

Make Your Data Work for You: True Stories of People and Technology

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Make Your Data Work for You: True Stories of People and Technology

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A Brief Introduction

I became aware of humanity's absurd relationship to technology back in high school. The teacher would stand at the front of the class and preach the virtue of Power Point, never making a connection between the technology and the knowledge that we would somehow acquire from it.

Likewise we were told that an ambitious new laptop program would increase our access to technology. No one seemed to care how access to technology correlated with access to learning.

Such trends reappeared in the summer workplace. Employers wished to digitize files and make submission processes electronic. No one asked what benefits the changes would bring. Digital was always thought to be better. Electronic was always thought to be progress.

These observations led me to consider technological change that did not bring about progress, change that was implemented simply for the sake of change without any real consideration of its effects. I mulled this over for a bit and started to write, but unexpected themes emerged.

The initial inspiration for these stories, the classroom, never showed up in a story. My musings on technological change broadened into universal themes of separation. In each account, modern technology could be seen as a buffer. In one instance, it might separate an artist from his work. In another instance, it would act as a barrier between friends.

What follows then are true accounts of the unfortunate ways that technology places a wall around its users. And I call these stories true because I believe the ultimate joke of satire is that it *is* true. These are glimpses into people's lives—glimpses into my life—and how they have been touched by modern technology

Learn to Appreciate

Walt Chambers, host of the popular *Talking Late Night with Walt Chambers*, sat behind a desk and smiled. The commercial break was over, and it was time once again to address the panel. Tonight's topic: The twentieth anniversary of the Flash Point file sharing service, an invention so innovative that it had completely revolutionized the world of digital media, setting a standard for distribution and payment that had lasted for two decades.

The panel consisted of Sheppard Greene, a sociology professor at NYU, Vic Miller, a former record executive whose job was rendered obsolete through growth of the new service, and Leslie Frost, author of *You Too Can Use Flash Point to Distribute Your Novel*.

Walt leaned over to Sheppard and asked a question.

“So Shepp, you were saying before the break that we came very close to not being able to use the Flash Point service.”

“Oh, yeah, Walt. And by ‘we,’ I mean everybody. The service almost didn’t make it out of the starting gate. Sure, consumers were thrilled with Flash Point, but most people didn’t realize that the service was totally illegal when it was introduced.”

Leslie interrupted, “Yeah, I remember that. Something about copyrights. How did that all work?”

Sheppard glanced at Leslie annoyingly and continued.

“Well Leslie, fortunately, Congress was able to see the potential of the new technology and pass some forward-thinking legislation that not only legalized it, but encouraged businesses to switch to digital methods of distribution. A lot of people weren’t aware of that when it happened.”

Walt looked over to Vic.

“Now, Vic, you were among the group of people who were upset over this ruling, correct?”

“Are you kidding me, Walt? I was furious. Almost overnight, all the world’s intellectual and creative works were available instantly, for free. I was a record executive. There was no way I could operate within this framework of distribution.”

“But you were able to do something, right?” asked Walt. “I mean, from the looks of it, you’ve been able to eat pretty well over the past twenty years.”

A few members of the audience forced a laugh.

“Well, yeah. I mean, what I decided to do was just work on creating my own music. I mean, I guess that’s why I originally got into the business, but I somehow got lost along the way. Ironically, the service that put me out of business made it incredibly easy to release the songs I wrote. I’m not making the kind of money I once was, but, it’s just so rewarding. I wasn’t doing anything before. I wasn’t creating anything. The past twenty years have been the best years of my life. It’s just been so rewarding.”

Leslie spoke up again, “And Walt, my book outlines how exactly people can make money like Vic here, I mean books or music—it’s basically the same thing.”

Walt glared at Leslie just as Sheppard had done earlier.

“Well, yeah, Leslie, that’s why we have you on the show tonight,” he said. “Why don’t you explain to everyone how this works? Because I’m sure a lot of people are confused by the specifics.”

“Well, the specifics are in my book, Walt, but I can give you a broad overview. Does that work?”

“That’s perfect.”

“Basically, you just have to sign up with a licensing service. They monitor which songs and books are downloaded and then divvy up licensing fees to artists, musicians— whoever’s works are being shared.”

“And where do these licensing fees come from?”

“Several places, but mostly from ISPs. A lot of people don’t realize this anymore, but part of the money that you pay your internet service provider is a media fee which goes to the licensing services. So it’s actually still illegal to download works if you haven’t paid the fee, but it’s such a small amount, most people don’t worry much about it anymore.”

“This is similar to how radio used to work, right?”

“Yeah, I think so. Radio stations would just get a blanket license instead of having to pay individual artists.”

“I actually teach a class on radio,” said Sheppard.

“From a sociological standpoint?” Walt asked.

“Yeah. And from that of a teacher.... But anyway, I know we’re almost out of time.... I just wanted to bring up one more thing about the impact of this service that I wasn’t sure you’d get to.”

“Go ahead.”

“Flash Point not only allows people to download work that is currently being produced, but all of the great works of music and literature from the past as well. Every book ever written is available in a digital format through Flash Point, and the way that Flash Point operates with different people keeping copies of works on their computers ensures that these books will be available forever. Physical libraries could never offer that.”

“That they couldn’t. Do you teach a class on libraries as well?”

“There’s not much demand for it....”

“Okay. We’re going to go to a commercial break and then come back for a final word from our guests.”

The audience clapped.



Grant O’Connell, a popular high school junior, sat in his garage recording a guitar solo with a digital recorder. He wore headphones and sang softly as he strummed his instrument.

When he finished playing, he pressed a few buttons on the recorder and plugged it into a laptop computer. A few taps on the keyboard, and the computer screen turned to all ones and zeros. Grant seemed pleased with these results. He pressed a few more buttons and a disk ejected from the computer which he placed in a case. He then left the garage to meet a couple of friends at Frankie’s Fifties Diner.

Frankie’s Fifties Diner was supposed to make patrons feel like they were back in the fifties, but except for some black and white tiling, the diner didn’t make much of an impression. Grant and his friends didn’t care much about the ambiance, though, and would frequently meet up there on weekends.

Grant's friends, Nolan and Casey, were waiting at Frankie's when Grant arrived. They had already secured a booth by the window. Grant joined them and pulled the disk that he had recorded earlier from his backpack.

"I think this is a really good one," Grant said to his friends as he placed the disk on the table.

"So did you put it online yet?" asked Nolan.

"No, I wanted you guys to see it first. Besides, no one's going to download it until I can start getting the word out."

"No luck with finding a gig?" asked Casey.

"No, but I mean, it doesn't help that I'm trying to push myself as a solo act."

He stopped talking and looked back and forth at his two friends.

Nolan extended his arms defensively, "Hey, I told you, man, I'm too busy with school. Besides you're a much better bass player than I am. Why don't you just record the other parts and play them in the background?"

"That's kind of a lame thing to do for a live performance.... Well, I guess it forces me to really pay attention to my guitar skills since it's the only thing that I'm using on stage."

Casey looked inquisitively at Grant, "How does the lack of bass and drums affect the final binary product?"

"Well," said Grant, "It's different, but the live aspect of the performance seems to add something that makes up for the lack of instruments. People like it both ways. It's hard to explain."

"But what about the number modulation?" asked Nolan.

"You're assuming that I paid any attention in music-coding theory class. I mean, I just play what comes to my head. When I'm out there performing, I'm not focusing on the binary code my music is producing. I don't know.... Of course, then I worry that since I don't know why my music is good maybe someday people will stop thinking it's good and I won't know how to fix it."

"Wait a minute," said Casey, "Who are these people who are saying that you're good?"

"I hate you," said Grant.

Casey continued, trying to be serious this time. “Don’t worry, I mean I kind of feel that way in literature class. For instance, just today, we were reading some passages from this guy Dusveskie or something.”

“Dostoyevsky,” said Nolan.

“Yeah, that’s it,” said Casey. “I mean, he was supposed to be a genius. There’s supposed to be so much that I’m supposed to be learning from him, but all I see are these random ones and zeros.”

“They’re not random,” said Nolan. “Were you even reading a translated version?”

“I was reading what I got off Flash Point. I don’t know where it came from. I mean people are telling me that this guy was a better writer than John Grisham, but I don’t see it. I read John Grisham’s works. They have a nice rhythm of ones and zeros, I guess. But how is it different than this Dos Vesksy?”

“You just don’t understand, Casey,” said Nolan. “Dostoyevsky’s writings are nothing like John Grisham’s. John Grisham would never be able to write anything that matches the binary genius of *The Brothers Karamazov*. Someday you’ll understand. Someday you’ll be thankful that we have Flash Point so that there’s no danger of ever losing the amazing message that Dostoyevsky brought to humanity.”

“Well, maybe that is the point,” said Grant.

“What do you mean?” asked Casey.

“Well, think about it. Flash Point ensures that creative works will never be lost. So maybe no one understands Dostoyevsky for a hundred years, or a thousand years. Eventually, someone will read it and understand. It doesn’t have to be Casey.”

Their conversation paused.

“Why don’t you give me that disk?” Nolan said. “I’ll take a look at it and give you some feedback.”

“Alright, here you go,” Grant said as he handed Nolan the disk. “You going to the game tonight?”

“Oh, no, I’m actually going to go hangout at Starbucks with my computer for a while.... Big project due Monday. I’ll probably take a look at this while I’m there.”

“Cool. See ya.”



Wallace Martin stood outside a coffee shop talking on his cell phone.

“Yeah, I don’t know. I looked at some of these tapes, but they were all recorded with low quality recorders.... That’s what I told them.... I don’t know. They didn’t seem to understand how much of a difference it makes to have the extra bit rate. It’s hard for me to get an idea of how good these acts are without a proper recording of them....”

He stopped speaking, held the phone down at his side, and spun around.

“Yeah, I can’t figure out where I am. I’m going to ask for directions. I’ll get back to you in a bit.”

Wallace stepped inside the shop. He got the attention of a woman working behind the counter.

“What would you like?” she asked.

“Oh, I don’t want any coffee. I’m having trouble finding East Oak St. Do you know how I can get there from here?”

The woman looked down at the counter for a moment and then said, “I think we have a book of maps in the back. Let me see if I can find it.”

Wallace stood at the counter waiting. He fiddled with some papers and shifted his feet about. Looking over his right shoulder he spotted a high-school aged boy sitting with a portable computer. It was Nolan. He was examining the binary code produced from Grant’s recording.

Wallace stepped away from the counter and approached Nolan. He stood behind him and read over the code as Nolan scanned it.

By this time, Nolan realized that someone was standing over his shoulder reading Grant’s work, but he did not turn around. He kept scrolling through the code and tried to ignore him.

“Did you make this?” Wallace asked.

“No, a friend of mine recorded it.”

“It’s amazing.” Wallace said as he stared at the screen. He stepped closer to Nolan.

Nolan kept his head pointed toward the computer. “It’s not bad. He’s getting better.”

“No, this is really good,” Wallace said. “This is some amazing work. Believe me, I know about music. I work as a concert promoter for Jack’s Music Shack over on Twelfth

St. I was actually on my way to scout out some new talent, but I think I may just want to put them on hold for a while.”

Nolan turned around and faced Wallace. “He doesn’t have a band. When he plays live it’s just him and his guitar.”

“It’s not going to matter,” Wallace assured him. “I can tell that your friend truly has an appreciation for music. He knows what music is supposed to do. These numbers on the screen, these ones and zeros, this is why we have music in our lives.”



Nolan stood with Grant at school. It was morning. They put books in their lockers and removed ones they would need for the day.

“He said it was amazing, Grant,” Nolan told his friend. “He said that you clearly have musical talent. This is what you’ve been looking for. Play a few shows, get your name out. Everyone will be talking about you, Grant.”

Grant shut his locker and stood silently for a moment with his hand against the metal door.

“Why didn’t he want to get in touch with me directly?” he asked.

“I wasn’t going to give your phone number out to a random person. Didn’t want you to freak out. I got his business card. See, it has an address on it. It’s a real place. Just give him a call. What have you got to lose?”

Grant took the card. “You know, for someone who doesn’t have time to play music with me, you’re spending a lot of time on this.”

“How about I help you set up your website? Give the guy a call. I’ve got to get to class.”



Grant sat in a dark office behind Jack’s Music Shack. He stared at a desk covered in papers. Wallace sat behind the desk.

“Okay, here’s the deal Mr. O’Connell,” Wallace said to Grant. “There are a lot of places that will let young people perform, and they do perform, and it’s great; but then what happens?”

Grant sat confused, unsure if and in what manner he was supposed to respond.

Wallace continued. “Nothing happens. That’s not a career, one show. There’s a lot more involved to make it big in this business. You need an image. You need to have a

vision. That's why we're different here at Jack's. Play a few gigs with us, and pretty soon everybody you pass on the street will be playing your songs on a data recorder.... So, what do you say?"

"I don't have a very good monitor. What kind of equipment do you guys have here?"

●

Back at Frankie's. Grant sat again with Nolan and Casey.

"It's great you got a gig Grant," Nolan said. "But I'm not sure you really need this guy to help in promotion. I told you I would help you get a website up and promote it."

"Yeah, but there are issues with registering with Flash Point. Wallace said that it can be tricky for beginners."

"Yeah, I don't know," said Nolan. "I've never really understood how the licensing worked."

"There should be books that could help you with that." Casey added.

"Hey, I haven't signed a long-term contract yet. I'll play a couple of show for the guy. At the very least it'll be good practice."

"Alright," said Nolan, "I mean, I was the person who encouraged you to get in touch with this guy, so I guess I shouldn't really be trying to discourage you.... When is your first show going to be?"

"A week from Friday. I figured I need to work on my literature project this weekend."

"What a rock star you are," Casey joked, "scheduling gigs based on when you can fit in homework."

Grant shook his head.

"Who are you writing your paper on?" Casey asked.

"John Grisham."

This time Nolan shook his head.

●

Grant stood before a darkened room filled with people. Most of them sat at small tables. Grant normally would not be allowed into such an establishment since he was under 18.

A giant X written on both of his hands signaled he was too young to buy drinks from the bar.

Wallace had introduced him to the audience. Called him a great up-and-comer at the very start of a spectacular musical career. During the introduction, Grant realized that Wallace had never actually seen him play. Wallace's grand career assessment was based on a single piece of recorded music. Grant hoped that his live performance would live up to the hype.

He took a deep breath and strummed his guitar. The audience seemed responsive. His guitar and microphone were plugged into a computer at his feet. As he played and sang, his words and music were recorded as binary code and projected on a screen located above the stage. The audience stared as ones and zeros flashed across the screen.

The last note of the song. Grant waited. The audience gazed at the screen trying to take it all in, to interpret this music that Grant had just presented them with. They started to clap. They liked it. Grant took another deep breath and started in with a second song. This might work out after all.

●

A television studio. Back with Walt Chambers and his *Late Night* crew.

"Alright. We're back with our panel. Almost out of time. I just have one more question, and this is for Sheppard. You tried to put Flash Point in some kind of historical context earlier. Where do you see this technology going in the future? What are we going to be talking about twenty years from now?"

"Well, Walt, Flash Point has brought about a creative renaissance of sorts. I hope, though, that as the system matures, its users—especially its young users—use the system to gain an appreciation for all the great works that have come before them. Just having every book available is itself not really progress. Young people have to download these books and experience them first hand. I've seen some evidence that this is starting to happen.... Of course, I don't want people to do too much learning on their own, or I'll be out of a job!"

The audience laughed.

"That's very true, Sheppard. And now we'll leave you with Leslie reading an excerpt from her book, *You Too Can Use Flash Point to Distribute Your Novel*, available for download now. Goodnight everybody."

"One. Zero. Zero. One. One. One. Zero..."

Prepare to Communicate

Greg James checked his watch. Ten thirty. Right on time. His plane might actually land a little early. He could get in touch with Caitlyn and be off to meet her for lunch.

His original nervousness had subsided. Though he had been with his company for several years, this was the first time he had been sent out alone to meet up with a client. Greg had no reason to worry. He was friendly. People liked him. Besides, this was lunch. Eating didn't exactly require complex programming skills.

Greg sat on the aisle. A woman sat by the window. There was no one in the middle seat. They had chatted briefly after boarding. It sounded like she was returning home to Boston after a trip. They spent most of the flight sitting in silence.

"So you said you're going to Boston on business?" she asked.

On business. What else do people do?

Greg shifted in his seat. "Yeah. I work for a web consulting firm in Atlanta. I'm meeting with a prospective client."

"That's nice," she said.

"We're going to have lunch."

The woman nodded at Greg.

"Do you know where?" she asked.

"No, she's—the woman I'm meeting—is going to call me when the plane gets in. I think she's going to be meeting me at the airport."

“Not one to plan things much in advance?”

“Actually, I am,” Greg responded. “Kind of funny actually. This is the first time that I have to use my company cell phone....”

He pulled the phone from the seat pocket, flipped it open, closed it, and then placed it back in the pocket.

He continued, “It’s been sitting in a box for the last couple of years.... But the people at DeliverCo didn’t want to plan anything in advance.”

The woman was curious. “DeliverCo?”

“Oh, yeah, that’s the company that I’m meeting with today. They work in deliveries and things like that. Trying to make it easier for people who live in the city without a car... anyway, they want to start moving much of their reservation system online. That’s where I come in.”

“Ah,” she said, then paused for a moment and continued awkwardly, “I guess if they had already implemented your system, you wouldn’t need the cell phone, because you could have just scheduled them to pick you up.”

“Yeah, I guess.” Greg said as he kind of faked a laugh.

“My name’s Greg, by the way.”

“Jules,” the woman responded. “Good luck with your meeting.”

“Thanks.”

The two sat quietly as the plane began its decent into Logan airport. Greg tried to figure out if he was allowed to keep listening to the plane’s complementary satellite radio system. He figured that he could. Why else would they have provided it? But he couldn’t see anyone else still listening to it.

A violent shaking of the plane interrupted Greg’s thoughts.

“Whoa!” he exclaimed.

“Sorry about that folks,” the captain murmured over the speaker. “I’ll try not to push the turbulence button this time.”

Greg looked over to Jules. She peered back with a look that simultaneously showed she appreciated the pilot’s joke but wished that he would focus more of his energy on flying the plane.

Greg noticed that his cell phone was on the floor. Must have been shaken from its home by the turbulence. He picked it up and held onto it.

He looked out the window. The ground grew closer as the plane descended. Almost at the runway. The plane shook with the familiar sensation of hitting the ground.

“Okay, we’re here,” the captain reported. “Feel free to use your cell phones now. It’ll just take a few minutes for us to reach the gate. If you are transferring to another flight, talk to one of our representatives when you exit the plane. They should be able to contact someone and find out which gate you need to get to.”

Greg turned on his cell phone. He had one message. Must be Caitlyn. He tried to figure out how to get it to play. He fiddled with the buttons. The phone went dead.

He couldn’t get it to turn back on.

He looked over at Jules, “Do you know how to work this type of phone? I can’t seem to get it to come back on.”

He handed her the phone. Jules pressed some buttons and then said, “I think the battery’s dead. You should be able to charge it in the airport.”

“Oh, thanks,” he responded.

Greg wasn’t sure what to do. He probably hadn’t brought the charger with him. Jules might be able to help. People were leaving the plane now. He quickly grabbed his bag from overhead and started toward the exit.

He emerged from the plane into a crowded room full of seats—people waiting to board the plane that he had just left.

Jules passed by. Greg tried to say something to her, but she kept going. Must have been in a hurry.

He found a seat next to the wall and rummaged though his bag. He found the box that his cell phone came in, but there was no charger inside.

There was an information sheet with a phone number on it. Greg took the sheet to a payphone. The number wasn’t toll free. He sat his bag down and removed a calling card from his wallet. Entered the 800 number into the phone.

A message from the operator, “We’re sorry. The number you have dialed cannot be reached from this phone.”

Greg tried another phone. This one didn't even have a dial tone. Most of the phones weren't working. The ones that did function wouldn't accept his card. Greg reached into his pocket and pulled out two dimes.

He opened his wallet. The smallest bill he had was a 50. He thought about buying a lemonade to get change. Decided against it and starting moving toward the bag check. Maybe he could find an information counter. Then he could figure out what to do.

He walked through the airport. As he passed through the baggage check area, he saw Jules waiting for luggage. He walked up to her.

"Jules," he said.

"Oh," she replied. "Did you get your phone working?"

"No, I don't have a charger and I can't get hold of the cell phone company. Do you have a charger? Could I try plugging it into my phone just to see if it is the battery that's broken?"

She looked at the phone. "You know, I don't think my charger works with that type of phone."

She looked back at the bag check as if she hoped Greg would go away.

"So you don't have a Verizon phone?" Greg asked.

"No, don't you have a phone number for the person you're meeting? I mean, it's weird that you would fly to a strange city and not know what's going to happen to you."

"I was just doing what they suggested..."

Jules interrupted, "Actually, you know, now that I think about it, there is a Verizon store that I frequently pass when going back to my apartment from the airport. If you want to split a cab, I can take you there."

Greg thought for a minute. He wasn't sure he should leave the airport without his host, but he didn't see how he had much of a choice.

"Yeah, okay," he said. "How far is it?"

"Not far." She grabbed a black bag as it passed by her on the conveyer belt. "Let's go."

Greg was grateful that he had bumped into someone who seemed to have her act together so well, that was, until they stepped into the cab. Jules didn't really know where the Verizon store was. It seemed she relied on her car's GPS when navigating around the city. She probably didn't even know the directions to her home from the airport.

“Well, can’t you just look up the store on your computer, there?” she said to the cab driver as she pointed at his GPS display.

“It only knows streets.... I’ll make a call and find out where it is. You said it’s in Jamaica Plain?”

“Somewhere between here and Jamaica Plain,” Jules said. “I’ve passed it before coming back from the airport.”

The driver made a call.

“Yeah, Wade, I need to find a Verizon store in Jamaica Plain.... Well, just give Johnson a call. Yeah, he can look it up from his work station.... No, take your time.... I can wait.”

“Actually,” Greg said, “If you’re looking up this place, do you think you could just look up DeliverCo instead?”

The driver looked into the rear-view mirror.

“No, you said Verizon.”

“Well, yeah, but...”

Jules grew impatient. “Greg, just let him find this....” She looked at the driver. “Yes, Verizon.”

The driver went back on the phone.

“Chestnut Ave? Okay, great. Yeah, I can get the directions from that. Thank Johnson for me.”

He closed his phone.

“Okay, we’ve got it,” the driver said. He entered the information into his GPS.

Jules looked at the screen and agreed, “Yeah, that’s where it is.”

Greg just slouched low into his seat. He thought back to the conversation his boss had with him when he was told that he would be sent to Boston by himself. “No problem,” Greg said. “Any moron can handle a simple lunch.” It seemed so straightforward at the time. Why was everything so complicated?

Greg looked at the meter. It was already at 15 dollars. It didn’t really seem fair that the driver would charge for the time they spent at the airport figuring out where to go....

He turned to Jules, "Is this place going to be near a subway stop?"

"Well, I don't know.... Why?"

"Well, I need to go somewhere eventually.... I guess I could call another cab.... It's all paid for by the company...."

They drove for a few more minutes. Greg saw a Verizon sign pass by on the side of the road.

"Hey, here it is."

"No, this isn't the one," said the driver.

"I don't care," Greg screamed, "just let me out here."

Greg hopped out, grabbed his bag, and threw Jules a fifty dollar bill.

"Oh, thanks...."

He slammed the door and approached the store as the cab drove away.

There wasn't much to be seen inside. Just one room. Mostly empty. A few telephones sat on pedestals throughout.

There was a counter at one end of the room. A man in his mid twenties sat behind the counter at a computer. A mirror behind him reflected a computer screen in the midst of a game of solitaire. The man wore a nametag. His name was Kenny.

Greg took his phone out of his bag.

"Hi. My phone stopped working. I think the battery might be dead, but I don't have my charger with me."

Kenny looked up from his computer.

"Did you try changing the battery?" he asked.

"I don't have a replacement battery," Greg said. "At least not with me."

Kenny extended his hand and Greg placed the phone in his palm.

Kenny examined the phone. He opened it and tried to turn it on. He pressed a few buttons.

"Yeah, we don't make these anymore.... Did you try calling our support number?"

“I didn’t have a phone to make the call with.”

“I can let you call them from here, but I really think you should just get a new phone. We can’t really offer any support with these phones. All our replacement parts are for our new ones. Besides, this one doesn’t even have a camera.”

“Listen, I really just need to check a voice mail. I have a voice mail on the phone. Someone left me a phone number. I just need to get the phone number. I don’t even care about the phone.”

Kenny smiled. “Oh, well I’ll just let you check your voice mail from the store phone.”

He moved a phone in front of Greg and gave him an index card with a phone number on it.

“Just call this number here and then enter your phone number and PIN number.”

“PIN number?” Greg asked.

“Yeah, the code you entered when you originally configured the phone for voice mail.”

“I didn’t configure the phone. It’s a company phone. Someone else set it up.”

Kenny thought for a minute. “Maybe the battery is dead. I can try charging it.”

“I thought you couldn’t charge this phone.”

Kenny looked confused for a moment, then replied, “Oh, yeah. That’s an old phone. We don’t have chargers for those.”

“Let me just use your phone to call the support number.”

“Okay. You can give it a shot.” Kenny pointed at the phone he had just passed to Greg.

Greg dialed the number and waited through the usual array of menu choices. He was eventually given the choice to speak to a person. He waited for a while longer, and then a woman’s voice came on the line.

“Hello, this is Barbara. How can I help you?”

“Hello, yes. My phone stopped working. I’m at a Verizon store right now, but they can’t help me because I have an old phone.”

“Oh, I can patch you through to sales. We’ll get you set up with a new phone right away. We’re having a special this month. Our new plans are more flexible than ever.”

Greg interrupted, "No, I don't want a new phone. I just need to check a voice mail that is on my phone."

"Oh, well, that's easy. You don't need the phone for that. You can check your voice mail from any phone."

"No, but I don't know my PIN. Is there anyway that you can look up my PIN number?"

There was a pause on the line.

"Yes, I can do that," said Barbara. "But it's going to take a couple of minutes. I have to make a few calls. Can you give me the phone number of the phone?"

Greg motioned to Kenny to hand him the phone. He read the number off of the back to Barbara.

"Okay. I'm going to put you on hold for a minute. This shouldn't take long."

Music played though the earpiece. Greg tested the receiver to see how far he could hold it from his ear and still hear the music.

Minutes passed. Another customer entered the store. Kenny showed him some phones.

The phone started beeping. Greg was initially confused, but then realized it must be a second call. He waved to Kenny.

Kenny took the receiver and pressed a button on the base.

"Yes, I understand," he said into the receiver. He picked up Greg's cell phone and started reading information from it into the phone.

"What's your mother's maiden name?" he asked Greg.

Greg stared "What?"

"The people from the support line need it."

"Travis," he said.

"Travis," Kenny repeated into the phone.

Greg was confused, but before he could say anything, Kenny switched the phone back to the first line, handed the receiver back to Greg, and rejoined his customer.

"Hello, Mr. James."

The voice was coming from the phone.

“Oh, yes,” Greg responded.

“I made some phone calls, and I was able to get the necessary information to connect you to your voice mail. Now, can you just tell me your mother’s maiden name for verification purposes?”

“Travis,” he said.

“Okay, that matches up with the name that I was able to get. Should I just connect you to your voice mail now?”

“Yes,” Greg said as he grabbed a pen off of the counter and searched for a piece of paper.

A different woman’s voice.

“Hello, Mr. James. This is Caitlyn Williams. I just looked your flight up online. I see that it’s on time, but I’m afraid that I’m going to be running late. I was actually in New York early this morning. I’m coming back for our meeting. I think maybe it would be best if you just headed straight to the DeliverCo office. I’ll call you when I get closer to Boston, and we can work out somewhere to meet for lunch. Our office is near the Government Center T stop. Just give us a call when you get there and someone will give you directions to the office.”

Greg wrote down the directions. The message concluded with phone numbers for both Caitlyn’s cell and the DeliverCo office. Greg scribbled them down and hung up.

He interrupted Kenny, “How easy is it to get to a subway stop from here?”

“Well, it’s a bit of a walk.... There’s a bus.... It’s probably easiest to walk. I’ll write down the directions for you. Let me just finish one thing with this customer.”

Greg sat for a minute. Then he stood up and said, “You know, I’m just going to call a cab. Can I use your phone again?”

Kenny didn’t really answer. Greg took that as a yes.

He dialed information and asked to connect to a taxi company. The cab would arrive in 20 minutes.

He then tried to call Caitlyn. She didn’t answer. He left a message saying that he was making his way toward her office, and he didn’t have a phone, so she shouldn’t bother calling him.

Then, while he still had access to the phone, he called DeliverCo to find out their exact address.

“Hello, DeliverCo.”

“Yes, what is the address of your office?”

“Well, you don’t actually need to come here, see, we deliver things to you.”

“Oh, no,” said Greg. “I have a meeting with Caitlyn Williams. It was supposed to be out at lunch somewhere, but she’s running late, so she just wants me to go to the office.”

“Oh, well, are you taking a cab here?”

“Yes.”

“Just tell the cab driver to take you to Government Center. When you get here, give me a call. I’ll direct you to our office.”

“No, I don’t have a cell phone. That’s why I need to get the directions now.”

“Well, it’s kind of hard to explain. You kind of need to be here to look at the landmarks.”

“Can’t you just give me an address?”

“Maybe you could call from a payphone when you get here.”

“What is the address of your office? I have a computer here. I’ll look up directions.”

“Maybe you could look up and see where the payphones near City Hall are, and then you could just call from here.”

“Please just give me the address.”

“Okay. Let me just find it.... 400 Congress St. Tenth floor.”

“Thank you,” Greg said. “I’m sure I’ll be able to find it.”

Kenny was still talking to the customer. Greg gathered up his stuff, including his non-functioning cell phone and left the store to wait outside.

A long taxi ride and another fifty-dollar bill later, Greg found himself being dropped off at 400 Congress St. Though the cab driver almost certainly went a round-about way to get to the office, he didn’t seem to have any trouble finding the building when he got close.

He took the elevator up to the tenth floor, but something wasn't right. It was some kind of legal office. The receptionist had never heard of DeliverCo.

Greg headed back down to the lobby. He asked the doorman about DeliverCo. He found out that he had been sent to the wrong floor. DeliverCo was on the sixth floor, or used to be rather, before it moved to a new building, which the doorman didn't know the location of.

Greg couldn't understand how the person he had talked to didn't know the address of the building, but then he remembered how she had spoken of "looking up" the address.

There were two payphones in the lobby of this building. Unsurprisingly, the first one didn't have a dial tone, but the second did. Greg pulled out his calling card and attempted to call Caitlyn.

She answered. Apparently, she was getting close to her office and had just checked her messages. It seemed that they would be able to meet for lunch after all. Greg asked where the new office was located, to which Caitlyn responded, "Walk out the door and tell me what you see. I'll direct you to the office."

Greg let go of the phone and just leaned against the telephone cabinet, his hand on his forehead. How could he ever make these people understand?

"Caitlyn, I don't have a cell phone."

"Oh... well, I'm not sure of our address...."

Greg hung up the phone and exited the building.

He looked in his wallet. Fifty dollars left. He found a cab and headed back to the airport.

Utilize All of Your Resources

Riley's Blog – A Girl with a Computer Shares Her Thoughts

January 14, 11:30 pm

Currently listening to: Green Day – American Idiot.

Currently eating: Raspberry fro yo.

Currently drinking: Diet Coke.

Wow, it's been a really long time since I've updated this thing. Winter break's almost over. School starts in just a few days. I was originally planning on getting some packing done, but I figured since I never get to update this thing when I'm at school, I might as well do it tonight.

I just got back from Applebee's with Owen and Kurt. It was really fun. I definitely want to do that more often. It's weird, because we really never went out to dinner like that in high school. We'd sometimes get ice cream, but never an actual dinner. Tonight was a lot of fun. I think I'll try to organize another dinner over Easter break.

Owen brought up summer plans. I can't believe sophomore year's only half over and we're already talking about the summer. Anyway, he suggested that we should all try to do something together during in August. Kurt's aunt and uncle have a house down the shore that we can use; we just have to let them know ahead of time. Of course, we'll have to work around our work schedules; but that'll be a lot easier to do once we figure out what we're actually doing this summer. What am I going to do this summer? Why don't I have a job yet?

I've been looking into a lot of stuff around Penn State, but I'm not sure that I want to stay at school for the summer. I loved getting to see everyone from high school on the

weekends last summer. Well, if I do stay at school, I'll make sure to tell them right away that I'm going to have to take a week off in August.

Maybe two weeks! I mean, my parents are going to want to spend at least a little time with me! :)

I'm looking forward to getting back to school. It's nice to spend a few weeks not worrying about studying lists of paintings, though living at home can get kind of tedious. (Notice that I only said I want to spend one week with my parents during the summer.)

I'm out. Leave a comment. Thanks for reading my blog.



Kurt's Blog

January 13, 8:03 pm

Hey, everyone, guess what? I'm actually updating my blog! Well, you know I care about my readers—all three of you, so I'm doing this for you, my readers.

Christmas break was great. I got a new jacket and a bunch of cool sweaters.

It's really weird to think that getting clothes for Christmas excites me. I mean, I didn't get any toys this year! But seriously, clothes are what I need. I mean, I've been rotating through the same three sweaters for a while now, so they were starting to get a little thread bear.

It's really crazy to think of how Christmas has changed over my life. I think one big clue this year was that the piles of presents that my parents had for each other was bigger than the piles that they had for either me or my sister.

I think part of the reason for this feeling is that there really isn't any magic in where the presents come from. I mean, my parents bought me a nice jacket, but then a week later they gave me two thousand dollars for food. So why is the jacket so special? Why did everyone make such a big deal out of it? Wouldn't it have just been easier for my parents to give me a little extra money, and then I could have bought clothes when I needed them?

Anyway, I had a few days off around Christmas, but I spent most of the break working at my Dad's office. I really hope I can find a different job for the summer. I mean, I like working there. It's easy, and I get paid pretty well, but I really feel like I'm just moving around files and papers, not really getting anything done. It's better than when I started there last summer, but it's still pretty dull.

I'm actually thinking of getting a job in DC this summer, maybe staying at school. I know of a few people who are also staying in the city, so I'll have people to hang out with. Of course, I have to get a job first.

All in all, I guess this was a pretty good break. I always like seeing people from high school, and it was cool being able to hang out with Owen and Riley. We actually spent New Year's together. We didn't do anything terribly ambitious, we saw fireworks, but then I don't usually get to see fireworks when I'm at school.

I want to make sure to hang out with them a lot more this summer. Last summer it seemed like we were spending too much time with our jobs and never really planned anything big.

Until next time (which may be a while.)



Owen's Blog – StuffThatOwenThinks.com

January 15, 5:32 pm.

I've been thinking. Our lives are broken into two pieces: the school year and vacations. Lately I've come to realize that school time and breaks have completely different dynamics than they ever did before. In fact, it almost seems like that everything is reversed in college. We drudge through the tedium of summer, and then we go on "school break."

In high school, all the fun times were during the summer or Christmas break. When the break ended, you would go back to the monotony of school, spending the whole day in a predictable, boring setting.

Now things are all backwards. College is where you have all your fun. Your mind is stimulated intellectually, socially, and creatively. When you're on a break, you go back to the same boring summer job. Your alarm goes off at an insanely early hour, and your mom sticks her head in your bedroom door saying, "Time to get up. It's the first day of summer!" She then gives you a brown-bagged lunch, and you're off to work.

I don't know. I mean, I guess working at the camping store is cool—at least I'm not sitting at a desk.

But then my boss says, "Oh, it looks like you've forgotten how to use the cash register while you were at school. Now I have to waste time retraining you." It's just like teachers complaining that students forget everything they know over the summer.

You know what I mean.

So other than working long days selling camping equipment, I guess the break was pretty cool. I went to New York with my family, and I was able to spend New Year's Eve with Kurt and Riley. It was cool. We went into the city, caught a movie and then watched the fireworks. I think maybe next year I might try to go to New York for New Year's. I think that would be fun.

Later.



Early April. Riley sat at a lunch table in a Penn State dining hall.

Sarah Stevens sat next to Riley. They were roommates freshman year, and pretty much best friends through all of college thus far. On the other side of the table sat Stephanie Patterson, Riley's current roommate, and Stephanie's boyfriend Frank.

"So when are you going to accept my Facebook proposal?" Sarah asked Riley.

"Oh, yeah," Riley chuckled.

"What do you mean?" asked Frank.

Sarah smiled, "I want to let the whole world know that we're in a relationship!"

Frank shook his head. "So I don't get this whole girls-pretending-they're-in-relationships-with-other-girls-on-the-Facebook thing. You don't see guys doing it."

"It's only cute when girls pretend they're gay," Sarah said.

"They're trying to hide the fact that they don't have boyfriends," said Stephanie. "Self-deprecating humor or something."

"I'm not looking for a boyfriend," Riley responded.

"That's because you're waiting for the guy back at home," Stephanie said. "What's his name, Owen?"

Riley grew more serious. "I don't know what's going on with him. I was looking at some pictures he posted online. He seems to be getting pretty close with one of the girls he knows at school.... Besides, I think he's going to be staying at school this summer, so I'm probably not really going to see him."

"Speaking of summer plans, how's your internship search going?" asked Frank.

"Oh, didn't you hear? I got accepted to the museum thing. It's unpaid, but it's only six weeks, so I'll only have to spend the first half of the summer here. I'm really excited."

“I’m impressed,” said Frank. “I’m not even finished making my résumé yet.”

•

Kurt sat in his dorm room with a few friends. College offered so many grand experiences, but many weekend evening still seemed to focus on the simple pleasure of sitting around the room with friends from down the hall, playing video games, and passing around a bottle of vodka.

The crowd was small so far, but it would get bigger. Jim sat mixing a drink with cranberry juice, while Ben flipped through the opening menu of a race-car video game.

“So are you going to be going canvassing with the College Dems this weekend?” asked Jim.

“Oh, yeah, I forgot about that,” Kurt stammered. “I’m not sure I’m going to be able to make it. I’ve got a lot of homework.”

“What is this?” asked Ben. “Politics on a Friday night? Let’s just talk about getting wasted!”

“Well, sometimes I think drunk political conversations can be the best ones,” said Kurt. “Besides, isn’t this what college is really supposed to be about, constantly having great, stimulating conversations with friends? Isn’t this what we should be focusing on most of all?”

“Even more than this delicious bottle of discount vodka?” Ben asked.

“Well, it is delicious,” Kurt said sarcastically. “Seriously, though. I mean, what do people talk about in high school? Baseball? Video games? College is about discussions of literature and philosophy, things that matter.”

“You can discuss that stuff anywhere you want, Kurt,” Jim said. “You can spend your entire summer discussing politics and philosophy with your friends from home. Do you need more vodka in your cup?”

“I don’t know,” said Kurt. He seemed to be taking Jim’s suggestion more seriously than he probably should have.

He continued, “My best friend from home is pretty conservative. I don’t really feel comfortable talking about politics with him. I saw on his Facebook profile that he was in the College Republicans.... I don’t know. I just hope that we can still get together over the summer like we had planned... that we haven’t drifted too far apart.”

"Well," said Ben, "from what you've said in the past, it's not this guy Owen that you want to spend time with over the summer. What about that girl you were hanging out with over Christmas break? What was her name?"

"Oh, Riley, yeah."

"She doesn't have a boyfriend, does she?"

"Uh, I don't think so. I actually haven't talked to her much since Christmas. Her Facebook profile doesn't help much. She just has herself down as in a relationship with another girl.... It's a joke, but it confuses things.... I think the bigger problem is that I noticed her away message the other day, and apparently she got some big internship that's going to keep her at school during the summer. I don't know if she's going to home at all."

"Well, she'll probably get a week off," said Jim.

"Yeah, but if she only has a week, she'll want to spend the time with her family."

Jim tried again, "Oh, well, maybe you could visit her,"

"Yeah, maybe... I guess it depends on what I'm doing this summer.... Actually, you know, I'm just going to tell them that I'll stick with my on-campus job over the summer. I'll be able to live up here. Okay. Now I know what I'm doing this summer...."

Kurt looked up at the television screen. Ben hadn't started his video game yet.

"Oh, and I saw the pictures that you posted online from the other night. That girl Julie, I think she was in every one of the pictures. Did anyone even know her at that party?"

"I thought you knew her," said Ben.

They all laughed.

"Hand me that bottle and a shot glass. We've got a lot more drinking to do tonight."



Owen sat with a few classmates from poly-sci class. They were trying to work on a group project, but kept wandering off topic. The conversation moved to gun control, which Owen felt that he knew something about.

"So you don't think there should be more restrictions on handguns?" said Greg, a senior in the class.

"No, not necessarily," Owen responded. "All I'm saying is that I have somewhat of a unique perspective on the issue. I work at a camping and outdoors store during breaks. We don't actually sell guns, but many of the people I interact with at the store shoot target practice or go hunting. So, these are people who are using guns in a way that really isn't hurting anyone. It seems kind of ridiculous to put unnecessary restrictions on the way these people spend their leisure time."

"Yeah," said Bill, another member of the group, "but the guns people use at the target range aren't the same type of guns that I want to put restrictions on. There are some types of guns which are made for a singular purpose, killing people."

Owen shook his head, "I'm not saying that I'm against having some restrictions on guns. I mean, some areas with strict gun laws are very safe because of them, but then there are situations where areas get safer when concealed guns are allowed. It's a complicated issue. I think maybe we just need to start by having more dialog about it."

Greg responded, "You know, Owen, I'm kind of surprised to hear you say that. I know that you're a member of the College Republicans. I kind of expected you be all like 'I think everyone should have guns and shoot them a lot.'"

Bill laughed and said ironically, "Yeah, Republicans do say things like that."

"Yeah, well I mainly just signed up for the College Republicans to make some friends," Owen explained. "I'm actually not really that conservative.... I mean my parents are Republicans, so I guess I'm more familiar with conservative ideals, but I certainly see a lot of positives about liberal ideology. I mean, for instance, I'm frequently surprised that the camping store keeps surviving all the Wal-Marts and other stores that compete with it in the area. While I'm not sure that I want to pass legislation banning Wal-Marts, I can certainly admit that something is wrong with the way our economy works. For these giant impersonal stores to take over all business—there's got to be a flaw somewhere."

"Well, we're starting to get into economics," said Greg. "Weren't we supposed to be talking about political science?"

"I'm not sure we were ever really on topic," said Bill.

He turned to Owen, "So, Owen, are you going to be working at the camping store again this summer? I mean, assuming that it's still in business when you get home?"

"Yeah, that's the plan. I've got to firm it up when I go home for Easter, but that's definitely the plan. I am going to make sure to take some time off during August, though. Some of my friends from home are going to be getting a house down the shore for a week or two."

"That'll be party central."

"Yeah, I'm not sure though. One of my good friends from home, I'm not sure that he really drinks.... I mean from what I can gather from his AIM profile and Facebook page.... I've got to get in touch with him, though. He's the one who can secure the house for the week.... I need to deal with that soon."

Greg looked down at the books on the table and then up at his classmates.

"Okay," he said. "Let's get back to work."

•

Riley sat at her computer. She had been meaning to call Kurt for quite some time, but she wasn't sure what to say.

She sent Owen an email a while back, but he had never responded. Besides, it was Kurt who would have to arrange for the shore house. She decided to log in to Facebook to see if he had any new information up.

She looked to the section that outlined Kurt's summer plans. It said, "Spending the summer in DC."

"Oh, well," she thought. She was actually really disappointed. She wondered if she would see him over Easter break. She thought about calling him again, but decided against it.

Stephanie walked into the room and looked at Riley's computer.

"So, are you guys going to be able to do anything over the summer?"

"Um, no," she answered. "He's going to be in DC this whole summer, so I guess the shore thing won't work. Yeah. That's what he told me."

•

Kurt sat in his dorm room. The phone rang.

"Hello?"

"Hey, Kurt, it's Owen."

"Hey, man. What's going on, are you going to be home for Easter?"

"Uh, yeah," Owen responded, "but actually I was giving you a call about the summer. I wanted to know when you were going to be making the plans for the beach house."

“Uh, the beach house?” Kurt asked. “Well, I didn’t think we were doing that anymore....”

“Oh. Well I thought last time we talked about it we all seemed pretty sure that we wanted to do it.”

“Yeah, well I’m staying at school over the summer anyway, so it wouldn’t work.”

“Well, weren’t you going to take some vacation time and come home?” Owen asked.

“I don’t think we could get the house now anyway. It’s getting pretty close to the summer, and Riley couldn’t do it anyway.”

“Oh, you talked to her? She sent me an email a while back but I never got around to answering it.”

“Yeah, she’s got some fancy internship.”

“Okay, well, I guess I’ll give you a call when I get home for Easter. Are you going to be getting home on Wednesday?”

“Yeah, Wednesday night. We should go to Applebee’s or something.”

“Yeah, sounds cool, I’ll see you then.”

“Alright, see ya.”

•

Owen sat staring at his phone. He hadn’t expected Kurt’s response. Could there have been a misunderstanding? Something didn’t seem right.

Owen valued the friendships that he had made in high school, but he eventually conceded that his high school friends were growing apart. It wasn’t so hard to believe. They were in college now. New people, new experiences.

And besides, they would still be able to keep in touch with each other through the Facebook.

He left his room and walked down the hall. Some college buddies had talked about getting a road trip together for the summer. Owen figured it wouldn’t hurt to ask if he could get in on it. He just wanted to see what was going on; gather some more information.

Step Back from Your Work Occasionally

Jennifer Mays entered her office at Mercury Publishing. She was prepared for yet another day of reviewing proposals from literary agents, always hoping to catch the rare idea that could become a best seller.

Though it could be tedious, Jennifer loved her job. She was responsible for transporting the ideas of authors into the brains of readers. She traded not in stocks or bonds, but in ideas, hopes, and creativity. With each book that reached the shelves, ideas were shared, and readers' lives were enriched.

Jen sat down at her desk. As she switched on her computer monitor, her boss, Joel, stopped by.

"Jen," he said, "we're going to be meeting in the conference room in ten minutes. Sorry for not letting you know earlier. It's kind of a spur-of-the-moment thing."

"Okay," she replied.

There was an email about the meeting—sent three minutes prior. "Strategies in Dealing with Global Media" was the subject.

Joel fiddled with his laptop as Jen entered the conference room.

It seemed that only a few people were invited. Jen was there with two others.

One of them was Randal Watson, Mercury's head of recruiting.

"New laptop, Joel?" he asked.

"Oh, yeah," Joel replied. "It's so small. Really changes the way I do my work around here. Makes things much simpler... I don't know why this thing isn't starting."

“Don’t you have to hit control-F7, or something?” Jen asked.

Joel removed cables and plugged them back in to his computer.

“I asked the guys in IT to send me revised specs for this machine... didn’t want to be caught in a situation like this.... My old computer was really easy to set up.”

Joel paused and looked up at the three employees in the room. The conference room was small, more like a conference alcove. They sat at a small round table. Much of the space on the table was taken up by a projector. A white screen covered most of one wall.

“If only there was some other way to present this information to all of you.”

The projector blinked. A Power Point slide appeared on the screen.

The slide heading: “Global Media.”

Three bullet points: “Problem, Solution, Strategy.”

“We’ve got a problem,” started Joel, “and we need a solution and a strategy.”



Sometimes Cooper wondered what he was even doing in San Francisco. An aspiring computer programmer, he went against the advice of his friends and family and took a job with Global Media straight out of college. He was going to be big. He knew he had promise. His teachers thought his programming was inspired. Where others had to do complex mathematical calculations to figure out the most efficient algorithms to use, Cooper just sat down and let it flow. He was a natural. Until now.

It had been weeks since he had written any worth-while code. Here he sat alone in his office at 11pm on a Friday. Everyone else was gone. Everyone else knew where their projects were going.

Cooper worked as part of Global Media’s art and literature capturing crew. For years, Global Media had been a traditional media provider, cultivating creative minds and distributing their work. Recently, though, they had started a new search service which would harvest the internet not for content, but for ideas, concepts, and story fragments. The automated search algorithms pieced the fragments into coherent works of literature. The conventions the algorithms used were likewise pulled from the web. It was the creative process contained.

While the story generation had people intrigued, it was not until recently that the leaders of Global Media really started seeing the potential of their technology. These same techniques might not just be used to generate stories, but television shows, movies, symphonies, and paintings. And the algorithms needed not only scan the internet, but a

vast array of creative and non-creative sources. The possibilities were endless, much like the potential profits.

Cooper had been assigned to develop algorithms that would scan paintings and create new works of art inspired by them. Everyone at Global Media knew that the big profits were not to be made by producing digital paintings, but every new program that they wrote added to their store of technological knowledge, and only one person needed to stumble upon a billion-dollar idea to make it all worth-while.

Cooper hadn't stumbled onto anything. In fact, he had barely started to walk. He had been providing false reports about his progress for weeks, and now he felt that he needed to discover some great advancement in programming to redeem himself.

"Oh, it's going great," he would tell co-workers, but he hurt inside. He had never experienced such programmer's block before.

"Maybe I need some more coffee," Cooper thought.

"Or maybe I should just take a walk around the building.... Then I can start my work."

"I just need to start...."



Joel read his bullet points as fast as he could make them fly onto the screen. Global Media's mission to become a fully-automated media company clearly posed a threat to Mercury Publishing's traditional business model. That was the problem. Now, how would they fix it?

"Are you sure we really need to worry this much?" asked Randal. "I mean, I'm subscribed to their automated joke-of-the-day service. It's really funny. They seem like a pretty cool company. I think they really want to improve the world, not destroy all media as we know it."

Jennifer disagreed. "They're just like any other business. Their only responsibility is to make money for their shareholders."

"I think we're getting off topic here," said Joel.

"But we're such a small company," said Jen, "I mean, how much will these trend shifts really affect our clients?"

"We're a small company," said Joel, "Which happens to be owned by a much larger company. I'm under pressure to deal with the threat in some way. The company brass wants this war fought on as many fronts as possible."

"So we're starting a war with a company that claims to do no evil," Jen mused.

Randal interrupted, "Forget the war with them, so we're going to hire a bunch of programmers to start generating books with computers. Doesn't that seem a little like defeating them by destroying our company?"

"Well, we could integrate their techniques into our process," said Jen. "I mean, I'm just throwing out ideas here, but maybe we could just generate plots, or characters, to help out writers.... Or maybe we could use similar technologies to check proposals that we're getting, to see how they might compare to books that have been written and were successful."

"So we could use similar techniques to analyze popular novels. We could find a model for a perfect novel, and only give contracts to writers who agree to follow it."

"Yeah," responded Jen. "I mean, I don't really think any of us know what similar technologies might be capable of, but we should definitely look into it.... I've never been real good with computers. I think it requires some kind of creative spirit which I've always lacked...."

"So then how would we promote ourselves? What would our company be?" asked Randal.

Everyone sat in silence for a moment, unsure of what he meant.

"I mean," he continued, "We'd be known as the company that still has people writing for them. How long would we be able to run on the novelty of using human authors? Is that something people would care about? Or should we just try and embrace the technology?"

"I think we need to start by hiring an outside consultant," said Joel. "We need to at least know what's possible. Then, maybe we can re-start this conversation."

Randal seemed to recall something. "Joel, I've been revising our new-employee training manuals. What about the part where we teach them inter-personal skills? We're going to be wasting a lot of time coaching people to interact with others if pretty soon we're just going to use computers."

Joel looked a little flustered. He didn't expect that question.

"Until further notice continue business as usual. For the moment, our competition is still a joke-a-day service."



"Hey, Cooper, how are things going?" asked Jim, a co-worker at Global Media.

“Oh, just great,” responded Cooper. “Did you fix the database problem you were having?”

“Yeah, I was able to do it as soon as I came in this morning. You know how sometimes things just seem to make sense as soon as you sit down at your computer? I had one of those mornings today.”

He continued. “Listen; did you hear about what Jameson has been using his free time to work on?”

Cooper really just wanted to get back to work. “No, I haven’t.”

“He’s been playing around with a program that can actually generate pieces of code automatically. He just used the same technology that we used to create the stories. You just scan code that you’ve written and the program starts to generate code that fulfills a similar function. It’s just a start, but he has some neat demos running.... Hey, I guess if we’re not careful we might end up programming ourselves out of our jobs. I’ll see you later.”

A program that generates programs. Cooper strained his imagination to try and figure out if such technology could be used to help him start his project, but he couldn’t think of a way. Maybe he could use it once he started, but he needed to first write something so that it could be scanned.

He contemplated.

Maybe he should just quit his job now. Creativity could not be delivered on demand. Why didn’t his co-workers realize this? Surely others had faced these same challenges. Who could he talk to? Who would he feel comfortable confiding in? Perhaps he should start by drafting an email.

●

Steve Windfell ran a small consulting firm. He sat eating lunch with Russell Johnson, Mercury Publishing’s main attorney.

“I’m sorry that Joel’s running so late,” said Russell. “I know he was really interested to get your input on the Global Media situation.”

“It’s a fascinating company. I worked there for a couple of years. My original ambition was in consulting.... I was really just using the position for experience.”

“Did you ever think you’d be giving advice on how to take down your old company?”

“Take down is a strong way to put it.... Besides, I don’t know much about the specifics of the programs they’re working on now. I think my role is just going to be general strategy. That should be at least some-what ethical.”

“Now, Steve, one thing that really confuses me about this whole situation... Well, much of my work with Mercury involves copyright issues, and you say these programs just piece together other people’s work. What kind of legal team do they have over at GB? How do they defend blatant plagiarism?”

“I don’t think you really understand,” said Steve. “Let me see if I can explain.... They’re using other people’s works as inspiration. They’re doing the same thing an author would do, but the process is automated.”

“I don’t understand.”

“Hmm...” Steve thought for a moment. “Well, I guess I should start with an example. When someone sits down to write a story, most of what they’re doing is not original. I mean, genre conventions, for example. Someone who writes a detective story is not infringing on Arthur Conan Doyle’s copyright.”

Russell interrupted, “Well, they’re in the public domain now....”

“You know what I mean. People write to a specific genre by copying conventions that they have read. That’s what you have to do. And it’s not just style but content. I mean, when someone writes a story about the Old West, where are they getting their information from, other artistic works! Writers of these stories have never been to an old saloon, ridden on a horse, or fired a pistol, but they all put these elements in their writing.”

“But people’s creativity...”

“I mean, think about it,” Steve interrupted. “A nine-year-old growing up in the suburbs might write a short story about a mob boss who gets shot over some bootlegged alcohol. This child has never seen a gun, or a mobster, and probably doesn’t even know what bootlegging is. So much of entertainment is copying from other entertainment. And these are just creative works that might be scanned. What if they start scanning not written works, but life itself? Then copyrights become even less of an issue.”

“Scanning life itself?”

“Global Media has stated that their mission is to completely transform the entertainment and media industries. Text is easy to scan and compile in a computer, but imagine if they started setting up video cameras in the streets, or voice recorders in restaurants like this one. They’d just pull dramatic elements from everyday life and use that as their inspiration.”

“I’m sensing that you might have some personal reasons to see Global Media fail at their mission.”

Steve looked up from the table.

“Joel just got here,” he said. “Maybe we can actually start this meeting now.”



An email window sat open on Cooper’s computer screen for two days. He had not sent an email. He had not drafted an email. He now not only had programmer’s block, but some kind of block in his writing of prose.

He rationalized much of this to himself. An email was such an impersonal way of communicating. Asking for advice in an email was a very silly thing to do.

He opened his text editor. Not to write an email, but a program. He just had to write something.

Perhaps a user interface. That would take some time. At least it would get him started. He could add the functional components later. And as a bonus, he would have something visual to demonstrate if anyone inquired about his progress.

Cooper paused. He still hadn’t typed anything.

He scanned old emails.

“Join the advertising department,” the subject said.

Positions at Global Media were decently fluid. Programmers jumped around between teams all the time. Employees usually finished their current projects before moving onto new ones, but Cooper felt there was something unique about the advertising team. Unlike his own task, their undertaking had to succeed for the company to be profitable. Cooper’s program might become popular in the future, but neither his nor others’ programs could ever really be successful until Global Media developed a reliable way to generate revenue from them. If Cooper showed adequate interest in advertising, he might be able to put his own project aside for a while.



Jen looked at Joel in surprise. She was talking to Joel and Russell.

“We’re going to sue them?” she asked. “Because they’ve got a more efficient way of doing business than we have?”

“Because they’re in violation of our copyrights, or at least that’s what we’re going to try and argue.”

“But,” Jen said to Russell, “I thought that they were covered under fair use. I thought everything they were doing was legal.”

“Well,” said Russell, “That’s what I was originally thinking, but then I talked to the IT consultant Joel hired; and we both started to think of the many ways that the copyright infringement is really not very clear cut.”

“But I thought we were bringing this guy in to help us compete with Global Media?”

“Well,” said Joel, “that was the original idea, but let’s face it, a swift legal battle would be a whole lot easier than actually competing. Besides, we’re a small publishing company. We have one person hired full time to start up our email and tell us to reboot our computers when Microsoft Word freezes. How could we hope to compete with a giant like Global Media? They’ve got hundreds of programmers who work on this stuff full time.”

“But, I still don’t understand. What type of stuff do you think is copyright infringement now?”

“Well, there are lots of possibilities. Some of the stories they generate use the names of different real companies, and certain plot elements seem to be almost exact copies of elements from other stories. We might have enough material here for a class action lawsuit. They’ve been scanning a lot content.”

“Jen, any court case that strengthens the rights of copyright holders is good for us,” said Joel. “It’s a no-lose situation.”



Cooper meandered down a corridor looking for Ellen’s office. Ellen Powel was leading a team at Global Media to develop a keyword-based advertising system for the generated content they were providing. Until now, Global Media’s web division had survived through traditional advertising means, including banners and pop-up windows, but Ellen was hoping to really elevate the value of the company by developing a seamless, unobtrusive advertising structure that could eventually bring about a profit for the entire company.

This was not a pet project. It represented what could eventually become a whole new way of making money online.

Cooper reached her office. He looked in. She wasn’t there. As he turned around and started to move away, he walked right into Ellen. She fought to not spill her coffee all over the two of them.

“Oh, Cooper, I’m sorry,” said Ellen.

“I’m sorry. I just... I was coming by because...”

“Oh, Cooper, I totally forgot. You wanted to see how you could help out our team.”

“Well, I thought maybe I could join...”

“Do you have time now?”

Cooper stared in confusion for a moment.

“Well, remember, we have an appointment...”

“Oh course, I’m not thinking at all today. Come in; let’s talk about how you can help.”

They entered Ellen’s office and both took a seat.

“So,” Ellen said, “you’re working on the beta image-generation system?”

“Art generation,” Cooper replied. “Well, yeah image generation, but I...”

“Cooper, how much do you know about the advertising systems that we’ve been working on?”

“Your stuff? Well, I was poking around at some stuff that you put on the site.... I mean everything’s still in early stages, but it looked like you’re trying to match up ads with relevant content, to make ads less obtrusive, and probably more powerful.”

“Sort of. That’s kind of where we started out from, matching ads with content, but lately we’ve been experimenting with actually generating advertisements in ways similar to how we generate content.”

“I don’t understand.”

“Well, say that you want to advertise, I don’t know—a new music player. We’d just start generating content that showed your player being used in a good light.”

“Like product placement?”

“Sort of, but, Coop, we have the potential to do so much more than product placement. I mean, just think. We could have the bad guys in a story use your competitor’s music player. Maybe it would break during the story. Or we could have a scene in a story in which a psychiatrist diagnoses his patient as not having enough music in his life.... This stuff will really get into people’s heads....”

“But doesn’t this change the purpose of what we’re trying to do?” Cooper asked. “Will people accept that companies are paying to have stories skewed their way?”

“No problem. We’ll just label stories that contain advertisements. They will sit right along side legitimate stories, and unlike traditional advertisements, they will add functionality to our service, not take away from it. The advertisements won’t affect the user’s experience at all. They are totally integrated into the content, it’s like they aren’t even there.”

“So what exactly would I be doing?”

“Well, for the moment, you’d be doing exactly what you are doing. You see, the visual art that your program is generating has some really interesting applications in regards to what we’re doing.... Perhaps to advertise an oil company, we could generate a picture that shows alternative energy sources in a negative light.”

“Oh, I see.”

“Do you want to set up a more formal meeting with the rest of my staff to set up some kind of strategy?”

Cooper was very flustered.

“Um, yeah, but could this be in a while? I’m really busy.”

“Okay, well, how about I get back to you in two weeks, and we’ll go from there? You’ll be happy. Your system will get priority status real quick if it’s already generating money.”

●

Jen leafed through a stack of proposals from agents. More of what she had seen before. Nothing original.

The radio played very softly. She reached for the knob.

“So Global Media has this new comic book generator,” the DJ said.

She turned it up.

“One day after it generates a story about a group of terrorists, who storm a high school, a local teen tries to repeat the same thing. Gets all dressed up, brings a knife to class—Thank God no one was hurt.”

A second DJ responded, “I mean, I really used to like Global Media. I thought they really cared about the common people, not like those other media giants... but this new

service, they market it to teenagers, and then kids go and read it.... It's like they just scan all these comic books and then do what they think the comic books are telling them to do."

"And they don't even realize what's happening. Because, I mean, really, it's like they're being inspired. In a way. The messages just go into their brain and then this is what comes out."

"Okay, we're gonna take some calls on this. What do you think? We see violence in the news, and you see it on these internet news sites. Are you seeing so much because of companies like Global Media? Give me a call at..."

Jen turned the knob to the left. The volume went down.

She looked back at her stack of proposals.

"*The Incredible Chair Race*. A Coming of age story, this book will be about a boy who starts a race, with chairs."

So much happening in the world. So much better than *The Incredible Chair Race*.

Jen sat in thought.

We have the technology to transfer life experiences to words. We can't sue these people. We have to embrace this new technology. There's so much happening in the world that should be conveyed through art.

•

Cooper could barely breathe. He had gone to Ellen trying to transfer away from his task and he had instead placed a deadline on his own work. He needed something. It didn't matter what. He needed something for inspiration. Some code that would really resonate in his heart. Something really amazing.

He thought back to the work that he had heard Jameson had been doing. The code that would generate code.

Cooper went to the bathroom. Looked himself in the mirror. He needed sleep. He splashed water on his face and then made his way toward Jameson's cubical.

As he approached the cubical, he realized that Jameson was not at his desk. Perhaps he had left his computer on. Cooper just needed something.... Something to inspire him.

Jameson's screen saver was on. Cooper moved the mouse. Fractions of seconds felt like minutes, but Jameson's screen flashed into view.

A text editor with code!

Cooper sat down. He was so excited that, for a moment, he forgot that he was not at his own desk. He reached for a sticky note and a pen. He then changed his mind and opened his web mail. Started copying and pasting code into an email. He could read it later and be inspired.

Someone entered the cubical.

It was Jameson.

“Oh, Cooper... Did you need something?”

“I’m sorry,” he stammered. “I just sat down here to leave you a note. I didn’t know when you were getting back.”

“Well, I’m here now. What did you have on your mind?”

Cooper searched for something to say. “Well...”

Not really waiting for him to respond, Jameson started up with, “Actually, you know, we had been talking around here, how would you like to do some collaboration with our department once you get your image-generation system up?”

Cooper knew where this one was going.

“That’s what I wanted to talk to you about. I can’t. I’m just really swamped.”

Cooper swiftly left the cubical. Jameson was confused, but Cooper was re-assured. He didn’t have a new project, and he might even have the inspiration that he needed to start his work.

●

“Three hundred million dollars?” Jen screamed. “How are you going to ever convince anyone that Global Media owes us three hundred million dollars?”

“And we want them to immediately stop developing their media-generating technologies,” said Russell. “We want that too.”

“I thought that you said we were going to have to make this a class-action suit, that there really wasn’t enough that Global media had done to hurt our company.”

“Well,” said Joel, “Russell and I have been going over some of the protocols that Global Media has listed on their website. It turns out that in the past they have used some of our books to check and see if their stories are plagiarized.”

“I don’t understand,” Jen said.

Russell continued, “Their system relies on the fact that the programs are not simply piecing together portions of previously-made works. They rely on there being a profound difference between plagiarizing and being inspired by a work.”

“Yeah, that’s why you said we couldn’t sue them.”

“But there’s more. When they develop a new scanning algorithm, they have to check to see if the produced documents lives up to current plagiarism and copyright standards. For example, copying complete sentences would be in violation of copyright law. So, they test their program by scanning some source texts, and then scan their generated product to make sure that it doesn’t contain any sentences that can also be found in the original documents.”

“So they used our books in their tests? That seems like it would be covered by fair use.”

“It probably would be,” said Russell, “except that they used e-book versions of our books.”

Jen knew where this was going.

“And our e-books have much stricter copyright protections than our print books.”

“It’s not just that,” said Russell. “In order to get at the text, to scan it as letters, into the computer, they would have to have broken the digital rights protection that is built into the books. That’s where we’re going to get them.”

Jen smirked. “And how did you calculate the \$300 million?” she asked.

“Seemed like a nice round number,” Russell responded. “I’m really just hoping to use the money as leverage. All we really want to do is stop them from using their technology. We can ask for less money later, pretend like we’re really giving in. They’ll never know.”

“But what if they say they’ll continue their research, and just not break any more copyright laws. How are we getting them to stop doing this in the future if they’re not breaking the law?”

“I guess you haven’t read the news recently,” Joel piped in.

Jen looked confused. “Um... Do you mean the kid who brought the knife into school?”

“We couldn’t have asked for better timing,” Russell said. “I think most companies are willing to consider cutting a program if it gets publicity like that.”

•

The code was inspiring. It was beautiful. It renewed Cooper's hope in himself and programming, but it wasn't Jameson's. It didn't belong to Global Media, and Cooper couldn't use it.

Jameson had been viewing some code that was submitted by a job applicant. Applicants signed an agreement stating that they wouldn't sue Global Media if elements of their code somehow made it into Global Media products, but copying any part of it would still be risky. Global Media had been burned before from taking pieces of code, especially if the code didn't really originate with the applicant.

He would just have to let it inspire him.

He copied one line of code into his text editor. He would start with just one line, and let things flow from there.

And flow they did. Hours later, late into the night, Cooper still found himself sitting at his desk. Everyone else had gone home. Cooper was not here because he was stuck, but because he was on a roll. The code just flowed. He composed code that scanned existing artistic works and generated new works based on compositional themes and techniques much like a painter would carefully and creatively place pigment upon a canvas.

This would be his greatest work.

It was at times like this that Cooper was truly thankful he had gone into programming. His parents had never been fond of the idea. They wanted him to become an accountant. They knew he was a gifted programmer, but they feared that the life of a programmer would not be stable enough. They wanted him to have something that would consistently provide him with money, without always fearing whether his current programming gig would last or whether he would be able to find a buyer for his latest batch of code.

Now was the time to prove to them that he could be successful in his chosen profession, and especially with a program that would help so many people and had so many practical uses.

Cooper started to look forward to his meeting with Ellen. The future was bright.

•

Jen sat with Randal in the lunch room. They weren't eating lunch, just drinking coffee. Rendell snacked on a bag of Fritos bought at the vending machine.

"So they're sending a cease-and-desist letter to Global Media," Jen said, "and they're demanding \$300 million in damages."

"How necessary do you really think this all is?" Randal asked. "I mean, from the beginning, it just seemed weird. A company everyone likes starts generating short stories and jokes and suddenly it's going to bring about the end of all conventional publishing? I like getting an original joke in my email each day. I don't see ABC sending me a joke each day."

Jen countered, "But it's a vision of things to come. I mean, once this thing really gets going... yeah I think it could drive us out of business. We could never run this company without computers or email; well it's the same thing here. Miss the progress train and you're out of a job."

"I don't..."

"Our job is to get ideas from people and put them to paper. That's a very labor intensive process. We need to find authors with ideas. They have to write their books. Then we need editors. This all takes time, all takes money. When computers can make our books for us, why would we want to do it the old-fashioned way?"

Jen paused for a moment, and then continued. "I really wanted to try and see what we could have done to compete with them; I mean especially if we were just going to focus on how the technology could specifically be used to help our publishing process.... I never even saw that consultant we had in. I think he actually helped convince Joel that legal action was the best way to go."

"Well, I guess we just have to wait for Global Media's response," Randal said as he looked at the back of his snack bag. "Hmm, there's a lot of fat in these things. Maybe we should send a letter to Frito-Lay."

●

"Wow, this is really more than I expected." Ellen said. "So this works with all types of images—paintings, advertisements?"

Cooper glowed. "Yeah, and I think we've really just begun to think about what these programs could do... I mean, especially with regards to the advertisements, because what the scanner is going to pick up are ads that have a presence, ads that people are talking about."

"So you're saying that not only will these images look good, but by the nature of the way they're generated, they're pretty much guaranteed to be effective."

"That's the theory.... I mean, you're really the expert on advertising effectiveness."

She laughed. "Coop, no one's an expert on advertising effectiveness. That's why a program like this has so much potential. I mean, for how long have people thought that the best way to make a product is through careful planning? We know now that's not the

case. If you want to make a popular story, feed popular stories into a machine and let the algorithms do their thing. If you want to make an effective advertisement, just take what's best about other great ads. It's so seamless. Makes so much sense."

She looked down at her computer, then back at Cooper.

"You know, I think we can get this up right away. Especially with the potential that this has to test our ad service. Yeah, let's get this thing going."

•

"They want to go to trial."

Russell stood over Joel's desk. Joel had just been going over some expense reports. His morning had been quiet until Russell barged in.

Joel looked at Russell. He thought.

"At least they're not counter suing," he said.

"Not yet," Russell responded.

"They bypassed our digital rights management. That's a pretty solid accusation, right?"

Russell nodded. "Yeah, I mean we found out about it from their website. The law's pretty clear. Nothing is certain, but I'm not sure how they could defend it, unless they try to argue with the law itself.... They violated copyright law."

"Alright," Joel said. "Let's do it."

•

Cooper sat in his cubical playing with the new image generator recently released on Global Media's website. One could enter keywords or image files and then the system would generate an image based on those specifications. At the moment, this beta version of the program didn't allow users to download the images that were generated. Cooper was unsure how that would eventually work. Ellen wanted the system to be run through advertisements, but there were some that insisted the image program might work better if users just paid for the images, which, of course, would still be protected by the appropriate digital rights management software.

"Copyright infringement."

It was very faint. People were talking in another cubical in the office.

Cooper strained to hear. Two voices.

“I think it’s ridiculous.... How did they even know? Do we know who’s responsible for this? Why did we ever put it on the website?”

“We could lose all of this.... I can’t believe they’re not trying to settle it out of court.”

Cooper felt sick. How did they spot the code he stole? Why did these copyright laws have to be so strict? Didn’t they know that by limiting how a programmer could operate, they were stifling creativity?

Cooper’s code was good. Really good. But he wouldn’t have anything without his inspiration.

He felt that he had to get rid of the code. He frantically started replacing pages on the website with blank pages. He deleted all traces of the program from his hard drive. He deleted the original email that he had sent to himself from Jameson’s desk. He’d just pretend that the servers had failed. No one would know. It would be tragic. He would be given plenty of time to work on new code because he would be so traumatized by the data loss.

No one would know.

A woman passed by Cooper’s desk.

“Cooper, did you hear about the cease and desist letter we got?” she asked. “I can’t believe that someone was so careless....”

Cooper ran off to the bathroom without responding.

●

Jen and Randal stood outside the court room. They didn’t really need to be there, and were starting to wish that they weren’t. So far, most of the trial had consisted of incomprehensible legal banter between the two lawyers. Nothing that would make for thrilling television.

As they stood there, a man ran past them and into the court room.

“That’s strange,” said Jen.

They followed the man into the court room.

He was being restrained by a police officer. It seemed that he had tried to run up to the judge.

A voice from the courtroom yelled, “Cooper, what are you doing?”

Cooper calmed down and it appeared that he might be allowed to stay if he stayed quiet.

He didn't.

"Do any of you know what it's like to be a programmer? I mean, this is our culture that's at stake. You can't define creativity like this. You can't put limits on it, dictate where it's going to come from..."

The judge interrupted, "Sir you have to sit down and be quiet."

"No, I'm not going to be quiet. I only took one line of code. How is this helping us, how is this helping anyone?"

Another voice from the courtroom, "What are you talking about? Do you even know what this case is?"

For a moment, everyone was quiet.

Cooper stood dumbfounded. Partly from that response, partly from the fact that he still hadn't been thrown out of the courtroom.

"Um," he said. "I'm sorry; it's just that I... I mean I work so hard to make programs that people will like..."

The officer finished his job and escorted Cooper from the room.

Jen admired the passion of the programmer. He was crazy and self-absorbed, but he would do anything to preserve his freedom to use his creative energy.

She sat down in the back of the courtroom. Randal left to find a snack. She knew a win for Global Media would be devastating for Mercury Publishing, but she couldn't help feeling sad about the loss of potential creativity. If writers and artists continued to slog away at their stories and paintings by hand, the world might never know what amazing content-generation programs could have been written.

Jen felt bad for Cooper, but she had a job to worry about. The trial bored her again, so she opened her brief case and started browsing through book proposals, hoping to find the next best seller.

Make Your Data Work for You

“Ah, Logan, it’s about time you got here. I was just going over the plan with Brodie. Why don’t you take a seat?”

Private Logan Hastings entered the tent of Sergeant Trapper. Logan was a member of the United States Army stationed in Iraq as part of Operation Iraqi Freedom. As far as combat went, his time in Iraq had been uneventful. Sergeant Trapper, however, was constantly looking for ways to better prepare his men should they actually encounter insurgents. These preparations tended to keep Logan pretty busy.

Logan took a seat next to Private Brodie Mede. Brodie always seemed to arrive on time for these things. He hung on every word that came from the Sergeant’s mouth.

Trapper continued, “There’s been talk among the higher-ups. They’re thinking of switching things around, making some changes.”

Logan tried to inquire how, but was cut off by the Sergeant.

“Lieutenant Wade doesn’t think we’re getting anything done around here. He thinks that I’m just letting you two goof around while we wait for those insurgents to come along and shoot us up. Well, you see, he likes to run things differently than I do. He likes to tell his men exactly what to do and where to do it. I, on the other hand, realize that you men can think for yourselves. I realize that you men have ideas, can really contribute. That’s why I give you two so much freedom. Well, anyway, he’s not convinced, so he’s decided to have you all start making logs of every project that you’re working on. He wants everything documented, everything that happens in the whole platoon.”

“What?” asked Logan. “How are we going to do that? What do you mean?”

Trapper continued, "Well, I expected this type of reaction, and so what I got him to agree to do is to go and order everyone tablet computers, which you'll be able to carry around and input your work into."

"That'll really improve efficiency," said Brodie.

Logan shook his head, "Wait a minute. Tablet computers? I don't understand. What are we going to do with them?"

"Well, the Lieutenant just wants everyone to start making logs of their daily activities. We'll then be able to email them over to him so he can check on everything we're doing.... But there's something he doesn't know."

Trapper walked over to the tent door and peered outside. He then reentered the tent and sat down again. He leaned toward Logan and Brodie and started speaking in a low voice.

"We're going to use these things to increase the efficiency of everything we do. I mean, think about the power we'll have once we start organizing our data into one central location. We'll have a database of gun parts, and then when something breaks, we'll know exactly what we do and don't need to order. And think of how much time we waste when the scouts have to give reports of the enemy camps they find. With the tablet computers, they'll just be able to enter the information into an online form and then it will automatically go in to a database. I can see efficiency improving by twenty percent, easy."

"Plus," said Brodie, "Tablet computers are great for giving presentations. Just imagine how much easier it will be to give orders by showing a Power Point presentation."

"Now you're thinking," said Trapper.

"But we've got to be careful," Trapper warned. "You see, these men—these higher-ups—they don't like thinking that we're going and doing anything new. They have their ways of accomplishing things, and they get upset when they see us really getting projects done without them. That's why you two have got to keep this stuff on the down low initially. Especially since we're using the computers that they're providing."

"I don't understand," said Logan. "Computers? You want us to give Power Point presentations? How much is all of this costing? Wouldn't the money be better spent on more body armor, or tanks or something?"

"But then how are you going to keep track of whose turn it is to wear the body armor?" Trapper asked.

Logan didn't know how to respond. "We could keep a list...."

“And how much time would we spend making lists?” asked Trapper. “And where would we find space to store all of these lists you’re creating? Now everyone can just go online and reserve the body armor when they need it. And you know what? I think we’ll find that we don’t really need more body armor. I think that we’re going to find that we actually have too much body armor. It’s just always with the wrong person because we don’t have any efficient system of signing it out.”

Logan and Brodie were silent again. Trapper walked to his desk and picked up an envelope which he gave to Brodie.

“The computers are being delivered to a location about three miles south of here. There’s more information in that envelope. Take one of our trucks and meet them at the coordinates listed. Pick up the computers and bring them back here. You better get going. Because of Logan’s tardiness, I’m afraid you’re a little behind schedule.”

Logan and Brodie left the tent and walked toward a truck.

“I really think these computers will improve our operating efficiency,” Brodie said to Logan.

Logan responded, “Operating efficiency? You realize we’re fighting a war here, right? I don’t know. I didn’t really understand half of the stuff he just said. I just feel like no one ever really sits down and really thinks about the best way to do things. I mean, if someone asked you what the best way to divvy out body armor was, would you say that you wanted to buy everyone in the platoon a computer, and then have people sign up using an online database? It just doesn’t make any sense.”

They reached the truck. Logan walked around to the driver’s side, and Brodie entered on the passenger’s side.

“I think your problem, Logan, is that you’re always trying to look big picture. I just do what I’m told. That’s my job.”

“Let’s get these computers. Do you know where we need to go?”

Brodie skimmed the instructions.

“Yeah this is easy. Just start heading east down the access road.”

“Do you have any idea why these things aren’t just being delivered the usual way?”

“I don’t know. I assumed that we weren’t getting them through our usual suppliers. I guess we’ll find out when we get there.”

Brodie and Logan approached a blue van with Arabic lettering. A dark-skinned man stood next to the van. He held a rifle.

"This should be it," Brodie said.

Logan pulled to within thirty feet of the van. The two grabbed their rifles and hopped out of their truck.

Logan addressed the man, "Are you the tablet computer guy.... Do you speak English?"

"Do you have the order slip?" the man asked.

Brodie fished through his envelope and gave a receipt to the man, who read it over before opening the van. The van was filled with brown cardboard boxes.

"Start unloading," he said.

"I think you need to work on your delivery service," Logan responded.

He approached the van and opened a box. It contained two tablet computers in colorful display boxes.

"Help me move them over to our truck," he said to Brodie. "And let's try to keep a count as we go. How many should there be? There's two computers to a box."

"Then we need forty boxes, I guess."

Logan and Brodie strapped their rifles to their backs and hauled boxes over to their truck. Their new friend just stood and observed.

As Logan placed the last box in the back of their truck he noticed that the courier was no longer standing next to his van. The van's engine started. It drove away.

An explosion—about one hundred yards from the truck. Logan and Brodie took shelter behind their vehicle as bullets started raining toward them.

"Where are they?" screamed Logan.

Brodie yelled back, "I need to get to a computer!"

"What? A computer!"

Logan looked under the truck. He could only see dust in the distance. He couldn't tell who was firing the shots.

Brodie jumped up to the bed of the truck. More shots came very close to him. Logan frantically jumped up beside him and fired in the direction of the insurgents, hoping to give Brodie some kind of cover. Brodie grabbed a box, and they both ducked back down behind the truck.

Brodie pulled Styrofoam pieces out of the box. He grabbed a computer and unwrapped it.

“What are you doing? What do you need that for?” Logan screamed frantically.

“We’re going about this in the wrong way.” Brodie screamed back. “If we can just get organized, make a plan. That’s the only way we’ll get out of here alive.”

“We’ll get out of here alive by distracting them long enough to get into the truck and drive away!”

“Here, can you plug this into the cigarette lighter?”

Brodie handed Logan the end of a plug.

Logan shook his head and grabbed the plug. He was aggravated, but he knew that Brodie was smart. He decided to trust his plan for the moment, at least until the shooting died down long enough for them to climb in to the truck and make a getaway.

Logan opened the truck door, leaned inside, plugged in the computer, closed the door, and crouched back down behind the truck.

They both sat there for a moment. The shots continued.

“Well?” Logan asked.

“It’s booting up.” Brodie responded

A loud crash near the truck. The driver’s side window was broken

Brodie took a piece of paper from his pocket. He started entering information into the computer.

“How much do you think the computers weigh?” he asked Logan.

Logan was exasperated. “What?” he yelled.

Taking a chance, Logan stood up to look over the truck. Another vehicle was about thirty yards away. The shots appeared to be coming from that vehicle.

Logan carefully opened the door to the truck again. There was a grenade launcher stored behind the seat. He set up the launcher.

“I think the dust has settled enough for me to at least have a target.” Logan told Brodie.

Logan looked around. He was having trouble finding something.

"Wait a minute. Where are the grenades? Why do I have a grenade launcher but no grenades?"

"You see, if we had all our ammo entered into a database, this type of stuff wouldn't happen."

An insurgent appeared next to Brodie. Logan lunged toward Brodie, grabbed the computer, and hit the insurgent with it. He fell to the ground.

"Into the truck!" he yelled.

They jumped into the front of the truck. The shots continued to ring out around them. They raced back to camp.

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"So you only lost one computer?"

Sergeant Trapper stood looking at Brodie and Logan as he asked that question.

"That's correct," Logan said. "But the truck took a lot of damage as well."

"That's okay. You boys did good."

Brodie spoke up, "Sarge, I had the computer out because I thought that it might help us analyze the situation before we made any rash moves."

"Oh, Brodie, I understand completely. I mean, these men upstairs, they're always riding my ass because they think I spend too much time planning things. They look at my weekly plans and they see that I allocate about ten percent of my time to meeting with people and making plans. And that really isn't that much time if you think about it. Because when you just start going at something without a plan, you never know what's going to happen."

Logan tried to interject, but Trapper continued.

"There's a really neat program on these things that lets you make nice-looking flow charts and diagrams. So, just think about it, a superior gives you an assignment, and then said he wants to meet with you. You start by planning things out and making a diagram. Then when it's time for the meeting, you can show the chart. They'll think you're a real professional. You'll be promoted in no time. Both of you men."

"Sarge, do you really think that these computers are the best way to go about solving problems?" asked Logan. "I mean, I tried to use a grenade launcher today that didn't have any grenades. Brodie immediately started talking about a munitions database...."

“That’s a great idea! I want you two to start working on it pronto. You’ll have to go around the camp collecting the data, and then try and figure out the best type of database to store it in. Of course, you’ll want to have an online-submission form so that people can easily change the database when they use ammo.”

“Now should we carry our computers with us into combat, or will it be okay to just enter our used rounds into the database after the fighting is over?” Logan asked sarcastically.

“Oh, that’s a decision for the higher-ups. This is just so exciting. I mean, once you start thinking about it, everything just comes together. We can have the system automatically order more ammo when the supplies get low and...”

At this point Logan stopped paying attention. His orders were clear. He had to start working on a munitions database system. Hopefully, when the insurgents return, he would be able to check the database and see whether or not he had enough ammo to fight them. The future was bright.

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Logan and Brodie sat in a tent using their computers.

“I still can’t get the automatic ordering system to work,” Brodie said.

Logan leaned over to him, “What do you mean?”

“Well, I’ve been trying to get this thing to automatically order bullets when categories get below certain levels.”

“Didn’t we just decide that we would have the database send an email to the officer in charge of ordering supplies when something was running low?”

“I think that was just a backup plan. Trapper really wanted everything to be automatic. It’ll really save a lot of time.”

“Brodie, we’ve been working on this project for seven months. How much time will this thing have to save us to make it worth while?”

“Well, I...”

“And what’ll happen if we get transferred to another division? Did you ever think of that? This thing is so complicated, I’m not sure anyone else will be able to maintain it.”

Brodie looked at Logan, “I’m just doing my job.”

Logan tried to be happy with that answer. He looked over to his side. Thirty-six boxes of computers, still unopened.

Both men resumed their work as Trapper entered the tent.

"Privates, I've got some bad news. The tablet computer program is being suspended indefinitely."

Logan and Brodie both gave Trapper a confused look.

"Wade heard about the type of stuff that we've been planning. He's not happy. The shit really hit the fan with this one. Whatever. He can do things anyway he likes. I was just trying to make things more efficient, but he doesn't care about efficiency."

Trapper exited the tent.

Logan looks at Brodie, "Well, in a way, I'm happy. I'm not sure I really ever knew how we were going to implement this thing, what with training and all."

Suddenly, there was an explosion outside their tent.

Logan and Brodie fell to the floor. Brodie crawled toward the door. Peered out. People were running. Confusion.

"I don't have my gun with me," Logan screamed.

"I'll cover you. Let's try to get to the munitions bunker."

The two fled the shelter. They found cover just as an IED exploded beside the tent they were just in. The computers were destroyed.

Sergeant Trapper appeared beside Logan and Brodie, "Well, so much for the computer program."

Brodie mused out loud, "I wonder how many bullets I have left?"

Trapper responded, "That's why you need a database. You see, organization is the key. We've got a lot of problems. If we get our data organized, the solutions will become apparent. You've got to be willing to let your data work for itself.... Yeah, that's what we need more of around here."

Logan put his head down and covered himself with his hands. He waited for the noise to subside, both from outside and within. The noise outside came from the detonation of explosives, and the noise inside came from the planning of databases.

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