

JOE DIMARCO
FIELD SERVICE
TECHNICIAN



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JOE DIMARCO

Joe is a Field Service Technician who works for BancSource, a Chicago-based bank equipment servicing company. He works in the Chicago area, primarily in downtown. He is on the road every day fixing ATMs for businesses and banks. He is responsible for fixing ATMs and things like tubes at drive-through banks.

Joe spends most of his time working out in the field. However, he stops in the office a few times a week, which is located in the South Loop of Chicago. He goes to the office to pick up parts, drop off any paper work, and meet with his manager.

Joe is 33 years old and has 7 years of industry experience as Field Service Technician. He has been in his current position for three years. Previously, he was a Field Technician at a company that was a major competitor to his current company.

He has an AA degree in addition to multiple technical certifications in phone wiring and repair.



PERSONAL CHARACTERISTICS

Joe is very practical and methodical; he is always paying attention to small details.

His characteristics include:

- He is dependable and is always on time to fulfill his obligations.
- Easy going guy who gets along with everybody.
- He is very patient and will spend as long as it takes to get something done
- Problem solver—he spends a lot of time trying to figure out solutions on how to fix the things that are broken
- He is not extravagant, he gets things based on price and functionality. Name brands mean nothing to him.



JOE'S TECHNOLOGY PROFILE

According to Joe:

“I’m new to mobile devices, but I’m learning that it’s really a great way to get things done.”

Joe is technically inclined when it comes to fixing phone lines, but he is not that savvy with mobile devices. He recently switched from a feature phone to a smartphone for personal use. His company over the past year provided him with a smartphone that he uses to manage his service orders and communicate with his clients and colleagues. He is learning that the more he uses his smartphone to get his work done while on the road, the less he has to do when he finishes with his customers at the end of the day.

JOE'S DEVICES



Mobile: Joe has a Pantech Burst running Android for work. His company paid for the device and pays the monthly service costs. However, they strictly prohibit him from using the device for personal use. Therefore, he purchased his own LG Escape to use for personal reasons.



Laptop: His laptop is a Toshiba PC, which he uses mainly at home and occasionally at the office. He uses the laptop to send email, manage service orders, and order parts.

Other technologies: Personal Dell PC and a Wii gaming system.

According to Joe:

“I’m thinking of getting a tablet, but they seem to cost more than they’re worth, and I’m not sure what I would do with it other than for entertainment.”

WORK PLACES

Joe is on the go all day long, so he really needs to make sure he is well prepared in the morning. He needs to make sure his truck is well stocked, and that he has easy access to everything he needs for the day.

His work locations include:

- **Van:** He uses the company van when visiting clients
- **Office:** He pick up parts, visits his manager, and does miscellaneous work at the office.
- **Client locations:** His clients are banks and small businesses, including convenience stores and bars.
- **Home:** He uses his home laptop to log into his enterprise field service application, check email, and sometimes print out information he needs to take on a job. However, often at home he uses his mobile instead of his laptop because it is easier to carry around and he does not have to set it up.



Joe is on the go all day long, doing work on site, in the office, and at home.



JOB RESPONSIBILITIES

Joe needs to remain efficient at his job because his company monitors his job and expects him to complete a certain amount of requests in a week. He does not cut corners because he needs to make sure that customers are satisfied with their repairs and do not call with complaints about his service.

His job responsibilities include:

- **Product repair:** Repair ATMs and other banking equipment for customers
- **Preventative maintenance:** Perform preventative maintenance on ATMs and banking equipment
- **Parts maintenance:** Order new parts for repairs and return broken parts
- **Service order maintenance:** Update service requests, including accepting the request, closing the request, making notes of what happened at the customer site, and tracking which parts have been used
- **Conduct post-customer visit activities:** Document notes about service, order additional parts, update the service order status, schedule follow-up visits
- **Communicate with field service technicians and management:** Attend weekly meeting with team, communicate with other technicians while in the field for troubleshooting help, and provide updates on activity in the field

Joe doesn't cut corners because he needs to make sure his customers are happy.

LAPTOP TASKS

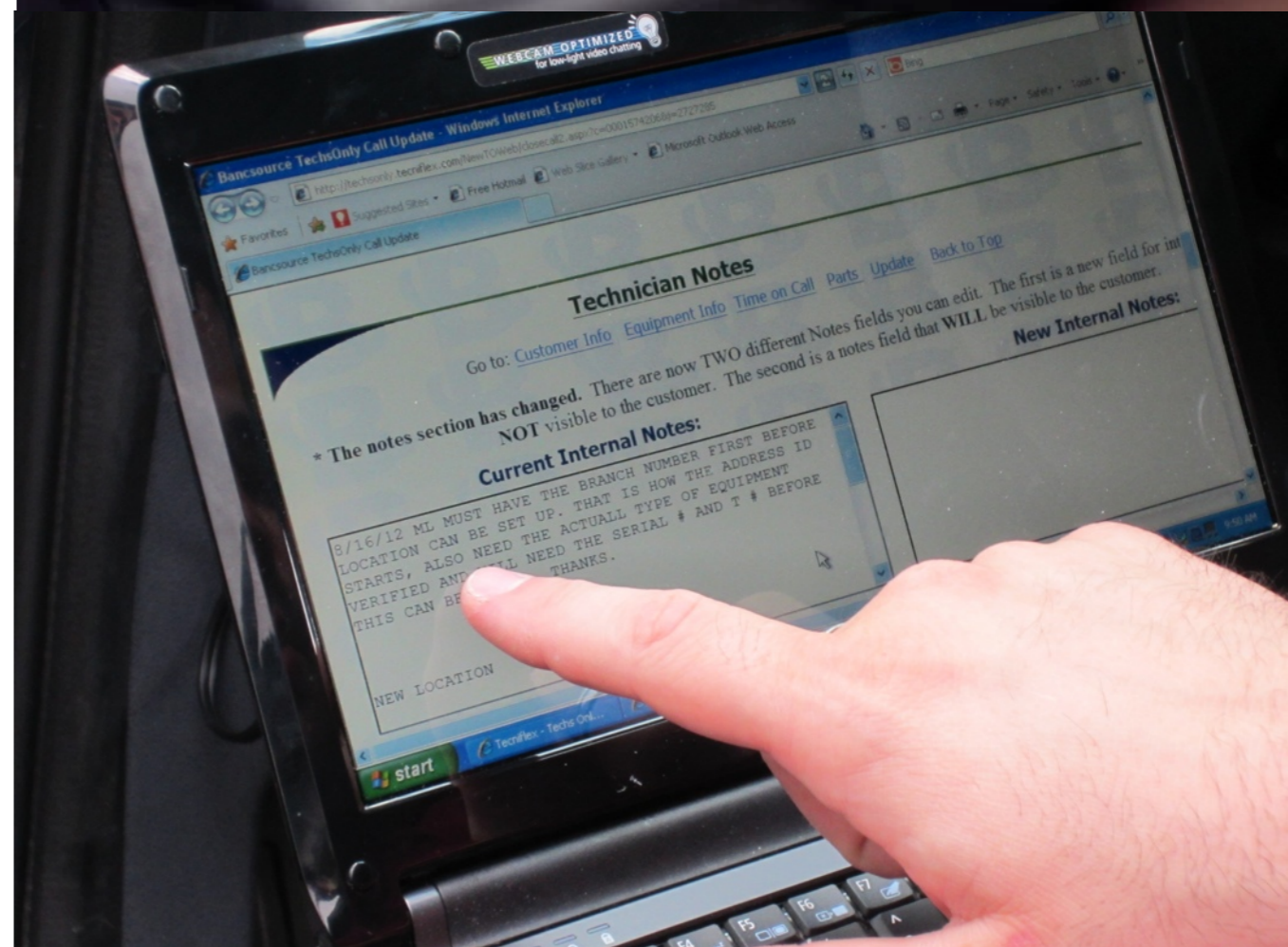
Joe mainly uses his mobile device but uses his laptop for some tasks.

Laptop tasks include:

- Logging into the Field Service application to manage service orders including:
 - Taking notes on what occurred at customer site
 - Ordering parts
- Checking where he needs to go for the next day

According to Joe:

“In the field, the laptop is not nearly as convenient as my mobile phone, but some things I can only do on the laptop.”





MOBILE WORK TASKS

Joe is learning quickly that his mobile device saves him time and makes things much easier while out in the field.

Smartphone tasks include:

- Make and respond to voice calls, SMS messages, IM messages
- View list of service orders that he has for the day
- Acquire new service orders from dispatching center that he can accept or reject
- Log into web-based field service application to review customer account information (e.g., customer name, phone number, address), preventative maintenance schedule, warranty information, system information, parts information, and work order history
- Track the status of service orders such as in progress or completed, amount of time spent
- Access technical document manuals
- Take pictures of systems that are broken or have a problem
- Use map and GPS applications to get to client locations
- Video conferencing with other technicians to troubleshoot problems

According to Joe:

“I used to have to rely on paper documents while out in the field. Now the phone makes things much easier.”



MOBILE PERSONAL TASKS

With Joe's hectic schedule he finds that his mobile devices provide him an outlet to stay connected with friends and family and be up to date on the most important information going on.

Smartphone tasks include:

- Email, text message, and call friends and family
- Listen to music
- Surf the Internet
- Read the news
- Play games
- Read information such as news, blogs, etc.
- Take pictures of friends and family

According to Joe:

“Staying connected has become increasingly important for my daily life, as well as for work.”

MOBILE PAIN POINTS

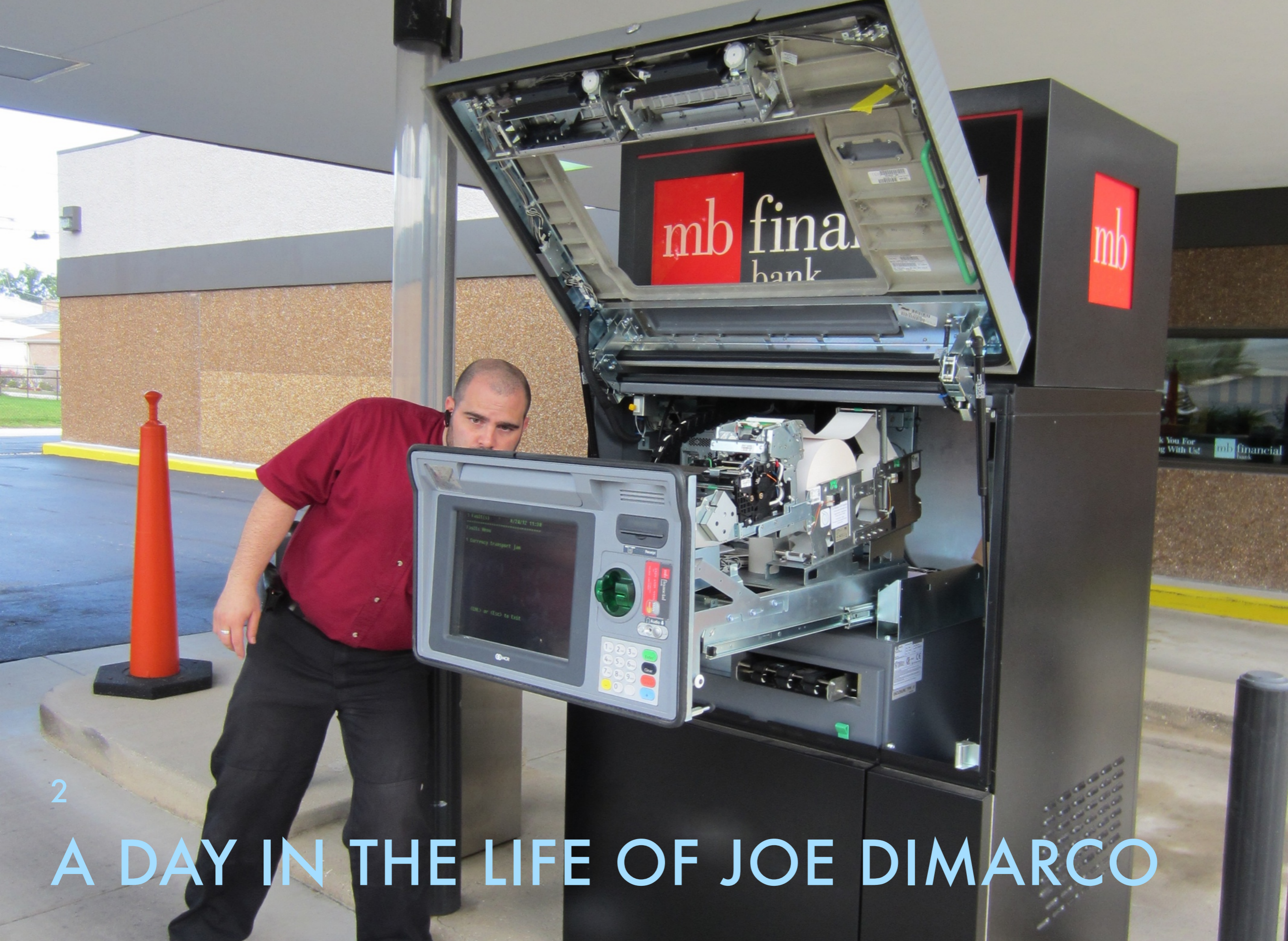
Even though Joe finds his smartphone very beneficial there are a few frustrations he faces.

Frustrations include:

- The keyboard is small on a smartphone, so it is hard to enter information, including notes.
- Joe has connection issues with his smartphone because he is often in neighborhoods with tall buildings or connection interference due to where he is setting up the phone wiring. Therefore, he has trouble accessing his web-based Field Service application when out in the field.
- Accessing the information he is looking for is difficult because everything is not housed in one application. He has to go one place for service request information, another place for parts information, and yet other place for manuals.
- Battery life is a problem.
- New service orders often come in as text messages. This requires him to text back a response or call the dispatching center. He doesn't like texting on his phone, as it is too much data entry. In addition, the text messages do not always have enough detail, so he has to log into the system to get all the information he needs.

Entering data needs to be easier, and everything should be accessible from one application.





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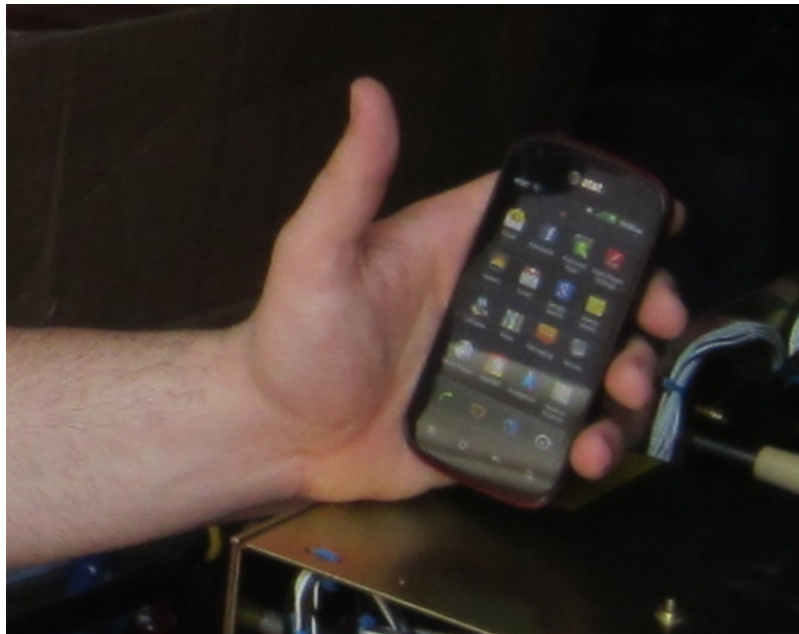
A DAY IN THE LIFE OF JOE DIMARCO

7 AM

7:15 am The alarm on Joe's phone wakes him up.



7:20 am He checks his phone for email and SMS messages to see what happened overnight. He determines if there are any urgent service requests or new tasks assigned to him that he did not know about. There was nothing new.



7:25 am He then reviews once again which service orders he needs to do for the day.

8 AM

8:00 am After finishing getting ready for work he heads to his van and starts driving to his office.

8:30 am Joe arrives at his office and picks up some parts he needs. He also grabs some printed copies of the service orders for the day since he will need to get customer signatures on them.

8:50 am He goes back to his van and types in the address into his mobile GPS to give him directions to the location.

8:55 am He brings up the first service order of the day on his phone, the customer is Mr. Wong. He dials the number and lets him know that he should be there by 9:15 a.m.

9 AM

9:05 am As he is driving, he gets an SMS from the dispatch center with details of a service request that they would like him to work on today. Since he is driving he decides to wait until he arrives at the customer to review the details.



9:10 am Joe arrives at the customer and reviews the SMS message he got from the dispatch center. It



gives him the customer information, what the issue is, and when it needs to be resolved by. He reviews what service orders he already has scheduled and determines he will have time to work on it in the afternoon. He replies back to the text message that he "Accepts" the job. He also lets them know he has arrived at MB Financial Bank. They will update his service order status.



9:15 am He arrives at MB Financial and finds the drive-through ATM that needs servicing. It looks like the cam-



era in the unit and the transport are non functioning properly. He takes a picture of the machine to document the state when he arrived. He will have proof to show the client and his boss in case someone blames him for not doing his job correctly.



him back and asks if he wants to do a video conference.

According to Joe:

“Video chat has completely changed how we deal with problems out in the field, saving lots of time and hassle.”

He realizes that the problem is complicated since this is an unusual wiring system that he has not seen in a long time. Joe texts his co-worker Ramon, who has been a tech for 30 years and has a lot of knowledge.

9:20 am



worker Ramon, who has been a tech for 30 years and has a lot of knowledge.

9:30 am



He isn't getting service so he connects via Mr. Wong's Wi-Fi and searches for possible ways to fix the air-conditioner. He finds a possible solution but does not think it will work. A few minutes later, Ramon texts

While he waits for Ramon to answer, he tries to connect to his CRM Field Service application.

9:40 am



Joe connects with Ramon using video chat software on their phone and Ramon walks him through how to fix the problem.

10:40 am



Once he gets done with the service he marks in his mobile field service application that he has finished the job. He jots down some notes on paper about which parts he used and their serial numbers, what parts he installed, and what he did to fix the problem. He will update the information in the system later on in the day.



Joe gets a physical signature from a manager at MB Financial to show that the work has been completed.

10:55 am



He heads back to his van and reviews the information for his next service request. He opens his

10 AM

mobile device and reviews the following information:

- Customer name
- Phone Number
- Address
- What the problem is
- Type of service and system type
- Service Request Number
- Notes
- Part Types and Numbers

and he is off to the East side of the Loop for his next service order.

Because entering data is difficult on his mobile device, Joe still takes some notes on paper.

11 AM

11:00 am As Joe is reviewing the information he clicks on the phone number for his next customer, a gas station convenience store, to call and say he'll be there in 15 minutes.



11:45 am Right when he gets to the convenience store, he uses his mobile device to mark that he has arrived for the service request.



12 PM

12:30 pm Joe spends 45 minutes investigating the wires and realizes that the wiring is fine, but the motor that pushes out the money has gone bad. He checks to see if he has that type of motor in his truck for replacement. Unfortunately, he does not.

12:35 pm He takes out his phone and calls the office to see if the motor is in inventory. The inventory manager replies that it is not available and instructs him to order it. He will order it when he arrives back home.



He explains to the manager of the convenience store that he has to come back when the motor arrives. He told him it usually will come in the next afternoon so he will be back in two days with the new modem.

He asks for a signature that the service has been attempted but still needs to be completed.

Joe uses his smartphone to indicate that the service order is on hold until the part comes in.

1:00 pm Joe arrives at a nearby McDonald's to get some lunch.

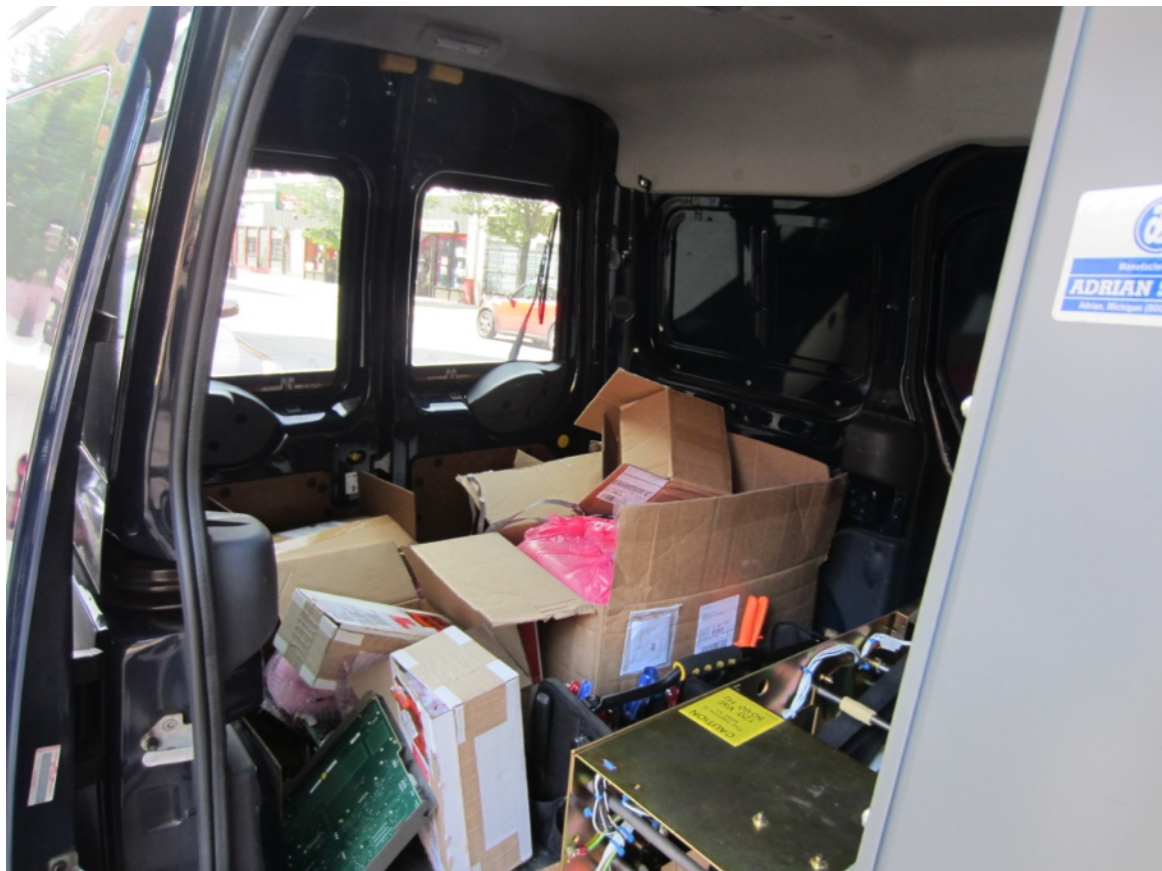
1:15 pm While he is eating he checks the details of his last service order of the day. It is the one that got added this morning. He sees that it is a repair service and that he doesn't have all the wires he needs in his truck.

He wishes he could see where his coworkers were by using his phone but there is no way to do that. So he calls into the dispatch center and asks who is nearby. He is told that Leo is nearby. He calls Leo and asks if

he has the available parts. Leo says he does, so Joe heads over to pick them up.

1:25 pm He meets Leo at a nearby Starbucks parking lot and grabs the parts.

1:45 pm He arrives at a bar for his last customer of the day, Joe's Saloon. He is repairing their faulty ATM machine, which looks like it is a cheap older model.

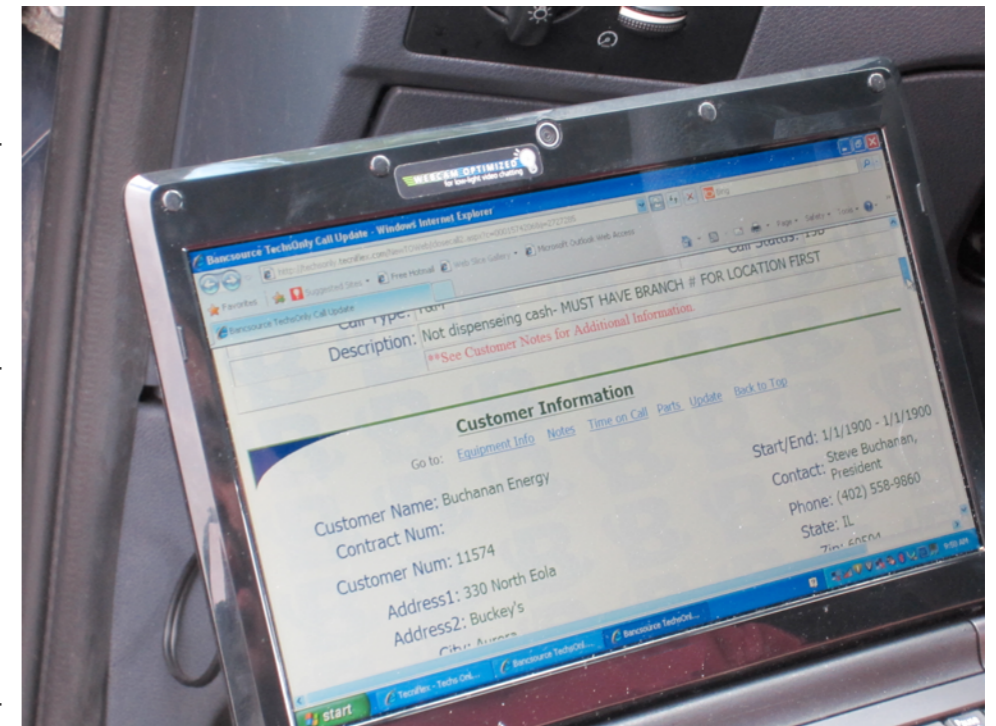


Due to the unfamiliar model, Joe is not sure how to go about the repair. He grabs his smartphone and logs into his field service application and looks for the manual on this particular model.

He finds it and it lists 12 steps he needs to follow.

2:20 pm He is at step 3 and gets confused with some of the terminology being used and thinks the diagrams are not sufficient. He decides to do further research online and looks up what to do.

Joe finds the information he needs online and continues on with the installation.



A variety of models means accessing manuals in the field is important.

3:10 pm It took awhile but he finally finishes the repair.

Since this service was added on last minute he was not able to get a printed form when he was in the office. Therefore he handwrites a blank form and requests the signature.

3:20 pm Joe finishes this customer and as he leaves he marks that it is complete in field service application. He also jots some notes down about the type of installation he performed.

3:30 pm As he is driving back home he calls his wife and says he finished in time that he can pick the kids up from school at 4:30 pm.

3:30 pm He arrives back home and heads to his laptop to enter in the notes from his service orders he completed for the day. He finds it much easier to update them on his laptop. He opens each service request and adds the notes of what he did, which parts he used and if there were any complications. He also

has to mark how many miles he travelled to ensure the van is being used for work purposes only. In addition, he is required to enter the amount of time he was performing the job. Lastly, he ordered the motor he needed for the convenience store.



4:20 pm Joe is finished with his work for the day. He heads out to pick up the kids from school.

Joe's job has been made easier by mobile technology, but there is still room for improvement in range of functionality and ease of input.



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FUTURE ORACLE PRODUCT CONCEPTS

- Signature capture of customer signatures
- Integrate photo-taking capabilities into the enterprise application so that pictures can be tied to service orders
- Ability to search for customers (via map) in a given area that need preventative maintenance (during down time)
- Show location of colleagues through GPS functionality
- Voice functionality and voice recording functionality to be used when hands are full and in small confined spaces as well as reducing need for typing on the keyboard
- Videos incorporated into the application on how to repair a piece of equipment
- Video conferencing between technicians
- Mileage tracker
- Analytics provided, such as open service orders, # of service orders per engineer, amount of calls/types
- Ability to order parts from the field
- Ability to connect mobile device to the equipment to run diagnostics and download problems

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Data Sources:

Persona based on observations made during research in India, Singapore, Sweden, China, and the USA