. By 6:30pm on Monday, there was still no contact.

The following afternoon, Aaron left a message with Cantera's wife. "Everything," he said, "was now ready to go." Cantera tried to register – once again without success. At 9 the next morning, Wednesday, Aaron called. Cantera asked Aaron

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to confirm his phone number, which proved different than the number he previously provided. Aaron explained that the first number was that of another representative. Cantera then asked why Aaron did not return his call within 24-hours as he promised. Aaron explained that he was pulled off the case on Sunday and only was reassigned to it on the previous day. Together Cantera and Aaron then went through the registration process, and again Cantera was unable to logon. Aaron said that, even though he had been off the case, he had checked on the registration process and been told that it was complete. He promised to check again and then call back. At 11am, feeling he could wait no longer for that call, Cantera called the second number Aaron gave him. He reached the voice mail for yet another support person, though this message did properly identify the firm.

Cantera mused to an observer about his quandary.

This has been very frustrating. I have spent a minimum of 36 hours trying to get this sorted out. I have stayed home, waiting for calls that often never came. With the exception of Aaron, I have not dealt with anyone at BigFone or MightyFone who seems either willing or capable of taking responsibility for getting something fixed. And now he has let me down. BigFone's systems seem to preclude anyone taking responsibility. Every call is a transaction, with the service representative seemingly far more attentive to how the call will influence her or BigFone's productivity statistics than on actually solving the problem. First-level technicians appear unable to actually fix problems, while second-level representatives seem to have a strong aversion to even talking to customers.

I'm a newcomer in Center City, but neighbors, students, and colleagues have not been particularly generous in their assessment of MightyFone's service record. My dean told me he waited weeks to get his DSL account activated after the system itself had been installed. At least three students in my Executive MBA

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class have had similar experiences. Others have raved about their positive experience with RoadRunner, the local cable alternative to DSL. Unfortunately my attempts to get problems fixed in my cable TV programming suggest that their provisioning service may be even worse than I have experienced with DSL. With the local cable company, I have a hard time just getting past the busy signal."

Cantera pondered what to do. He felt he had given the firm every chance but BigFone's DSL organization seemed incapable of self-regulation, self-monitoring, or internally driven process improvement. He felt his options included actually filing a report with the state Public Service Commission, or contacting the Better Business Bureau. But first he felt he had one last responsibility – to give the senior management of BigFone and MightyFone an opportunity to fix his immediate problem and, far more importantly, address the broader systemic problem. He decided to write the BigFone Chairman and CEO, Whitney Edwards and send a copy of the correspondence to Alexander Wainwright, the CEO of MightyFone, the local phone company. On Wednesday afternoon the two letters went in the mail (Sidebar 3).

The following day, Cantera received a bill for services from MightyFone. The bill included August 3rd charges for a Basic DSL Internet Package (\$49.95), and a DSL Modem (\$99) and September 3rd, charges for Enhanced DSL Internet Service (\$113.01), a DSL Modem (\$99) and \$200.00 for technician installation.

On Friday September 7th, Cantera left a message for Aaron describing the billing problems. Aaron's return message assured Cantera the billing problem would be fixed and that he was still working on the registration problem. He also said that another employee who specialized in registration problems had joined the hunt.

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Sidebar 3: Letter to BigFone Chairman and CEO

September 9, 2001

Whitney Edwards.
Chairman and CEO
BigFone
175 E. Center City Street
Bowie, QQ 99999-2233

Dear Mr. Edwards:

I read in an article published on you in *Business Week* that you had landed your first job at MightyFone through determined tenacity. I have followed your lead during a six-week marathon attempt to get my DSL service established through MightyFone in Center City. As a professor of Business I have written many case studies, indeed having learned to do so while a fellow at the Great Eastern School of Business several years ago. Such cases can be instructive for our students but also for the organizations that are featured in the cases. Attached is such a case, this time providing "a customer view" of the DSL provisioning process at BigFone. I intend to use it in several of our MBA and Executive MBA classes this fall and, assuming it is well received, shall draw the case web site to the attention of colleagues at other B-Schools.

I suspect there are several people on your management team who might value reading the case, which highlights potential problems in organization design, employee assessment, systems design, and, most of all, customer service. Many of these difficulties, of course, appear related to the challenges that must be faced in merging computing and operations systems from the several firms that make up BigFone. Others, however, appear to have emerged from the faithful execution of a rather narrow view of customer service. Still, I am sure there are also explanations that might make the story appear less one-sided. I would be pleased to publish with the case such responses as BigFone personnel might care to prepare describing some of the root causes and systemic improvements planned. I would also be most pleased to have a member of your team attend one or more of our discussions of the case later this fall.

I hope you will pardon my taking a small amount of your attention with this matter. My actions were inspired by the creative whirl that emerged from the sensory depravation accompanying the long hours I spent on the phone waiting for BigFone representatives. Lemons to lemonade!

I do look forward to hearing from you or a member of your staff.

Cordially,

Brian Cantera Professor of Business Leadership Director, Information Systems Research Center

CC:

Alexander Wainright President, MightyFone

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On Monday morning, September 10th, Aaron called again. He said that he had sorted out the billing problem and was continuing to work on the registration issue.

Three days later Cantera received a call from BigFone Internet Services. The caller, Martin Bell, identified himself as an operations manager. He assured Cantera that, while he was a novice on the help line, he had a technical support person sitting with him. He told Cantera that they had not yet been able to resolve the registration problem but, in the meanwhile, would set him up with a MightyFone Dial-Up Internet account. This would be accessible over DSL and permit him to see password protected web pages and send email through a MightyFone net account. He assured Cantera that the following day, the dial-up and email accounts would be merged, for billing purposes, into a single account. Bell provided him with the server addresses for incoming and outgoing email as well as the local Center City dial-up number. He told Cantera that dial-up numbers for other cities were available on the MightyFone web-site, though calls from outside the area would cost 4¢ per minute.

Bell said that he did not anticipate problems, but there was a slim chance that there might be a duplicate billing for the dial-up service and the DSL service. If so, he instructed Cantera to call him.

The next morning Cantera received a call from Terrell Bunker from Advanced Solutions, a subsidiary of MightyFone Bunker identified himself as a network center technician within the executive complaints department of customer service. He said he had received the letter but without the subscriber number had been unable to actually find anything out about the problem. After Cantera gave him the number, Bunker promised to follow up on those problems which were within his area of responsibility.

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He explained that his organization provided the DSL service but that the various brands (e.g., MightyBell) provided the ISP service. The registration problem, Bunker explained, was probably outside of his area of responsibility, but he was nevertheless, going to track down any issues that might relate to his business and send a memo "to the Presidents." Cantera noted that while he experienced considerable difficulties even getting the DSL service installed, those early problems were less well documented in the case.

Bunker mentioned that there had been problems due to the recent alliance between BigFone and Proisp, including some problems with file integration. It was therefore not possible to tell how many times a customer had actually called. He also acknowledged that terminology used with customers across the several organizations was not consistent — one unit, for instance, referring to "trouble ticket numbers" while another called them "case numbers." Bunker also reiterated an issue previously raised by Bell, that FCC regulations further compounded integration problems between MightyFone, BigFone, Proisp, and the other BigFone brands. Bunker asked Cantera to call him if there were any further problems, including problems getting reimbursement for the services inadequately provided over the previous two months.

A few minutes later Cantera's phone rang again. The caller was Hamilton Diaz, President of BigFone Internet Services. Diaz apologized for the service failings, and asked about the current status of the service. He also offered to come to Cantera's Executive MBA class to shed some further light on the case. He also mentioned regulatory issues as a barrier to full coordination among the various businesses.

That evening, Cantera found a voice mail from Martin Bell. Bell was calling to verify that the email was working. He said that the service was now "completely

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set up on our site," and that there was "absolutely nothing that could cause us any additional issues." He left his number, in case anything did come up.

The following Friday, four days since his last call, Aaron had called and left two messages. He indicated he knew that the email had been set up and confirmed the email address.

A week, later a MightyFone marketing representative called Cantera to see if he might be interested in subscribing to MightyFone's DSL or long distance service. A few days later, in early October, Cantera received a dunning letter from MightyFone's collection's department. If the "undisputed portion of his" unpaid bill was not paid by October 15th, his service would be cancelled. The letter did not indicate what the amount due was.

As the October bill was due to arrive, prior to the 15th, Cantera decided to hold off paying the bill until the new one arrived. Several days later, on October 10th, Martin Bell called and mentioned the letter. He said that the only portion of the unpaid bill that Cantera would be required to pay was the phone charges and the cost of a router. Cantera said he had received a modem, but no router. Indeed, he had his own router. Bell apologized and said that the only charge would be \$99 for the modem plus the regular telephone charges.

That afternoon the October bill from MightyFone arrived. The two modem charges had disappeared but there were now, listed for September, two charges of \$378 each for CPE Premises Charges, two more for \$64.95 each for DSL Internet Package-Enhanced1, two of \$200 each for Technician Installation Charge, two fees of \$50 for Service Order Processing, and two \$100 fees for DSL Installation and Set up. A separate section of the bill showing charges for October, included a third charge, this time for \$83.79 for DSL Internet Package-

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Enhanced. Cantera's, total current charges, due by October 26 were for \$1,938.81

Elsewhere in the bill Cantera noted that his previous month's bill for \$758.99 had been adjusted by a credit to MightyFone Internet Services of \$1,515.62, leaving him with a credit of \$756.63. This credit had been applied to the more recent charges, leaving him with a bill of \$1182.18. Based on his conversation with Martin Bell earlier in the day, Cantera estimated that the real amount he owed was probably somewhere between \$190 and \$330.

On October 26th, four people (Hamilton Diaz, Martin Bell, a customer services manager, and an external public relations consultant) entered Cantera's Executive MBA classroom. Per their request Cantera agreed that there would be no audio or video taping and no visitors in the classroom.

Editor's Note: This case was received on October 2, 2001 and was published on December 4, 2001. The manuscript was with the author for six weeks for one revision.

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