

# The Human Side of Computerization

*Contributed by Daniel Girard, Sylvie Lavoie,  
Andre LaFrance, and James R. Taylor*

The main character in this situation is Susan. She is 28 years old and has been called an individual with a strong personality. Self-taught. Susan has been accustomed to taking the initiative in any position or situation in which she finds herself. She has been described by coworkers and associates as a clever and dynamic woman.

Susan began work as a part-time cashier in a neighborhood grocery store. From there, she graduated to working for the owner as his purchasing assistant for the four stores he owned. Two years later she was promoted to being in charge of advertising for all the stores. Susan held this position until her previously independent business owner joined with an established network of franchises.

With Susan's position in advertising having been abolished because of the franchise link, she was transferred to the administration department of the local company. There she became dissatisfied with the existing system of cash register operations and decided to make it more efficient. When the person in charge of the accounting office quit, Susan took his place. She has been responsible for the finance department for three years now.

## ■ THE BEGINNING—THE OLD SYSTEM

The computerization of the accounting department was initiated two years ago, the same day a cash register salesman came to see the owner and proposed a "sensational new accounting software." The owner signed the contract and the check, and the equipment arrived. Everything was settled in two days. Susan was not consulted and, in fact, did not even have the chance to see the software demonstrated.

Practically no training came with the new system. Training could best be described as "You see, you do this, and that, and thank you, and goodbye!" Susan was left alone to manage the new system with only the user manual as her guide.

This software, which was already being used by another franchisee of the same group, had originally been conceived for restaurant accounting. Unfortunately, in a grocer's context, the software was not perfectly suitable. Many of its options were useless in the more specific environment of a grocer's goods, rapid turnovers, and inventories. Susan had to build every single report format that she needed. The interface was built around a menu system organized into a hierarchy (on the general principle of a Russian doll, as Susan described it). In order to go from one function to the next, she had to circle back through the main menu. There was no apparent logic linking menus. Nor were the supplier's codes sufficient or recoverable through the alphabetical search. For Susan, using this software was a tedious and frustrating process from the very start.

As she became aware of the limitations and problems with the system, Susan asked the software suppliers for modifications. The more she asked, however, the more time it took to get them done. Sometimes the suppliers would even tell her, "The modifications you are asking for are impossible to make." Considering how things were going, and knowing that she couldn't continue to limp along with that system much longer, Susan decided in November to start looking for a more appropriate computer system. Her goal was to begin the next financial year with a new system in place.

## ■ CHOOSING THE NEW SYSTEM

Susan has described the journey into the system as follows: "Before the Christmas holidays I received a letter at my office from a computer hardware supplier. The supplier was inviting me to attend a product demonstration, and I decided to go. My employer was supposed to come with me, but at the last minute he could not make it. So I decided to take along Michele, one of my employees who also works with computers and accounting. At the demonstration, I found myself in the company of a few other members of the franchiser's group.

"Michele and I were amazed by the performance of Softcount, the accounting software being used with the hardware systems on display. Probably because we were so used to bugs and glitches and procedures that were inapplicable to us, we couldn't believe that such a software could exist and perform so well. So I asked the sales representative to come and meet my employer, Mr. Robertson, and make a demonstration to him in person. I even took the initiative to make the appointment and to assure the representative that my superior would be there.

"At first, Mr. Robertson really didn't want to meet the representative. However, seeing that I was insistent and, I believe, not wanting to make the same mistake twice, he finally agreed."

"The meeting took place in our office. For the occasion my employer had called in our accountant. The objective of that meeting was only partially to see what the software could do. The other intent was to trap the sales representative.

"During the presentation, the representative was unable to answer immediately all the questions he was asked. He took extensive notes, though. It was only after four or five meetings with us that he finally was able to come up with all the information we needed, including such details as the price for the software package."

A few weeks later, one of Susan's friends in her professional association called. During their conversation about computer software systems, the colleague suggested that Susan check another supplier and program. Accordingly, Susan reported, "I went to a Quickaccount demonstration. The software was similar to Softcount, having some advantages that the former did not have, and vice versa. I was tempted again by Softcount, especially when I discovered that the franchisor was also interested in it and wanted to make some changes so the software would be better adapted to our needs."

However, the acquisition of a new system was not proceeding as fast as Susan had desired, or as she had planned. Time was running out on the fiscal year, and she had to close the books soon. She had a major decision to make: was she going to suffer out the closing on the old system?

Circumstances made up Susan's mind. "When entering the amount of a check dated January 1 in the system, I noticed that the computer software system we had been using during the past year couldn't differentiate between years. That meant that the check was posted the date of the preceding year. At that very moment I decided to stop using the old system."

Instead of being able to transfer from the old system to the new one, however, Susan would have to work manually for awhile. Even with the drudgery of that manual-entry process, it seemed preferable. Susan also knew that once the new system was installed, all the bills accumulated after the start of the next fiscal year would need to be posted one by one. Hopefully, there would not be too many.

Finally, Susan had to close the year and prepare a report. She tried three times to print out a financial report using the old system. The report took two eight-hour days to print, and then it was not comprehensible. Under such circumstances the auditors could not conduct a real audit, and they chose to issue a "comment" for that year. (There were lots of unhappy people about that one.)

In the meantime, negotiations between the franchisor and the supplier for the proposed new accounting software were dragging on. Obviously, this situation could not continue much longer. A few weeks later, Susan decided to see her employer personally. "I explained to him that I hadn't put out a financial report for several months, and that we couldn't go on like this. We decided then to proceed by ourselves, negotiating with the software vendor without waiting to hear from the franchisor. We took the system 'as is' and did not have the benefit of the requested modifications.

“My employer called the supplier directly and was told that our office had been chosen to be a pilot site. A call to the franchisor’s computer department confirmed this fact. For certain internal ‘political reasons,’ however, the franchisor’s computer department suggested that we better not mention the existence of a pilot operation to headquarters.”

## ■ IMPLEMENTATION

Susan’s adventure with purchasing and setting up a system continued. “The supplier suggested that we buy the IBM<sup>®</sup> equipment with OS/2<sup>®</sup> operating system. My friend, though, advised me to use the WZ/100. The supplier answered that the WZ/100 was completely outdated and the future was in IBM<sup>®</sup> with OS/2<sup>®</sup>. On the other hand, my friend told me that the OS/2<sup>®</sup> system was not yet running properly and that we would be in for delays and difficulties. Once again, the scale tipped on the supplier’s side. I thought that maybe my friend didn’t know enough about this new system, and that the supplier’s choice must be better since the franchisor’s computer department trusted him.”

To convince Susan to go with the proffered system, the supplier told her that the demonstration she found so impressive had been made with OS/2<sup>®</sup> and IBM<sup>®</sup>. Susan only learned much later that the demonstration had been done on something called AS400 and that it did not use OS/2<sup>®</sup>.

“The important thing,” reported Susan, “was that we couldn’t afford the AS400. It was just too expensive. I had already pushed my employer to the limit of what he could invest in a computer system for our financial operations. I was also convinced that most of the franchises in the group could not afford an AS400 either, and that they wouldn’t see the use of buying one. For them it was a major expense. It wasn’t something that brought in money and concrete results.

“The franchisor’s goal, from my point of view, was to make the franchisees buy the software and then connect them all to an AS400 central. But nobody is interested in letting the franchisor take a look at our data. It is my company. It is my data. It is personal. Nobody can take a look in my books!”

Thus, Susan ordered the IBM<sup>®</sup> equipment and system. She requested that it be delivered to the software retailer’s office because her office was too small to accommodate four persons (Susan, her employee, Nicole from franchise headquarters, and the trainer) during training periods. Susan also knew that she wouldn’t have been able to free herself from regular work if the training were given in her office. Five full-time days of training were scheduled, in twice-a-week periods.

## ■ THE TRAINING

Nicole, who worked in the computer department of the franchise headquarters, accompanied Susan to all the training sessions. The two had been in fre-

quent and regular contact since the beginning of the computerization project. The training was structured in a rigorous way. It followed all the steps needed to build up a computerized accounting system in a company (in the case of the training example, an imaginary company).

Susan's report continued, detailing how "the trainer started to explain to us the running of a computer, but Nicole and I were already familiar with that part. So he skipped that and went on to explain about supervision, support, and accounting. Then we learned about accounts payable, budgets, and finally, during the fifth session, accounts receivable.

"While I am not an accountant, I think that the training went well for me because of my good practical base in accounting. Even someone who's not really familiar with computers can still understand what to do because all the material and steps are founded in accounting principles. But for someone who doesn't have a good accounting base, the situation is more problematic. Frankly, I was a bit concerned about how the franchisor was going to adapt this program for every franchise because my perception was that very few office clerks in the franchises do bookkeeping, and even fewer do the auditing.

Feeling good about their training sessions, Susan and Nicole didn't hesitate to ask all sorts of questions. Nicole was particularly interested in the computer aspects, Susan in the accounting. The instructor took time to explain points that were not clear to one or the other. Mostly, however, the two women helped each other.

In a word, the training was personalized. The instructor adjusted the training to the participants' knowledge and interest levels. In Susan's opinion, the instructor was very competent. Susan was also pleased to have been trained on her own material. It helped to identify the modifications necessary to the software. As far as Susan was concerned, the computer-assisted training sessions, even without a user manual, were better than self-training done exclusively through the use of a supposedly "friendly" user guide.

In spite of the advantages and success of the training, the whole procedure was not without some weak spots. After the training sessions, Susan couldn't practice because her own computer was still in the software retailer's office. There was no handbook available either. The only resources Susan had were her notes and the phone calls she could make to the instructor. Susan confessed that she would have spent even more time on the phone if she hadn't taken the initiative of writing down in her notes an example beside each application.

There were technical problems as well. During the training sessions the instructor, using Susan's system, had detected some bugs and had corrected most of them satisfactorily. However, others appeared during installation of the materials in Susan's office. For example, the technician could connect only one monitor to the IBM® system. Only one printer out of three was operable because they couldn't obtain the suitable drivers and cables to join the printers to the computer. Susan said that "even the retailers could not explain all the technical problems we had. We should not have had them, but we did."

## ■ FINALLY, THE RESULTS

In June, five months behind schedule and hundreds of hours of training and orientation later, Susan was able to enter all the data into the system. By mid-July she was using two monitors and had one display unit working, "thanks to the AT I already had." Susan reported, "The supplier had promised that I would be able to work with more than one monitor at a time. One of the technicians told me that my request was unusual and that he would have to doctor the system a little bit to do it. By that time I was used to hearing about the unusual requests and the modifications, so I was not surprised. I was not happy about it, either. The problems, incidentally, did not come from the Softcount software, which had sold us on the whole thing. With the AS400 hardware used in the demonstrations, everything worked perfectly. But Softcount is on the supplier-recommended hardware and system!"

When Susan did discover a problem, her first reflex was to call the instructor to see if she (Susan) had done something wrong. When the instructor couldn't find any mistakes in her manipulations, they had to think there could be some incompatibility with the operating system.

Throughout this period, Susan could not fault the help and attention she was getting. She was aware, however, that "it was due to the prospect of a big potential contract (computerizing all the franchise's network) that I was receiving such excellent service. Each problem I had was also pointed out to Nicole of the computer department."

By the end of July, Susan could finally send out computerized checks for the company's payroll and for all its accounts.

## ■ CONCLUSION

Through all this process, Susan's employer, Mr. Robertson, had not been very involved in the steps and details. Susan explained that "for him, the implementation should have been completed long before. He didn't understand why I was so late, why I had to search for hours and hours on the computer to balance one penny. All that really mattered to him was what went in and out of his pockets. To him, the computer was just a toy to keep the employees happy. He pressed the keys and found it amusing to see the messages appearing. Besides, I give him access to all the information he wants. He verifies all the suppliers' accounts, and so on, but he can't print out reports or make modifications."

When Mr. Robertson asked to have his own computer on his desk, Susan encouraged him. She hopes that with time he will learn to use the software properly and make the verifications by himself. "For example," Susan said, "it would be useful for him to be able to call up, in the computer, information that could allow him to answer directly some questions raised by a supplier who complains about a late payment or the disposition of an order."

Susan's biggest challenge was to educate Robertson about a computerized accounting system going from strictly a cash basis of accounting to an accrual method. This effort required a whole different understanding of accounting for the boss. Susan was patient about the learning process, however, saying, "when someone has always done his bookkeeping in a certain way, it is not necessarily easy to make the switch. Add to that the reluctance to tackle the computer. Well, eventually . . ."

When everything was finally up and running, Susan admitted, "I am satisfied with the new system. It is pleasant to work with it because it seems to interpret accounting the same way I do. The system does not correspond exactly to what I have learned, but it is a nice copy."

Susan was keenly aware that her search had been time-consuming, frustrating, and at times exhausting to her, to Mr. Robertson, to the franchisor, to Nicole, to the trainer, to the hardware and software suppliers, and to the technicians. Still, her search to find the best system on the market had not been exhaustive and might not yet be over. She admitted, "Surely, there is something better, but I think that it was important for me to have a new management system. Yes, we might even have to change for something better in a few years, because the franchisor has asked for modifications that could apply to all the franchises."

## ■ QUESTIONS FOR DISCUSSION

1. What factors contributed to the delays in adopting and implementing a new computerized system for Susan's operations?
2. Describe the theory or rationale that reflects how and why Susan was able to make changes in how she accomplished her work. How would you describe Susan as a change leader?
3. In a planned change, extensive communication commonly goes in all directions about the change process as well as about the goals of the change. Why didn't that happen in this case? How might the lack of communication have influenced the events or process?
4. What recommendations would you make to Susan in order to implement the next similar change in a smoother, more effective way? What would you recommend to her employer? To the hardware and software suppliers? To the franchisor?